

MERCOSUR AND THE CREATION OF THE FREE TRADE AREA OF THE AMERICAS

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foreword by
Joseph S. Tulchin
Luis Bitencourt



Woodrow Wilson
International
Center
for Scholars

Latin American Program



MERCOSUR AND THE CREATION OF THE FREE TRADE AREA OF THE AMERICAS

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GLOSSARY

The following acronyms are frequently used in the text

ALADI Association for Latin American Development and Integration

ALALC Latin American Free Trade Area

CAN Andean Community of Nations

CET Common External Tariff

CMC Common Market Council

CMG Common Market Group

ECLAC Economic Commission for Latin America and the Caribbean

EU European Union

FTAA Free Trade Area of the Americas

GATT General Agreement on Tariffs and Trade

IDB Inter-American Development Bank

IMF International Monetary Fund

ISI Import Substitution Industrialization

MERCOSUR Southern Common Market (Spanish)

MERCOSUL Southern Common Market (Portuguese)

NAFTA North American Free Trade Agreement

OAS Organization of American States

OECD Organization for Economic Cooperation and Development

WTO World Trade Organization

FOREWORD

JOSEPH S. TULCHIN
Director, Latin American Program

LUIS BITENCOURT
Director, Brazil @ The Wilson Center

This book results from a convergence of initiatives conducted by two institutions concerned with the prospects for regional trade integration in the Western Hemisphere: the Latin American Program of the Woodrow Wilson International Center for Scholars (LAP/WWIC) and Red de Investigaciones Económicas del Mercosur (Red-Mercosur).

The Wilson Center has been paying close attention to the steps toward regional trade and integration following the launch of the Free Trade Area of the Americas (FTAA) initiative in 1994. Since then, the Latin American Program and, since 2000, its project Brazil @ The Wilson Center have hosted a number of seminars on regional integration and the Mercosur, the role of Latin America within the international system, and Brazilian and Argentine approaches to international trade. We have also published three books on the subject: *Latin America in the New International System* (2000), *Paths to Regional Integration: The Case of Mercosur* (2002) and *The Strategic Dynamics of Latin American Trade* (2004).

With financial support from the Tinker Foundation and the GE Foundation, this joint project included the organization of a seminar and the publication of this book summarizing the status of negotiations aimed at the creation of an FTAA, with special attention to the positions of Mercosur countries.

The seminar took place on 26 February 2004, in Washington, DC, and gathered, in addition to the sixteen chapter authors, trade negotiators and diplomats who brought distinct and often differing perspectives on the complex nature of the ongoing negotiations. During a panel that contrasted official positions toward the FTAA, Rubens Barbosa, Brazilian Ambassador to the United States, Alejandro Casiró, a senior diplomat from the Argentine

Embassy, and Karen Lezny, a senior negotiator from the office of the U.S. Trade Representative, agreed that success will depend on a level of mutual commitments and concessions currently not present in the negotiations. Their lively debate unveiled some variables of the complex, dynamic, and asymmetric nature of the process. Qualifying Mercosur as a strategic alliance, both Barbosa and Casiró affirmed that the feasibility of the FTAA depends largely on the elimination of agricultural subsidies and antidumping policies practiced by the United States. Barbosa also criticized the United States for having altered its multilateral approach—required by the very nature of the FTAA commitment—to a bilateral-agreement approach, as a tactic to neutralize the unity of the Mercosur.¹ He conceded, however, that the Brazilian approach to the FTAA negotiations changed between the Cardoso and Lula administrations: whereas Cardoso's team was more flexible during the intermediary steps of the negotiation, postponing major disagreements to the end, Lula's team negotiates zealously at every step.

Conversely, Lezny made clear that for the United States progress in the FTAA was linked to the disposition of the Mercosur countries to negotiate on government procurement, services, and intellectual property. In what illustrates the intertwined nature of regional and global stances, she added that the United States would consider discussing agricultural subsidies only after concluding negotiations with the European Union and Japan in the context of the World Trade Organization.

The seminar provided nuances to these different positions often tainted by political and emotional discourses. The rationale for U.S. interest in promoting an FTAA draws on the perception that the mature U.S. economy has few opportunities to grow domestically and must open foreign markets for its products. However, while U.S. negotiators envisaged the FTAA as merely an extension of the North American Free Trade Area (NAFTA), Mercosur negotiators had a different idea. The United States believes that, in addition to the elimination of tariffs and quotas on trade, the FTAA should include a hemisphere-wide code on matters such as copyright and patent protection, foreign investors' property rights, and rules for government procurement. It would not include, though, the issue of agricultural subsidies. For the Mercosur countries, the FTAA rests upon a reduction of U.S. agricultural subsidies and Mercosur in itself is transformed into a strategic platform.

The ten chapters of this book shed light on the debate on these negotiations. Focusing on political as well as technical issues, these chapters

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encompass a broad range of themes critical to the implementation of the FTAA. At this point, it is clear that before an FTAA comes to fruition, the key countries will have to reach a consensus on these thorny issues. Notwithstanding, one thing is already evident: for good or for ill, the U.S. negotiators have learned that there is no way to ignore Mercosur and they must cope with it. At this point, there is general agreement that the previously scheduled January 2005 deadline for the FTAA will not be met. It is also clear that if any prospects for a free trade area in the Americas still exist, they hinge on the ability of the Mercosur countries and the United States to resolve their differences and converge.

This book would not have been possible without the dogged persistence of Fernando González Guyer, General Coordinator of the Red-Mercosur. He brought me the idea of this collaboration two years ago and made sure that we carried out his plan. In preparation of the manuscript we want to thank Alexander Parlini for pulling it all together, Leah Florence for copy-editing, and Michelle Furman for her excellent design work.

Joseph S. Tulchin



Luis Bitencourt



NOTES

1. Indeed, the United States adopted a strategy seemingly designed to outflank the resistance of Mercosur countries, particularly Brazil and Argentina: the launching of several bilateral free trade agreements with other countries in the region. The most important was the U.S.–Chile accord, which came into force on 1 January 2004. The United States also announced that it was concluding free trade agreements with four Central American nations (CAFTA—Central America Free Trade Area), as well as with Costa Rica, the Dominican Republic, and Panama. Finally, negotiations are on course for bilateral trade agreements with four Andean countries, starting with Peru and Colombia.

PREFACE

FERNANDO GONZÁLEZ GUYER
General Coordinator, Red-MERCOSUR

From February 2002 until June 2003, a group of researchers at the MERCOSUR Economic Research Network (Red-Mecosur) worked together to analyze the most sensitive aspects of the negotiations on the Free Trade Area of the Americas (FTAA), seen from the perspective of the South. This team, with financial support from the Tinker Foundation, included scholars from Argentina, Brazil, Paraguay and Uruguay.

The general objective of this project was to contribute to an evaluation of the economic impact on the MERCOSUR countries of the possible creation of the FTAA. Even though each country is well aware of the most controversial issues at stake, it seemed appropriate to make a preliminary assessment of the costs and benefits of the most plausible outcomes independent of the political factors that play such a crucial role in the negotiation process.

The specific goals of the project were to evaluate the trade creation and trade diversion effects that will likely result if the MERCOSUR countries join the FTAA; to identify the sectors that will presumably raise the strongest objections when faced with trade liberalization; and to analyze the negotiation process from a political economy approach. The methodology used was based on standard economic theory as well as recent developments in trade theory and political economy. Statistical analysis of data, econometric techniques, and interviews with relevant agents in the negotiation process were used where appropriate. The research results were reviewed and evaluated by fellow scholars, policymakers, and civil society actors in a series of workshops that took place in Montevideo (ALADI, 1 August 2003), Asunción (CADEP, 7 August 2003), and Washington, DC (WWC, 26 February 2004). The final version of the project is presented in this book.

The fate of the FTAA may well depend on the outcome of the central factor in the entire process: the negotiations between the United States and the MERCOSUR. Now that the hemispheric negotiations have

entered a decisive phase, we hope that this contribution by Red-Mercosur will help to strengthen the position of the governments, facilitate the participation of regional civil society in this complex process, and contribute to the achievement of a balanced agreement that will be useful to and beneficial for all the countries involved.

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Exploring the Link Between Decentralization and Democratic Governance

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1. INTRODUCTION

Many studies that have tried to examine the process of the construction of the Free Trade Area of the Americas (FTAA) have been limited by the vast agenda of subjects, countries, and negotiating positions involved. The complexity of the process would seem to require the development of a new perspective. Recent events suggest that focusing on the most important bilateral relations involved is a suitable strategy to use both for the analysis and for the negotiation process itself.

Our central premise is that, considering the asymmetries in market size of the countries involved, the most important bilateral relation on the continent is that between Brazil and the United States. Brazil has formally committed its common trade policy to the MERCOSUR, and past and present Brazilian governments have manifested and put into practice a policy of strengthening the negotiating posture with third markets by having a single voice for the whole MERCOSUR. In this context, the bilateral relation between the United States and the MERCOSUR takes on even more importance.

The population of the United States is 1.3 times larger than that of the MERCOSUR countries and the per-capita product is around 8 times greater, which gives it an economic weight more than 10 times that of MERCOSUR. But clearly it is potentially the United States' most important trade partner on the continent (even more important than Mexico and Canada considered separately).

Although the United States has not ignored MERCOSUR as a valid voice in the FTAA negotiations, it has preferred to orient its efforts

toward the continental ambit. There has recently been an indication that bilateralism could become the new element in bringing dynamism to the negotiation process; see, for example, the recent FTA between Chile and the United States and also the acceleration of trade negotiations with the Central American and Caribbean countries in 2003.

The objective of the project that gives rise to the present book is to analyze the economic incentives, on the social and on the private level, of the different alternatives for trade liberalization. That is to say, information is processed to deeply understand the different negotiation scenarios, the bilateral as against the plurilateral alternative, considering aggregated as well as particular national interests in each country/region. The integration process involves many subjects (the harmonization of domestic policies on competition, environmental and labor standards, intellectual property, and so on) and sectors (now including services). Although many of these issues are mentioned and discussed, the focus here is on the changes in market access associated with the proposed liberalization of the trade opening for goods, the area in which MERCOSUR has its clearest interest.

This chapter is organized into two parts that tackle the issue from complementary perspectives. Section 2 deals with the negotiations, the trade patterns, and the global evaluation of the most interesting of the different possible alternatives. The overall organizing criterion has to do with effects on collective welfare, abstracting distributive impacts at the sectoral level, and other considerations that the countries may have in carrying the negotiations forward. These concerns are the focus of Chapters II through IV of this volume. Section 3 is an analysis of the political economy of the bilateral negotiations between the United States and MERCOSUR. Perspectives that are sectoral and also specifically national are developed, particularly with regard to the United States and Brazil, the two central actors in the trade negotiation process. These are the concerns dealt with in Chapters V through X of this book.

2. TRADE AND WELFARE

MERCOSUR and the Agenda of International Negotiations

Since its creation in 1991, the MERCOSUR has conceived of regional integration as the fastest way of advancing the process of economic

development with equity, in an international context characterized by consolidation into large economic blocs. The process of trade liberalization is a complex phenomenon that includes unilateral opening, multilateral negotiations, and plurilateral preferential agreements.

MERCOSUR's agenda over the next few years will include hemispheric negotiations on the Free Trade Area of the Americas (FTAA), potential separate negotiations with the United States in the "4+1" format (the United States plus the MERCOSUR countries), multilateral negotiations within the framework of the WTO, and ambitious negotiations with the European Union. In South America, MERCOSUR has incorporated Bolivia and Chile as "associated" countries, and has proposed negotiating a free trade area with the countries of the Andean Community of Nations (CAN).

The progress that the MERCOSUR countries made in their own integration process has been a positive contribution to the progress of their external negotiations, since the member countries demonstrated their ability to negotiate, and this increased their credibility. However, in the last few years, these countries have had internal problems that have led to delays in completing their customs union; this has damaged the bloc's credibility and affected its power to negotiate externally.

Although MERCOSUR'S external strategy is the result of compromise among diverse national interests, the bloc as a whole has been able to present a common front in the main negotiations on its agenda (WTO, FTAA, European Union). In particular, it is important to highlight the countries' common position on the question of agricultural protection in the developed countries. As far as the FTAA is concerned, the MERCOSUR countries agree on the importance of gaining access to the US market, and on the premise that the FTAA will be beneficial only if the United States effectively opens its market.

In Chapter II Lorenzo and Osimani analyze the different stages in the process of creating the FTAA. It is currently in the fourth phase, called the end of negotiations, which will run from November 2002 until January 2005, and in it the countries' offers are being negotiated so as to obtain final approval; the presentation of revised and corrected offers will take place on 15 July 2003.

Although the individual MERCOSUR countries have shown different degrees of enthusiasm for negotiations in the FTAA framework, their

participation in these talks is inevitable. Staying out is not a feasible strategy because other countries are participating in the negotiations. The MERCOSUR members are aware that the best solution is to work as a bloc, as this strengthens their negotiating power. However, the fact that the FTAA will erode the intraregional preferences that each country has inside the MERCOSUR area cannot be ignored.

For the bloc countries, resolutions on the points of the “old agenda” (market access, agricultural goods, antidumping trade rules, and so on) are of fundamental importance. The question of market access is crucial to them because many of their export products are subject to high tariffs in the markets of many of their potential partners in the FTAA. In fact, these products are even subject to nontariff barriers in the US market. MERCOSUR exports of textiles, clothing, and footwear are in an unfavorable position there compared to exports from Central America and the Caribbean, which enjoy preferences in the US market. In spite of the importance of this question, no substantial progress on it has been made in the FTAA negotiations.

The United States and the MERCOSUR have divergent positions on the subject of agricultural products. The United States maintains a policy of supporting its own agricultural production with direct subsidies to producers and for exports. In 2002, the US Senate approved a Farm Bill that meant a rise in those subsidies. This policy has been particularly prejudicial to MERCOSUR because the bloc has clear competitive advantages in these products. This obstacle worsens the outlook for negotiations in this area. It is true that the United States is disposed to discuss its agricultural policy, but only in a multilateral ambit like the WTO. It considers this subject relevant also to its relations with other developed countries, like those in the European Union and Japan.

The negotiations will probably be beneficial for the MERCOSUR countries if the discriminatory costs that affect them are eliminated. A comparison of access conditions to the US market shows that the MERCOSUR countries are less favored than those in the Latin American Integration Association (LAIA) with respect to trade preferences, and that they are the most affected by nontariff barriers. This discrimination has become a strong incentive to negotiate within the FTAA framework. Another major pending negotiation is about rules of origin. In the creation of a free trade area, it is essential to reach a con-

sensus on this issue, which involves the consent of various actors that have divergent interests.

The negotiation of a “4+1” type of agreement between the MERCOSUR and the United States means similar benefits when it comes to market access, so this kind of negotiation is also on the bloc’s external agenda. For this reason, every countries in the bloc, including Brazil, has considered a bilateral agreement with the United States. However, as in the case of the hemispheric agreement, the MERCOSUR countries do not all share the same opinion as to the suitability of such an agreement. In 2001 and 2002 the countries showed considerable interest in establishing better relations with the United States, and this strategy of initiating negotiations in a more reduced sphere confirms the importance of the relationship between MERCOSUR and the United States. The depth and direction of negotiations in this format will be key elements in understanding whether this alternative will be complementary to and compatible with the FTAA process.

Characteristics of the Trade Pattern

In Chapter III Osimani describes the pattern of bilateral trade between MERCOSUR and the other countries on the continent. In the first ten years of MERCOSUR’s existence, there was an important increase in intraregional trade as well as in trade with third countries. Although imports and exports both grew considerably, imports increased more in terms of current dollars. To a large extent, the expansion in the 1990s was related to the fact that the MERCOSUR countries opened their trade to the rest of the world. Another factor, as far as imports are concerned, was the effect of stabilization programs based on the exchange rate used as the nominal anchor.

In the 1980s, total exports grew at a cumulative annual rate of 4.4%, but exports to the MERCOSUR countries grew at a lower rate than those to third countries (the European Union, the United States, and Canada). In the 1990s, exports grew at a cumulative annual rate of 5.6%, but this time they increased among the MERCOSUR countries and in trade with Chile, Bolivia, and the rest of the Americas (excluding the United States). At the same time, the rate of growth of exports to countries of the European Union and to the United States fell.

The growth rates of imports also differ before and after the creation of MERCOSUR. In the 1980s, growth rates were lower because the

economies were less open and there were external restrictions. These characteristics changed after MERCOSUR; an improvement in the currency exchange rate and a reduction in tariffs for third countries led to a considerable increase in imports, which grew at a cumulative annual rate of 10% in the 1990s.

The greater share of intra-MERCOSUR exports is in manufactured goods with economies of scale and those based on natural resources. Manufactured goods have also had more weight in exports to other countries involved in the FTAA process, where exports are more diversified and there are also better possibilities of intraindustrial trade. On the other hand, exports to the European Union have followed the more traditional pattern of a high proportion of primary goods.

Manufactured goods account for most of MERCOSUR imports (90% in 1997), especially goods with a high technological content and associated diffusion of technical progress. In second place come goods with economies of scale. Primary goods have a larger share in intrabloc imports. In imports from the FTAA, manufactured products have the greatest share; goods connected with the diffusion of technical progress make up 48% of the total, and goods with economies of scale and those based on natural resources account for 25%. Imports from the European Union also have a high content of manufactured goods, with the largest single category of goods with a high technological content. Primary goods have great weight in imports from the rest of the world due to the purchase of energy products.

To analyze the trade between MERCOSUR and the rest of the FTAA countries, the trade intensity index is used. The import intensity index measures the share of imports from the FTAA in total MERCOSUR imports, in relation to exports from the FTAA (net of MERCOSUR) in total world exports. The evolution of this indicator shows that, during the second half of the 1990s, the potential partners in the FTAA sold 1.5 times more to MERCOSUR than they exported to the rest of the world. However, it has to be borne in mind that this intensity shows differences between the various countries considered; it is higher for the CAN countries (especially Chile) and the United States, and lower for Canada and Mexico. The analysis of MERCOSUR imports compared to exports from its potential partners in the FTAA suggests that an agreement that would facilitate access to the MERCO-

SUR for the FTAA countries, in particular those belonging to NAFTA, would be beneficial.

The export intensity index is defined as the share of MERCOSUR exports to the rest of the FTAA countries in relation to the weight of imports from these countries in the world total. This index shows that the share of exports from MERCOSUR to the FTAA is greater than 1 but never exceeds 1.3. Again, the greatest intensity is found for Chile and the CAN countries, while Canada and Mexico have the lowest intensity. The analysis of the data on import intensities suggests that an agreement that facilitates the entry of MERCOSUR exports into new markets, especially those of the NAFTA countries, would be beneficial.

Another important factor used in evaluating the ex-ante impact of the formation of the FTAA is the degree of trade complementarity among the members. This can be analyzed through the so-called complementarity index, which is the result of the differences in trade specialization of two countries. When the composition of one country's exports is specialized in a way similar to the structure of the other country's imports, the bilateral trade between those two countries will be more intense. This is the complementarity effect precisely. Trade intensity is also the result of differences in transaction costs between the partners. Therefore, the intensity index can be expressed as the product between the complementarity index and an index of nonexplained biases.

The pattern of exports to the United States from all the FTAA countries that are members of the LAIA is characterized by a high rating on the complementarity index, but the pattern by subregion is more differentiated. Although Mexico is very connected with the United States as far as exports are concerned, the countries of the Andean Community of Nations (CAN) are less connected, and there is nearly no bias for Chile and the countries of the MERCOSUR. This means that the United States weighs the same in exports from the MERCOSUR and Chile as it does in world trade. The changes that occurred between the 1980s and the 1990s reinforced the structural pattern of the exports from the countries in the region. Mexico moved closer to the United States, the CAN countries did, too, but to a lesser extent, while the MERCOSUR countries and Chile became more distanced. In the 1990s, geography was reinforced by trade agreements; these are tighter and more discriminatory the closer together the countries are geographically.

For MERCOSUR exports to its potential FTAA partners in 1997, the complementarity index and the intensity index were both close to 1. This means that there were no biases related to transaction costs in bilateral trade. When exports to Chile and to the CAN are considered, the greater intensity of the index is explained both by greater complementarity and by lower transaction costs. As for exports from the United States, the intensity index was greater than 1, and when the FTAA (excluding the United States) is considered, the index was 3.65 in 1997. This means that the participation of exports from the United States to the other FTAA countries was nearly four times greater than the participation of these countries in world imports (excluding the United States).

Impact of the Agreements and Alternative Strategies with Respect to the Agreements

According to the simplest models the effects on welfare of the formation of a free trade area (FTA) are the result of the balance between trade creation and trade diversion. The terms-of-trade effect must also be taken into account. When there are preferential agreements that were in force between countries prior to the FTA, evaluation is more complex because the new agreements can have a positive effect in reducing the costs of trade diversion related to the old agreements, as well as a negative effect in reducing the benefits associated with preferential access.

In this context, two extreme cases can be considered. On the one hand, is a case that can be called an FTA with *reduced protection*; this is when a big partner improves its access to the market of an importing partner, and can satisfy all the demand for imports at the price prevailing in that market. In this case, the net effect of the creation of an FTA is clearly positive for the area as a whole and for the rest of the world. On the other hand, there is the case in which the formation of an FTA means an increase in protection, that is, *enhanced protection*. This occurs when the exporting country is small and the importer is big, so the former's production is not enough to satisfy the latter's demand for imports at the price prevailing in the exporting country. The formation of the FTA allows the small country to reorient production toward the big country at the higher price prevailing in it. In this case, the net effect of the FTA is negative: part of what the importer country loses by trade diversion is compensated for by what the exporter gains from the

increase in tariff income and the producers' surplus, but there is a net loss because the FTA reduces imports (at a lower price) from the rest of the world. There is a reallocation of inefficient resources for the FTA, since it discriminates against the rest of the world.

What happens is that the formation of an FTA erodes the prevailing advantages that stem from preferential agreements with other partners. In the case of an FTA with reduced protection, exporters who previously benefited from preferential access lose access to the market, and the costs of trade diversion go down. In the case of an FTA with enhanced protection, the importing country would increase trade diversion while the welfare of the countries which exported under protection would not change.

The simulations carried out in Chapter IV by Laens and Terra allows these arguments to be brought into the discussion of the effects on MERCOSUR of the formation of the FTAA. Simulating a discriminatory unilateral opening on the part of each country of the bloc vis-à-vis the rest of the FTAA, the effects of the creation and diversion of trade on the country which opens, and the effects of the erosion of preferences on the other members of MERCOSUR, can be estimated, added to the income effect derived from the increase in efficiency. The changes in the other members of the FTAA measure the "market access" effect. Access to the market for each member can be measured by simulating a simultaneous opening by all the members of the FTAA while MERCOSUR does not follow suit.

Among the countries that are negotiating the FTAA there is a complex network of bilateral or subregional agreements, including agreements within the framework of the LAIA, the NAFTA, the Central American Common Market (CACM), and the Caribbean Community (CARICOM). Similarly, Canada and the United States concede nonreciprocal preferences to most of the countries in the region in the framework of the Generalized Preference System (GPS). In addition to this, the United States concedes preferential treatment to certain countries, as in the Caribbean Basin Initiative (CBI) and the Andean Trade Preference Act (ATPA). Consequently, the tariffs that are in fact applied to trade in the hemisphere are considerably lower than the Most Favored Nation (MFN) tariffs, which are normally taken as the starting point in FTAA simulations.

It is predictable that, when prior preferential agreements are taken into consideration, the gains from the creation of the FTAA are significantly less, except for the United States and the other NAFTA countries.

Likewise, the losses for the countries that do not participate are lower. The countries that enjoy preferential agreements on access to the large markets in the region are harmed by increasing competition; for Uruguay and Chile the net effect on welfare becomes negative, and the gains of the countries that make up “the rest of the Americas” are seriously eroded. The opposite occurs for the United States; its welfare increases because it benefits from improved access to other regional markets without ceding any significant advantages as regards access to its own market because it has already awarded preferences to its trade partners.

The debate about MERCOSUR’s trade insertion ranges from the FTAA, the possibility of creating a South American Free Trade Area (SAFTA) with the formation of a free trade area with the CAN, and the negotiation of agreements with the United States under the “4+1” format. Even though its impact would be small, the FTAA would seem to be the most suitable option for MERCOSUR. According to the simulations, the gain with the FTAA would be 0.26% of total consumption, compared to 0.18% for the SAFTA, and 0.19% for the sum of all the other options. However, these figures include the effects of agreements that have been fully negotiated and whose schedules for trade liberalization are already under way (although the full agreements had not been implemented by 1997). This is the situation of the full completion of MERCOSUR and of total liberalization in the CAN, and the effects of these should be deducted.

An agreement with the United States would have a positive effect for MERCOSUR, but the potential gains would be only slightly greater than those that would flow from a MERCOSUR–CAN agreement. Brazil would be the main winner, there would be a negative impact on Argentina, and Uruguay would hardly be affected at all. The effects of a SAFTA (equivalent to an FTA between MERCOSUR and the CAN) on MERCOSUR’s welfare would be clearly positive. For Argentina and Uruguay, this option would be better than a “4+1” agreement with the United States, while for Brazil the welfare effects would be much better with the “4+1” agreement. These results contradict the positions that the countries of the bloc have taken up in the negotiations, and they seem to suggest that besides trade there are other interests in play that are of an economic or political nature. However, it should be borne in mind that this is only a static analysis, and the possibility of significant dynamic effects cannot be discounted.

The MERCOSUR countries have placed a lot of emphasis on defending the liberalization of agricultural trade, and this has brought them into conflict with the United States, which is refusing to negotiate this question within the framework of the FTAA. A comparison of the welfare effects of a total FTA with an FTA that excludes the agricultural sector shows that all three options (the FTAA, the MERCOSUR-CAN agreement, and the MERCOSUR-United States agreement) are positive for MERCOSUR, but it gains much less if the agricultural sector is excluded. Although this is still true for Argentina and Brazil taken individually, surprisingly it is not for Uruguay. This is because Uruguay's preferences in the Brazilian market, one of the main destinations of Uruguayan exports of meat and other agricultural products would be eroded.

Chapter IV allows some conclusions to be drawn with regard to the impact the FTAA could have on the MERCOSUR countries. First, the results of the simulations indicate that the effects of the FTAA on welfare in the MERCOSUR countries are small, and that they have been overestimated in previous studies because they did not take into account existing preferential agreements. Second, the results show that the difference between trade creation and trade diversion is negligible for Argentina and Uruguay, and very small for Brazil, while the "market access" effect assumes greater importance. The erosion of the preferences that Argentina and Uruguay enjoy in the Brazilian market has a strong negative impact.

Third, it can be proved that the consequences of an FTAA have been overestimated (even when the preferences prevailing in 1997 are taken into consideration) because of liberalization schedules that have been negotiated in other subregional agreements that are not attributable to the FTAA. This means that the most important negotiations for the MERCOSUR are those with the United States and the CAN. These results seem to stand in contradiction to the stances that the MERCOSUR countries have adopted in the FTA negotiations (except for Brazil, which has promoted an FTA in South America and seems less enthusiastic about the FTAA negotiations).

Last, the exclusion of the agricultural sector from the FTAA negotiations reduces the potential gains that Argentina and Brazil would enjoy from this agreement. This is not the case for Uruguay because of the importance of its preferential access to Brazilian agricultural markets. However, it ought to be borne in mind that the simulations

here focus exclusively on tariff reduction, and ignore the question of agricultural subsidies.

3. THE POLITICAL ECONOMY OF THE NEGOTIATIONS

Winners and Losers in a Bilateral United States-MERCOSUR Agreement

In Chapter V Vaillant and Ons focus on the characteristics of the political economy of an FTA of this kind. With this objective, they develop a methodology that allows them to study the welfare effects of a bilateral agreement by identifying the sectors that would encounter the most problems and those that would be most favored by a trade agreement. A general typology of the changes under different protection regimes in an eventual free trade area between the United States and MERCOSUR is developed (enhanced protection versus reduced protection and trade diversion versus trade creation). This methodology utilizes data on trade and production, and it allows the typology of goods in each of these categories to be determined empirically. The work is carried out at a high level of disaggregation so as to be able to identify the reciprocal sensitive sectors. The results constitute an objective base for analyzing the lists of exceptions that the trade agreement would entail.

They construct two lists of products (Harmonized System to 6 digits), one expansive and the other defensive, for each of the participants in the FTA agreement. The expansive list includes the trade opportunities (increase in production caused by the expansion of exports), and the defensive list includes the trade perils (contraction in production due to the expansion of imports) that could result from trade liberalization. Governments will try to include in the agreement those products that constitute opportunities and exclude those that are identified as perils.

The authors propose a mercantilist perspective, like the one that is currently being put into practice in trade negotiations. This standpoint supposes that exports are good and imports are bad, although it is well known that, in terms of welfare, the exact opposite is true. But the idea is to identify, and so rationalize in terms of the traditional economic effects of economic integration, the mercantilist focus. The theoretical reference is the model of the political economy of trade policy

(Grossman and Helpman 1994 and 1995, cited by Vaillant and Ons in this volume) applied to the political economy of free trade agreements. From the point of view of the viability of the agreement, the interests to identify are those of producers, who may be against the agreement, defending their domestic market, or in favor of the agreement, seeking to export more to the new trade partner.

In the example, two countries/regions, A and B, that are negotiating an agreement are considered. It is supposed that the area in question is small relative to the rest of the world, so international prices are given. Without loss of generality, a certain product i is considered for which A is the more inefficient producer. That is to say, A is an importer, while B is a less inefficient importer or a producer that is as efficient as the rest of the world (it could be an exporter). The effect of including this product in the trade liberalization agreement depends on the extent of the offer from B in relation to the demand for imports in A. The differences between the prices in each country reflect the differences in efficiency.

There are asymmetries in size between the economies that would be integrated, and it is of particular interest to consider these for an FTA between MERCOSUR and the United States. They have been explicitly introduced into the analysis through the identification of three protection regimes: enhanced protection, reduced protection, and the intermediate case.

Enhanced protection represents the situation when, at the domestic prices prevailing in A before the agreement, the offer from B is not sufficient to satisfy demand. Reduced protection occurs when, at the lower prices which prevail in B, the offer in this market is greater than the demand for imports in country A. Last, the intermediate case occurs when the offer in B is greater than imports into A, at the higher price which prevails in A before the agreement is made, and less at the low price in country B.

Under each protection regime, the economic effects on the interests of producers (which are those that have to be considered when applying a political economy focus) in each country are quite different. Under enhanced protection, the producers in country A will not be affected because the domestic price does not change, so their level of protection remains unchanged. On the other hand, the producers in B are positively affected because now they can export to their trade partner at the higher protected price in the other market. That is to say, an expansion

in production is expected, led by an expansion in B's exports. Consumers in A will be worse off due to the trade diversion effect, and consumers in B may be better off if domestic production is substituted by more efficient production from the rest of the world. The FTA as a whole is worse off. However, these products are good candidates to be included in the agreement by virtue of the fact that they have a favorable political economy; there is no lobby against in country A, and there is a lobby in favor in country B.

Under reduced protection, it is the producers in country A who are negatively affected. Country A stops importing from the rest of the world and starts importing everything from the local area, therefore the price in country A falls to the level of prices in B. Producers in country A are negatively affected. With the free trade area they enjoy less protection than they had in the initial situation, and in this sense the agreement does liberalize trade. Consequently, producers in country A will have to reduce production because of an increase in imports from country B. At the same time, the producers in B will not be affected; they are going to trade at the same price after the free trade area is set up as before. Last, the FTA as a whole will be better off as a consequence of trade creation effects (consumers in A may be better off, and consumers in B will be better off if this country is inefficient). This product is a good candidate to be excluded from the agreement insofar as the producers in A are against it, and the producers in B are not applying pressure to be included.

With the creation of a free trade area, governments have to effect a balance between those who find their access to the new partner's market improved (opportunities) and those who lose protection in the domestic market (perils). The methodology used to select these involves three steps: identify products with trade complementarity, identify those that will undergo a significant change in trade preference (sensitive products), and differentiate the protection regimes, and thus the opportunities and the perils, in each country.

In the case of Argentina, the industries in the group with high trade complementarity account for approximately a quarter of exports; around 80% are in the agricultural and fuel sectors. For Brazil, this group makes up about half of the exportable offer, and various manufacturing sectors predominate in it. Only 10% of Paraguay's exports are in this category, and these are mainly agricultural. A quarter of Uruguay's exports have

high trade complementarity with the United States, and they are very concentrated in the agricultural sector. Last, the products with high trade complementarity that are exported from the United States to MERCOSUR constitute about half its exports to the bloc, and manufactured goods dominate completely, with around 90% of the total.

When a comparison is made of the total exportable offer of each country, the group of goods with trade complementarity, the group of sensitive products, and the different protection regimes, we find very differentiated levels of access to other markets. In fact, although the overall tariffs that the total exports of each MERCOSUR country face in the United States are lower than those applied to US exports to the MERCOSUR, this relation is drastically inverted when the group of sensitive products is considered. For these products, it emerges that the United States should make much greater tariff concessions, and this is particularly so between Brazil and the United States.

In light of the asymmetry in market size between the two economies, MERCOSUR and the United States, the original conjecture of this study was that exports from the United States would enter MERCOSUR under a reduced protection regime (production in the United States is greater than MERCOSUR's demand for imports at the new prices prevailing in the FTA), but MERCOSUR exports would enter the United States under an enhanced protection regime (imports from the United States are greater than the domestic offer in the MERCOSUR countries).

The central characteristics of the political economy of the agreement based on the above conjecture can be summed up as follows:

- Exporting industries in MERCOSUR will be in favor of the agreement (opportunities) and producers in the United States will be indifferent.
- Import substitution industries in MERCOSUR where the United States is the exporter will be against the FTA (perils for MERCOSUR) and producers in the United States will be indifferent because they will continue to sell at the same price.
- Consumers in the MERCOSUR countries will gain as a consequence of the trade liberalization, and consumers in the United

States will lose as a result of the trade diversion effect associated with an increase in the price of MERCOSUR exports, which means a loss in tariff income that is transferred to the smaller economy.

A first conclusion of the study is that, in the case of US exports to MERCOSUR, the conjecture was confirmed for all products. However, the majority of sensitive exportable products from MERCOSUR to the United States are classified as in a reduced protection regime, and therefore those products constitute perils for the United States. Consequently, it is logical to expect opposition to the agreement from the corresponding group of producers in the United States. On the whole, a possible FTA agreement would be liberalizing in both senses; this does not mean that trade diversion costs would not be incurred in certain exports of manufactures from MERCOSUR to the United States (which would enjoy more protection in the bigger market) or in sectors that would eventually take advantage of the reduction in trade barriers in the other market.

The political economy of an eventual agreement can be summed up as follows:

- Agricultural products in the United States would face a peril if an FTA were formed with MERCOSUR, while agricultural producers in MERCOSUR could have an opportunity, as long as the lowering of barriers in these markets had a big country effect and led to an increase in international prices caused by liberalization and the consequent expansion of demand. The agricultural products that stand out in this situation are frozen concentrated orange juice, sugar, tobacco, and bovine meat.
- There are no evident opportunities for US producers in MERCOSUR because the regional market is small. US producers enter under conditions of reduced protection, and international prices are not expected to be significantly affected by the agreement. On the other hand, MERCOSUR producers in the manufacturing sectors are faced with a clear peril in their domestic markets and in their regional exports. The main manufacturing sectors and products in this situation are machinery and capital goods, as well as some sectors in the automobile industry (engines for vehicles).

- MERCOSUR opportunities, that is to say products that would benefit from protection in the US market, are mainly concentrated in light manufacturing industries, footwear, and clothing.

To sum up, MERCOSUR producers in agricultural sectors in which the region has considerable comparative advantages and in some light manufacturing subsectors would have greater opportunities and would be in favor of the agreement, but there would be resistance from producers in machinery industries, capital goods, and transport materials. In the United States, there would be clear opposition from certain agricultural subsectors.

In general it is expected that consumers on both sides would benefit from an FTA agreement without restrictions because this would liberalize trade to a considerable extent, and a net gain in welfare on both sides can be expected. However, this is not a determinate factor from the perspective of the political economy of the agreement.

Manufacturing, Agriculture, and Services: Sectors of Interest

An in-depth analysis of various sectors that illustrate different combinations of interests is the focus of Chapters VI and VII. Two types of sectors are chosen for goods, one with regional defensive interests, and the other with offensive exporting interests in the US market. For each sector, and in each region/country, production, domestic demand, trade flows, foreign direct investment, and sectoral employment are studied. Trade specialization indicators are prepared, and trade policy (tariff and nontariff) in the United States and in MERCOSUR is examined. The impact of liberalization (prices, domestic production, consumption, and trade) is analyzed using a partial equilibrium model, and gains and losses of consumers and producers in each case are evaluated.

Lopez and Rossi in Chapter VI identify an industry in which MERCOSUR would have a defensive interest (the region was protected), in which there is intraregional trade, and in which the United States would at the same time have comparative advantages for its exports. With these criteria, the case of the petrochemical industry was selected. This is a sector of the importer-exporter type (intraindustrial specialization and intraregional trade) for MERCOSUR, particularly for Argentina and/or

Brazil. The United States has both an exporting and an importing interest that have to do with the increasing globalization of this sector.

The study of the petrochemical industry has two objectives: to evaluate the potential trade effects of MERCOSUR–NAFTA integration in the petrochemical industry (PCI); and to quantify the welfare effects through a computable partial equilibrium model. The PCI is heavily capital intensive and there are considerable economies of scale, with high intrafirm vertical integration; there is also considerable horizontal integration. Investment is characterized by strong indivisibilities and long gestation periods. Costs and the possibility of access to raw materials (oil, gas) are key factors. The general structure of the market is of the competitive oligopoly type.

The PCI is important in all the NAFTA countries. Raw materials are abundant and cheap, and the United States is the world's largest market in this industry. The plants on the largest scale and with the most modern technology are in Canada and the United States. Protection is low, and in the 1990s there was an increase in the level of intraindustrial trade. In that same period, Mexico's production was stagnant and there was a great increase in imports.

In MERCOSUR, the petrochemical industry is concentrated in Argentina and Brazil. There has been a major change in the organization of this sector. Until the 1980s, it developed with active state participation and a high level of external protection. However, in the last decade, the industry has opened up considerably (although even today MERCOSUR tariffs are somewhat higher than those prevailing in NAFTA), with privatizations, deregulation of the market, and the elimination of subsidies. Argentina has major advantages in availability of raw materials (abundant and cheap natural gas). One of the consequences for MERCOSUR in the PCI has been the growth of intraregional trade, particularly bilateral trade between Argentina and Brazil.

Most petrochemical plants, both in the MERCOSUR countries and in NAFTA, have a scale of production that is greater than or equal to the efficient minimum in the context of the current state of technology in this sector. However, the United States has larger plants; they are up to 7 times larger than Brazil's and 20 times larger than Argentina's. In general, the plants in Brazil are somewhat smaller than those in Canada, and Argentina has plants on a scale similar to those in Mexico.

The effects of the creation of a free trade area in this industry were simulated. The results show that there would be relatively small efficiency gains: for Argentina between 0.14% and 0.37% (with respect to the size of the market) and between 0.04% and 0.12% for Brazil. The estimated reduction in production and local prices in the MERCOSUR countries is also small (less than 5% in most cases). There would be a considerable increase in imports from NAFTA (in some cases more than 100%) that would probably displace intraregional imports. Based on prices and quantities for the year 2000, it was estimated that NAFTA exports to MERCOSUR would increase by \$85 million, in contrast to a \$2 million increase in exports from MERCOSUR to NAFTA.

Efficiency gains would be small, probably because the current degree of openness is relatively high. Redistributive effects from local producers to local consumers predominate. The NAFTA countries have competitive advantages over the MERCOSUR countries (scale, market size, technology, etc.) and it was estimated that a large increase in the import specialization of the MERCOSUR countries would be generated in this sector. Last, it was shown that it is very important to study dynamic effects in the petrochemical sector, particularly the effects on the destination of new investment and the central role of the entrepreneurial strategies of multinational companies.

In Chapter VII Fracalanza, Nunes Ferreira, and Fava Neves analyze an industry in which MERCOSUR has advantages and the United States is a net importer that protects import substitution producers. For this, the case of frozen concentrated orange juice (FCOJ) was selected. This is an agroindustrial sector in which MERCOSUR production is greater than the import demand of the trade partner. The United States, the importing market, is big in the international economy. It follows that a reduction in impediments to trade would mean an expansion in demand and a rise in the international price. These exports enter the United States under a regime of reduced protection and it is expected that improvement in market access conditions would benefit the exporters because of a better price.

The aim of this study is to examine the allocation of resources and the welfare consequences of reduced trade barriers in the US market for FCOJ imported from MERCOSUR (Brazil). The same methodology is used as for the manufacturing sector mentioned above (a partial equilibrium model with two markets, the domestic product and the imported

substitute). Two cases are analyzed, first, without effects on international prices (the small country case), and second, with effects on international prices (the large country case).

Brazil has an outstanding position in international trade in FCOJ; it accounts for more than 80% of world exports. The main destination of these exports is the European Union, which takes more than two-thirds of Brazil's total exports, after which are the NAFTA countries (especially the United States), which receive somewhat more than one-fifth of the total. In the European Union, the tariff applied to FCOJ imports is 35%; in the United States there are specific taxes that are equivalent to an *ad valorem* tax of 56.7%.

The analysis suggests that there is very strong resistance in the United States to trade liberalization for FCOJ. The most realistic case for this market is that of a large country, and it has been found that, within certain parameters, tariff reduction would lead to welfare losses in the US economy due to an increase in international prices. On the other hand, the MERCOSUR exporters (Brazilians) with the best access conditions would enjoy higher prices and would export more. As a consequence, it would be expected that strong resistance would be encountered in the North American market. As is normal in these situations, and anticipating this resistance, Brazilian producers have invested in the North American market, creating orange juice processing capacity in order to become buyers (importers) of FCOJ.

The study carried out by Berlinski in Chapter VIII focuses on services. This sector was chosen because liberalization here is clearly in the interests of the United States, while the MERCOSUR countries tend to maintain a defensive position in negotiating in these sectors. Trade in services is one of the new and important subjects in international negotiations. The same emphasis would apply to domestic deregulation, which is necessary for opening up new opportunities for trade and investment. In these sectors, restrictions on exchange center on asymmetries in domestic regulations.

Basically, trade in services is not restricted by tariffs, which makes the task of liberalizing this area more difficult. The complexity involved in identifying and quantifying trade in services requires the introduction of rules. The analysis of the rules on national treatment (NT) and most favored nation (MFN) help to identify restrictions and determine reciprocal relations. The only way to evade the MFN clause is the Annex on Exemptions, and the Council for Trade in Services examines the persist-

ence of the motives for maintaining these exceptions. The General Agreement on Trade in Services (GATS) introduces the concept of market access (MA), thus access to the market and national treatment are specific commitments applied to the members' positive list, subject to the appropriate qualifications and conditions.

In this study, a comparison is made between multilateral concession in the GATS of the MERCOSUR countries and the NAFTA countries (particularly the United States). In each case there is a comparison with the starting point, corresponding to what was negotiated in the Uruguay Round both in MA and NT, and later, when the additional effect of Protocols 4 (telecommunications), 2, and 5 (financial services and insurance) were introduced. The overall orientation of the negotiation in services in the framework of the FTAA is also reviewed.

The GATS includes four modes of offer among members: from the territory of one to the territory of another (cross-border supply); in the territory of one to a consumer in another (consumption abroad); the commercial presence of a provider in the territory of another member (commercial presence); and the physical presence of persons from one member in the territory of another (presence of natural persons).

The FTAA agreement is of the so-called second generation type, since apart from the subjects of trade it includes domestic regulations, rules of recognition of evaluation procedures, and conformity with sanitary and phytosanitary rules. There are marked asymmetries among the MERCOSUR countries, and this makes it difficult for them to negotiate as a bloc with third parties without first going through a process of regional harmonization. However, following Brazil's lead, they are tending toward greater liberalization of the commercial presence mode in relation to the cross-border supply of trade in services. The United States has the opposite emphasis.

Since the regulations that are being debated involve domestic aspects, it can happen that, in federal states, national regulations negotiated with other countries may contradict regulations established by local governments. This problem makes it necessary to complement the negotiating process with an institutional juridical analysis that would accompany the process of liberalization in this services sector.

An important question is the maintenance of preferences that were conceded previously. Depending on the orientation of the negotiations, individual countries or groups of countries could welcome the forma-

tion of blocs with common commitments and interests. Commitments in the FTAA could coexist with other commitments that involve deeper integration. Besides this, the difference in income levels in the economies involved has to be considered. This could mean taking into account differences in the negotiations with respect to the sizes of the economies, or the possibility of nonreciprocity in agreements with countries that have high income levels.

The Vision of the Main Actors: The United States and Brazil

In order to determine whether greater trade liberalization in the hemisphere is viable, it is necessary to characterize the positions of the main actors in this process—the United States and Brazil. The central elements of the new context in which the countries are positioning themselves are the increasingly strong link between security and trade (especially since 11 September), the economic recession in the United States, the increase in protectionism in the United States, the economic crises in the MERCOSUR countries, and the slowing down of the economic reform processes in Latin America.

In Chapter IX, Masi and Wise analyze the posture of and describe the main objectives that the United States is pursuing in the FTAA compared to its strategies and objectives in the context of NAFTA. The authors are particularly interested in determining why MERCOSUR is important for the United States in the context of the creation of a hemispheric free trade area. A group of related questions are answered in this study: Is MERCOSUR, in its format as a customs union, compatible with the trade interests of the United States in the region? Why is the Brazil-United States axis important for negotiating perspectives in the FTAA? What place do relations with Argentina and the smaller MERCOSUR countries have in the situation? What are the main points of convergence and divergence between MERCOSUR and the United States in the context of the creation of a hemispheric free trade area? In particular, the positions of the governments at the negotiation table are examined. This includes a study of the stance of the United States on the different subjects under negotiation vis-à-vis the posture of Brazil and the rest of the MERCOSUR countries.

The authors maintain that there are at least three ways to locate and justify the United States' strategy in the FTAA. First there is the idea that

more trade is the answer to the needs of the countries in the region for development, for help, and for cooperation. Second is the issue of increasing opportunities to expand trade and direct foreign investment in the countries in the region, thus reducing the discrimination that prevails under subregional agreements and weakening the intensity of those countries' economic and trade relations with the European Union (the new Monroe doctrine, and the idea of a new "manifest destiny"). Third, regionalism in the hemisphere is a response to the slow progress of multilateral negotiations in the WTO. At the same time, it is understood that North America's international interests are best defined in relation to Japan and the European Union based on the framework of hemispheric integration, which is the only regionalism that would allow the economies of the region to join in the process of international economic globalization.

The benefits for the United States of the FTAA in general, and with MERCOSUR in particular, are an increase in trade, fostered by tariff reduction for competitive goods (capital and high technology goods); the opening of markets for services and government procurement issues; and a greater regional commitment on subjects that are a priority for the United States, such as the defense of intellectual property rights.

The costs for the United States, and the conflictive situations involved, occur both on the sectoral level and in general terms that cover all sectors. At the sectoral level it is clear that the United States has a group of productive activities that are much protected (particularly in some agricultural sectors and in traditional manufactures) that coincide with sectors in which the MERCOSUR countries have advantages. These sectors have put a brake on any rapid progress towards a reciprocal trade liberalization agreement.

As far as general matters are concerned, there is the traditional presence of groups that distrust this kind of trade agreement and warn of the dangers involved because they consider that such agreements erode environmental and labor rights. This position can be summed up as what has come to be called environmental dumping and social dumping. It is known that the developing countries in the region have less stringent and less committed institutional regulations than the industrialized countries on environmental and labor matters. To intensify trade with the region would mean importing goods that are "artificially cheaper" because neither environmental costs nor the adequate attention to labor rights are included. Therefore, this intensification of trade could erode domestic

dispositions in these areas, resulting in a kind of “back to the bottom” leveling process. Although this argument has merit, it necessarily involves a position that is strongly protectionist and against trade liberalization. These are powerful interest groups in the United States, and they must be taken into account when it comes to identifying the points of conflict.

Another posture in the negotiations is based on the conviction that the benefits are greater than the costs. The discussion about the Trade Policy Authority (TPA) in July 1992 showed that the coalition in favor of the FTAA is made up of a heterogeneous group of sectors (agricultural, electronics manufacturing, and high technology manufacturing) that see major opportunities for expanding trade and investment in the MERCOSUR region.

Masi and Wise consider that the future of the FTAA in 2005 basically depends on four points:

- an agreement between the United States and Brazil on trade liberalization strategy;
- the kind of support the United States will give to the economic recovery of Argentina and Brazil;
- the weight and the speed of the US bilateral and multilateral negotiations, and in particular how negotiations about agriculture progress in the WTO;
- what strategy, with respect to the MERCOSUR, do Argentina and Brazil want to pursue.

The study concludes with a description of three alternative scenarios: the construction of the FTAA on a foundation of bilateral agreements; expansion and deepening of MERCOSUR and FTAA only to include Central America and the Caribbean; and a complete union of North and South in the FTAA.

Finally, in Chapter X Mezquita Machado and Ferraz discuss the challenges and risks involved for Brazilian society in the creation of the FTAA, in the model currently defined in the negotiating process. They examine the role of the government, the level of commitment, and the

negotiating strategy in both the ambit of the FTAA and in a “4+1” type of agreement with the United States. They also examine some Brazilian productive sectors that are under threat (capital goods, petrochemicals, transportation equipment) in relation to others that have opportunities (paper and cellulose, steel, fruit juice, textiles).

Whether or not Brazil supports the FTAA depends to a large extent on far-reaching changes in the structure of protection in the United States. Major concessions ought to be made in areas like agricultural subsidies, legislation on and the implementation of antidumping practices, and the levels of protection for products that are defined as sensitive (Paiva Abreu, 2002, cited by Mezquita Machado and Ferraz in Chapter X). On the other hand, Brazil is wary about whether major and reciprocal tariff reduction would be the correct strategy for generating symmetrical conditions for constructing a level playing field in market access. This is because tariffs are so important in both countries for providing protection.

Skepticism about the negotiations generates fear that an FTAA could come into being without Brazil. This leads to a defensive strategy that is made up of a number of components: intensification of the subregional integration process; taking an active leadership role in MERCOSUR again after letting this weaken (in order that an agreement excluding Brazil would be equivalent to excluding MERCOSUR); and the search for extraregional agreements with other countries or regions that would also be ultimately threatened by the consolidation of the FTAA. This strategic motive explains Brazil’s interest in a relationship with Europe, but that is not the only case; Brazil has undertaken many initiatives that fit in with this defensive scenario, the most significant of which are new relationships with Russia, India, and South Africa.

With respect to the impact that the FTAA agreement would have, and based on a series of previous studies, the authors group the industries into four categories. The first are those industries that would have greater opportunities if an FTAA were established, namely coffee, fruit and citrus juice, leather and clothing, steel, and part of the textile sector. The second group is formed of sectors that would be seriously threatened by the North American countries in the domestic Brazilian market and in the region; it includes capital goods, the petrochemical industry, and processed plastics. The third group comprises industries with a combination of opportunities and perils: ceramics, wooden fur-

niture, and cosmetics. The fourth group includes industries with the dominant participation of multinational companies and in which intrafirm trade is of paramount importance, which is the case of the automobile industry, pharmaceuticals, telecommunications equipment, and consumer electronic appliances. Trends in trade flows in this group are very dependent on the strategies of multinational companies regarding the postintegration role of their Brazilian subsidiaries.

There is a general feeling that it is necessary to tread carefully in the FTAA negotiations because of the serious risk that major contractions could follow from a large-scale penetration of the Brazilian market by imports from the NAFTA countries, or of the displacement of Brazilian exports to the other countries in the region (MERCOSUR). The capital goods and petrochemical industries are two cases in point. It is feared that Brazil might become less important in the strategies of multinational companies, and that the domestic market would be supplied through NAFTA exports substituting the production of Brazilian subsidiaries, especially in pharmaceuticals, telecommunications equipment, and the automobile industry.

On the opportunities side, their study shows that an increase in exports from groups of sectors that have advantages depends on considerable concessions being made both in tariffs and in nontariff barriers, and, furthermore, that these preferences should not be extended to other competitive countries outside the continent. It is understood that the dispute in agribusiness could be resolved more satisfactorily in a multilateral sphere rather than in the specific ambit of the FTAA. As to the multinationals, there is a feeling in Brazil that this question can be resolved by negotiating with these companies on the role their Brazilian subsidiaries would have under the new FTAA rules. The potential gains from economies of scale that the FTAA would make possible are great, but it is believed that these will not be attainable in the short term.

4. CONCLUSION

In all the scenarios, the consolidation of MERCOSUR seems to be a necessary prerequisite to progress in the process of continental trade liberalization. The establishment of the FTAA is not seen as a substitute for the process of subregional integration. The road to follow, in a way that is

realistic from a political point of view, is to understand these two processes as complementary modes for bringing about the greater integration of the MERCOSUR economies into the international economy.

The simulations confirm the theory in that they show it is universal agreements between all countries and including all sectors, rather than agreements between particular countries and only certain sectors that make the greatest aggregate gains possible. However, paths to liberalization that are based on choosing less domestic adjustment and consequently a lower political cost among the groups that are negatively affected are not necessarily the best. The domination of criteria that are exclusively mercantilist and political leads to the worst agreements, in spite of the fact that, for certain countries in certain situations, these agreements may appear to be the most attractive under the circumstances. The particular balance between the costs of trade diversion, gains in trade, and the effect of improved access to another market produces a very idiosyncratic fabric of effects on sectors and countries. Orientation toward a universal agreement is a suitable goal, but the gravitational pull of the most important bilateralism on the continent, between the United States and the MERCOSUR, cannot be ignored. An in-depth understanding of the nature of this bilateralism has been one of the aims of this project.

Negotiations between MERCOSUR and the United States are clearly complex because, in mercantilist terms, there is much to be gained and much to be lost in them. The position of the United States is characterized by the demand for greater access in certain agricultural and manufacturing sectors (chemicals, electronics, high technology, capital goods), and liberalization in services and government purchases, and by the desire to limit the extent of negotiations on access to its own market in sensitive and protected goods (steel, paper and cellulose, softwood lumber, textiles, concentrated orange juice, sugar, tobacco). MERCOSUR's position, which is clearly represented by Brazil, is the exact opposite.

The two industrial studies, one in each group, give a result that is in accordance with the political economy vision, but the quantification involved permits greater precision in the definition of each case. For example, the study of the MERCOSUR PCI does not expect any large contraction in that industry, and furthermore it is understood that the consolidation of the regional process itself is more important than the construction of the FTAA. On the other hand, the liberalization of

FCOJ in the United States would have serious negative consequences for that sector. This is only one example, and certainly in other cases the seriousness of the adjustments would be inverted (capital goods and paper pulp, for example).

To sum up, the possibility of the liberalizing position gaining strength depends on the favored groups (exporters and entrepreneurs disposed to invest in the other market). The extent of their power to put pressure on their own government depends critically on the options for improving access to the other partner's market. In other words, the United States has the option of going forward with an active policy of obtaining liberalization in the MERCOSUR market in the sectors and areas it is interested in, and making large concessions in its own market in sectors in which MERCOSUR has a clear interest. This would strengthen the coalition of exporters who are in favor of an agreement with the MERCOSUR and promote the liberalization and opening of the United States' own market. It will be difficult for the United States to obtain improved access in the electronic manufactures, high technology, or capital goods markets if it is not disposed to making considerable concessions in the core of its protectionist structure in agriculture and traditional manufactures that would alter the equation in favor of the other partner. What is true for the bigger partner (the United States) is also true for MERCOSUR, and this underlines the fact that international negotiations ultimately center on domestic matters.

MERCOSUR and the FTAA Negotiation Process

FERNANDO LORENZO¹ AND ROSA OSIMANI²

1. INTRODUCTION

The purpose of this study is to describe and to put into perspective the negotiations of the MERCOSUR countries on the FTAA within the framework of their external agenda, which also includes separate negotiations with the United States. This perspective takes into account the background of the MERCOSUR countries, their strategies for insertion into the world economy, and the stances they have adopted on the main subjects under debate. All these elements are important in an analysis of the role of MERCOSUR in these processes, especially in view of the recent setbacks in its own integration process. The FTAA negotiations might enhance the unity of the bloc or they might dilute it; in fact, they could strain relations within the bloc and test the viability of a common strategy among the four member countries.

The third stage of the FTAA negotiations have been completed and some progress has been made despite deterioration in the economic situation and serious problems on the political and social fronts up to November 2002. During 2003 and 2004, negotiations will go through their last and critical stage. Simultaneously, MERCOSUR has to deal with separate negotiations with the United States under the “4+1” agreement, which has been a parallel development since 2001. In 2002, in a situation of severe macroeconomic instability in the region, this type of negotiation was another option on MERCOSUR’s external agenda. The result of these negotiations is crucial for the future of the region, as the potential members, particularly the United States, are major trade partners with the bloc.

2. MERCOSUR: MAIN FEATURES

The Creation of MERCOSUR

MERCOSUR, which was created in 1991, was part of a wave of a new type of regional trade agreement that emerged in the context of a growing tendency toward “opening up” and a feeling of dissatisfaction with the outcome of multilateral liberalization negotiations within the General Agreement on Trade and Tariffs (GATT, now the World Trade Organization—WTO). MERCOSUR has conceived of integration as the answer to speeding up the process of economic development with social justice, within an international framework characterized by the consolidation of large economic blocs. In the “whereas” clauses of the Treaty of Asunción, the MERCOSUR members set out this vision of the expected results from integration, and the same holds true for its insertion into the global economy.

This new “open regionalism” differs in the way that trade relations with the rest of the world are conceived and seeks to pave the way for structural reforms so as to achieve economies that are more market based, more competitive, and more democratic (Devlin and Estevadeordal 2000). Therefore, the liberalization processes become more complex since unilateral trade opening is carried out together with multilateral negotiations and plurilateral preferential agreements, both interregionally and bilaterally (CEPAL 2001). The various simultaneous negotiations that the MERCOSUR countries face are an example of this complexity.

The Negotiations Agenda

The external negotiations agenda that MERCOSUR envisages for the years ahead includes the hemispheric negotiations within the Free Trade Area of the Americas (FTAA), the separate “4+1” negotiations with the United States, and others, such as:

Multilateral negotiations within the WTO. MERCOSUR, as a bloc, has presented some documents to be discussed at the WTO. On the multilateral front, the MERCOSUR countries are taking part in meetings of the “Cairns group” (a group of agricultural countries that are fighting against the protectionism of industrialized nations), where MERCOSUR has also maintained a single unified position as a bloc.

Free trade agreements within Latin America. MERCOSUR has incorporated Bolivia and Chile as “associated” countries, and has proposed negotiating a

free trade agreement with the countries of the Andean Community of Nations (CAN). Before the last summit of the MERCOSUR presidents in December 2002, a MERCOSUR-CAN “framework agreement” was drawn up that lays the foundations for signing a free trade treaty by late November 2003. The agreement does not allow bilateral country-to-country free trade negotiations, but makes it possible for a single country to trade with the entire bloc as a whole. MERCOSUR also faces the challenge of making compatible the preferences that bloc members negotiated in the past under the Latin American Integration Association (LAIA).

MERCOSUR and the European Union. In the MERCOSUR-EU agreement, both parties presented their first offer in 2001, and they have recently improved on it by presenting a second offer, which might be accepted as a starting point for negotiations.

The progress made in MERCOSUR’s own integration process up to the year 2000 is considered a positive factor for these negotiations. The success of the first stage had favorable consequences because the member countries improved their negotiation capabilities and acquired more credibility. However, recent problems, which mean a halt in progress toward completion of the customs union, weaken the credibility of the bloc and its negotiating power. This weakening may delay negotiations, as it has in the case of those with the EU, or it may even mean opening new negotiation fronts by the members of MERCOSUR independently of each other.

MERCOSUR’s Strategy for Integration into World Markets and the Position of the Member Countries

The decision to create MERCOSUR as a customs union open to the world was laid down from the very beginning and was shared by all the member countries of the bloc. This means that they have to work toward the definition and approval of a common trade policy, which involves a common external tariff, definition of guidelines for a policy of enlargement, and adoption of a common position in discussions or trade negotiations in the regional and international spheres.

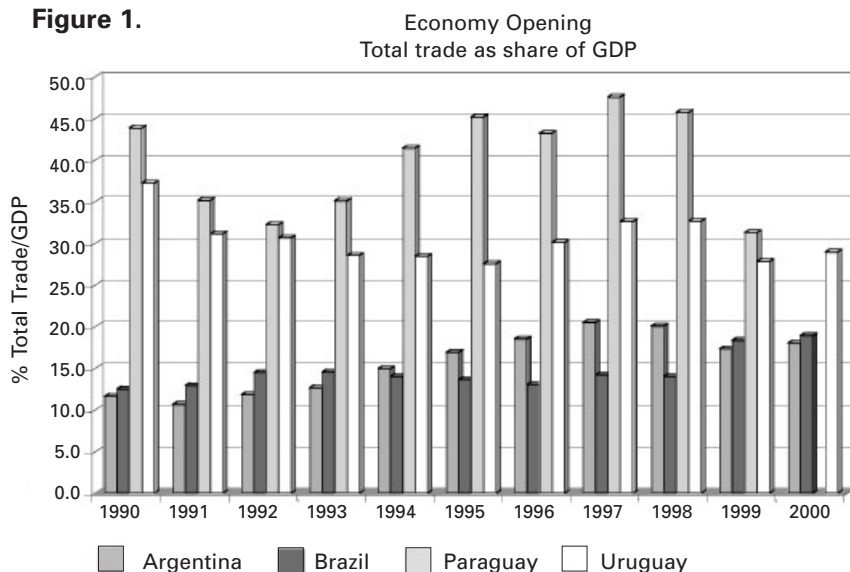
In general MERCOSUR has made a great deal of progress toward a common trade policy, but there are still important obstacles because of the varying positions of its four members. First, they differ as to the extent that the market should open up. Second, they are willing to permit different diversion levels in the desired specialization pattern as a consequence

of this opening. Their positions are the result of the different size of the countries, the initial opening conditions of their respective domestic markets, and their individual productive structures, among other things. It is also important to consider the macroeconomic context of the region, especially in recent years.

Paraguay and Uruguay start from an initial position that is more open than that of other countries. (Figure 1). Given the smaller size of their domestic markets, improving access to foreign markets is a crucial issue that has a decisive bearing on their development processes. Argentina, which has a considerable domestic market and had even more purchasing power in the past, is less open than Paraguay or Uruguay, although its degree of openness did increase in the 1990s. Brazil, which is a very large country, has adopted a development process in which the domestic market plays a much more important role. On the other hand, it still has a relatively closed economy, although it did open up to an extent toward the end of the 1990s (Figure 1).

Another feature that yields useful information is the pattern of trade specialization in each of the MERCOSUR countries. This underlies the positions taken in the negotiation process both by the bloc as a whole and by each of the countries separately. In the analysis of this pattern, the CEPAL classification of goods is adopted (CEPAL 2001).

Figure 1.



As with the rest of Latin America, the trade pattern of the MERCOSUR countries shows a positive balance for the primary commodities of agriculture and mining and for traditional manufactured goods (mainly, food), and a negative balance in the trade flows of the rest of manufactured goods (Table 1). This trade specialization pattern is explained basically by the standard theory of comparative advantage.

Even though this basic pattern is common to all MERCOSUR countries, it is worth pointing out the main differences and similarities. First, all the MERCOSUR members have a positive trade balance in agricultural commodities; the largest contribution is from Argentina. Another positive balance (except for Paraguay) is in food, beverages, and tobacco. They also all have in common a negative trade balance in manufactured goods with economies of scale and intensive in natural resources (petro-

Trade 1. Trade Balances by Type of Goods, 1999

Millions of current US dollars

Types of goods	MERCOSUR	Argentina	Brazil	Paraguay	Uruguay
Primary commodities	8412	6319	1799	309	-15
Agriculture	7529	4292	2684	340	213
Mining	2997	369	2643	-4	-11
Energy	-2113	1658	-3527	-27	-217
Manufactured goods	-18128	-8850	-6702	-1474	-1102
Traditional	10980	1821	8806	-252	605
a) Food, beverages and tobacco	10343	3742	6114	-126	613
b) Other traditional	636	-1921	2691	-126	-8
With economies of scale and natural resource intensive	3131	-330	-1774	-407	-620
Durable goods (and parts)	2689	-1885	-252	-284	-268
Goods that disseminate technical progress	-23289	-8457	-13481	-532	-819
Other goods	840	44	820	-1	-23
Total	-8876	-2487	-4083	-1166	-1140

Source: Economic Commission for Latin America and the Caribbean (CEPAL)

chemicals, paper, pulp, cement, basic metals, etc.), durable goods (appliances, consumer electronics, automobiles, etc.), and goods that disseminate technical progress (machinery, fine chemicals, etc.).

Only the largest members have a positive trade balance in mining and “other goods,” although the bloc as a whole has positive balances in both primary commodities and other goods. Argentina is the only one to have a positive balance in energy products, but this is not sufficient to compensate for the deficit of the other countries, particularly Brazil; and only Brazil has a positive balance in the other traditional manufactured goods (textiles, furniture, footwear, leather, etc.).

Like the trade balance, the composition of MERCOSUR exports by type of good is similar to that of Latin America and the Caribbean as a whole. In 1999, about 75% of MERCOSUR exports were manufactured goods and the rest were primary goods (Table 2). Among the latter, agricultural commodities are the most important, with a 15% share of total exports. Among manufactured goods the highest share (24%) is made up of goods with economies of scale and intensive in natural resources; however, exports of food, beverages, and tobacco also have a considerable share (18%).

In 1999 the large partners, Brazil and Argentina, on average accounted for about 65% and 31% of MERCOSUR exports, respectively, which makes the specialization pattern of the bloc as a whole reflect the features of these two countries. The small partners, Paraguay and Uruguay, accounted for only 1% and 3%, respectively, of MERCOSUR exports in that year. It is interesting, however, to note the different contributions of each country by type of good (see Table 2).

Primary goods accounted for 32% of total Argentine exports and a lower share of Brazilian exports (18%). Brazil made a relatively smaller contribution to total exports of agricultural commodities. Argentina provided most of the exports of energy products exports and Brazil most mining exports.

Manufactured goods had slightly higher shares in the exports of Brazil and Uruguay than in the bloc as a whole. Goods from these industries had similar shares in the total exports of each country (about 20%), except in Uruguay, where they accounted for almost 40% of the total. In the case of other traditional goods, their relative importance in Uruguay was more than twice that for the bloc as a whole. Goods with economies of scale and intensive in natural resources accounted for about 25% of the total exports in the largest countries. The share of durable goods in total

Trade 2. MERCOSUR Exports by Type of Good, 1999
Millions of US dollars and percentages

Types of goods	MERCOSUR		Argentina		Brazil		Paraguay		Uruguay	
	Mill. \$	%	Mill. \$	%	Mill. \$	%	Mill. \$	%	Mill. \$	%
Primary commodities	16885	23	7282	32	8726	32	408	55	364	16
Agriculture	11296	15	4880	21	5560	21	408	55	360	16
Mining	3727	5	550	2	3164	2	0	0	4	0
Energy	1863	3	1852	8	3	8	0	0	0	0
Manufactured goods	55922	76	15437	67	38113	67	332	45	1848	83
Traditional	22406	30	6422	28	14156	28	265	36	1468	66
a) Food, bever. & tobacco	13337	18	4569	20	7728	20	132	18	854	39
b) Other traditional	9070	12	1853	8	6430	8	133	18	614	28
With economies of scale & nat. resource intensive	17799	24	5733	25		25	57	8	188	8
Durable goods (& parts)	5847	8		7	11764	7	2	0	122	6
Goods that disseminate technical progress	9870	13	1710	7		7	8	1	70	3
Other goods	1133	2	1572	1	3997	1	0	0	4	0
Total	73940	100	301	100	8195	100	740	100	2216	100

Source: CEPAL

Trade 3. Composition of Country Exports by Destination, 1997
(Percentages)

Destination	MERCOSUR			US			FTAA exc. US & Merco			European U.			Rest World		
	AR	BR	UR	AR	BR	UR	AR	BR	UR	AR	BR	UR	AR	BR	UR
Primary goods	28	5	14	33	13	11	32	6	14	33	38	25	37	22	23
Agric. Commod.	17	2	13	12	10	11	14	4	14	32	29	25	34	11	22
Mining comm.	0	2	0	0	2	0	0	3	0	1	9	0	1	11	1
Energy prod.	11	0	0	21	0	0	18	0	0	0	0	0	2	0	0
Manufactured goods	72	95	86	66	87	89	68	94	86	67	62	75	63	78	77
Traditional	20	23	57	43	29	87	27	20	78	57	35	70	41	37	76
Food. Bev. & tobac.	12	8	36	22	5	34	18	5	46	49	23	37	33	30	29
Other traditional	8	15	22	21	24	54	9	15	32	8	12	34	7	7	47
M. w/scale ec. based on nat.res.	15	26	17	16	26	1	31	27	4	7	15	0	20	30	1
Durable goods	26	25	6	2	7	0	2	20	0	1	4	0	1	3	0
G. that dissem. tec. progress	11	21	6	6	21	1	8	27	4	3	7	1	1	7	0
Other goods	0	0	0	0	4	0	0	0	0	0	0	3	0	1	0
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: Prepared with data from CEPAL and Feenstra (2000).

exports was similar for all the countries except Paraguay. And for goods that disseminate technical progress, the Brazilian export pattern showed the greatest differences from the others: the share of this subgroup (17%) was higher than the share of food, beverages, and tobacco (16%), which is one of the most important subgroups in the other countries.

These specialization pattern characteristics also explain the countries' positions in the negotiation process. Paraguay and Uruguay have less diversified structures and their trade flows in extra-MERCOSUR markets are based on traditional comparative advantages, which means a specialization pattern based on primary and traditional manufactured exports. On the other hand, their trade within the bloc, which has a very important share in their totals, is more diversified. In the case of Uruguay, exports within the region of nontraditional manufactured goods to MERCOSUR add up to 29% (Table 3). For these two, the proposed external negotiations mean the opportunity to lift the restrictions their main exports face in extra-MERCOSUR markets. Both countries have been in favor of the MERCOSUR negotiations in the FTAA and with the European Union, although these negotiations will also have the effect of making them lose preferential access to the Brazilian market.

For Argentina, the creation of MERCOSUR means preferential access to an important enlarged market that will facilitate greater trade diversification. Therefore, within MERCOSUR, the share of Argentine exports of nontraditional manufactures is 52% of the total (Table 3). In extrabloc markets, Argentina's exports are also based on agriculture, but its productive structure has better possibilities of competing in MERCOSUR and of attracting sizeable flows of foreign direct investment.

On the other hand, Brazil, with its special characteristics of large size and less openness, has a development strategy that indicates a more diversified specialization pattern based not only on traditional comparative advantages but also on dynamic advantages. Its domestic market is very rich, and Brazil needs time to ripen the investments made in different sectors and to let its productive structure improve in competitiveness. The composition of its exports to the potential future FTAA partners, including the United States, is quite similar to its intra-MERCOSUR exports (Table 3). In particular, exports of nontraditional manufactured goods with higher value added account for more than 54% of exports to the United States.

These characteristics provide a different evaluation of the costs and benefits of an integration process. Brazil has maintained a more cautious position with regard to the benefits of the FTAA and seeks to delay the opening of its domestic market to competition from developed countries. It is not willing to let negotiations lead to a change in its productive profile that would mean a return to more primary specialization. Besides, Brazil has proposed alternatives that would lead to deepening existing subregional agreements and has sought to gather all the South American countries into a free trade agreement prior to the FTAA, so that the bloc might have a stronger position in negotiations with the United States. In 1993, there was a proposal from the Brazilian government to promote a South America Free Trade Area (SAFTA), which demonstrates its willingness to find a closer approach to the countries of the subcontinent. The strategy was not successful because, among other things, they lacked an understanding with the CAN countries.

In the SAFTA option, Brazil would exercise some kind of attraction for the rest of South America and become the hub of an exchange network on the subcontinent. SAFTA would make Brazil the leading country in the region, and give it a privileged position with the European Union. This is another reason why it has a different evaluation of the FTAA negotiation, and why it challenges the United States as the leading country in the region. On the other hand, Argentina and Uruguay are in a different situation with the United States, and this has been reflected in several attempts to negotiate independent bilateral agreements with that country. Argentina and Uruguay also agree on much stronger positions with regard to agricultural protectionism in the EU.

Consequently, MERCOSUR's external relations strategy arises as an arbitrage of diverse national interests. In spite of this, MERCOSUR has been able to present a common position in the main negotiations (WTO, FTAA, EU agreement), thereby improving the negotiations for each member country. In particular, it is important to stress that they have a common position on the developed countries' agricultural protectionism. On the other hand, the importance to the members of MERCOSUR of the FTAA negotiations is not limited to trade, because the flow of foreign direct investment to the bloc, mainly from developed countries, can be very large.

In the face of such a complex negotiation agenda, numerous issues have not been defined within MERCOSUR because of the different positions of each member country and the difficulties they are going through. In any

case, the MERCOSUR countries have reached an agreement on key topics. They have agreed on the importance of access to the US market and on the idea that the FTAA would only be beneficial if the United States effectively opened its market. In the last phase of the FTAA negotiations, the MERCOSUR countries will chair the negotiation groups for crucial subjects: Argentina will chair the group on subsidies, antidumping, and compensatory duties; Uruguay will chair the group on agriculture; and Brazil, together with the United States, will chair the Trade Negotiations Committee.

THE FTAA PROCESS

One feature of the FTAA negotiations is that most of the 34 countries involved are, at the same time, members of preferential trade blocs of different sizes and scope. Besides the North American Free Trade Agreement (NAFTA), MERCOSUR, the CAN, the Central American Common Market (CACM), and the CARICOM (Caribbean Community and Common Market), there are numerous preferential agreements in the LAIA framework.

Although the enthusiasm of the MERCOSUR countries for the FTAA has not been uniform, participating in the process seems to be unavoidable. Other countries are negotiating, so to be excluded is not a reasonable strategy, and therefore the best option is to work as a bloc so as to attain greater negotiating power. However, it should be kept in mind that the FTAA negotiations will erode the preferences that each member country has within the MERCOSUR.

MERCOSUR's negotiation of a "4+1" agreement with the United States would have similar benefits as far as market access is concerned, so this possibility is also part of the external agenda. Moreover, all the MERCOSUR countries, including Brazil, have considered the suitability of a bilateral trade agreement with the United States. The success of Chile, which has just reached an agreement, opens up new perspectives for this alternative.

Background and Characteristics of the Negotiations

Stages

The creation process for the FTAA began at the 1994 Miami Summit of the Americas, but the idea of a hemispheric free trade area (excluding Cuba) had already been proposed by President George Bush in 1990, in what was

known as the Initiative for the Americas. The rationale behind the creation of the FTAA is that free trade and integration are key factors for increasing the standard of living and improving the working conditions of all the peoples of the Americas, and for protecting the environment.

It is important to emphasize that before the Miami Summit, the United States was considering two alternatives for its trade strategy in Latin America. The first involved the gradual inclusion of other countries in NAFTA. The second was aimed at reaching agreements of the hub-and-spokes kind, in which the United States would be the central hub. Finally, a hemispheric negotiation of the FTAA type was adopted, which made the role of MERCOSUR more important. The existence of the NAFTA-MERCOSUR axis has stimulated the other countries involved in the FTAA process to adopt bloc positions in the negotiations, in line with the organizations to which they belong (CAN, CACM, and CARICOM).

From its very beginning, MERCOSUR aimed not only at liberalizing trade among its members, but also at facilitating its integration into the global economy. The FTAA negotiations match the latter objective. Peña (1999) even argues that the incentive for the conception of MERCOSUR was to facilitate negotiations with the United States, which at that time were becoming more important as a result of the launching of the Initiative of the Americas. In fact, MERCOSUR's first international agreement was the Agreement on Investment and Trade Advising, signed in Washington in June 1991, and known as the "Rose Garden Agreement." This is a "4+1" type of agreement between the MERCOSUR countries and the United States.

Following the launching of the initiative, there was a preparatory phase that lasted until March 1998. As a result of the meetings at this stage the institutional structure of negotiations was set up, it was decided which countries would chair the meetings, nine negotiation groups were formed, and an administrative secretariat was established. Negotiations were formally opened at the next stage, which started in April 1998, after the Second Summit of the Americas in Santiago, Chile. It was agreed that the process would be transparent and there was reassurance that the FTAA agreement would be balanced, comprehensive, and compatible with the WTO, and that it would be a single undertaking.

In 1999 the meeting of trade ministers instructed the groups to draw up a draft of the FTAA agreement, pointing out the consensus and the conflicts detected by each of the negotiation groups. That same year,

MERCOSUR and the FTAA Negotiation Process

business facilitation measures were agreed on, and there was a resolution to work jointly on the negotiations on agriculture in the WTO. This stage finished in April 2001 with the presentation of the draft for the preliminary FTAA agreement.

The third stage, continuation of negotiations, covered a period of eighteen months, from April 2001 to November 2002. It started right after the third Summit of the Americas in Quebec. The draft of the preliminary agreement was received, and dates were ratified for the start of negotiations and the start of integration (January and December 2005, respectively), with some proviso made by Venezuela. A commitment was made to supervise and support the complete implementation of the business facilitation methods. The most important steps taken during this stage in the Ministerial Declaration of Quito, Ecuador (November 2002), were the following:

- Preparation of the second version of the draft of the agreement.
- Approval of the methods and ways of negotiation that would be applied in the following stage.
- Opening of negotiations on market access in May 2002.
- Setting up the schedule for the exchange of market access offers.
- Definition of different methods of notification of the base tariff.
- Approval of guidelines to deal with differences in levels of development and size of economies.
- Creation of the Program of Hemispheric Cooperation, with the aim of strengthening the capabilities of countries seeking assistance in negotiations and the definition of stages of trade strategies, the implementation of policies, and the identification of sources of financing.

The fourth stage, end of negotiations, will run from November 2002 to January 2005. For final approval of concession offers in this stage, countries will negotiate as follows: from 15 December 2002 to 15 February 2003—presentation of initial offers; 16 February to 15 June

2003—revision of offers and sending of requests to improve offers; and 15 July 2003 onwards—presentation of revised offers and improvements.

Issues under debate at the FTAA

Up to the third stage of the negotiations at the FTAA, discussion was based on negotiation mechanisms and schedules, the modality of the agreement, and the subjects to be included. The discussion on negotiation mechanisms ended with the creation of institutions and the definition of which countries would be in charge of presiding over each negotiation group and each stage of the process. Based on what we have seen above, it is not difficult to see why Brazil and the United States have been appointed to jointly preside over the Committee of Trade Negotiations in the final stage of the process.

For the MERCOSUR countries, the resolutions reached on the subjects on the old agenda (market access, agriculture, and antidumping measures, etc) are crucial for the success of the agreement. The question of market access is a key issue in the MERCOSUR proposals because many of the products that make up its export offer are subject to high tariffs in many of the potential members of the FTAA. In fact, these products are also subject to nontariff barriers in the US market (CEPAL 2001). This is the case of products from traditional industries such as textiles, clothing, and shoes. Exports of these goods from the MERCOSUR are in an unfavorable position compared to those from countries in Central America or the Caribbean, which have some preferences in the US market. In spite of the fact that the issue of tariff barriers is particularly sensitive, there has not been substantial progress in the FTAA negotiations (ALADI 2001).

A special case in this demand for market access is agricultural products, in which the United States and the MERCOSUR have divergent positions. The United States supports its own agricultural production with subsidies for exports and direct subsidies to producers, and this affects many of the products in which MERCOSUR has clear competitive advantages. The United States is open to discussion on its agricultural policies, but only agrees to talks within a multilateral framework, such as the WTO, because it considers that this issue in particular involves its relations with other developed countries, such as those in the European Union and Japan. In 2002, the US Senate passed a farm

bill that means an increase in subsidies. This obstacle has an important bearing on the perspectives for the negotiations because it increases disagreement in the agricultural area. Nevertheless, all countries have made a commitment to neither maintain nor introduce any subsidies for exports (direct subsidies, freight rates lower than those charged in the domestic market, etc.) once the FTAA comes into force.

Likewise, negotiations will be beneficial as long as they eliminate the discrimination costs that the MERCOSUR countries are currently suffering. In a comparison of the conditions under which the LAIA countries access the US market, it becomes clear that the MERCOSUR countries are the least favored when it comes to preferences, and the most affected when it comes to nontariff barriers (ALADI 2001). Another key issue in the pending FTAA negotiations is that of rules of origin. Since countries are trying to reach a free trade agreement, it is essential that they reach a consensus on rules of origin, and this means the consent of many actors with very divergent interests.

Negotiations under the “4+1” Agreement

There are signs of strong interest in negotiating a better relationship between MERCOSUR and the United States, and both parties have stated this. In June 2001, the Common Market Council decided to convene the Advisory Council on Commerce and Investment established in the Rose Garden Agreement to explore the possibilities of starting negotiations of the “4+1” type with the United States, which could improve market access.

In August 2001, with the International Monetary Fund’s approval of the financial support program for Argentina, the United States stated its willingness to talk with MERCOSUR under the “4+1” format with the aim of facilitating Argentina’s trade expansion, which in turn would help Argentina to overcome its crisis. This attitude of initiating negotiations in a more reduced environment has to be taken as a sign that both sides would like to reach an agreement, and confirms the importance in the FTAA negotiation process of MERCOSUR’s relationship with the United States.

As with the FTAA, the various countries have different positions in this negotiation. Argentina and Uruguay are the most enthusiastic for working within this format. The pace and direction of progress towards a

“4+1” understanding will be key factors in determining the extent to which this initiative will be complementary to and compatible with the FTAA process. Because of the unsuccessful exchange of offers at the FTAA, the “4+1” option reappeared in February 2003; Brazil and the United States have scheduled a bilateral meeting for May 2003.

CONCLUSION

Faced with a very complex negotiation agenda, MERCOSUR is involved in the process of creating the FTAA, which is one of the most important options on that agenda. Potential partners in the Americas are very important to MERCOSUR trade. Simultaneously, MERCOSUR has a negotiation process going with the European Union. The two negotiations are interdependent in the sense that progress in one stimulates progress in the other.

There are many issues that have not been defined within MERCOSUR because of the different positions of each member country and the difficulties they are experiencing. As a consequence, it is difficult to characterize the MERCOSUR strategy. In the past, it stemmed from an arbitrage of diverse national interests, but the recent crisis in the region has deepened some differences in strategies for insertion in the world economy. MERCOSUR’s own process seems to be at an impasse. Since the arrival of President Lula Da Silva, Brazil has shown more interest in the progress of MERCOSUR. There are a number of signs that Brazil would be willing to accept a key role in relaunching MERCOSUR and has made it clear that this agreement is a crucial element in its strategy for insertion in the global economy.

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NOTES

1. CINVE.
2. CINVE.
3. The new round of negotiations is the ninth in a series that began in Geneva in 1947. The present round was convened in November 1999. After the WTO summit in Doha (Qatar) in November 2001, the mandate for negotiations on different subjects was approved. The most controversial issues on the agenda are those related to agriculture and services. The negotiations are due to be completed in January 2005.
4. The share of primary goods in total exports from Latin American and the Caribbean is 23%. If Mexico is excluded, primary goods increase their share to 34% of total exports (CEPAL 2001).
5. Although on average the Brazilian share in MERCOSUR exports was 65%, in this type of good it was lower (50%). On the contrary, Argentina provides 43% of MERCOSUR agricultural exports. The relative contribution of Paraguay to total MERCOSUR exports is higher in this subgroup than in any other.
6. This argument was explicitly stated in the Declaration of Principles and Plan of Action of the 1994 Miami Summit of the Americas.
7. The draft (first version) was published on the FTAA site in July 2001: "Borrador de Acuerdo," <http://www.ftaa-alca.org>.
8. Another important step in this period was the approval of the fast track (now called TPA, Trade Promotion Authority) by the US Congress, which means the removal of a very important obstacle. This mechanism is a necessary condition for the creation of the FTAA, since the other countries would not make a definitive proposal until they were certain that the US Congress could not change the agreement.
9. Common Market Council meeting held on 22 June 2001 in Asunción, Decree No. 08/01.

MERCOSUR - FTAA Trade: Evolution and Perspectives

ROSA OSIMANI

1. INTRODUCTION

The purpose of this paper is to make a contribution to the assessment of the impact that the Free Trade Area of the Americas (FTAA) may have on the MERCOSUR countries. The literature provides a set of indicators that contribute to evaluations of the relative importance of a preferential trade agreement like the FTAA. The indicators used in this paper take into account trade evolution between the partners in the past, with emphasis on the importance of the partners and on some particularities of the flows involved.

The evolution of MERCOSUR's trade with potential FTAA partners and the rest of the world is given in section 2. In order to anticipate the effects of the creation of the FTAA, it is helpful to examine the trade flows among all participating countries from the starting point. The last decade has been characterized by the spectacular growth of trade, not only within MERCOSUR but also with third countries; therefore, changes among MERCOSUR's most important partners are shown. The 34 participant countries are classified taking into account existing trade blocs, their importance in MERCOSUR trade, and their degree of association with the MERCOSUR. Using those trade flows, an analysis is made of patterns of the MERCOSUR countries' external insertion with potential FTAA partners and with the European Union.

In section 3, indicators that take into account world trade evolution are estimated, to present another view of MERCOSUR trade. The trade intensity and trade complementarity indexes vis-à-vis the potential partners give clues as to the possible reorientation of trade and the FTAA benefits to the MERCOSUR countries.

2. THE EVOLUTION MERCOSUR TRADE

In the 1980s the MERCOSUR economies showed low growth rates, they were relatively closed, their currencies were depreciated, and they faced strong external restrictions. On the other hand, the ten-year period after the creation of MERCOSUR was characterized by economic growth in the four countries, the spectacular growth of trade among them, mainly in the early years, and trade increases not only among the MERCOSUR partners but also with third countries. Even though both imports and exports increased considerably, imports grew more in current US dollars.

Trade growth in the 1990s was linked to the opening of the MERCOSUR countries vis-à-vis the rest of the world. This opening led to a change in the composition of tradable goods production, favoring the production of exports to the detriment of import substitutes. In addition, the growth in the imports of the bloc was explained by the exchange rate policies in force in the 1990s. At different moments in time (Argentina, 1991; Brazil, 1994; and Uruguay, 1990), the MERCOSUR countries adopted stabilization programs based on the exchange rate as nominal anchor (Fanelli, Lorenzo, and Oddone 2003).

According to Fanelli et al., even though the instruments used were different (crawling peg with a fluctuating margin in Uruguay, conversion board in Argentina, and adjustable fixed exchange rate in Brazil), the effects were similar. The three countries registered large distortions in their relative prices, which discriminated against the domestic production of tradable goods. This is the usual result of this type of stabilization program, as the prices of nontradable goods converge more slowly to the exchange rate path than the prices of tradable goods.

Moreover, unlike Chile, none of these three countries adopted measures to confront the macroeconomic effects of the massive capital inflows that the bloc attracted during the first half of the decade. This reinforced the vicious circle of currency appreciation, relative price distortion, deterioration of the current account.

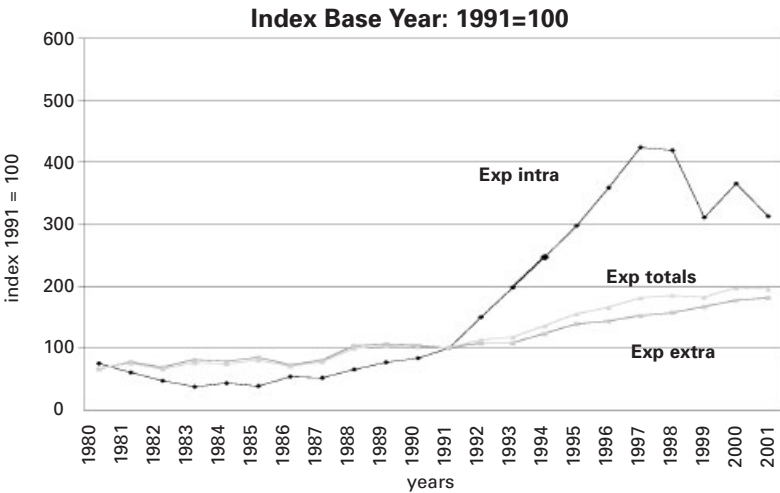
The 34 countries involved in the FTAA negotiations account for 22% of world exports and more than 28% of world imports. The contribution to this total by different countries or groups of countries is very unevenly distributed. Countries belonging to NAFTA are the most important subgroup, with an 86% share in total exports in 2001; the MERCOSUR

comes second, with a share of less than 7% in FTAA exports. The CAN countries follow, with a share of approximately 4%, and the other countries or groups have very small shares.

Export Growth and Composition

Figure 1 shows the export growth of the MERCOSUR countries between 1980 and 2001. In the 1980s the index of total exports grew by an average annual rate of 4.4%, and in the 1990s the average growth rate was 5.6%. After the creation of MERCOSUR, exports from the region increased very rapidly, with the index reaching almost 450 by 1997; there was a considerable decline after 1998, due to the economic crisis in the region.

Figure 1. MERCOSUR Export Growth



Source: Feenstra (2000).

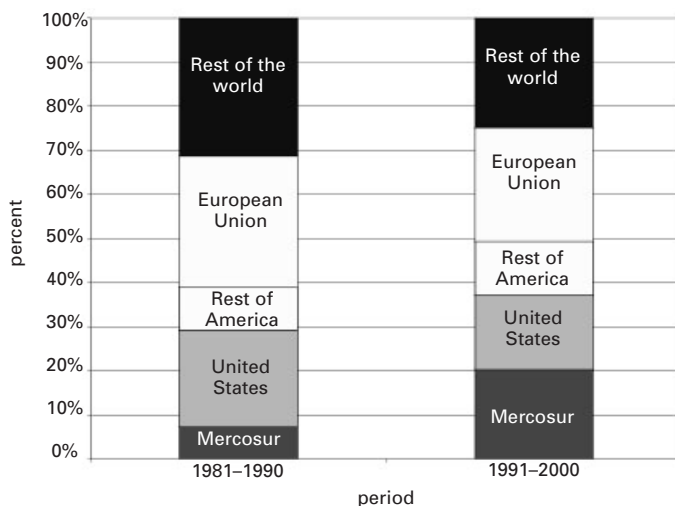
In the 1980s, exports both increased and became more diversified in terms of destination markets. Exports to the developed countries like the United States, Canada, and those of the European Union increased at a higher rate than exports to the countries that later created the MERCOSUR (see Table 1). After 1991 this pattern of growth by destination changed, and exports within the region increased at a much faster rate. Two other trends are notable in Table 1: the rate of growth of exports to the rest of the Americas (excluding the United States) almost doubled in

Table 1. MERCOSUR Export Growth
(Percentages)

Destination	Cumulative annual growth						Composition	
	1981-1990	1991-1995	1995-2000	1991-2000	1981-1990	1991-2000		
MERCOSUR	1	29	3	15	18	7	41	20
United States	8	3	7	5	56	22	34	17
Canada	8	3	2	2	4	2	2	1
Mexico	3	-4	21	8	3	1	4	2
Chile	4	21	7	14	4	2	7	4
Bolivia	-1	22	1	11	2	1	2	1
CAN	4	16	-2	7	9	3	7	3
MCCA	7	14	4	9	2	1	2	1
CARICOM	11	3	5	4	1	0	0	0
OECD	22	-12	-7	-10	0	0	0	0
Total FTAA	5	13	5	9	100	39	100	49
European Union	5	4	1	2	30			26
Rest of the world	3	8	-1	3	31			25
TOTAL	4	9	2	6	100			100

Source: Prepared with data from Feenstra (2000).

Figure 2. Export Composition by Destination



Source: Data from Feenstra (2000) and Economic Commission for Latin America and the Caribbean (CEPAL 2001)

the 1990s; and there was a fall in the rate of growth of exports to the United States and the European Union.

It is worth comment that the growth in exports during the first half of the 1990s was different from that in the second half of the decade. In the first half, intra-MERCOSUR exports and those to associated countries increased more than 20% annually; after 1995, the growth of intra-MERCOSUR exports suffered a steep decline as a result of the economic crisis, while exports to the United States and especially Mexico showed increases.

The growth of MERCOSUR exports to the other countries in the hemisphere is also different in the two decades. In the 1980s, exports to countries in North and Central America grew at a faster rate than to other destinations, and during the 1990s, exports to South America grew even more. Exports within MERCOSUR and to Chile and Bolivia (associated countries) increased more than 10% annually, with MERCOSUR partners the destination of almost 50% of exports between 1991 and 2000.

The differences in growth rates of MERCOSUR exports by destination indicate changes in the relative importance of each group of trading partners. In the 1980s, the shares of the three main destinations of exports

Table 2. MERCOSUR Import Growth
(Percentages)

Destination	Cumulative annual growth					Composition	
	1981-1990	1991-1995	1996-2000	1991-2000	1981-1990	1991-2000	
MERCOSUR	1	29	3	15	26	11	39
United States	0	21	-1	9	48	21	45
Canada	-6	21	0	10	6	3	4
Mexico	-3	31	0	15	5	2	3
Chile	-2	22	-2	10	5	2	4
Bolivia	1	-11	1	-5	3	1	0
CAN	-7	32	2	16	7	3	4
MCCA	5	10	10	10	0	0	0
CARICOM	-4	21	-2	9	0	0	0
OECD	2	12	-9	1	0	0	0
Total FTAA	-1	24	1	12	100	43	100
European Union	-1	27	-2	12		22	26
Rest of the world	-4	12	6	9		35	23
Total	-2	22	1	11	100	100	100

Source: Prepared with data from Feenstra (2000).

outside the MERCOSUR countries were quite similar. The European Union, the rest of the Americas (but excluding the MERCOSUR countries) and the rest of the world each received approximately one third of total MERCOSUR exports. Exports to the countries that later became members of the MERCOSUR were only 7% of the total (Figure 2).

Since the creation of MERCOSUR, the four groups of trade partners have had more similar shares. The more noteworthy changes are the increased share of intraregional exports and the reduced share going to the European Union and the Rest of the World. Intrabloc exports reached 20% of the total, and the rest of the Americas (including the United States) accounted for 29% of the total, mainly explained by the large share of the United States (17%). Exports to the European Union were 26%, and those to the rest of world were 25% (Figure 2).

Import Growth and Composition

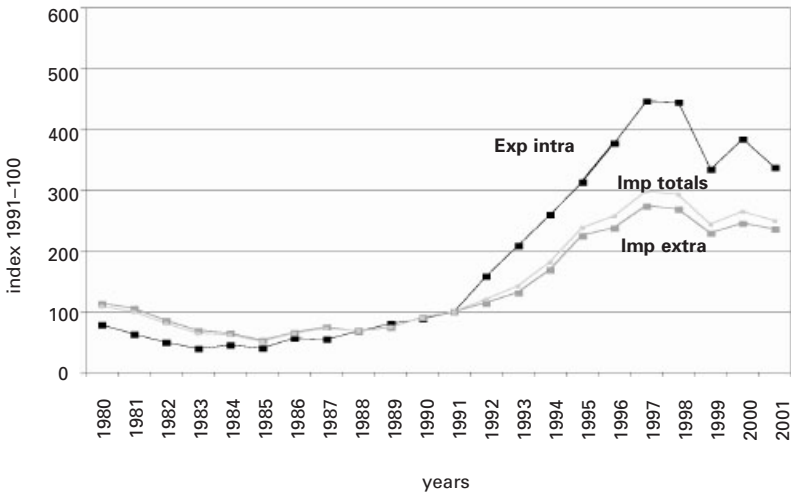
Figure 3 shows the import growth of the MERCOSUR countries between 1980 and 2001; there is a positive trend in the indexes for the whole period. In the 1980s, however, the annual growth rate was negative, but in the 1990s, imports increased by an average of 10% annually.

We noted above that in the 1980s the MERCOSUR economies showed low rates of growth, they were relatively closed, their currencies were depreciated, and they faced strong external restrictions (the debt crisis). These features changed considerably in the 1990s, after the creation of MERCOSUR. The tariffs for third countries were lowered and local currencies appreciated. Both factors generated a considerable increase in imports from almost every origin, not only from within MERCOSUR (Table 2). The generally high rates of import growth in the 1990s suggest that there was no trade diversion due to the creation of MERCOSUR.

As with total imports, MERCOSUR purchases from other countries in the FTAA also showed a great increase, with imports from Mexico and the CAN growing at the same rate or even more than those from within MERCOSUR (Table 2). The growth in imports during the early 1990s was very high, but was affected in the second half of the decade by the regional crisis: imports from virtually all other countries in the Americas increased at annual rates of 24% in the first half of the 1990s, but after 1995 they remained almost unchanged.

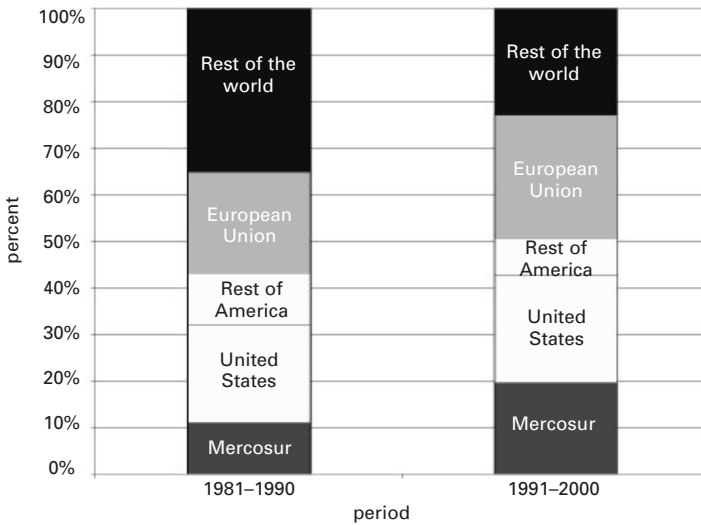
Figure 3. MERCOSUR Import Growth

Index Base Year: 1991=100



Source: Feenstra (2000).

Figure 4. Import Composition by Destination

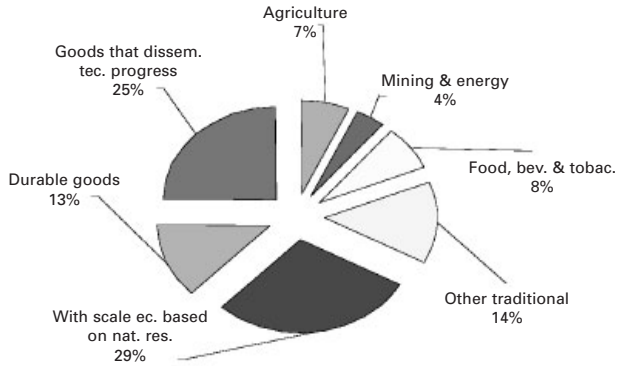


Source: Data from Feenstra (2000) and Economic Commission for Latin America and the Caribbean (CEPAL 2001)

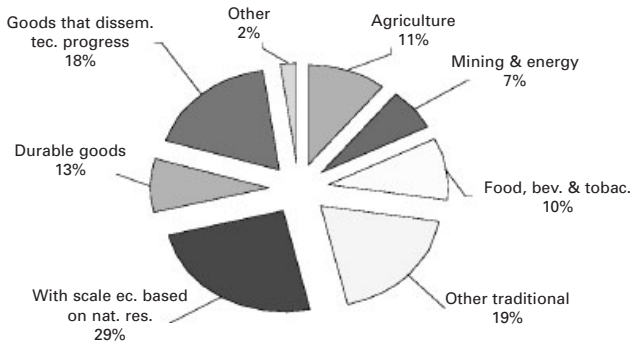
Figure 5. Composition of MERCOSUR Exports

Feenstra (2000)

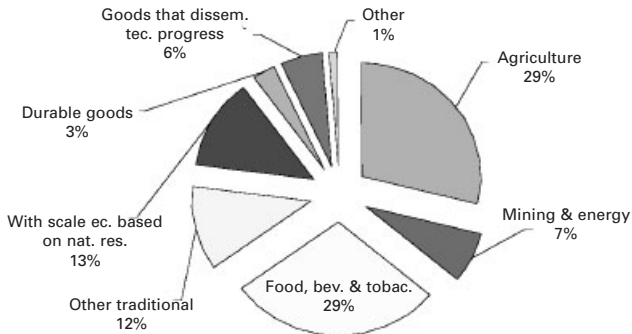
(a) Composition of Intra-MERCOSUR Exports



(b) Composition of Exports to the Other FTAA Countries



(c) Compositions of Exports to the EU



The relative importance by origin of FTAA imports shows other changes that occurred in the 1990s (Table 2). The most important of these is the increase in intra-MERCOSUR imports, whose share climbed to almost 40% of total imports from the FTAA, while there was a decline in the relative weight of imports from almost every other origin. Within the FTAA, the United States is still the largest provider of MERCOSUR imports, and has been since the creation of MERCOSUR.

A graphic look at MERCOSUR imports by origin in the 1980s and 1990s shows that intra-MERCOSUR imports noticeably increased and the Rest of the World noticeably decreased; imports from the European Union and the United States both increased, but only slightly (Figure 4).

Composition of MERCOSUR Trade

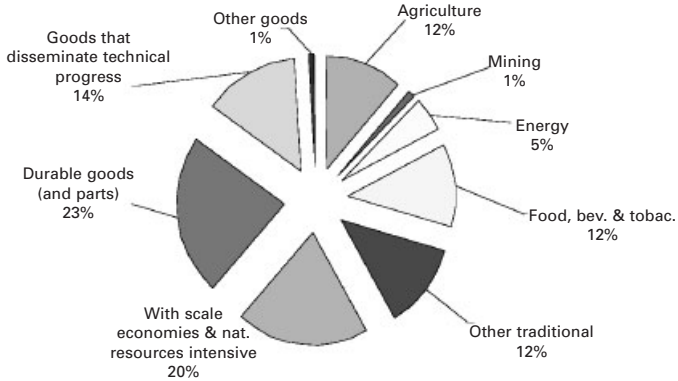
MERCOSUR Exports by Type of Good and Destination

The composition of MERCOSUR exports by type of good is similar to that of Latin America and the Caribbean as a whole. In 1999, about 75% of MERCOSUR exports were manufactured goods and the rest were primary goods. Among the latter, agricultural commodities were the most important (15% of total exports). In manufactured goods, the highest share (24%) was made up of goods with economies of scale and intensive in natural resources; however, exports of food, beverages and tobacco also had a significant (18%) share (CEPAL 2001).

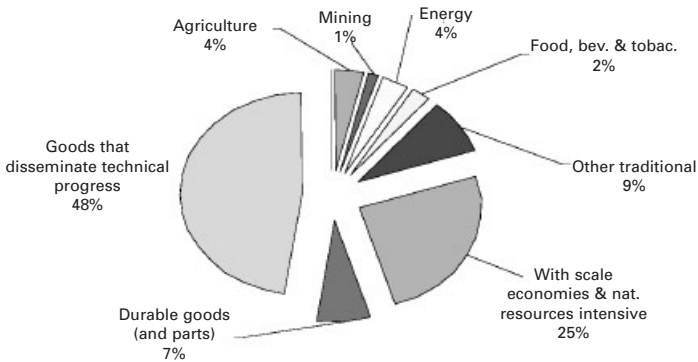
Figure 5 shows the specialization pattern of exports within MERCOSUR, to the other FTAA countries, and to the European Union, which is included for comparison. The pattern of intra-MERCOSUR exports (Figure 5a) shows primary and traditional manufactured goods making up only 33% of the total. Of the manufactured products, goods with economies of scale based on natural resources and goods that disseminate technical progress have the largest share. Exports to other countries within the FTAA (Figure 5b) are almost equally balanced between primary and traditional (47%) and manufactured goods (53%); again, goods with economies of scale based on natural resources and goods that disseminate technical progress have the highest share of manufactured goods exports. Exports to the European Union (Figure 5c) reflect the more traditional pattern cited above for Latin America and the Caribbean. They show almost exactly the reverse composition to that of intra-MERCOSUR exports: primary goods and traditional manufactured goods make up

Figure 6. Composition of MERCOSUR Imports
Feenstra (2000)

(a) Composition of Intra-MERCOSUR Imports



(b) Composition of Imports from the Other FTAA Countries



(c) Composition of Imports from the EU

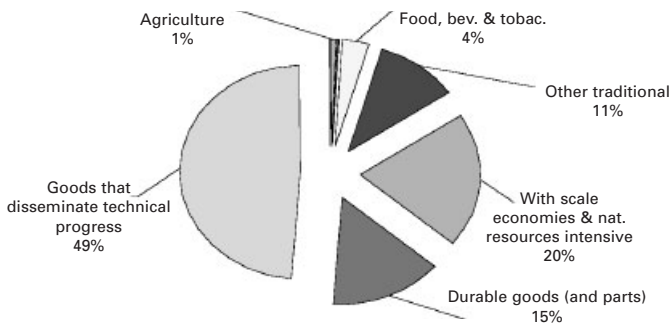


Table 3. MERCOSUR Imports Relative to FTAA Exports

	1995	1996	1997	1998	1999	2000	2001
FTAA	1.65	1.57	1.49	1.44	1.39	1.37	1.37
<i>Countries and/or groups of countries with highest intensity:</i>							
US	1.86	1.79	1.72	1.72	1.74	1.68	1.71
CAN	3.20	2.82	2.51	2.57	2.63	2.83	2.90
Chile	7.13	6.80	6.22	6.25	6.36	6.73	6.28
<i>Countries and/or groups of countries with lowest intensity:</i>							
Canada	0.50	0.52	0.53	0.49	0.40	0.39	0.34
Mexico	1.00	1.06	0.98	0.81	0.60	0.61	0.55
Rest of FTAA	1.68	0.66	0.47	0.43	0.30	0.41	0.44

Source: Feenstra (2000).

77% of the total, with agricultural commodities and food, beverages, and tobacco having the top shares.

These numbers, which give the specialization patterns vis-à-vis the FTAA countries and the European Union, show that export penetration in the FTAA is the most diversified, which offers greater possibilities for intraindustry trade.

The composition of MERCOSUR imports by type of good shows that manufactured goods had a large share (almost 90% in 1997). Among these goods, the most important category was goods that disseminate technical progress, whose share was 38% of total imports. Next in the ranking were goods with economies of scale and based on natural resources. Durable goods and non-food traditional industries came next (CEPAL 2001).

Figure 6 shows the composition of MERCOSUR imports from within MERCOSUR, from the other FTAA countries, and from the European Union. Intra-MERCOSUR imports (Figure 6a) were almost balanced between manufactured goods (58%) and primary and traditional goods (42%). In the former, durable goods and those with economies of scale and based on natural resources had the main share; in the latter, agriculture, food, beverages, and tobacco, and other traditional manufactured goods had almost equal shares. Imports from the other FTAA countries (Figure 6b) and from the EU (Figure 6c) showed almost identical patterns

Table 4. Mercosur Exports Relative to FTAA Imports

	1995	1996	1997	1998	1999	2000	2001
FTAA	1.17	1.18	1.07	0.98	1.10	1.17	1.22
<i>Countries and/or groups of countries with highest import intensity:</i>							
US	1.00	1.02	0.90	0.91	1.00	1.03	1.06
CAN	6.08	6.07	5.88	5.86	5.93	5.92	5.95
Chile	12.52	12.10	11.39	11.19	14.75	17.39	18.02
Rest of FTAA	1.78	1.56	1.69	1.49	1.63	1.70	1.89
<i>Countries and/or groups of countries with lowest import intensity:</i>							
Canada	0.24	0.27	0.25	0.27	0.27	0.27	0.25
Mexico	0.63	0.77	0.65	0.69	0.74	0.91	1.00

Source: Feenstra (2000).

for imports in the major categories of manufactured goods (80% and 84%, respectively; in both cases, goods that disseminate technical progress were in the lead) and primary and traditional manufactured goods (20% and 16%, respectively).

3. MERCOSUR-FTAA: TRADE INDICATORS

Trade Intensity

The import intensity index takes into account the share of imports from the FTAA countries in total MERCOSUR imports, relative to the share of FTAA exports (net of MERCOSUR) in total world exports. If this index is greater than 1, MERCOSUR buys more from the other FTAA countries than might have been expected in light of the FTAA share in world exports (see Methodological Appendix). The first row of Table 3 shows the evolution of the intensity index for MERCOSUR imports from the FTAA countries as a whole between 1995 and 2001. They are all greater than 1. In the second half of the 1990s, the potential FTAA partners sold approximately 1.5 times more to the MERCOSUR than to the rest of the world. The decline in the intensity indicator in that period is explained by a lower share of MERCOSUR imports from the FTAA countries and an increase in the FTAA share in world exports.

The intensity index shows important differences among the FTAA partners. For some of them, MERCOSUR is a very important export destination. That is the case of the CAN, and even more so of Chile, where there is a clear bias in bilateral trade. Similarly, the intensity of MERCOSUR imports from the United States is greater than the indicator for the FTAA as a whole, reaching a value of 1.71 in 2001. Canada, Mexico, and the rest of the FTAA have an intensity of less than 1 for their trade with MERCOSUR by the end of the decade, and the trend is decreasing; therefore, bilateral trade is less than might be expected.

The analysis of the intensity of MERCOSUR imports relative to the exports of its potential partners in the FTAA suggests that an agreement that facilitates access to the MERCOSUR market, particularly for exports from the NAFTA countries, would be beneficial. For the NAFTA countries whose trade intensity with MERCOSUR is less than for the other countries in the FTAA, the potential for export growth is quite good.

To complete the analysis, the evolution of the export intensity index, defined as the share of MERCOSUR exports to other FTAA countries in total MERCOSUR exports, relative to the share of imports from the other FTAA countries in total world imports, is presented in Table 4. The share of MERCOSUR exports to the other FTAA countries is greater than 1 in most years but has never exceeded 1.3. Those countries buy relatively more from the MERCOSUR countries than from the rest of the world, but the difference is fairly small. Even though the share of MERCOSUR exports to the FTAA have increased in the period 1995–2001, the index did not increase because FTAA imports now have a larger share in world imports.

Some of the FTAA countries have bilateral trade that is more intense. Again, the greatest intensity is between the CAN and Chile, whose intensity is 5 to 15 times greater than that of the FTAA as a whole. It is worth noting that these countries were the destination of 8% of MERCOSUR exports in the 1990s (see Table 1). Bilateral trade is also intense with the group of the rest of the FTAA countries. The intensity indicator of MERCOSUR exports to the United States is close to 1, so no bias is found. There is the least bilateral trade between Canada and MERCOSUR, and trade with Mexico, although increasing, is still low.

To sum up, analysis of intensities of MERCOSUR exports to its potential partners in the FTAA suggests that an agreement that facilitates access to the NAFTA market would be beneficial.

Table 5. Intensity, Complementarity, and Nonexplained Bias
Year 1997

	MERCOSUR exports relative to FTAA imports							
	With partners:							
	FTAA	US\$	Canada	Mexico	CAN	Chile	Rest of FTAA	
Intensity	1.07	0.90	0.25	0.65	5.88	11.39	1.69	
Complementarity	1.02	0.91	1.08	1.13	1.88	1.49	1.40	
Bias not explained	1.06	0.99	0.23	0.58	3.14	7.66	1.21	
	US exports relative to FTAA imports							
	With partners:							
	FTAA	MERCOSUR	Canada	Mexico	CAN	Chile	Rest of FTAA	
Intensity	3.65	1.61	4.80	5.05	2.13	1.68	2.61	
Complementarity	1.13	1.10	1.18	1.21	1.16	0.99	0.81	
Bias not explained	3.23	1.46	4.06	4.17	1.84	1.70	3.21	

Source: Feenstra (2000)

Trade Intensity, Complementarity, and Nonexplained Bias

Another important feature to consider in order to assess the ex-ante impact of the FTAA is the degree of complementarity in the trade composition of all the potential partners. To do this, complementarity indicators were calculated using the 4-digit Standard International Trade Classification (SITC), Revision 2, trade data for the year 1997.

The complementarity index used by Anderson and Nordheim (1993) is derived from the index of revealed comparative advantage (Balassa 1965). It is the weighted average of the comparative advantage index of country *i* in the product *s*, multiplied by the comparative disadvantage index of country *j* in the product *s*; the weight is the share of product *s* in world imports. The index tends to zero when country *i* does not export the same products that country *j* imports (see Methodological Appendix).

The complementarity index gives another perspective on the trade intensity index. The trade intensity index is the result of different effects. On the one hand, it is the result of the differences in trade specialization between two countries. When the export composition of one country is very similar to the import composition of the other, bilateral trade would be more intense; this is the complementarity effect. On the other hand, intensity is also the result of differences in the transaction costs between the partners. These costs depend on transport costs and the existence of discriminatory trade policies between the partners. The intensity index can be expressed as the complementarity index multiplied by an index of the nonexplained bias (Vaillant 2001). The complementarity index is close to 1 for the import composition of the FTAA as a whole; as the intensity index is also close to 1, there is no bias in bilateral trade associated with lower transaction costs.

For MERCOSUR exports to the potential partners in the FTAA, the intensity index was disaggregated in these two components for the year 1997 (Table 5). There is a high intensity index for exports to Chile and the CAN, which is explained by the result of both components. In these cases, there is a large complementarity effect and also there are low transaction costs due to the geographical proximity and the existence of discriminatory agreements.

To understand these results for the MERCOSUR, it is useful to compare them with the same indexes for the other countries. In the case of US exports, the intensity index was higher than 1, and when the FTAA (exclud-

ing the United States) is considered, the index was 3.65 in 1997 (Table 5). This means that the share of US exports to the other FTAA countries is almost 4 times greater than the share of those countries in world imports (excluding the United States). This bias was also found by Vaillant (2001), who calculated the intensity index of US exports to the LAIA countries for two different periods. In the period 1990–97, the intensity indicator of exports to the LAIA countries was 3.20. In the case of US exports to the FTAA, the higher intensity index or the bias in bilateral trade is basically explained by US exports to Canada and Mexico, for which the index climbs to almost 5. This can be explained by the effect of discriminatory trade policies and lower transport costs in US trade with its partners in NAFTA.

For bilateral trade between the United States and the Central American and Caribbean countries, gathered in the Rest of FTAA, the unexplained bias is more noticeable. Even though these countries have the lowest complementarity index (lower than 1), the effect of the bias is so powerful that the intensity of US exports to that region is greater than it is for the South American countries, whose complementarity is higher.

4. SUMMARY

The potential partners in the FTAA were the destination of 29% of MERCOSUR exports in the 1990s, excluding exports within the MERCOSUR bloc itself (see Figure 2). In that period, MERCOSUR exports to the United States grew at a lower rate than MERCOSUR exports to the other potential partners of the FTAA.

The specialization pattern of MERCOSUR exports to the FTAA countries shows a more diversified export penetration, with greater possibilities for intraindustry trade. This feature suggests a possible benefit of the FTAA agreement.

On the other hand, MERCOSUR imports from the potential partners of the FTAA had a 31% share in the 1990s (see Figure 4). MERCOSUR imports from the United States are more dynamic than from the rest, and have a higher share. Imports from the European Union also show this evolution. Import composition by type of goods reveals another similarity between import flows from the United States and those from the European Union; from both origins, manufactured goods that disseminate technical progress represent almost 50% of imports.

To sum up, the analysis of the evolution of MERCOSUR trade flows reveals that an agreement like the FTAA is important and in all likelihood would be beneficial for these countries because the potential partners already have a large share in MERCOSUR's trade. In particular, an agreement with the United States in the "4+1" format would also be important.

When we consider the evolution of world trade, the intensity index yields other clues. Although the potential partners buy relatively more from MERCOSUR than from the rest of the world, the difference is very small. Despite the fact that in this period the share of MERCOSUR exports to the FTAA increased, the intensity index did not rise because the share of FTAA imports in world imports was also higher. So, MERCOSUR did not take advantage of the import growth in its potential partners. On the other hand, in the second half of the 1990s, those countries sold approximately 1.5 times more to the MERCOSUR than to the rest of the world. In that period the trade intensity indicator declined. A lower share of MERCOSUR imports from the FTAA in recent years, and an increase in the FTAA share in world exports, explain this result.

Another characteristic that the analysis of trade flows confirms is that prior discriminatory agreements between some of the potential FTAA partners were a factor in explaining trade intensity and bilateral bias. Therefore, the FTAA agreement will have different effects depending on prior relationships between each pair of countries. In the case of trade between the MERCOSUR and some partners like Chile and the CAN, both of whose intensity indexes and nonexplained bias are higher, the effect will be less. On the other hand, for MERCOSUR trade with the NAFTA countries, whose intensity is lower and for whom prior discriminatory agreements are irrelevant, the FTAA agreement will have important effects. The potential for trade growth seems to be quite sizeable in the latter case.

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METHODOLOGICAL APPENDIX

The Intensity Index

The intensity indexes were developed by Drysdale (1988) and modified by Anderson and Nordheim (1993). Intensity is defined as the share of imports into country *i* from region *j* in total imports into country *i*, relative to the share of exports from region *j* (net of country *i*), in world exports (net of country *i*).

$$\text{intensity} = IX_{ij} = m_{ij} / X_j$$

- In the case of MERCOSUR imports from FTAA countries or regions:
 m_{ij} = Share of MERCOSUR (*i*) imports from region *j* in total imports into MERCOSUR. In this case *j* was alternatively: FTAA as a whole, United States, Canada, Mexico, CAN, Chile and the Rest of FTAA.
 X_j = Share of *j* exports (net of MERCOSUR exports in the case of *j*=FTAA as a whole) in world exports (net of MERCOSUR exports).

Sources of data: The indexes were calculated on data from Feenstra (2000) and CEPAL (2001).

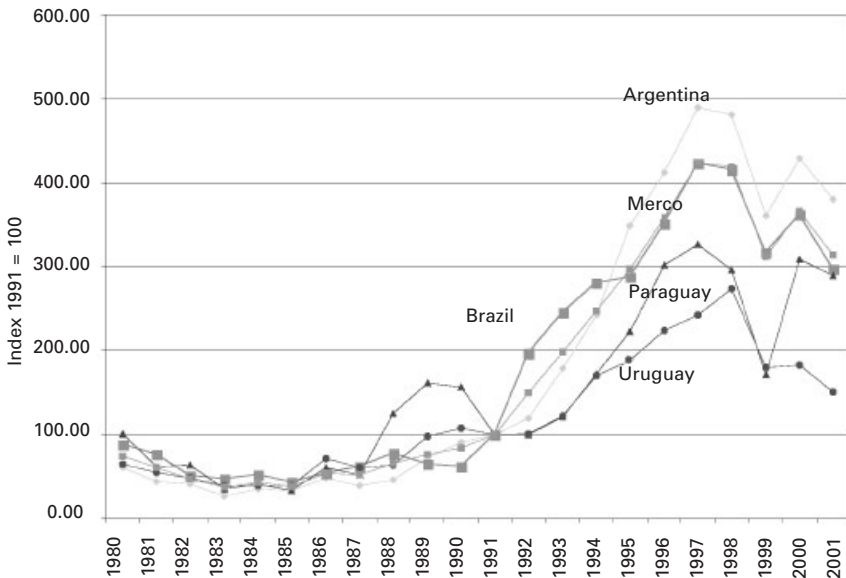
The other intensity index is defined as the share of exports from country *i* toward region *j* in total exports from country *i*, relative to the share of imports from region *j* (net of country *i*), in world imports, net of country *i*. For a review of these indexes see the methodological appendix developed in Vaillant (2001).

$$\text{intensity} = \text{IM}_{ij} = x_{ij} / M_j$$

- In the case of MERCOSUR exports to the FTAA countries or regions:
 x_{ij} = Share of MERCOSUR exports (*i*) to the region *j* in total exports from MERCOSUR. In this case *j* was alternatively: FTAA as a whole, United States, Canada, Mexico, CAN, Chile, and the Rest of FTAA.
 M_j = Share of *j* imports (net of MERCOSUR imports in the case of *j*=FTAA as a whole) in world imports (net of MERCOSUR imports).

Sources of data: The indexes were calculated on data from Feenstra (2000) and CEPAL (2001).

SA 1. Intra-MERCOSUR Export Growth Index by Country



SA 2. World Exports: Share of the FTAA Countries and Contribution by Groups

	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001
FTAA	19.3	21.2	19.5	20.1	20.0	21.2	21.4	22.1	22.6	22.3
EU	37.2	36.5	44.4	41.9	40.0	38.4	40.7	40.3	37.0	38.3
Rest of the world	43.5	42.3	36.1	38.0	40.0	40.4	37.9	37.6	40.4	39.4
Total	100	100	100	100	100	100	100	100	100	100
MERCOSUR	7.5	8.6	7.0	7.0	7.0	7.1	7.0	6.1	6.0	6.6
NAFTA	79.4	82.0	85.1	85.4	85.9	86.2	87.1	87.0	86.6	86.1
Chile	1.2	0.9	1.3	1.6	1.4	1.4	1.3	1.3	1.3	1.3
CAN	7.8	6.0	4.7	3.9	4.2	3.9	3.4	3.5	4.1	3.9
Rest of FTAA	4.1	2.5	1.9	2.0	1.4	1.4	1.3	2.1	2.0	2.0
Total FTAA	100	100	100	100	100	100	100	100	100	100

Source: Data from the World Trade Organization (WTO)

SA 3. World Imports: Share of the FTAA Countries and Contribution by Groups

Percentages

	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001
FTAA	20.7	25.3	21.7	23.2	22.9	24.8	26.3	27.9	28.8	28.4
EU	40.9	36.1	44.6	40.3	38.0	36.5	39.0	39.3	36.8	37.2
Rest of the world	38.3	38.6	33.8	36.5	39.1	38.7	34.7	32.9	34.4	34.4
Total	100	100	100	100	100	100	100	100	100	100
MERCOSUR	8.8	3.8	3.9	6.8	6.9	7.2	6.6	5.1	4.7	4.7
NAFTA	80	89.5	90.1	85.8	86.0	85.4	86.0	88.9	89.5	89.0
Chile	1.4	0.6	1.0	1.3	1.4	1.4	1.3	0.9	1.0	1.0
CAN	5.1	3.3	2.5	3.5	3.0	3.3	3.2	2.3	2.2	2.6
Rest of FTAA	5.0	2.8	2.5	2.6	2.7	2.7	2.9	2.7	2.5	2.7
Total FTAA	100	100	100	100	100	100	100	100	100	100

Source: WTO

SA 4. Complementarity Index of FTAA Countries
1997

Imp Exp	FTAA	MERCOSUR	US	Canada	Mexico	CAN	Chile	Rest of FTAA
MERCOSUR	1.02		0.91	1.08	1.13	1.88	1.49	1.40
US	1.13	1.10		1.18	1.21	1.16	0.99	0.81
Canada	1.14	1.06	1.19		0.93	1.07	1.05	0.86
Mexico	1.20	1.04	1.25	1.20		1.00	1.20	0.87
CAN	1.02	0.95	1.14	0.75	0.45		1.09	1.12
Chile	0.78	1.20	0.77	0.73	0.65	0.91		0.46
Rest of FTAA	0.99	0.73	1.08	0.96	0.71	0.71	0.87	

Source: Feenstra (2000)

**SA 5. Intensity Index
US Exports Relative to Imports of FTAA Partners**

Years	FTAA	MERCOSUR	Chile	Canada	Mexico	CAN	Rest of FTAA
1980	3.41	1.45	1.93	5.18	4.95	2.78	1.88
1981	3.23	1.29	1.73	4.70	4.48	2.68	1.78
1982	3.30	1.28	1.89	4.99	4.48	2.71	1.95
1983	3.58	1.21	1.91	5.07	4.97	2.73	2.09
1984	3.56	1.13	1.66	4.87	4.83	2.58	1.82
1985	3.82	1.52	1.72	4.98	4.91	2.60	1.98
1986	3.87	1.63	1.68	5.05	5.08	2.57	2.38
1987	4.16	1.56	1.65	5.44	5.37	2.59	2.57
1988	3.91	1.51	1.46	4.93	5.02	2.37	2.48
1989	3.87	1.81	1.61	4.59	5.17	2.53	2.70
Prom 1980-89	3.67	1.44	1.72	4.98	4.92	2.61	2.16
1990	4.03	1.70	1.75	4.92	5.21	2.56	2.84
1991	3.91	1.91	1.74	4.77	4.92	2.71	2.67
1992	3.87	1.76	1.74	4.77	5.11	2.57	2.62
1993	3.74	1.62	1.95	4.80	4.97	2.23	2.47

1994	3.73	1.68	1.72	4.91	4.85	2.11	2.44
1995	3.80	1.68	1.96	5.12	5.42	2.13	2.66
1996	3.78	1.64	1.86	5.07	5.39	2.16	2.44
1997	3.65	1.61	1.68	4.80	5.05	2.13	2.70
Prom 1990-97	3.81	1.70	1.80	4.90	5.11	2.32	2.61

Source: Feenstra (2000)

- In the case of US trade with the FTAA countries or regions:
 x_{ij} = Share of US exports (i) to the region j in total exports from the United States. In this case j was alternatively: FTAA as a whole, MER-COSUR, Canada, Mexico, CAN, Chile, and the Rest of FTAA.
 M_j = Share of j imports (net of US imports in the case of j=FTAA as a whole) in world imports (net of US imports).

Source of data: The indexes were calculated on data from Feenstra (2000).

The Complementarity Index

The complementarity index used by Anderson and Nordheim (1993) is derived from the index of revealed comparative advantage (Balassa 1965). It is the weighted average of the comparative advantage index of country i in the product s, multiplied by the comparative disadvantage index of country j in the product s, and the weight is the share of the product s in world imports.

$$C_{ij} = \sum_s \frac{|x_i^s \cdot m_j^s \cdot t_w^s|}{|t_w^s t_w^s|}$$

x_{is} = is the export share of the product s in the exports of country i

m_{js} = is the import share of the product s in the imports of country j

t_{ws} = is the import share of the product s in world imports

The index tends toward zero when country i does not export the same products that country j imports. If C_{ij} is greater than 1 there is strong complementarity between country i exports and country j imports. If C_{ij} is close to 1, the specializations of both countries are similar to world specialization; if there is then a bilateral bias it cannot be explained by the existence of comparative advantages.

Then, following Anderson and Nordheim (1993), the import intensity index can be expressed as the complementarity index multiplied by an index of nonexplained geographical bias (see Vaillant 2001):

$$IM_{ij} = C_{ij} \cdot B_{ij}$$

Source of data: The information on trade by product (export and import) was obtained from Feenstra (2000).

NOTES

1. The author acknowledges the collaboration of Paula Garda and Nicole Perelmuter in data collection and processing.
2. CINVE.
3. Between 1999 and 2002 the three countries abandoned their stabilization programs based on the exchange rate.
4. The following classifications are used: MERCOSUR countries—Argentina, Brazil, Paraguay, Uruguay; United States; Canada; Mexico; countries associated with MERCOSUR—Chile and Bolivia; countries belonging to the CAN (except Bolivia)—Colombia, Ecuador, Peru, and Venezuela; MCCA—includes all Central America; CARICOM—the English-speaking Caribbean countries; OECO (Organization of Eastern Caribbean States); European Union countries; and Rest of the World.
5. See Statistical Appendix, SA2 and SA3.
6. The increase in exports within MERCOSUR can be seen for all the four members (Statistical Appendix SA1). Argentina shows the highest increase in intra-MERCOSUR exports. However, it is surprising that Brazil also shows a very significant increase, so the larger MERCOSUR countries increased their bilateral trade much more than their trade with the smaller countries. Obviously, the MERCOSUR totals are very much influenced by the trend of Brazilian exports.
7. The share of primary goods in total exports of Latin American and the Caribbean is 23%. If Mexico is excluded, primary goods increase their share to 34% of total exports (CEPAL 2001).
8. See the complementarity indexes for the rest of the FTAA (SA 4) in the Statistical Appendix.
9. See the intensity index for US exports for the period 1980–1997 (SA 5) in the Statistical Appendix.

Integration of the Americas: Welfare Effects and Options for the MERCOSUR

SILVIA LAENS¹ AND MARÍA INÉS TERRA²

1. INTRODUCTION

During the 1990s, there was a powerful surge of new regionalism in the Americas; its characteristics have been discussed by several authors (Ethier 1998; Devlin and Ffrench-Davis, 1999; Devlin and Estevadeordal 2001). Against this background, a number of regional agreements in the Americas emerged or were restructured, like the Southern Cone Common Market (Mercado Común del Sur—MERCOSUR), the North American Free Trade Area (NAFTA), the Andean Community of Nations (CAN), the Caribbean Community (CARICOM), and the Central America Common Market (CACM). There were also several bilateral trade agreements between Latin American countries, like those signed by Chile with MERCOSUR, with Mexico, and with the Andean countries, and one between MERCOSUR and Bolivia.

The movement toward regional trade agreements is still going on. At present, MERCOSUR is involved in a number of negotiations with different countries or groups of countries. The most important of these negotiations are those that have to do with the Free Trade Area of the Americas (FTAA), those leading toward a free trade agreement with the European Union (EU), and the multilateral negotiations in the framework of the World Trade Organization (WTO). The FTAA is the most ambitious initiative in the Americas, comprising 34 countries in the hemisphere.

In addition to this, MERCOSUR has to renegotiate its partial agreements with Mexico and the CAN in the framework of the Latin

America Integration Association (LAIA), in order to avoid perforations in its Common External Tariff (CET). In fact, the negotiations with the CAN have a more ambitious purpose, to reach a free trade agreement similar to those signed with Chile and Bolivia. If such an agreement were achieved, it would practically complete a South American Free Trade Area (SAFTA). However, if the FTAA negotiations are successful, the preferences obtained through subregional agreements will eventually vanish.

The purpose of this study is to assess the impact of the elimination of tariffs within the FTAA on the MERCOSUR countries, and to look at MERCOSUR's other options for trade agreements within the Americas, considering the existing preferences. A number of questions can be raised about these negotiations. What would be the impact of market opening in each country? What is the effect of improved market access, particularly to the United States? How do the results change if the FTAA excludes the agricultural sector? Is trade creation more important than the expected trade diversion? Are all the MERCOSUR countries affected in the same way by the integration options the bloc is facing? The simulation exercises described in this chapter set out to tackle these and other related questions.

From a theoretical point of view, it is well known that the effects on welfare of a preferential trade agreement are ambiguous, both for the countries involved and for the rest of the world. Even if theory may help to predict the direction of the possible welfare effects, the final result is an empirical question. Computable general equilibrium (CGE) models have become the main tools for the *ex ante* analysis of the effects of preferential agreements. This study uses the model developed by the Global Trade Analysis Project (GTAP) for the quantitative analysis of the effects of the elimination of trade barriers within the FTAA on the MERCOSUR countries. The effects on each of the MERCOSUR countries are considered, and also the overall impact on the regional bloc.

In the next section a brief review of the theoretical approach to free trade areas is presented. Section 3 deals with the version of the GTAP model that was used, the aggregation criteria, and the simulation strategy. In Section 4 the issue of the existing preferential tariffs is set out, and the simulation results are presented in Section 5. Finally the main conclusions are drawn in section 6.

2. TRADE CREATION AND TRADE DIVERSION IN A FREE TRADE AREA: THE THEORETICAL APPROACH

The FTAA is a complex agreement among 34 countries in the hemisphere, which are already linked up a net of bilateral and/or subregional preferential agreements. The FTAA would erode the effects of the intricate system of preferences currently in force, and would establish a free trade system that, in the long run, would give clearer signals for investment location and resource allocation. This, in turn, would enhance growth and facilitate economic stability in the region, especially for the small economies where uncertainty about the permanence of preferences does not provide sufficient incentive for long-term investment.

In this section, a review of the theory is presented in terms of the expected results from a static model with perfect competition. This approach might be considered too restrictive, as the empirical evidence shows that the main effects of a free trade area are dynamic, or are associated with the exploitation of economies of scale or with increased competition in small markets where noncompetitive structures prevail. However, even though several works on the FTAA have dealt with these dynamic effects (among them Monteagudo and Watanuki 2001, CEI 2002, and Diao and Somwaru 2001), none of them has taken into account the more basic issue of the magnitude of the actual policy change (considering previous preferences) or the analysis of its different components.

In a static model with perfect competition, the effects on welfare of a free trade area are trade creation, trade diversion, terms of trade, and market access. In a world where there are preferential trade agreements in existence prior to the formation of a free trade area, the extension of preferential treatment to new partners creates different effects that should be examined. On the one hand, the costs of existing trade diversion might decrease and, at the same time, the access effect might also decrease for those partners whose exports were already receiving the benefit of preferential treatment. When analyzing an agreement such as the FTAA, these effects can be isolated by adopting an appropriate simulation strategy; the rationale for the simulation design is discussed below.

Trade creation and trade diversion. These are the effects of a free trade area from the point of view of the importing country, when the terms of trade are not affected. A free trade agreement induces imports from a more effi-

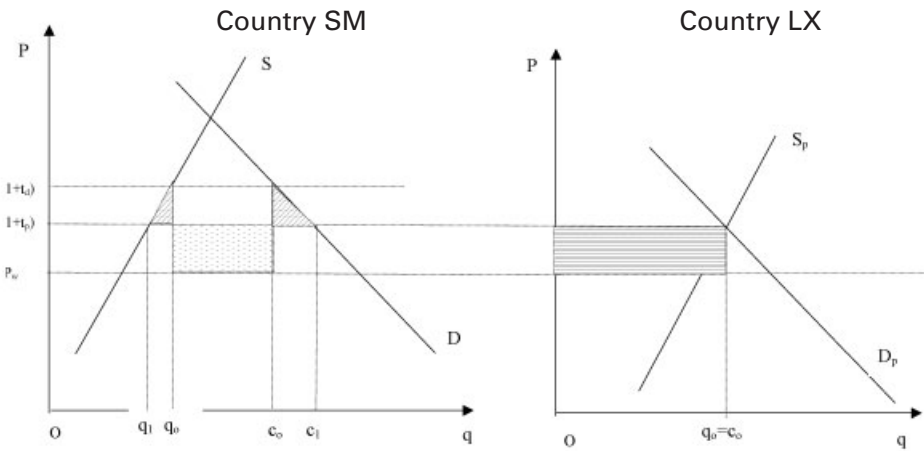
cient partner that substitute for domestic production, and this leads to an increase in welfare because resources are allocated more efficiently (trade creation). It is also possible that the increased imports from a partner substitute for imports from a more efficient nonpartner (trade diversion). Therefore, the joint impact of both effects may be measured by a simulation that captures the effect of the unilateral opening of MERCOSUR to imports from the FTAA partners, without considering the reciprocal opening of those partners. If the effects of this opening on the terms of trade are negligible, the net effect of trade creation and trade diversion for any particular partner can be approximated in this way.

Terms of trade. The approach described above seems to be appropriate for analyzing the global effects of the opening of the MERCOSUR members vis-à-vis the rest of the FTAA because, from a global perspective, they are small countries. However, the MERCOSUR is not a minor supplier in the case of some export sectors, and this approach does not seem to be appropriate for analyzing the effects of the largest partners in the FTAA. Using the GTAP model, the net effect on the terms of trade for each bilateral agreement can be isolated.

Market access. When a country participates in a free trade area it opens its own domestic market while at the same time obtaining preferential access to the markets of the other partners. Wonnacott and Wonnacott (1981) emphasize the importance of improved market access as a result of preferential agreements. Harrison, Rutherford, and Tarr (2001, 2002) find that market access is the main motivation behind Chile's involvement in trade negotiations, as the possibilities of increasing its efficiency by opening its own domestic market would be modest because its tariff is uniform and low. This effect can be measured for the MERCOSUR by simulating the opening of its FTAA partners without the compensation of its own domestic market opening.

Although the trade creation, trade diversion, and terms-of-trade effects have been widely analyzed, the market access effect is frequently disregarded, so it is useful to go into further detail on this subject. Preferential access to the other partners' markets can have positive and negative welfare effects in the exporting country, so the analysis can be clarified by considering two extreme cases (Figures 1 and 2). Let us assume the case of a free trade area with rules of origin that limit trade deflection. It is a small region, so world prices are exogenous (represented by a horizontal line in Figure 1 (P_w)).

Figure 1. Reduced Protection



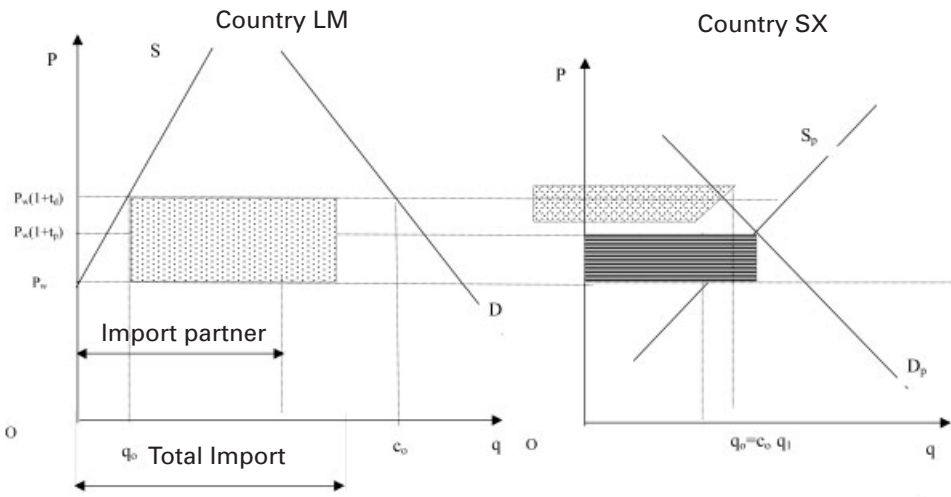
*FTA reduced protection.*³ A large exporting partner (country LX) improves its access to the market of a small importing partner (country SM). In this case, the country LX can satisfy all the import demand from country SM at its own domestic price (c^1-q^1 ; see left-hand side, Figure 1). If the domestic price does not change in country LX, the free trade area does not have any effect on its consumption or domestic production. Country LX will reduce sales to its own domestic market to the same extent that it will increase its exports to country SM. At the same time, country LX will start importing from the rest of the world the necessary quantity to fully satisfy the excess demand in its domestic market ($O-c_0$; right-hand side, Figure 1). Imports and tariff revenue increase in country LX, and its welfare gain will be equal to the total amount of its imports multiplied by the tariff (striped rectangle, right-hand side, Figure 1). In country SM there will be a welfare gain from trade creation and a decrease from trade diversion (dotted rectangle), as imports from country LX substitute for imports from third countries.

The welfare loss in the free trade area due to trade diversion is equal to the tariff in country LX multiplied by imports of SM before the creation of the free trade area (lower than the subsequent imports). Therefore, under these conditions, the net result of the free trade area is clearly positive. Country LX (the exporting country) gains from the trade diversion

of country SM (the importing country), which means a redistribution of benefits within the area, and it also benefits from trade creation. The free trade area increases its imports from third countries and its tariff revenue. The rest of the world increases its exports to the free trade area, so its welfare also increases. Consequently, there is a welfare gain for the free trade area members and for the rest of the world.

FTA enhanced protection. The exporting country is small (country SX) and the importing country is large (country LM), so production in the former is not sufficient to satisfy import demand from the latter (see Figure 2, where $O-q_0$ [right-hand side] is smaller than c_0-q_0 [left-hand side]). Again, country SX increases its imports from the rest of the world to satisfy its own domestic demand; its domestic price does not change and domestic demand is satisfied by imports, so tariff revenue increases (striped rectangle on the right-hand side, Figure 2). Furthermore, the producer's price increases to equal the domestic price in country LM ($P_w(1+t_d)$), production rises and so do exports to country LM (q_1-q_0). Prices do not change in country LM, the quantities imported are maintained, and there is no trade creation, but there is trade diversion (dotted rectangle, right-hand side, Figure 2). In country SX, producer surplus increases but there is an inefficient allocation of resources. The net effect on welfare in the exporting country SX is posi-

Figure 2. Enhanced Protection



tive (tariff revenue increases and so does producer surplus). However, the producer surplus increase plus the revenue increase in country SX (striped rectangle plus dotted area on the right-hand side, Figure 2) do not compensate for the welfare loss from trade diversion in country LM (dotted rectangle, left-hand side). Therefore, the free trade area has a net negative effect due to the efficiency loss of a reallocation of resources to the production of goods that could be purchased at a lower cost in the rest of the world. There is a redistribution of benefits within the area, and a negative effect on the rest of the world, which is discriminated against.

In between these two extreme cases, there are numerous possibilities: a free trade area can reduce protection in the importing country when this is a small country that adopts its partner's prices, or protection can increase in the exporting country when it is a small country.

MERCOSUR can be thought of as a small country in the FTAA; it imports manufactured goods and it is more protected than the United States. In contrast, the United States is a large country importing agricultural products, and it has higher protection than the MERCOSUR for those types of goods. In the first case, one can expect a welfare improvement for the area as a whole, an ambiguous effect on the MERCOSUR, and a clearly positive effect on the United States. In the case of the agricultural sector the second situation would hold; the MERCOSUR would improve its welfare while the United States would suffer a clear trade diversion effect that cannot be compensated for by the MERCOSUR.

If a free trade area is created on top of previous preferential trade agreements, the existing preferences will be eroded. In the country that was already importing from its partners, trade diversion can be reduced, but for the country that exported to the region, the gains associated with regional market access diminish. If it is a *reduced protection* free trade area, the exporting country loses in terms of market access. In this case, the importing country increases its welfare because trade diversion is reduced and there is trade creation, but the country that exported to the free trade area loses. If the free trade area is *enhanced protection*, trade diversion increases in the importing country and the welfare of the exporting country does not change.

These issues can be discussed in the case of the effects of the FTAA on the MERCOSUR through an appropriate simulation strategy. By simulating a unilateral discriminatory opening of each MERCOSUR country

vis-à-vis all the other partners of the FTAA, the trade creation or trade diversion effects can be approximated. The effects on the other MERCOSUR partners would be the costs associated with the erosion of preferences plus the income effect derived from the greater efficiency. The effects on the other FTAA partners would measure the access gains. In turn, the market access effect can be evaluated by simulating the opening of the other FTAA partners without the compensation of the domestic market opening in the MERCOSUR countries.

3. THE MODEL

The GTAP Model

The study carried out here requires a multicountry model, as the regional integration options for MERCOSUR will bring about changes for its members, for each of the potential partners, and for third countries that are not involved in the agreement. For this reason, the model developed by the Global Trade Analysis Project (GTAP) at Purdue University was chosen for the empirical work. This model has the advantage of comprising a database and the appropriate software to facilitate the simulations. The database (version 5) contains information on 66 regions or countries and 57 sectors or commodities for the year 1997, which is quite appropriate for this study. The base year is a good reference point to illustrate the situation prior to the beginning of the negotiations. In addition, the model has disaggregated data for three of the MERCOSUR partners (Argentina, Brazil, and Uruguay), so the bloc can be analyzed not only from a global perspective but also from the point of view of countries with very different interests. Furthermore, the country data allows the disaggregation of a large number of the countries involved in the FTAA negotiations.

The model developed by the GTAP is very well known (Hertel 1996). The standard version of this model (used here) is static and assumes perfectly competitive markets for goods and factors, but it admits differentiation by geographic origin in the goods market. There are five production factors in the model: capital, skilled labor, unskilled labor, land, and natural resources. The last two of these are specific for each sector. The institutions considered by the model are government, producers, and a representative regional household.

The representative regional household collects all the income generated by a representative agent in the region (factor payments and taxes) and distributes it through a nested utility function. At the first level, total income is allocated to private expenditure, per-capita government expenditure, and savings. At the second level, private consumption is allocated to different commodities assuming a constant difference elasticity (CDE) utility function. It is a nonhomothetic utility function so it is more flexible for representing consumer behavior than more common functional forms such as the Cobb-Douglas or the CES functions. The government spends its income on consumer goods, assuming a Cobb-Douglas utility function. Thus, each good or sector has constant shares in total government expenditure. Savings are exhausted in investment, and the model is investment-driven as investment is a constant budget share. As this is a static model, investment does not have any impact on production, but is a component in final demand.

On the production side, a nested technology separable function with constant returns to scale is assumed. At the first level, a Leontieff function is adopted, which combines a fixed quantity of a composite of value added and intermediate inputs. At the second level, domestic and imported intermediate inputs are combined using an Armington function (Armington 1969). Finally, an Armington function combines imported goods from different regions in a composite imported good. Additionally, a constant elasticity of substitution (CES) technology function combines the five factors of production to obtain value added. Thus, the optimal mix of labor, capital, land, and natural resources is independent of the prices of intermediate inputs. The elasticity of substitution between intermediate inputs and primary factors is zero. All the elasticities used are the default values provided by the GTAP model.

The GTAP database provides tariff data for 1997. It includes some nontariff barriers but it does not consider some preferential agreements in force at that time. In this study, tariffs were adjusted to take into account the preferences within MERCOSUR, among the LAIA countries, and those granted by the United States to the countries in the FTAA. These adjustments in the GTAP benchmark are described in Section 4 below.

Aggregation Strategy

Because this study focuses on MERCOSUR, three of its members were considered separately (Argentina, Brazil, and Uruguay, but not Paraguay,

because data were not available in the GTAP database). Five more countries/regions were considered in order to evaluate the effects on other relevant FTAA partners. The European Union (EU) was also individualized and all other countries were gathered in a single group.

Thus, the GTAP data were aggregated into the following 10 countries/regions:

1. Argentina
2. Brazil
3. Uruguay
4. Chile
5. CAN (Colombia, Venezuela, Peru and the rest of the Andean Pact)
6. United States
7. Rest of NAFTA (Mexico and Canada)
8. Rest of FTAA
9. EU
10. Rest of the World

Consequently, in this study, the FTAA will be considered as an agreement involving four large regions, MERCOSUR (Argentina, Brazil, and Uruguay), the rest of South America (Chile and the CAN), NAFTA (Canada, Mexico, and the United States), and the Central American and Caribbean countries (Rest of FTAA).

The FTAA countries account for 39% of the world's GDP and 30% of its trade. The countries involved in the FTAA negotiations are remarkably asymmetrical as regards their relative size, the levels of development they have achieved, and their specialization patterns. MERCOSUR can be seen as a relatively small bloc negotiating with countries or regions that hold a significant share of world trade and production. Together, NAFTA represents 33% of world production and 25% world trade, while MERCOSUR's share is far less than 5%. The disparities between MERCOSUR and its potential partners are not only quantitative, significant differences can also be found in the trade specialization pattern of each region.

In order to analyze the impact of the FTAA, ten sectors were considered. The classification of sectors adopted in this paper is based on that suggested by CEPAL (2001). However, some changes were introduced to take into account MERCOSUR's main interests as regards market access

and the level of protection for each sector in the United States (which is the largest potential market for MERCOSUR exports). Consequently, the following aggregation was finally adopted:

1. Agriculture
2. Mining
3. Beef and dairy products
4. Milling
5. Sugar
6. Other food, beverages and tobacco
7. Other traditional manufacturing
8. Manufactured goods based on natural resources and large economies of scale
9. Durable goods and manufactured goods that facilitate the diffusion of technical progress
10. Services

Table 1 shows the revealed comparative advantages for MERCOSUR as a whole and for each of its members, for the rest of South America, for NAFTA, for the rest of the FTAA, and for the FTAA as a whole. The MERCOSUR has strong comparative advantages in all agricultural sectors and food, while it has clear disadvantages in manufacturing and services. However, there are some differences for each member: Argentina has clear advantages in agricultural goods and milling, Brazil in milling and sugar, Uruguay in beef and dairy products and milling. On the other hand, NAFTA shows advantages in agricultural products, manufactured goods that diffuse technical progress, and services, while the rest of South America has advantages in agricultural products; mining; sugar; other food, beverages, and tobacco; and manufactured goods based on natural resources and with economies of scale. The FTAA in general has comparative advantages in agricultural products, milling, sugar, and services.

The differences or similarities in specialization patterns might suggest that negotiations could be easier when complementarity is found, because potential gains in welfare are greater when comparative advantages are strong. However, nations usually grant more protection to sectors that are not competitive by themselves, for social, political, or strategic reasons. Therefore, to get an idea of the difficulties that the negotiations will

Table 1. Revealed Comparative Advantages

	Argentina	Brazil	Uruguay	MERCOSUR	Rest South America*	NAFTA	Others FTAA**	Total	EU	ROW
1. Agriculture	5,811	3,775	3,227	4,404	4,404	4,363	4,587	1,774	0,710	0,832
2. Mining	1,406	1,116	0,024	1,160	1,160	0,584	0,834	0,856	0,170	1,890
3. Beef & dairy	3,784	2,300	11,651	3,196	3,196	0,741	0,709	0,874	1,539	0,550
4. Milling	23,853	7,569	8,526	12,843	12,843	0,665	0,706	1,511	0,747	0,949
5. Sugar	1,335	15,336	0,120	10,156	10,156	0,144	1,002	1,610	0,740	0,899
6. Other food, beverages and tobacco	2,504	1,301	2,294	1,732	1,732	0,781	0,962	1,013	1,258	0,742
7. Other trad. manufact.	0,598	0,895	1,729	0,837	0,837	0,585	0,635	0,648	0,886	1,315
8. Manuf. based on Nat. res. w/sc. ec.	0,710	1,162	0,567	0,990	0,990	0,874	0,899	0,905	1,191	0,870
9. Manuf. tec. diffusion	0,446	0,585	0,132	0,520	0,520	1,185	1,090	1,052	1,022	0,948
10. Services	0,613	0,713	1,597	0,721	0,721	1,157	1,144	1,116	1,024	0,909
Total	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

* Includes Chile and CAN

** FTAA except Mercosur

encounter, other aspects need to be considered. In particular, the present level of protection for each sector should be examined.

A comparison of the average tariff prevailing in the MERCOSUR countries with those in the NAFTA countries shows a remarkable difference, both in the level of protection and in its distribution by sector (see Table 2).

The average tariff in NAFTA is much lower than in MERCOSUR. However, some sectors in the NAFTA countries show higher average tariffs than any sector in MERCOSUR. An example is the beef and dairy products sector, which has an average tariff of 50.1% in the rest of NAFTA (Canada and Mexico). Similarly, in the United States the average tariff for the sugar sector is twice the average tariff in the MERCOSUR. On the other hand, MERCOSUR has significantly higher protection than imposed by the NAFTA countries in the case of nontraditional manufactured goods (sectors 8 and 9).

The observed differences in the level of protection by sector point to the sensitivity of each sector when facing the possibility of future liberalization. Therefore, stiff resistance can be expected in the NAFTA countries against the trade liberalization of some of MERCOSUR's main exports (beef and dairy products, sugar, other agricultural products).

As can be seen, the MERCOSUR countries are specialized precisely in those sectors where the United States imposes the highest average tariff. Therefore, it is plain to see that negotiations about sensitive sectors will not be easy. In fact, the United States has clearly stated that treatment for the agricultural sector is a matter of multilateral negotiation, so it should be addressed within the framework of the WTO and not in regional negotiations. At the same time, Brazil is particularly interested in maintaining protection as high as possible in some manufacturing sectors.

4. PREFERENTIAL TRADE AGREEMENTS

Background

The wave of regional trade agreements (RTAs) characteristic of the “new regionalism” has been particularly intense among the countries of the western hemisphere (Devlin and Estevadeordal 2001). The countries involved in the FTAA negotiations are linked by a complex array of RTAs, which should be considered when assessing the possible impact of the creation of the FTAA.

Table 2. Average MNF Tariff

	Argentina	Brazil	Uruguay	Chile	CAN	US	Rest of NAFTA	Rest of America
1. Agriculture	8.5	8.7	9.8	12.0	11.4	13.2	5.0	12.8
2. Mining	0.1	4.7	0.2	11.2	5.0	0.4	0.2	1.0
3. Beef & dairy	17.3	19.0	22.5	10.9	18.5	14.6	50.1	22.0
4. Milling	12.6	12.5	13.2	11.1	18.6	4.6	8.0	20.3
5. Sugar	19.7	18.4	19.5	19.8	17.6	52.9	4.9	19.8
6. Other food, beverages, and tobacco	16.4	16.7	17.4	11.2	17.5	10.7	19.3	15.7
7. Other trad. manufact.	20.1	19.4	19.3	11.0	16.9	8.8	15.5	13.9
8. Manuf. based on Nat. res. w/sc. ec.	10.5	8.1	9.3	11.0	9.7	3.4	6.4	7.9
9. Manuf. tec. diffusion	15.4	18.5	12.7	10.9	16.7	1.9	5.5	12.4

The Latin American countries' willingness to follow an integration path was declared as long ago as 1960 with the creation of the Latin American Free Trade Association (LAFTA), which was reformulated and renamed the Latin American Integration Association (LAIA) in 1980. However, trade liberalization made little progress until the 1990s, when the "third generation" agreements came into being (LAIA 1997). This new type of agreement aimed at the liberalization of trade flows among the participants through the phasing out of tariffs and the establishment of very short lists of exceptions. Most members of LAIA became involved in the negotiation of bilateral agreements of this kind, which has given rise to a complicated network of reciprocal preferences.

The integration wave moved further ahead for the Andean countries (Bolivia, Colombia, Ecuador, Peru, and Venezuela), which revived the former Andean Pact and became the Andean Community (CAN), a free trade area that is intended to become a customs union. Similarly, Argentina, Brazil, Paraguay, and Uruguay created the MERCOSUR as an imperfect customs union, and they made significant progress in the deepening of the integration process, despite the macroeconomic instability prevailing in recent years.

Other countries in the hemisphere were also actively involved in negotiating RTAs in the 1990s (Salazar-Xirinachs 2002). Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua restructured the CACM, created in 1961, in order to turn it into an effective customs union. The same thing happened to the CARICOM, created in 1973 among the English-speaking countries of the Caribbean. These customs unions have negotiated free trade agreements with other countries in the hemisphere, and MERCOSUR has done the same. Some individual countries like Chile and Mexico have also been very active in pursuing bilateral free trade agreements within the region and outside it.

Last but not least, the United States has also given proof of its willingness to pursue RTAs by creating the NAFTA with Canada and Mexico and, more recently, by reaching a free trade agreement with Chile (still in the process of completing all formalities). Furthermore, the United States has been one of the driving forces in the FTAA process.

As a consequence of this proliferation of agreements in the Americas (see Table 3), a full array of reciprocal tariff preferences is in force. In addition, the Generalized System of Preferences (GSP), which is applied by the

Table 3. Main Regional Trade Agreements in the Americas

Agreement	Date of signature	Entry into force
<i>Customs unions</i>		
Central American Common Market (CACM) ¹	1960	1961
Andean Community ²	1969	1969
Caribbean Community (CARICOM) ³	1973	1973
Southern Cone Common Market (MERCOSUR) ⁴	1991	1995
<i>Free trade agreements</i>		
Chile - Mexico ⁵	1991	1992
Chile - Venezuela	1993	1993
North American Free Trade Agreement (NAFTA) ⁶	1992	1994
Chile - Colombia	1993	
Costa Rica - Mexico	1994	1994
Group of Three (G-3) ⁷	1994	1995
Bolivia - Mexico	1994	1995
Chile - Ecuador	1994	1995
Chile - MERCOSUR	1996	1995
Canada - Chile	1996	1996
Bolivia - MERCOSUR	1996	1997
Mexico - Nicaragua	1997	1997
Chile - Peru	1998	1998
CACM -Dominican Republic	1998	1998
CARICOM - Dominican Republic	1998	1999
CACM - Chile	2000	1999
Mexico - Northern Triangle ⁸	2000	2001
<i>Canada - Costa Rica</i>	2001	2001
CACM - Panama	2002	

1. Members: Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua. In 1990 it was reactivated and in 1993 the creation of a customs union was decided.
2. Members: Bolivia, Colombia, Ecuador, Peru, and Venezuela. In 1996, the original Andean Pact was revised and its name was changed to Andean Community.
3. Members: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Sr. Kitts and Nevis, St. Lucia, Sr. Vincent and the Grenadines, Suriname, Trinidad and Tobago, and Montserrat.
4. Members: Argentina, Brazil, Paraguay, and Uruguay. In 1995 the (imperfect) customs union came into force.

5. Agreement was substantially revised and upgraded since 1999.
6. Members: Canada, Mexico, and the United States.
7. Members: Colombia, Mexico, and Venezuela.
8. Northern Triangle includes El Salvador, Guatemala, and Honduras.

Sources: Devlin and Estevadeordal (2001), Salazar-Xirinachs (2002).

United States and Canada on imports from the other countries of the hemisphere, also grants preferential access to those markets. Finally, the United States gives special treatment to some particular countries and some selected items, as in the cases of the Caribbean Basin Initiative (CBI) and the Andean Trade Preference Act (ATPA). To sum up, the tariffs applied on a considerable proportion of trade flows within the hemisphere are a long way from the Most Favored Nation (MFN) tariffs, which are usually taken as benchmark in the assessment of trade liberalization.

The Treatment of Tariff Preferences

The GTAP database used in this study includes the MFN tariffs enforced in each country in 1997. Therefore, those tariffs do not take into account most of the existing preferences granted through bilateral or regional agreements among the FTAA countries. The case of NAFTA is an exception, since the GTAP database includes the tariff liberalization among its members, as well as the prevailing tariffs for the items still protected.

If the existence of preferential tariffs is not considered in the FTAA simulations, the effects of this hemispheric agreement will be overestimated since the MFN tariffs are higher than the tariffs applied to a significant proportion of current trade flows. For this reason, a special effort has been made in this study to consider the main preferential regimes in force among the FTAA countries.

First, the GSP was considered, so a zero tariff was applied to 6.3% of US imports from FTAA countries. Second, the preferences granted through the CBI and the APTA were included (only the *ad valorem* portion). These regimes accounted for 8% of total US imports from the FTAA countries. Third, all the reciprocal preferences granted under the LAIA framework were considered (including the liberalization of intrabloc trade in the Mercosur and the CAN). On the other hand, the existing preferences within the CARICOM were not taken into account. The methodology used for calculating residual tariffs can be found in the Appendix.

Table 4. Average Tariffs (MFN and Residual Preferential Tariffs)

PARTNER	IMPORTING COUNTRY OR REGION					
	Argentina		Brazil		Uruguay	
	PREF	MFN	PREF	MFN	PREF	MFN
Argentina			5.88	21.79	2.07	11.95
Brazil	0.00	15.47			2.01	12.10
Uruguay	0.00	15.64	1.02	14.97		
Chile	3.50	13.57	0.35	7.15	4.08	13.87
And. Com.	1.31	6.99	4.42	6.53	0.00	2.15
US	9.84	9.83	10.43	10.43	6.21	6.20
R. of NAFTA	10.05	13.23	8.13	9.55	1.31	7.45
R. of FTAA	3.90	3.90	4.27	4.27	9.30	9.47
Europ. Un.	12.00	11.98	10.69	10.69	9.52	9.52
R. of World	10.34	10.32	9.37	9.37	9.12	9.11
MERCOSUR	0.00	15.48	5.35	21.05	2.04	12.02
NAFTA	9.87	10.30	10.10	10.31	5.55	6.36

Source: Prepared with data from GTAP database version 5; IADB, Hemispheric Trade and Tariff Database; LAIA (database of trade preferences); and USITC.

When these adjustments were made, the average tariff actually applied to trade with particular partners was much lower than the MFN tariff available in the GTAP database (see Table 4). The difference is particularly large in the case of the MERCOSUR countries, which have liberalized their reciprocal trade almost completely.

In the case of the CAN, the intrabloc tariff decreases from 14% to 2%. Other agreements among the LAIA countries also have significant effects on the level of tariffs applied to reciprocal trade. This can be clearly seen in the case of Chile, which has signed agreements with most other LAIA members.

Finally, it should be noted that, on average, tariffs applied by the United States do not change significantly, except in the case of the Rest of FTAA (mainly due to the CBI preferences). However, tariff reduction

IMPORTING COUNTRY OR REGION									
Chile		Andean Com.		US		Rest of NAFTA		Rest of FTAA	
PREF	MFN	PREF	MFN	PREF	MFN	PREF	MFN	PREF	MFN
5.29	10.92	8.09	12.83	3.24	4.96	6.09	9.90	9.76	9.73
4.61	10.82	9.86	12.46	3.94	5.22	5.42	7.43	10.92	10.91
3.99	10.52	8.02	13.58	1.78	2.70	0.59	8.63	13.84	13.95
		3.34	13.03	3.00	3.60	4.47	13.00	11.36	11.41
5.54	10.68	1.72	13.98	2.15	3.57	1.16	5.29	7.19	7.18
9.37	9.37	9.98	9.98			1.16	1.16	12.28	12.23
5.05	10.22	13.34	13.38	0.41	0.41	2.60	2.60	8.40	8.40
9.60	9.64	11.54	11.55	2.63	10.50	5.18	5.18	12.20	12.20
8.57	8.56	7.98	7.97	2.16	2.16	4.98	4.98	9.19	9.19
9.05	9.05	10.72	10.71	3.26	3.26	5.56	5.56	10.81	10.81
4.99	10.87	9.18	12.62	3.73	5.09	5.30	7.93	10.67	10.66
8.31	9.57	10.55	10.55	0.41	0.41	1.19	1.19	11.68	11.64

can be quite considerable for some particular sectors, since all the three regimes included (GSP, CBI, and APTA) are applied to selected items, and these are mostly concentrated in a few sectors.

Comparison of Simulations With and Without Preferential Tariffs

The differences between MFN and preferential tariffs suggest that the simulation of the impact of the FTAA might be greatly affected if the previous RTAs in the hemisphere were disregarded. In order to assess the significance of this question, two simulations were carried out. In the first, the FTAA liberalization was simulated starting from the MFN tariffs, just as they are available in the GTAP database. In the second, the FTAA is simulated taking into account the abovementioned preferential

regimes, so the starting point is lower than in the first case. The results in terms of equivalent variations are presented in Table 5.

As was expected, the impact of the FTAA is overestimated when the MFN tariffs are used in the benchmark. If the actual (preferential) tariffs are used, the gains are clearly lower for all the countries involved in the agreement except the United States and the rest of NAFTA. At the same time, the losses for the countries that do not participate in the agreement (the EU and the rest of the world) are also lower when preferential tariffs are used.

It should be noted that in the cases of Uruguay and Chile the FTAA would even generate a welfare loss if the actual tariffs were considered. The reason for this is the importance of the existing preferences both countries enjoy in the market of their main trading partners. Clearly, Uruguay would be harmed by competition from other countries in the Brazilian market, so the *market access effect* in its favor (due to MERCOSUR) would be lower. Chile, in turn, has preferential access to most hemispheric markets, and this situation would be eroded by the FTAA. Similarly, the countries gathered in the Rest of FTAA would see their gains significantly reduced from the hemispheric agreement since their present preferential access to the US market would be severely eroded.

The opposite is true in the case of the United States, whose welfare increases. The reason for this is that this country improves its access to the other hemispheric markets while the conditions of access to its own market do not change significantly because of unilateral preferences already granted to the other partners. The United States suffers smaller losses due to trade diversion in favor of its regional partners and at the same time obtains greater gains through improved market access to the other partners.

Similar reasoning explains the results for the European Union and the rest of the world. The negative impact they receive from FTAA creation is lower than could be expected if there were no previous preferences. When the latter are considered, the negative trade diversion effect would be smaller, so their total loss is reduced.

The comparison of these sets of results clearly indicates the need to take into account the existing preferential agreements in the hemisphere. Therefore, all the simulations presented in the following sections of this paper were carried out including the preferential tariffs in the benchmark.

Table 5. FTAA Simulations with MFN or Preferential Tariffs FTAA

Countries / regions	FTAA with MFN tariffs	FTAA with preferential tariffs
Argentina	0.89	0.28
Brazil	1.00	0.25
Uruguay	1.38	-0.04
Chile	0.40	-0.12
Andean Community	0.89	0.23
US	0.08	0.10
Rest of NAFTA	0.19	0.20
Rest of FTAA	3.92	1.10
European Union	-0.09	-0.05
Rest of the world	-0.08	-0.04
MERCOSUR	0.97	0.26
Total	0.05	0.03

5. SIMULATION RESULTS

If the *ex ante* assessment of the effects of a free trade area is a complicated task, it becomes even more complex when the whole array of previous agreements is taken into account. A general equilibrium model is a very useful tool for carrying out this analysis but its results cannot be easily interpreted. On the one hand, the effects of an agreement with several participants can be conceived of as the sum of results of multiple bilateral agreements among them. Even though the final completion of the FTAA depends, to a large extent, on the possibility of reaching an agreement between Brazil and the United States, each bilateral agreement adds its own complexity. The result of each bilateral agreement is the sum of the direct effects on each partner of the opening of its own market and of improved access to the market of the other partners, plus indirect effects on third countries. On the other hand, from a theoretical point of view, in a static model the result depends on the balance among trade creation, trade diversion, terms of trade, and market access.

Consequently, in this section the FTAA simulation is broken down into several components so as to facilitate the interpretation of results.

FTAA: Trade Creation, Trade Diversion, Terms of Trade, and Market Access

In order to analyze the possible effects of the FTAA on welfare, a 100% tariff reduction in every country of the hemisphere was simulated. In a way it could be said that this experiment does not capture the full impact of the FTAA, as it does not take into account the possible removal of nontariff barriers. However, the tariff has been the main instrument under consideration in recent trade negotiations, as nontariff barriers, although quite important as a protection device, are very difficult to measure and thus very hard to agree upon. Furthermore, the total liberalization of trade in the hemisphere is not very likely because in most agreements the protection of sensitive sectors is preserved, even between developed countries like Canada and the United States.

The impact of the FTAA was simulated, breaking it down into the following components:

Opening of each of the three MERCOSUR partners vis-à-vis the rest of the FTAA countries. The sum of these three simulations is equal to the effect of the simultaneous opening of the three MERCOSUR countries to the other FTAA partners. In the country that opens, the welfare effect captures the net effect of trade creation, trade diversion, and terms of trade variation. Simultaneously, the welfare effect on the other partners captures the result of the erosion of preferential market access. Thus, when Argentina opens its domestic market to the new partners in the FTAA, the other MERCOSUR countries lose their preferences in the Argentine market. In theory, this effect can be conceived of as a reduction in the market access effect, as there are more partners that can benefit from trade diversion in that country.

The results of these simulations are presented in Table 6. The net welfare effect of MERCOSUR opening up to other FTAA countries is negative (a loss of \$418 million). Argentina would be the country with the largest losses because the opening of the Brazilian market would erode existing MERCOSUR preferences, and the net effect of trade creation and trade diversion from Argentina's own opening would be positive but minimal. In the case of Brazil the net effect is also negative but less so, because even though it loses from increased competition in the Argentine

market, this is partly offset by the net trade creation that occurs due to the opening up of its own market. Finally, the net losses for Uruguay are considerable, as in the case of Argentina, because the market access loss is much higher than the positive trade creation gain. Therefore, in all three countries the estimated results show that the welfare reduction that occurs due to the deterioration of market access within MERCOSUR is only partially offset, in the case of Brazil, by the net trade creation stemming from greater competition in its own market.

Access for each MERCOSUR country to the markets of the new FTAA partners. Again, the sum of these three simulations is the total market access effect for MERCOSUR. The bloc gains \$2.629 million. This access effect can be separated into two components: (a) the improvement in market access for a given MERCOSUR country in the other FTAA countries, and (b) the indirect effect on the other MERCOSUR partners. When a country obtains preferential market access, all the countries excluded are harmed. By adding up the effects of the three simulations, the net effect of the simultaneous improvement in market access for the MERCOSUR countries is obtained. In most cases, a positive effect can be expected, but it will be lower than when market access improvement is limited to each individual country, as the gains from market access are partly offset by the increased competition with the other partners. This actually happens in Brazil and Uruguay, but in Argentina the better access conditions of its MERCOSUR partners generate a positive effect.

Creation of a free trade area among the other countries of the FTAA. In this case the welfare effect on the MERCOSUR countries is clearly negative. If the other FTAA countries liberalize their reciprocal trade, the MERCOSUR would be discriminated against. In the simulations carried out, the net welfare effect on MERCOSUR of a free trade area among the other FTAA countries would be negative (MERCOSUR would lose \$900 million).

Completion of MERCOSUR. Finally, as the liberalization within MERCOSUR had not been completed by 1997 (benchmark year), the FTAA simulation captures the effect of the phasing out of tariffs within MERCOSUR (a gain of \$682 million). Since that year, MERCOSUR has made considerable progress in the elimination of exceptions to free trade within the bloc, and it does not seem appropriate to impute the result of this process to the FTAA negotiations. Even though some defensive instruments (like antidumping measures) are still used, their effects are

Table 6. Welfare Effects on MERCOSUR, Equivalent Variations Simulations with MFN or Preferential Tariffs
(Millions of US dollars)

Scenario	Argentina	Brazil	Uruguay	MERCOSUR
1. MERCOSUR opening to the rest of FTAA	-292	-104	-22	-418
Argentina	4	-278	-7	-282
Brazil	-284	191	-17	-110
Uruguay	-12	-17	2	-27
2. Market access of MERCOSUR to the rest of FTAA	509	2.077	42	2.629
Argentina	479	-54	-7	418
Brazil	29	2.135	-1	2.163
Uruguay	1	-3	49	47
3. Free trade area in the rest of FTAA (without MERCOSUR)	-240	-647	-22	-909
<i>Sub-total:</i>				
FTAA without completion of MERCOSUR	-23	1.327	-2	1.302
4. Completion of MERCOSUR	743	-57	-4	682
Total FTAA	720	1.269	-6	1.984

Source: Estimates based on GTAP

not considered in the tariff data for MERCOSUR. Table 6 shows that the net welfare effect of the FTAA on MERCOSUR is positive, and amounts to \$1,302 million, if this fourth effect is not considered.

Integration Options for the MERCOSUR: Simulations and Results

The creation of the FTAA is one of the most important options on the menu of integration strategies that the MERCOSUR countries might pursue. However, there are other options that are under consideration in one

way or other. The possibility of creating a South American Free Trade Area (SAFTA), or reaching a free trade agreement just with the CAN, or the alternative of negotiating an agreement only with the United States, have been frequent issues in public debate. Both in Argentina and Uruguay there have been influential opinions in favor of a bilateral agreement with the United States. Brazil, in turn, has shown a strong preference to negotiate a SAFTA before getting into the crucial negotiations of the FTAA. Therefore, it seemed interesting to evaluate these options and to compare the results with those of the FTAA alternative. Moreover, to simulate these other options is equivalent to breaking down the FTAA agreement into its main subregional agreements, which is quite useful for understanding the results.

The Welfare Effects of Different Options

Table 7 shows the results obtained when the welfare effects of the FTAA are broken down by RTAs. The first thing to notice is that none of the agreements that involve exclusively South American countries has any effect on the world as a whole (see the row totals). Only the agreements in which the United States is one of the participants have some global impact, but it is negligible.

At first glance, the FTAA seems to be the most suitable option for MERCOSUR, even though its impact is not very great. The columns in bold type show that, in the case of the FTAA, the welfare gain for MERCOSUR is 0.26% of total consumption, while it is only 0.18% in the case of the SAFTA and 0.19% for the sum of all the other possible RTAs that the bloc can reach in the hemisphere. More generally, MERCOSUR benefits from all the possible RTAs in which it might be involved, but the wider the agreement, the greater the gains. On the other hand, the NAFTA and other agreements that exclude the MERCOSUR countries have negative effects on the bloc.

The other countries participating in SAFTA obtain mixed results in comparison with the effects of the FTAA. Chile would be better off with SAFTA, since its welfare loss would be smaller than in the FTAA. This is because the SAFTA would only erode the Chilean preferences in the South American markets, while the preferences Chile has in the NAFTA countries would remain untouched. The opposite is true in the FTAA where all the preferences obtained through bilateral agreements by Chile would be eroded.

Table 7. Welfare gains as percentage of consumption

	FTAA	Prev. RTAs in South Amer.*	MERCO- Andean Comm.	SAFTA	MERCO- US	MERCO- Rest of NAFTA	MERCO- Rest of America	Sum of other MERCOSUR RTAs
ARG	0.28	0.32	0.05	0.37	-0.04	0.00	0.04	0.00
BRA	0.25	0.01	0.09	0.09	0.16	0.04	0.09	0.28
URY	-0.04	-0.02	0.05	0.03	0.00	-0.02	0.10	0.08
CHL	-0.12	-0.03	-0.03	-0.06	-0.06	-0.01	-0.01	-0.08
CAN	0.23	0.03	0.01	0.04	-0.02	0.00	-0.01	-0.03
US	0.10	0.00	0.00	-0.01	0.04	0.00	0.00	0.04
RNAFTA	0.20	0.00	0.00	0.00	-0.05	0.05	0.00	0.00
RAM	1.10	-0.02	-0.02	-0.04	-0.08	0.00	-0.01	-0.08
EU	-0.05	0.00	0.00	-0.01	-0.02	0.00	0.00	-0.02
ROW	-0.04	-0.01	0.00	-0.01	-0.01	0.00	0.00	-0.01
MERCO	0.26	0.11	0.07	0.18	0.09	0.03	0.07	0.19
Total	0.0	0.00	0.00	0.00	0.01	0.00	0.00	0.01

* MERCOSUR, Andean Community, Chile-MERCOSUR, Chile-Andean Community

βSource: Estimates based on GTAP

In the case of the CAN, the welfare gains obtainable through the FTAA would be cut to one-fifth in the case of SAFTA, although they remain positive. This can be explained by the preferential treatment principle in LAIA (see Table 4). The CAN has greater preferential access to the MERCOSUR countries and Chile than these countries have in the CAN markets. Therefore, the SAFTA agreement would considerably improve market access for Chile and the MERCOSUR countries, while the benefits from market access would be minimal for the CAN. In this case, it is likely that the erosion of existing preferences will not be offset by the market access effect.

As might be expected, the SAFTA yields negative results for the United States and for the Rest of America, as they do not participate in the agreement, but their welfare loss is negligible. The impact is null for the other countries in NAFTA.

Integration of the Americas

NAFTA	Chile- NAFTA	Chile- Rest of America	Andean Comm. - NAFTA	Andean Comm. - Rest of America	NAFTA- Rest of America	RTAs in Rest of America	Sum of RTAs excl. MERCOSUR
0.01	-0.01	-0.01	0.03	0.00	-0.03	0.00	-0.09
-0.02	-0.01	-0.01	-0.04	0.00	-0.04	-0.01	-0.13
-0.07	0.00	0.00	-0.03	0.00	-0.03	-0.01	-0.15
-0.06	0.17	0.17	-0.10	0.00	-0.03	-0.01	0.02
-0.03	-0.01	-0.01	0.20	0.12	-0.06	0.00	0.22
0.01	0.01	0.01	0.02	0.00	0.03	0.00	0.07
0.18	0.00	0.00	0.02	0.00	0.00	0.00	0.20
-0.13	-0.01	-0.01	-0.08	0.15	0.38	0.88	1.22
0.00	0.00	0.00	-0.01	0.00	-0.01	0.00	-0.02
0.00	0.00	0.00	0.00	0.00	-0.01	0.00	-0.02
-0.02	-0.01	-0.01	-0.04	0.00	-0.04	-0.01	-0.11
0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02

The other options for MERCOSUR should also be considered. An agreement with the United States yields positive results for the bloc, but the welfare gain is one half of what could be obtained through SAFTA. However, the benefits for each individual country are completely different. Brazil would have the greatest gains from an agreement with the United States, and these gains would be significantly greater than those obtained through SAFTA. The opposite is true for Argentina, which would suffer a negative impact from an agreement with the United States. Uruguay would be mostly unaffected.

Finally, it should be noted that an agreement with the other countries in NAFTA would be less suitable for MERCOSUR than an agreement with the CACM and the CARICOM (gathered in the Rest of America). The welfare gains for the bloc are about twice as high, and they are much higher in the case of Uruguay.

The Effects of Previous Subregional Agreements

The analysis above does not take into account the fact that, as was shown in Section 3, there are several free trade agreements already in force among the countries involved in the FTAA. In fact, the welfare gains from FTAA and from SAFTA include the effects of several agreements that have almost completely liberalized trade among certain countries. In particular, they include the effects of full trade liberalization within MERCOSUR, and within the CAN, which is at present virtually complete. They also include the effects of the completion of all the bilateral agreements signed by Chile (with the Andean countries, with MERCOSUR and with the NAFTA countries) which, in most cases, will come fully into force before the FTAA takes shape. Therefore, the impact of all these previous subregional agreements should be deducted from the welfare gains of the FTAA in order to evaluate the real *additional* effect of the hemispheric agreement.

In Table 7 the effects of FTAA and of SAFTA have been further broken down in order to assess what is the real impact of the liberalization that has not yet been negotiated.

The first thing to notice is that the completion of SAFTA is generally equivalent to the negotiation of a free trade agreement between MERCOSUR and the CAN. Chile, the only South American country that does not belong to either bloc, has signed bilateral agreements with each of the Andean countries and with MERCOSUR (see Section 3), so the only liberalization agreement that remains to be made is that between the two blocs. Table 7 shows that the welfare effects of the previous regional trade agreements on MERCOSUR (0.11) are greater than those stemming from the agreement between MERCOSUR and the CAN (0.07). This is mainly because of the large gains that Argentina obtains through the completion of previous agreements. Instead, Brazil and Uruguay would receive larger gains from an agreement with the CAN. These different results are explained by the composition of each country's trade with the CAN and their degree of complementarity.

The CAN would not benefit so much from an agreement with MERCOSUR (a gain of 0.01). The welfare gains would be one-third of those derived from the completion of the full enforcement of previous agreements. Apparently, the completion of the free trade area within the CAN and the bilateral agreements with Chile would improve

welfare in the Andean countries more than a free trade agreement with the MERCOSUR.

According to these results it is doubtful whether the CAN will be interested in the SAFTA option. Besides the low welfare gain that they would obtain from the remaining negotiations, it is clearly a second-best option compared to an agreement with NAFTA, which would generate much greater welfare gains (0.20).

It is interesting to note that the welfare effects on Chile are always negative, except in the case of an agreement with the NAFTA countries. Such an agreement is virtually sealed, as Chile has signed bilateral agreements with Canada and Mexico, and it has recently finished its negotiations with the United States. Therefore, Chile's negotiating strategy seems to be consistent with the welfare impact expected. As long as this country has bilateral agreements with most other countries in the hemisphere, it would be harmed by any new agreement involving the other countries. Chile would lose the preferences previously obtained, and that is why the FTAA would reduce its welfare, as would any other agreement.

These results to a certain extent contradict the position that each of the MERCOSUR countries has frequently maintained. In fact, Brazil has been the most enthusiastic advocate of the SAFTA while it has been quite reluctant to negotiate with the United States. In contrast, Argentina and Uruguay have paid little attention to the SAFTA option and have frequently expressed their willingness to reach an agreement with the United States. The numbers suggest that these positions have been mainly determined by political motives rather than reasons based on economic grounds. However, the present analysis is merely static, and significant dynamic effects cannot be discarded; therefore, a deeper analysis of that issue would be needed for a full understanding of the impact and a more comprehensive comparison of the options available.

The Option of an FTAA That Excludes the Agricultural Sector

The protection granted to the agricultural sector is one of the most difficult issues in trade negotiations. It is an unresolved subject in the WTO negotiations, and it threatens to be the Achilles' heel of the FTAA. The MERCOSUR countries have strongly supported the elimination of all protective measures in the agricultural sector, as the developed countries'

policies hinder the growth of their exports. This issue has led MERCOSUR into confrontation with the United States, which refuses to deal with it in the FTAA negotiations and prefers to discuss it at the WTO. Given the extreme difficulty of reaching agreement on this subject, it seemed reasonable to simulate the FTAA on the assumption that the agricultural sector might be excluded from liberalization.

Table 8 compares the welfare effects of the full agreement with the results that would be obtained if the agricultural sector were excluded. Three options are compared with and without the liberalization of the agricultural sector: the FTAA, the MERCOSUR-CAN agreement, and the MERCOSUR-United States agreement.

As was said before, if a full agreement is assumed, the three options are positive for MERCOSUR. The same sign is found when the agricultural sector is excluded, but the gains are less, particularly in the case of a MERCOSUR-United States agreement, when gains are cut by more than one half.

Both Argentina and Brazil reduce their gains (or increase their losses) in virtually every option. In the FTAA simulation, their welfare gain (as a percentage of total consumption) goes down from 0.28% to 0.25% of consumption in the case of Argentina, and from 0.25% to 0.18% in the case of Brazil. The latter is not harmed by the exclusion of the agricultural sector when the MERCOSUR-CAN option is considered. This is because the agricultural production mix in Brazil and the CAN are similar, and so there is only a small amount of trade in agricultural products between them.

Surprisingly, in the case of Uruguay, when the agricultural sector is excluded from the FTAA negotiations the welfare loss gets smaller, so Uruguay would be better off if the agricultural sector was excluded. This astonishing result is due to the erosion of its preferences in the Brazilian market, which is one of the main destinations of Uruguayan exports of beef, rice, and other agricultural products. The improvement in market access to other countries is not enough to compensate for the loss of preferences in Brazil.

The last columns in Table 8 show how each MERCOSUR country is affected by a potential bilateral agreement between each of the other partners and the United States. Argentina gains 0.02% of consumption by reaching a bilateral agreement with the United States, but loses 0.08% if Brazil does so. Similarly, by signing an agreement with the United States,

Table 8. Welfare Gains as Percentage of Consumption

	FTAA		MERCOSUR - CAN		MERCOSUR - US		ARG-US		BRA-US	URY-US
	All goods	Manuf. goods	All goods	Manuf. goods	All goods	Manuf. goods	All goods	Manuf. goods	Manuf. goods	Manuf. goods
ARG	0.28	0.25	0.05	0.02	-0.04	-0.06	0.02	-0.08	0.00	
BRA	0.25	0.18	0.09	0.09	0.16	0.09	-0.04	0.13	0.00	
URY	-0.04	-0.02	0.05	0.02	0.00	0.00	-0.03	-0.05	0.08	
CHL	-0.12	-0.23	-0.03	-0.02	-0.06	-0.04	-0.02	-0.02	0.00	
CAN	0.23	0.08	0.01	0.02	-0.02	-0.01	0.00	-0.01	0.00	
US	0.10	0.08	0.00	0.00	0.04	0.04	0.01	0.03	0.00	
RNAFTA	0.20	0.03	0.00	0.00	-0.05	-0.04	-0.01	-0.03	0.00	
RAM	1.10	0.65	-0.02	-0.01	-0.08	-0.03	0.00	-0.02	0.00	
EU	-0.05	-0.04	0.00	0.00	-0.02	-0.01	0.00	-0.01	0.00	
ROW	-0.04	-0.04	0.00	0.00	-0.01	-0.01	0.00	-0.01	0.00	
MERCOSUR	0.26	0.20	0.07	0.06	0.09	0.04	-0.02	0.06	0.00	
Total	0.03	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	

Source: Estimates based on GTAP

Uruguay would gain just as much as it would lose when the other MERCOSUR countries do so. Only Brazil gains more with its own agreement than what it would lose with the other partners' agreements. These separated effects explain the results obtained in a MERCOSUR-United States trade agreement.

6. CONCLUSION

From the results of the simulations presented in this study, the following conclusions about the effects of the elimination of tariffs within the FTAA can be drawn:

The welfare effects of the FTAA are rather small. This is partly due to the fact that, as a fraction of GNP, most countries do not trade very much.

Whatever the integration option simulated may be, all the results are significantly different if previous preferential agreements are taken into account. If they are not considered, the effects of the FTAA are clearly overestimated, except in the case of the NAFTA countries. This is particularly important in designing compensatory policies within the FTAA because if previous preferences were considered, the welfare gains would be greater for the NAFTA countries and smaller for the rest.

As of 1997, there were a number of agreements in force that included a phasing out of tariffs not completed at that time. Even though the tariffs used were adjusted to capture the existing preferences at that time, none of the liberalization commitments that stem from previous agreements among the FTAA countries were considered in the benchmark data. Therefore, despite the inclusion of preferences in existence in 1997, the results of the simulations are still overestimates, as the completion of those agreements cannot be attributed to the FTAA negotiations.

Conversely, the static effects of the FTAA could be higher if the existence of nontariff barriers were taken into account. In fact, this type of obstacle to free trade can be quite important, but it is very difficult to measure, and requires a more detailed study.

Leaving aside the liberalization previously negotiated, the most important negotiations for MERCOSUR in the FTAA are those with the United States and with the CAN.

The net effect of trade creation and trade diversion for the importing country can be positive or negative, but is generally low. The market

access effect is positive and much more important. The erosion of Argentine and Uruguayan preferences in the Brazilian market has a clearly negative effect, as their privileged access to that country is very valuable. In some alternatives, this negative effect is partly or fully offset by the increase in demand due to an income effect, as Brazil raises its expenditure and demand from all origins. In all the simulations, when the net effect of trade creation and trade diversion is isolated, it is almost nil for Argentina and Uruguay and very small for Brazil.

If the FTAA is created without the participation of MERCOSUR, the welfare effect of this bloc is clearly negative but rather low. Furthermore, agreements among other FTAA countries (excluding MERCOSUR) lower the potential gains of the hemispheric agreement for this bloc.

The results obtained from the simulations carried out in this study contradict the stance that each MERCOSUR country has taken in the FTAA negotiations. Argentina and Uruguay would have greater welfare gains through an agreement with the CAN than through one with the United States, but in spite of this they frequently express willingness to reach an agreement with the United States. Even though these countries can improve their welfare by reaching an agreement with the United States, their gain is partly or fully offset when the other partners also reach such an agreement. Therefore, the positive effects of an individual strategy of this kind are quite unstable as they depend on the other partners failing to make progress in a similar strategy. The opposite is true for Brazil, which has repeatedly insisted on the suitability of creating a free trade area in South America, and is less enthusiastic about the FTAA.

The exclusion of the agricultural sector from FTAA negotiations reduces the gains of the hemispheric agreement. This is also true for Argentina and Brazil when considered separately. However, the exclusion of the agricultural sector does not worsen Uruguay's situation because in that case there would be no erosion of its preferences in the Brazilian market, which absorbs a large share of Uruguayan agricultural exports.

Despite the limitations of the methodological approach, the findings summarized in this section give a number of clues as to which issues are more important at the time of conducting the negotiations. In particular, the need to take existing preferences into account should be emphasized, and this suggests the need to obtain more complete and reliable data on that subject.

The assessment of the impact of the FTAA on the MERCOSUR countries needs to be tackled from different perspectives. The approach that has been adopted in this study is suitable for identifying the static effects of such an agreement, but does not allow any inferences to be drawn about the dynamic effects or those derived from the exploitation of economies of scale. The empirical evidence shows that both of these could be very significant. By the same token, the effects of increased competition in small markets where noncompetitive structures prevail are not considered, and they can be quite important.

All these effects, which are not analyzed in this study, could offset some of the negative impact found through the static approach. Consequently, the FTAA should be analyzed further, with other tools and from other perspectives, in order to have a full understanding and evaluation of its suitability for the MERCOSUR countries.

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APPENDIX

Preferential Tariffs

Tariff preferences granted by the US to other FTAA countries

In the case of tariffs actually applied by the United States to imports from other FTAA countries, three special regimes are relevant: the Generalized System of Preferences (GSP), the Caribbean Basin Initiative (CBI), and the Andean Trade Preference Act (ATPA). In fact, imports from FTAA countries that enter the United States with these preferential tariffs accounted for more than 10% of total US imports from those countries. This figure might not be considered very high but it is significant for a number of sectors in which preferences are concentrated.

Tariff data for the year 1997 was obtained from the US International Trade Commission (USITC). The USITC Tariff Database provides information about the ad valorem and the specific MFN tariff rates for all items at the 8-digit level of the Harmonized Tariff Schedule (HTS), and also information about preferential regimes. In particular, it indicates the items eligible for the GSP, for the CBI preferences, and for the ATPA, as well as the countries excluded from those preferences in some particular items. For the CBI and the ATPA, the database also gives information about both ad valorem and specific tariff rates. In order to obtain the average tariff for each of the sectors considered in this study, the estimated ad valorem equivalents to full MFN rates were used. For

the CBI and the ATPA, only ad valorem tariffs were considered, and a zero tariff was assigned to the GSP.

The same aggregation method used in the GTAP database was followed to obtain the average tariff by sector and country of origin. Starting from the tariffs at the 8-digit level, simple averages were taken to obtain tariff rates at the 6-digit HTS level. Then, US average imports for the period 1998–2000 (from the ITC dataweb) by partner and tariff treatment were obtained at the 6-digit HTS level. Finally, these import flows were used as weights to obtain the average tariff by sector.

Tariff preferences granted through bilateral or regional agreements in LAIA

In the case of reciprocal preferences granted by LAIA members, all the agreements in this framework were considered. The most important of these agreements is the MERCOSUR, which established a free trade area (except in the sugar and automotive sectors) among Argentina, Brazil, Paraguay, and Uruguay. The CAN agreement is also very important, as it created a free trade area among Bolivia, Colombia, Ecuador, Peru, and Venezuela. Additionally, all bilateral agreements between any LAIA members were also considered: Bolivia and Chile with MERCOSUR, Chile with all other LAIA members, Mexico with most of them, some of the MERCOSUR countries with some countries belonging to the CAN, and so on.

The residual tariffs applied by each LAIA country to imports coming from all the other members, averaged at the 6-digit HTS level for 1997, were obtained from LAIA. Trade flows at that same level were obtained from Hemispheric Trade and Tariff Data Base for Market Access. It was assumed that the residual tariff on any particular item was applied to all imports of that item. Then, for each country or group of countries considered in this study, average tariffs by sector and country of origin were obtained, using import flows as weights.

NOTES

1. CINVE, RED MERCOSUR
2. Departamento de Economía, Facultad de Ciencias Sociales, RED MERCOSUR
3. Originally this concept was introduced by Grossman and Helpman (1995). In the study by Vaillant and Ons, which is included in this volume, a complementary approach to this topic is presented.

Winners and Losers in a Free Trade Area between the United States and MERCOSUR

MARCEL VAILLANT¹ AND ALVARO ONS²

1. INTRODUCTION

Three successive summits of heads of state and governments of the Americas and six ministerial meetings have established the terms for carrying forward and concluding negotiations for the creation of the Free Trade Area of the Americas (FTAA), which should come into force in the second half of this decade. A renewed impulse has been given to hemisphere negotiations, which could mean a significant change in trade and economic relationships within the continent and also with the rest of the world.

In international trade negotiations, a priority objective for the MERCOSUR countries is to improve their market access conditions in high-income countries, so as to achieve better export performance. The new strategies are oriented toward establishing preferential trading arrangements with the industrialized economies. The MERCOSUR countries are involved in various trade negotiations, among which those with the United States stand out.

However, the process of gaining increased access to the big markets of North America will also lead to a reduction in differentials in the regional trade preferences of the four MERCOSUR countries. The FTAA negotiations would result in important consequences for the foreign trade of each of the countries in the region and also for their economic performance as a function of their trade patterns, in particular those within the region and with the United States.

There has been growing skepticism about the likelihood that a free trade area will be constituted on the announced date. From the Initiative

of the Americas at the beginning of the 1990s, through the Summit of the Americas in Miami in 1994, and up to the Summit of Quebec in 2001, the time invested in the negotiation process has not yielded definite results for the MERCOSUR countries. Market access to the United States is still difficult, and the situation is worsening in some industries, such as agricultural products; an illustration of this was Farm Bill 2002. The FTAA is turning out to be a very long negotiation process with an “infinite” agenda of issues (relative to negotiation capacities) and a big and heterogeneous group of countries (34). The advantages of the FTAA strategy with respect to multilateral negotiation have not yet become clear.

Up to now, the main output of the FTAA process has been the production and exchange of information, and the construction of a specific agenda of the many points involved in the negotiations. The many meetings and the exchange of information have had a positive impact on the countries in the region in terms of a learning process about new trade issues; for many of them there is also a clear need to deepen structural reforms and build new domestic institutions in order to participate in the agreement.

The FTAA negotiations have been carried on with a plurilateral methodology, but some signs of bilateralism have been evident, specifically some parallel bilateral initiatives from the United States to individual countries or blocs.

Unlike the European Union strategy, in which trade negotiations with other trade blocs in South America (the Andean Community and MERCOSUR) are viewed positively, the United States has resisted this approach and prefers to negotiate in the plurilateral FTAA scenario or with individual countries (Chile and, more recently, Uruguay). There is a weak antecedent for negotiations with a bloc, the Rose Garden Agreement of 1991, which is also known as the “4+1” agreement (Argentina, Brazil, Paraguay, and Uruguay with the United States). The very name of the agreement is a sign of US resistance to recognizing the MERCOSUR (even after 1994, when the MERCOSUR crystallized as a customs union) as a single partner that could be party to bilateral trade negotiations.

Without a doubt the most important and at the same time most complicated trade negotiation that the United States has undertaken at the continental level is with Brazil. Brazil has shown real commitment to the MERCOSUR strategy, but seems to lack conviction in its negotiations with the United States, which would point to a weakness in the consis-

tency of the regional trade bloc. For all these reasons, it is important to evaluate the resistance and the reciprocal opportunities that each MERCOSUR country and the United States would have in the constitution of a bilateral free trade area (FTA). In spite of the current lack of political realism, the evaluation of these forces is important; on the other hand, the likelihood of success in the trade negotiations currently under way is not high in any of the different scenarios in which the reciprocal trade liberalization processes are taking place (multilateral, plurilateral, and bilateral).

The objective of this study is to construct two lists of products, one expansive (opportunities) and one defensive (perils), for each of the participants in the United States-MERCOSUR agreement. We argue that a government would have incentives to include in the trade liberalization agreement those industries on the opportunities list and to exclude those on the perils list.

The general focus here is of a mercantilist type; it implicitly assumes that exports are good and imports are bad. In fact, it is known that, in terms of an evaluation of the effects on economic welfare, exactly the opposite is true. However, in trade negotiations the mercantilist focus is often equally or more decisive than considerations of added welfare. Trade negotiations are in their very essence mercantilist.

The idea is to identify the private interest groups that are for or against the trade arrangements between the United States and the MERCOSUR countries. The importance of explicitly introducing the list of products to be excluded from the negotiations has been pointed out in the modern literature on the political economy of trade policy (Grossman and Helpman 1995). From this perspective, the exceptions list improves the chances of signing an FTA because it makes it more palatable in political terms. The general results of these models are summed up by the fact that the ideal exceptions list of each partner is like an index of the comparative advantages of the other. As Grossman and Helpman (1995) explained, the conditions needed for the political viability of an FTA may contradict those that ensure its social desirability. The industries with more potential for trade creation, for which the FTA implies an improvement in welfare, are those in which there will be more resistance in the import substitution country to accepting their inclusion in the agreement.

In a previous paper we applied this idea to the eventual trade agreements between the European Union and the South American countries,

but we only considered perils to regional exports, and only studied the unilateral stances of the developing countries (see Vaillant and Ons 2002). In this study, we extend the analysis by also considering the effects of the FTA in each domestic market; that is, we take into account a country's production interests inside its own market, in the regional market (for the MERCOSUR countries), and the potential expansion of its exports to the new partner. We propose a general methodology, and we study the effects of the eventual preferential trading agreement on exports and production on both sides (MERCOSUR and the United States). We suggest an industry typology of the effects of the FTA on trade inside MERCOSUR (the United States) and on exports from MERCOSUR (the United States) to the United States (MERCOSUR).

Our method consists in the analysis of trade flows and trade policy, and reaches conclusions about the unilateral stances of MERCOSUR countries and the United States with respect to a bilateral FTA. A mercantilist perspective has been adopted, since it is the most pertinent from a political economy point of view. We explicitly include interests inside the United States, and so we can analyze the position of the US government in relation to the agreement.

ECONOMIC AND WELFARE EFFECTS OF AN FTA: TYPOLOGY OF CASES

The production framework is specified as in a specific factors trade model.³ There are $n+1$ industries in each country: a numeraire industry (0) that only uses the mobile factor (labor), and n other industries that use labor and a sector-specific factor.⁴ All goods are produced with constant returns to scale, and there are fixed endowments of all specific factors. Hence the assignment decision is only made for the labor factor.

The consumers within each economy have identical preferences that are suitably represented by a quasilinear utility function. Each individual is endowed with labor, and possibly with some sector-specific factor. The consumer receives a lump-sum transfer from the government, which corresponds to the uniform redistribution of tariff revenue.

The owners of specific factors are all organized into lobby groups, and ownership is highly concentrated in the population. From the political economy point of view, the relevant economic interests are given by the owners of the specific factor in a certain sector (the producers), who seek

to maximize their own industry profit function, and those consumers who are only endowed with labor.

The economy is small, and therefore world prices are given exogenously. Without loss of generality, all international prices (τ_i^*) are normalized to one. Initially, the most favored nation (MFN) principle holds. The trade policy (t_i^z) is a set of instruments that can directly affect the domestic prices (τ_i^z) of export and import goods. The initial domestic price of any export good is one (the international price) while import goods may be taxed.⁵

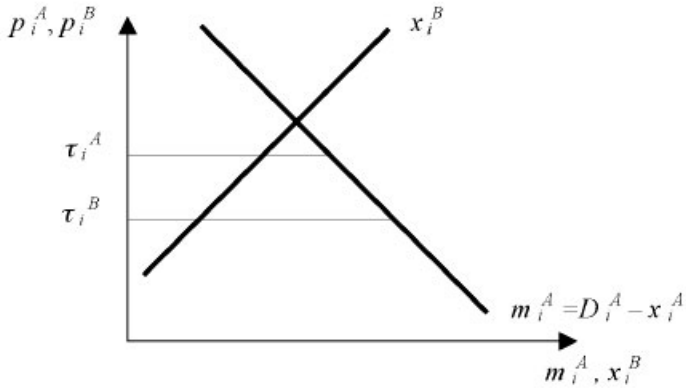
Countries *A* and *B* exhibit the qualitative features mentioned above, and they are negotiating an FTA. In this context, the relevant cases are given by those products which are initially imported by at least one of the countries, subject to an MFN tariff rate different from zero. If both countries export a particular good in the initial equilibrium, then domestic prices are similar to the international price, and the trade agreement would have no effect on production, consumption, or bilateral trade. In this case, the countries could compete in third markets. Without loss of generality, an industry is considered in which the following condition holds: $\tau_i^A > t_i^B \geq 1$. That is, *A* is an importer of good *i*, while *B* can be a less inefficient importer ($\tau_i^B > 1$) or an efficient producer ($\tau_i^B = 1$). Three cases are distinguished according to the size of country *B*'s aggregate supply of good *i*: enhanced protection, reduced protection, and an intermediate case. In each case, two different situations are studied depending on production efficiency in partner *B*. The economic effects of the FTA on producer and consumer prices in each economy are derived, as well as the consequences for the welfare of the different actors and countries.

Enhanced Protection

For a particular industry *i*, the total supply from country *B* (x_i^B) and the excess demand of country *A* (m_i^A) are presented in Figure 1. In this good, country *B* is small with respect to country *A* as a result of a relatively small endowment of the specific factor in *B*.

At price τ_i^A (the initial domestic price in *A*), the aggregate supply from country *B* is not enough to satisfy all the import demand of country *A*; $x_i^B(\tau_i^A) < m_i^A(\tau_i^A)$. Therefore, under an eventual FTA, *A* has to continue importing from the rest of the world (ROW) and its domestic price remains unchanged. The producers in *B* prefer to sell in *A*'s

Figure 1. Country A's Import Demand and Country B's Total Supply (small supply case)



market at price τ_i^A which is higher than that which they face in their own domestic market (τ_i^B). Thus, producers in B divert all their production to A's market, while consumers in B have to satisfy all their demand by purchasing from the ROW at the initial price. In conclusion, the only effect of the FTA in terms of prices is the increment in those paid to the producers in the more efficient country (see Table 1[a]). Producers in B benefit from the higher protection granted to the producers in A (enhanced protection).

This situation is presented in Figure 2, which shows the aggregate supply and the aggregate demand (D) of good i in each market. In the initial equilibrium, the consumers in A satisfy all their excess demand for good i , $D_i^A(\tau_i^A) - x_i^A(\tau_i^A)$, by purchasing from the ROW at the international price plus the MFN tariff rate. In the event of an FTA, the consumers in A import an amount $x_i^B(\tau_i^A)$ from B. So the only effect of the FTA in terms of A's welfare is a tariff revenue (TR) loss that negatively affects the consumers in A, since, under an FTA, tariffs are not levied on imports from B (see equation I.1, Appendix I).

Country A's welfare reduction corresponds to the area 1+2 in Figure 2. This loss reflects the adverse effects of trade diversion (TD). In this particular case, an efficient producer from the ROW is substituted by a protected and less efficient supplier from inside the FTA. However, the amount of this welfare loss in country A depends on its own protection

Table 1. Prices Before and After the Creation of the FTA

Agent	Country	Prices	
		Pre FTA	FTA
(a) Enhanced Protection			
Producers	B	τ_i^B	τ_i^A
Producers	A	τ_i^A	τ_i^A
Consumers	B	τ_i^B	τ_i^B
Consumers	A	τ_i^A	τ_i^A
(b) Reduced Protection			
Producers	B	τ_i^B	τ_i^B
Producers	A	τ_i^A	τ_i^B
Consumers	B	τ_i^B	τ_i^B
Consumers	A	τ_i^A	τ_i^B
(c) Intermediate Case			
Producers	B	τ_i^B	τ_i
Producers	A	τ_i^A	τ_i
Consumers	B	τ_i^B	τ_i^B
Consumers	A	τ_i^A	τ_i

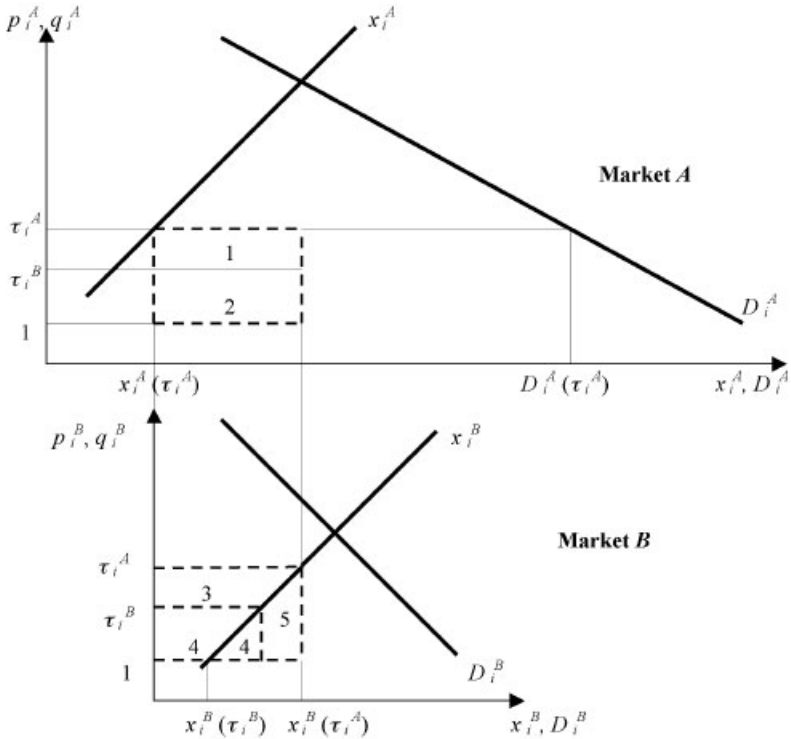
level, not on the efficiency level of country *B*'s suppliers (the protection level in *B* does not affect the size of the area 1+2).

On the other hand, consumers and producers in *B* improve their welfare. The producers in *B* benefit from their preferential access to country *A*'s protected market (see equation I.2, Appendix I). This increment in the profits of the specific factor owners in *B* corresponds to area 3 in Figure 2.

The consumers in *B* receive a bigger lump-sum transfer as a result of the increment in the tariff revenue which is represented by area 4 in Figure 2 (see equation I.3, Appendix I). Under an FTA, initial domestic sales by country *B*'s producers, $x_i^B(\tau_i^B)$, are replaced by imports from the ROW, which remain taxed.

The total welfare improvement in country *B* is obtained by adding the gains of producers and consumers; areas 3+4 in Figure 2 (see equation I.4, Appendix I).

Figure 2. Supply and Demand Curves of Countries A and B in the Enhanced Protection Case with B Inefficient



From the point of view of the zone as a whole, the welfare loss in country A is bigger than the welfare gain in country B (see equation I.5, Appendix I). The welfare loss of the zone as a whole is given by area 5 in Figure 2.

If the economic size of the zone is small, the changes in trade flows with the ROW have no effect on international prices. However, it is interesting to determine if the amounts traded with the ROW decrease or increase. ROW exports to country A decrease by the amount of: $x_i^B(\tau_i^A)$. ROW exports to country B increase by the amount of: $x_i^B(\tau_i^B)$. The net effect is a reduction of ROW exports of the amount of: $x_i^B(\tau_i^A) - x_i^B(\tau_i^B) > 0$.

Country B Is Efficient ($\tau_i^B = 1$)

If the international price equals the domestic price in country *B*, then the domestic market in *B* is not protected, and two kinds of specialization for the producers in *B* are possible: an “import substitution” industry or an export industry.⁶

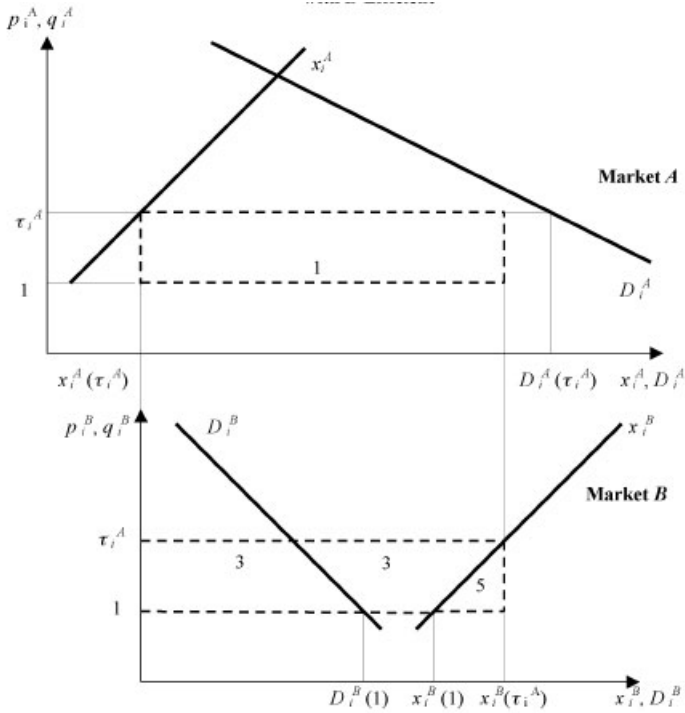
The case in which *i* is an import substitution industry in *B* can be analyzed with the aid of Figure 2. Area 4 disappears since $\tau_i^B = 1$.⁷ That is, the MFN tariff imposed by the government of *B* on the imports of good *i* is zero ($\tau_i^B = 0$). The welfare loss in *A* due to the reduction in tariff revenue remains the same. However, in country *B* only the producers improve their welfare, and the zone as a whole loses more than in the previous situation. The greater welfare increment for producers in *B* is not sufficient to compensate for the absence of an increment in tariff revenue. The reduction of ROW exports is given by the amount of: $x_i^B(\tau_i^A) - x_i^B(1) > 0$ (which is greater than in the previous case).

In country *B*, industry *i* could also be an export industry. This kind of specialization could be obtained by starting from a situation like that shown in Figure 2, and making a suitable displacement to the right of the supply curve of country *B*.⁸ In Figure 3, the good *i* is exported by country *B* at the international price.

In country *A*, the size of the welfare loss depends on the fraction of tariff revenue that is transferred to the producers in country *B* (area 1 in Figure 3). In country *B*, the producers’ profits increase (area 3 in Figure 3) while tariff revenue does not change. The welfare loss of the zone as a whole corresponds to area 5 in Figure 3.

When country *B* is an efficient producer and exporter, the amount of the reduction in ROW exports to country *A* depends on the amount that country *A* imports from country *B* in the initial equilibrium. The maximum reduction equals: $x_i^B(\tau_i^A)$ (country *A* does not import from *B* in the initial equilibrium). The minimum reduction equals: $x_i^B(\tau_i^A) - [x_i^B(1) - D_i^B(1)]$ (country *A* imports all country *B*’s excess supply in the initial equilibrium). On the other hand, ROW exports to country *B* increase by the amount of: $D_1^B(1)$. The net effect is negative, and the reduction is between: $[x_i^B(\tau_i^A) - x_i^B(1)]$ and $[x_i^B(\tau_i^A) - D_i^B(1)]$.

Figure 3. Supply and Demand Curves of Countries A and B in the Enhanced Protection Case with B Efficient



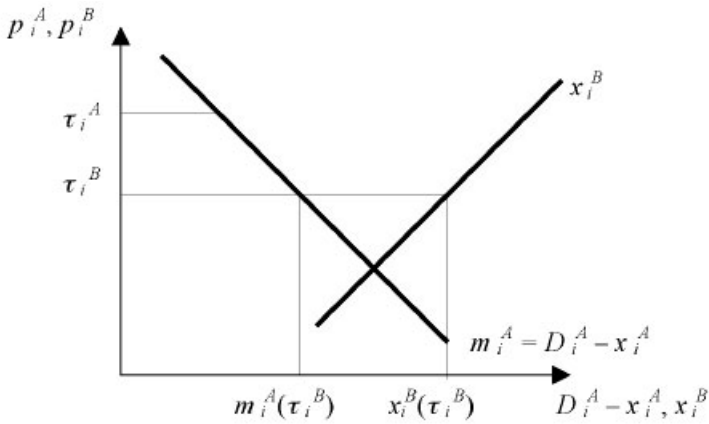
Reduced Protection

Country B’s total supply and country A’s import demand for good i are presented in Figure 4, as in a reduced protection case. In industry i , country B is big with respect to country A, which is the price taker country.

At the lowest initial domestic price (τ_i^B), the aggregate supply of country B can satisfy all of country A’s import demand; $x_i^B(\tau_i^B) > m_i^A(\tau_i^B)$. Then, under an FTA, A stops importing from the ROW and its domestic price falls to τ_i^B . The producers in A enjoy less protection under the FTA than in the initial equilibrium (reduced protection).

The producers in B are the only foreign suppliers in A’s market, and they also satisfy at least a part of their domestic market. The price paid by consumers in B for good i and the price obtained by producers in B remain unchanged at the level τ_i^B . The price changes are summarized in Table 1[b]).

Figure 4. Country A's Import Demand and Country B's Total Supply (big supply case)

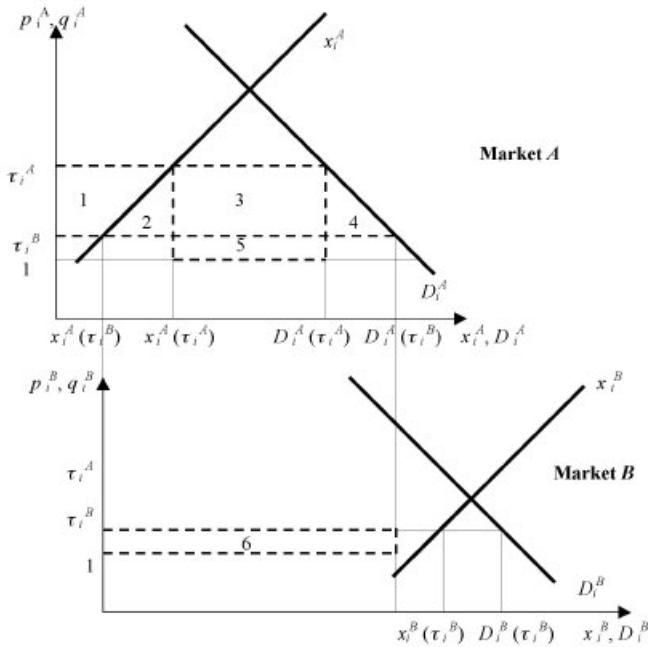


Country B Is Less Efficient than the ROW ($\tau_i^B > 1$)

Figure 5 shows the aggregate supply and the aggregate demand for good i in each market. There are three effects in country A : a reduction in profits for the specific factor owners; an increment in the consumers' surplus; and a reduction in tariff revenue. The producers' loss in country A , which results from the reduction in the domestic price that follows increased competition from inside the FTA, is given by area 1 in Figure 5 (see equation I.6, Appendix I). This price variation implies an increment in the consumers' surplus, represented by the area 1+2+3+4 in Figure 5 (see equation I.7, Appendix I). The consumers in A are also negatively affected since, under the FTA, all their imports originate in B , and therefore the tariff revenue in industry i falls to zero. The tariff revenue loss is captured by the area 3+5 in Figure 5 (see equation I.8, Appendix I). The net effect on consumers' welfare in country A is ambiguous. The same occurs with the net effect on country A 's aggregate welfare.

The analysis above can be developed in terms of traditional trade creation and trade diversion definitions. In this case, an inefficient domestic producer has been substituted by a less inefficient supplier from inside the FTA (trade creation), and an efficient producer from the ROW has been substituted by a protected and less efficient supplier from inside the FTA (trade diversion). The trade creation effect (TC)

Figure 5. Supply and Demand Curves of Countries A and B in the Reduced Protection Case with B Inefficient

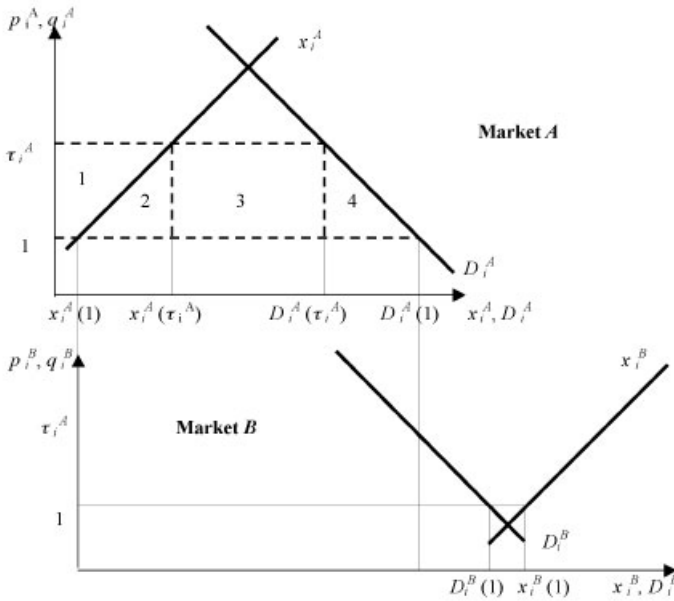


corresponds to the sum of areas 2 and 4 in Figure 5 (see equation I.9, Appendix I), while the trade diversion effect (TD) corresponds to area 5 (see equation I.10, Appendix I). The sign of the net effect on country A's aggregate welfare depends on the relative sizes of trade creation gains and trade diversion losses (see equation I.11, Appendix I).

On the other hand, the only effect of the FTA in terms of country B's welfare is an increment in the tariff revenue which is given by area 6 in Figure 5 (see equation I.12, Appendix I). Country B has to import from the ROW the same amount that its producers export to A under the FTA.

The welfare of the zone as a whole unambiguously increases (see equation I.13, Appendix I): the losses in A (TD, area 5) are a fraction of the gains in B (area 6). That is, the joint welfare gain equals the sum of areas 2 and 4, plus the difference between areas 6 and 5 (see figures 5 and 10 and equation I.14 Appendix I).

Figure 6. Supply and Demand Curves of Countries A and B in the Reduced Protection Case with B Efficient



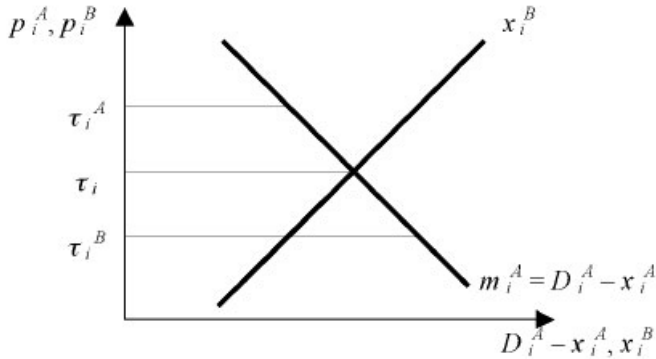
ROW exports to country A decrease by the amount of: $m_1^A(\tau_i^A) = D_1^A(\tau_i^A) - x_1^A(\tau_i^A)$. ROW exports toward country B increase by the amount of: $m_1^A(\tau_i^B)$. The net effect is an increment of ROW exports of: $m_1^A(\tau_i^B) - m_1^A(\tau_i^A) > 0$.

Country B Is Efficient ($\tau_i^B = 1$)

Again, when the international price equals the domestic price in country B, two kinds of specialization for the producers in B are possible: an import substitution industry or an export industry.

The import substitution industry case can be analyzed with the aid of Figure 5. Area 6 disappears since $\tau_i^B = 1$.⁹ In country A, the reduction in producers' profits and the increment in the consumers' surplus are greater than in the previous situation, while the tariff revenue loss remains unchanged. The welfare of the consumers in A and country A's aggregate welfare unambiguously increase (there is no trade diversion in this case).

Figure 7. Country A's Import Demand and Country B's Total Supply (intermediate case)



There is no effect on country B's welfare, and the zone as a whole gains more. The increment in ROW exports equals the amount: $m_i^A(1) - m_i^A(\tau_i^A) > 0$ (which is greater than in the previous case).

The export industry case is presented in Figure 6 and the results are almost the same. The profit reduction is given by area 1, the increment in the consumers' surplus corresponds to the area 1+2+3+4, and the tariff revenue loss is represented by area 3. The consumers' welfare gain in A equals the sum of areas 1, 2, and 4. The welfare improvement in country A equals the welfare improvement in the zone as a whole, and is given by the sum of areas 2 and 4.

When country B is an efficient producer and exporter, the amount of the reduction in ROW exports to country A depends on the amount that country A imports from B in the initial equilibrium. The maximum reduction equals: $m_i^A(\tau_i^A)$ (country A does not import from B in the initial equilibrium). The minimum reduction is zero (country A only imports from B in the initial equilibrium). On the other hand, ROW exports to country B increase by the amount of: $m_i^A(1)$. The net effect is an increment of ROW exports between: $[m_i^A(1) - m_i^A(\tau_i^A)]$ and $m_i^A(1)$.

Intermediate Case

Country B's total supply and country A's import demand for good i are presented in Figure 7 as in the intermediate case in which both curves matter in the determination of the producers' price under the FTA (τ_i).

The relative sizes of countries A and B mean that neither A nor B can determine the new price by itself.

Only at the highest initial domestic price (τ_i^A) can country B 's aggregate supply satisfy all the import demand of country A ; $x_i^B(\tau_i^A) > m_i^A(\tau_i^A)$ and $x_i^B(\tau_i^B) < m_i^A(\tau_i^B)$. Then, under an FTA, A stops importing from the ROW and its domestic price falls to τ_i . The producers in A enjoy less protection under the FTA than in the initial equilibrium ($\tau_i < \tau_i^A$) while the producers in B benefit from a higher price in A 's market ($\tau_i > \tau_i^B$) (intermediate case). The producers in B are the only foreign suppliers in A 's market and they do not sell in their own domestic market. The price paid by consumers in B for good i remains unchanged at the level τ_i^B . These price changes are summarized in Table 1(c).

Country B Is Less Efficient than the ROW ($\tau_i^B > 1$)

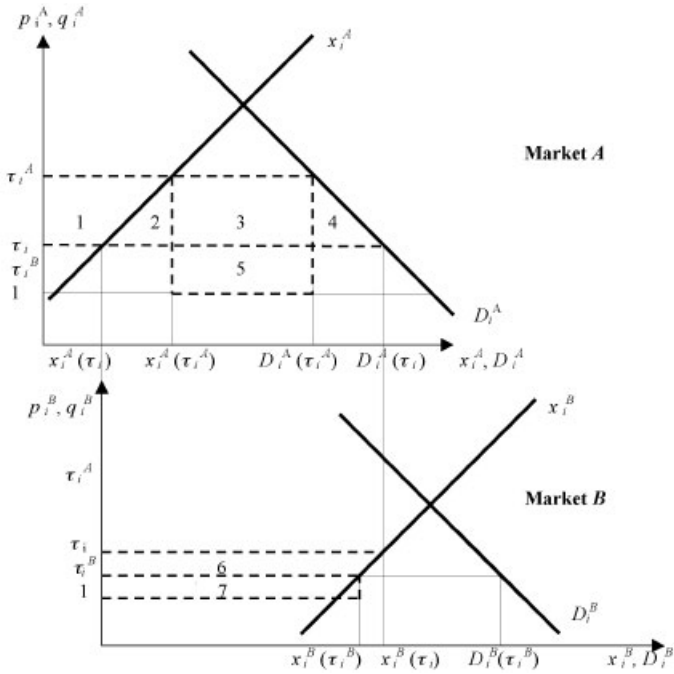
Figure 8 shows the aggregate supply and the aggregate demand for good i in each market. The constitution of an FTA has three effects in country A : a reduction in the profits of the specific factor owners, an increment in consumers' surplus, and a reduction in tariff revenue.

The producers' loss in country A , which results from the reduction in their domestic price, is given by area 1 in Figure 8 (see equation I.15, Appendix I). This price variation implies an increment in consumers' surplus, represented by area 1+2+3+4 in Figure 8 (see equation I.16, Appendix I). The consumers in A are also negatively affected by the total loss of tariff revenue in industry i , which is captured by area 3+5 in Figure 8 (see equation I.17, Appendix I).

The net effects on consumers' welfare and on A 's aggregate welfare are ambiguous. This can be shown in terms of trade creation and trade diversion; the former corresponds to the sum of areas 2 and 4 (see equation I.18, Appendix I), while the latter corresponds to area 5 (see equation I.19, Appendix I). Again, the sign of the net effect on country A 's aggregate welfare depends on the relative sizes of trade creation gains and trade diversion losses (see equation I.20, Appendix I).

On the other hand, there are two positive effects in country B : the producers increase their profits by selling more at a higher price (see equation I.21, Appendix I); and the consumers benefit from greater tariff revenue since the initial domestic sales of B 's producers are replaced by

Figure 8. Supply and Demand Curves of Countries A and B in the Intermediate Protection Case with B Inefficient



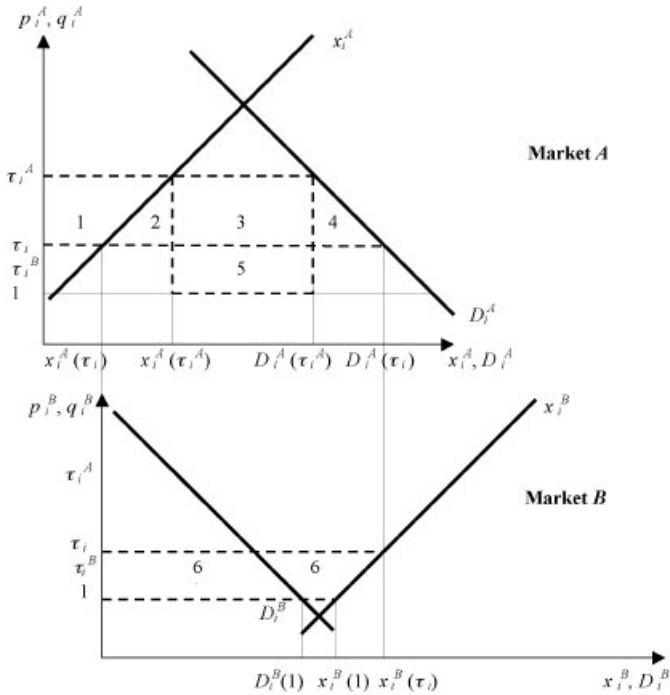
imports from the ROW (see equation I.22, Appendix I). The total welfare improvement in country B is obtained by adding the gains of producers and consumers, areas 6 and 7, respectively, in Figure 8 (see equation I.23, Appendix I).

The welfare of the zone as a whole could increase or decrease depending on the relative sizes of country A's losses and country B's gains (see equation I.24, Appendix I). Graphically, the zone welfare variation equals the sum of areas 2 and 4, plus the difference between area 6+7 and area 5 (see Figure 8).

ROW exports to country A decrease by the amount of: $m_i^A(\tau_i^A)$. ROW exports to country B increase by the amount of: $x_i^B(\tau_i^B)$. The net effect is a variation of ROW exports of $x_i^B(\tau_i^B) - m_i^A(\tau_i^A)$ which could be positive or negative.

Country B Is Efficient ($\tau_i^B = 1$)

Figure 9. Supply and Demand Curves of Countries A and B in the Intermediate Protection Case with B Efficient



The import substitution industry case can be analyzed with the aid of Figure 8. Area 7 disappears since $\tau_i^B = 1$.¹⁰ The effects in country A remain unchanged from the previous case, while only the producers improve their welfare in country B, and the zone as a whole is worse off than in the previous situation. The greater welfare increment for the producers in B is not sufficient to compensate for the absence of an increment in tariff revenue. The variation in ROW exports equals $x_i^B(\tau_i^B) - m_i^A(\tau_i^A)$.

The export industry case is presented in Figure 9 and the results are almost the same.

The maximum reduction in ROW exports to country A equals: $m_i^A(\tau_i^A)$. The minimum reduction is: $m_i^A(\tau_i^A) - [x_i^B(1) - D_i^B(1)]$. On the other hand, ROW exports to country B increase by the amount of: $D_i^B(1)$. The net effect is a variation of ROW exports between: $[x_i^B(1) - m_i^A(\tau_i^A)]$ and $[D_i^B(1) - m_i^A(\tau_i^A)]$.

Table 2. FTA Welfare Effects

Agent	Country	Change in welfare	
		<i>B</i> inefficient	<i>B</i> efficient
(a) Enhanced Protection			
Consumers	<i>A</i>	Negative	Negative
Producers	<i>A</i>	Nil	Nil
Total	<i>A</i>	Negative	Negative
Consumers	<i>B</i>	Positive	Nil
Producers	<i>B</i>	Positive	Positive
Total	<i>B</i>	Positive	Positive
	<i>Zone</i>	Negative	Negative
	<i>ROW</i>	Could be negative	Could be negative
(b) Reduced Protection			
Consumers	<i>A</i>	Negative or Positive	Positive
Producers	<i>A</i>	Negative	Negative
Total	<i>A</i>	Negative or Positive	Positive
Consumers	<i>B</i>	Positive	Nil
Producers	<i>B</i>	Nil	Nil
Total	<i>B</i>	Positive	Nil
	<i>Zone</i>	Positive	Positive
	<i>ROW</i>	Could be positive	Could be positive
(c) Intermediate Case			
Consumers	<i>A</i>	Negative or Positive	Negative or Positive
Producers	<i>A</i>	Negative	Negative
Total	<i>A</i>	Negative or Positive	Negative or Positive
Consumers	<i>B</i>	Positive	Nil
Producers	<i>B</i>	Positive	Positive
Total	<i>B</i>	Positive	Positive
	<i>Zone</i>	Negative or Positive	Negative or Positive
	<i>ROW</i>	Could be negative or positive	Could be negative or positive

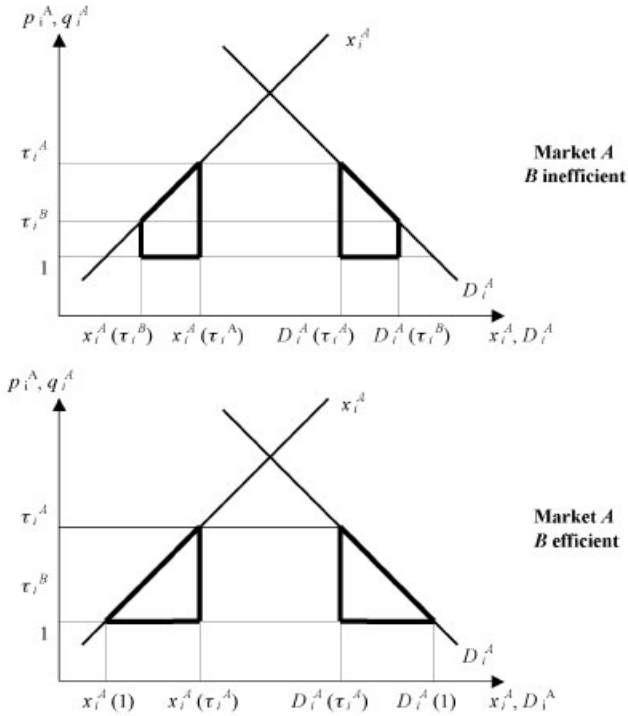
Distributive Welfare Effects: Comparison between Countries and Actors

Table 2 summarizes the welfare effects of an FTA in the different cases for each actor (producer and consumer) and each country.

In the enhanced protection case, consumers in *A* always lose, producers in *B* always win, and consumers in *B* could win. Welfare in *A* always decreases and welfare in *B* always increases. In spite of the fact that the contribution of these industries to the welfare of the zone as a whole decreases under the FTA, they are very good candidates for inclusion in the agreement because no strong opposition is expected.

In the reduced protection case, producers in *A* always lose, consumers in *A* could win or lose, and consumers in *B* could win. The welfare effect could be positive or negative in *A*, while it could be positive in *B*. The

Figure 10. Zone’s Welfare Improvement with Reduced Protection *B* Inefficient vs *B* Efficient



zone as a whole always improves its welfare. However, in these kinds of industries there is potentially strong opposition to their inclusion on the list of liberalized goods (specifically from the producers in *A*).

Country *A*'s welfare improves, and the welfare of the zone increases more, when country *B* is efficient. Figure 10 presents the welfare variation in the zone as a whole according to the efficiency level in country *B*.

Finally, in the intermediate case some results depend on the particular values of the parameters. Producers in *A* always lose, producers in *B* always win, and consumers in *B* could win. Welfare in *B* always increases. The effects on consumers' welfare in *A*, on country *A*'s welfare, and on joint welfare could be positive or negative, depending on the particular values of the parameters.

3. METHODOLOGY

From the perspective of each of the participants in the MERCOSUR-United States agreement, the FTA would mean a trade-off between the gain in access to the new partner market and the loss in protection in those markets where the new partner improves its access conditions. The first can generate *trade opportunities* and the second can generate *trade perils*. In this section, we outline the methodology for the construction of two lists of products, one expansive (opportunities) and one defensive (perils). Thus, it would be possible to design a guide for trade negotiations between the United States and the countries of MERCOSUR that would establish expansive and defensive priorities at the level of products for each of the participants. The opportunities and perils analysis is interpreted in terms of the typology introduced in the previous section, based on the effects of integration in the different markets, in order to better identify the private interest groups that are for or against the agreement. With this outcome, the idea is to apply a political economy approach in the Grossman-Helpman perspective to analyze the political viability of an FTA between the United States and MERCOSUR.

Without loss of generality, we consider only two countries, *A* and *B*, and assume that these countries are going to sign a free trade agreement that could involve more participants.

The methodology involves three steps: the first selects industries (Standardized International Trade Classification [SITC], 4 digits), the sec-

ond selects products (Harmonized System [HS], 6 digits) within the selected industries, and the third classifies the selected products.¹¹ The first step consists in identifying the industries where the greatest contractive or expansive adjustments are expected due to the FTA creation (industries with high trade complementarity). Then, products are chosen taking into account the changes in trade policy that are implicit in the FTA, that is to say, those products for which the agreement means an improvement in preferential access to the other market (sensitive products). Finally, the selected products are classified according to the eventual expansion in exports (opportunities) and/or contraction in production (perils), establishing an explicit link with the three protection regimes defined above.

Industries with High Trade Complementarity

In line with the theoretical presentation, in each industry we should know which country is the less efficient producer, since, under an FTA, it is expected that this country will import products from the other in that industry. For this purpose, one option could be to compare domestic prices in both economies in each industry. However, the required level of data disaggregation for working with domestic prices is too high, the availability of price information is very limited, and consequently the statistical task is too great. For this reason, an indirect methodology has been developed using trade flows at industry level. The efficiency level of each country in each industry is inferred from revealed comparative advantage indexes. If one country has a revealed comparative disadvantage then it could potentially be more inefficient than the international economy, while if the country registers a revealed comparative advantage then it could be inferred that the good is produced at least as efficiently as in the international economy.

We defined as industries of interest, those in which country *A* (*B*) is an exporter and country *B* (*A*) is an importer. This selection involves consideration of the export profiles of *A* (*B*) together with the import profiles of *B* (*A*). We consider the industries (SITC Revision 2, 4 digits) in which country *A*'s (*B*'s) exports show strong trade complementarity with country *B*'s (*A*'s) imports. These are the industries that would have better chances of exploiting the eventual improvement in access to the new partner's market. The industries of interest concept covers those in which the differences in the conditions of production in the two markets that are in the process of eliminating trade barriers are greatest. For this reason, it

is logical to expect that these will be the industries in which the greatest adjustments will occur, and at the same time these will be the industries that most oppose or support the trade agreement.

Specifically, we use a trade complementarity index based on the “revealed comparative advantage” index of trade specialization proposed by Balassa (1965). For each industry, the trade complementarity index of the exports of A (B) in the market of B (A) equals the product of the export specialization index of A (B) (comparative advantage index) and the import specialization index of B (A) (comparative disadvantage index). The export (import) specialization index equals the ratio between the share of the industry in a country’s total exports (imports) and the share of the industry in world trade. When the export (import) specialization index is greater than one, we say that the country is more export (import) oriented in that particular industry than the world average, and therefore we conclude that the country has a comparative advantage (disadvantage) in that industry.

The industry set where country z is an exporter and country p is an importer, that is, the “high trade complementarity set” for the exports from z to p (HTC^{zp}), is defined as:

$$HTC^{zp} = \{i \in S \mid XS_s^z > 1 \text{ and } MS_s^p > 1\}$$

with: $z = A, B \quad p = B, A$ and $z \neq p$.

Product i belongs to industry s and S is the universe of industries. Two trade specialization indexes are used: XS_s^z is the export specialization index of country z in industry s ; and MS_s^p is the import specialization index of country p in industry s .

The global high trade complementarity set (HTC) is the union of the two subsets ($HTC = HTC^{AB} \cup HTC^{BA}$).¹² We have selected as industries of interest a subset of the industries with export trade complementarity greater than one: those industries that also satisfy the condition that export and import specializations are greater than one.

At this point we should stress some shortcomings of the methodology that we are introducing:

1. The methodology is limited when it comes to the precision with which industries are identified. These limitations could generate errors that we can classify in two groups: errors by defect (some industries that ought to be included are not in the selection), and errors by excess (industries included that ought not to be in the selection). In the first

group, the method does not permit identification of those industries in which both countries produce with an import substitution specialization, but one of them is more efficient than the other.¹³ In the second group, a country could have a comparative disadvantage in one industry but produce in a way similar to the international economy. The second proposed filter, which is applied in the next subsection, permits the solution of the second problem, that of including more industries than are wanted.

2. Some other limitations could stem from the fact that the methodology is based on indexes of comparative advantage that are of a “revealed” type. Thus, as has been typically stated, we are assuming that the real pattern of comparative advantage can be observed from trade data. In this sense, the indexes could be biased due to existing trade policy barriers, subsidies, geography, tastes, foreign direct investment, and so on., all of which are not uniform across sectors and countries. However, we are still interested in the patterns of specialization, beyond the factors that are generating those patterns, since these indexes help us to map the private interest groups that are for or against the FTA.

3. The trade specialization indexes are biased by economic size. That is, bigger countries tend to have more diversified export and import structures, and therefore the share of each industry in total imports and total exports, and the average value of the index, tend to be lower. We tried to correct for this bias, performing OLS regressions of the indexes (one for export and one for import specialization) over economic size, and employing the corresponding residuals as the corrected trade specialization indexes.¹⁴

4. We are not identifying those products that are basically exchanged on a regional basis; the type of products that do not travel long distances. In those cases, the opportunities and perils would not be relevant.

The data source for this first step was the world trade flows (Feenstra 2000). Because of the structural nature of the variables involved in trade specialization, we computed the indexes for averaged trade data for the period 1990–1997 (1997 being the last year for which consistent information on the world economy is available).

Trade Opportunities and Trade Perils

Without loss of generality, and in order to establish a link with Section 2, we define the trade opportunities for country *B* (the more efficient country) and the trade perils for country *A*.

Trade opportunities refer to the potential expansion of country B 's exports as a result of the improvement in the access conditions to A 's market, while trade perils refer to the potential displacement of domestic sales of the producers in country A by exports from country B following that eventual improvement. In the case of our study, the United States would face trade perils in its domestic market while the MERCOSUR countries would face trade perils in the four regional markets (the “domestic market” for the member countries). The MERCOSUR–United States agreement would mean a reduction in the differential in regional trade preferences with respect to US suppliers.

The construction of the opportunities and perils sets requires the prior determination of what we call sensitive products.

The selection of sensitive products involves completing the selection of the industries of interest with trade policy information and trade data at a higher level of disaggregation (HS, 6 digits). In the previous subsection, we applied a trade complementarity filter. Now we filter the HTC^{BA} set using information about *ad valorem* tariffs; it is a trade policy filter. Specifically, we consider that a product (HS, 6 digits) is sensitive when the following multiple condition is satisfied:

- the product belongs to an industry (SITC, 4 digits) that is included in HTC^{BA} ,
- country B exports the product,
- country A imports the product, and
- country A 's imports of that product from country B face an *ad valorem* tariff different from zero.

Thus, sensitive products are those that, being in HTC^{BA} , would gain improved conditions of access to the new partner market as a result of the constitution of a free trade area. On the other hand, the product is not sensitive when suppliers are currently faced with a zero tariff. The sensitive products set when B is an exporter and A is an importer (SP^{BA}), is:

$$SP^{BA} = \{i \in s \in SI^{BA} / X_i^B > 0 \text{ and } M_i^A > 0 \text{ and } t_i^{AB} > 0\}$$

where, X_i^B are country B 's total exports of product i ; M_i^A are country A 's total imports of product i ; and t_i^{AB} is the tariff rate imposed by the government of A on the imports of product i from country B .¹⁵

The additional data needed for carrying out the sensitive products analysis came from different sources. We used a database of US trade policy that includes the MFN tariffs (*ad valorem* equivalent of complete MFN rate) and all the current trade preferences granted by the United States to MERCOSUR countries.¹⁶ These data were obtained from the United States International Trade Commission (USITC). The trade policy of MERCOSUR countries (the MFN tariffs which are those applied to imports from the United States) were supplied by the LAIA General Secretariat. We averaged export and import data of the MERCOSUR countries, and of the United States, at the HS 6-digit level for the time period 1996–1998. The data were supplied by the LAIA General Secretariat and the USITC, respectively.

There is another potential shortcoming that we should mention. Since our analysis takes into account the universe of products, we could not pay attention to some very detailed aspects of trade policy that affect some of them specifically. That is, we are considering a simplified trade policy and, therefore, ignoring things like the existence of quotas, GSP requirements, and so on.

The sensitive products turn into trade opportunities for country *B* when there is an expansion in its production led by exports to country *A*. The opportunities set for *B* in *A* (OP^{BA}) is:

$$OP^{BA} = \left\{ i \in SP^{BA} / x_i^{B^{FTA}} > x_i^B \right\}$$

The sensitive products turn into trade perils for *A* when there is a displacement of domestic production in *A* led by imports from country *B*. The perils set for *A* generated from *B* (PE^{AB}) is:

$$PE^{AB} = \left\{ i \in SP^{BA} / x_i^{A^{FTA}} < x_i^A \right\}$$

Taking into account these two definitions and the protection regimes introduced in the previous section, we observe that for a particular product the enhanced protection case means an opportunity but not a peril, the reduced protection case means a peril but not an opportunity, and the intermediate case means an opportunity and a peril. So it is possible to establish an explicit link between the two sections and to analyze the political economy consequences of the creation of an FTA in terms of the Grossman and Helpman model.

The enhanced protection set when country B is the exporter (EN^{BA}) includes the products that constitute a trade opportunity for B and are not a trade peril for country A .

$$EN^{BA} = \{i \in s / i \in OP^{BA} \text{ and } i \notin PE^{AB}\}$$

The reduced protection set when country B is the exporter (RE^{BA}) includes the products that constitute a trade peril for country A and are not a trade opportunity for B .

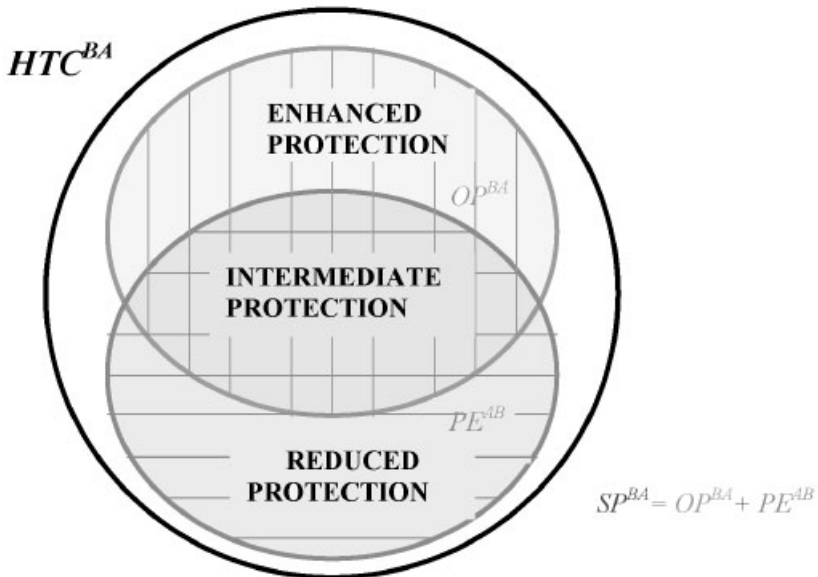
$$RE^{BA} = \{i \in s / i \notin OP^{BA} \text{ and } i \in PE^{AB}\}$$

Finally, the intermediate protection set when country B is the exporter (IN) includes the products that constitute a trade opportunity for country B and a trade peril for country A .

$$IN^{BA} = \{i \in s / i \in OP^{BA} \text{ and } i \in PE^{AB}\}$$

The essential aspects of the methodology and its link with the protection regime analysis are captured by Figure 11.

Figure 11. Opportunities and Perils vis-à-vis Protection Regimes



The Measure of the Trade Protection Regime

The protection regime after the FTA is determined using information about domestic production in each potential export country. The problem is that what is observed is the value of the domestic offer of country *B* (the more efficient) at domestic prices in *B* before the FTA, and the value of the excess demand in country *A* at the prevailing prices in that market before the agreement. Therefore, the observed ratio is the following:

$$\frac{\tau_i^A (D_i^A(\tau_i^A) - x_i^A(\tau_i^A))}{\tau_i^B x_i^B(\tau_i^B)} \quad (1)$$

The following relations should be observed, in order to determine the protection regime:

- Enhanced protection

$$\frac{\tau_i^A (D_i^A(\tau_i^A) - x_i^A(\tau_i^A))}{\tau_i^A x_i^B(\tau_i^A)} > 1 \quad (2)$$

- Reduced protection

$$\frac{\tau_i^B (D_i^A(\tau_i^B) - x_i^A(\tau_i^B))}{\tau_i^B x_i^B(\tau_i^B)} < 1 \quad (3)$$

- Intermediate protection

$$\frac{\tau_i^A (D_i^A(\tau_i^A) - x_i^A(\tau_i^A))}{\tau_i^A x_i^B(\tau_i^A)} < 1 \quad (4)$$

$$\frac{\tau_i^B (D_i^A(\tau_i^B) - x_i^A(\tau_i^B))}{\tau_i^B x_i^B(\tau_i^B)} > 1 \quad (5)$$

It is not possible to observe exported domestic production valued at the domestic price of the import country (the denominator in relation [2]), nor the excess demand of the import country valued at the domestic prices of the export country (the numerator in relation [3]). Making some specific assumptions, it is possible to find the nonobserved values as a function of the observed ones. In the case of the domestic offer in the export country, it can be shown that:

$$\tau_i^A x_i^B(\tau_i^A) = \tau_i^B x_i^B(\tau_i^B) (1 + (e_i^{AB} - 1) \varepsilon_{st}^B) e_i^{AB} \quad (6)$$

Where: $e_i^{AB} = \frac{\tau_i^A}{\tau_i^B}$ is the relative efficiency of country A with respect to country B ; ϵ_{st}^B is the elasticity of domestic supply in country B .

In the case of the excess demand in country A , it is shown that:

$$\tau_i^B (D_i^A(\tau_i^B) - x_i^A(\tau_i^B)) = \frac{\tau_i^A (D_i^A(\tau_i^A) - x_i^A(\tau_i^A))}{e_i^{AB}} (1 + (\frac{1}{e_i^{AB}} - 1)\epsilon_{mi}^A) \quad (7)$$

Where: ϵ_{mi}^A is the import elasticity of country A .

In conclusion, to find the values that are sought it is necessary to have estimates of the following parameters: domestic supply elasticity in country B ; import elasticity in country A ; relative efficiency measured through the domestic prices in both markets.

4. RESULTS

Industries with High Bilateral Trade Complementarity

Figures 12 to 15 present the *HTC* sets for US exports to MERCOSUR as a whole, and for the exports of each MERCOSUR member to the United States. The coordinates of each point on the plane represent the trade complementarity levels of a certain industry's exports in both directions. In all figures, the vertical axis is the same and corresponds to the *HTC* set for US exports, while the horizontal axis corresponds to the set of one of the MERCOSUR countries. Every industry represented belongs to the *HTC* set of at least one of the economies under consideration: an empty icon is an industry in the *HTC* set of the corresponding MERCOSUR country (the United States), while a black icon is an industry that belongs to both sets. The industries have been classified into four big groups: agriculture, raw materials, fuels, and manufactures (a square corresponds to agriculture, a cross to raw material, a circle to fuel, and a triangle to manufactures).¹⁷

The figures suggest a markedly interindustrial pattern of trade since the industries are concentrated along the axes and there are few black icons, although there are rather more when Brazil is the MERCOSUR exporter. The limited presence of black icons means that the industries in which both sides, the United States and the MERCOSUR, have simultaneously an export and an import specialization are rare.¹⁸

Figure 12. US-MERCOSUR and Argentina-US: *HTC* sets

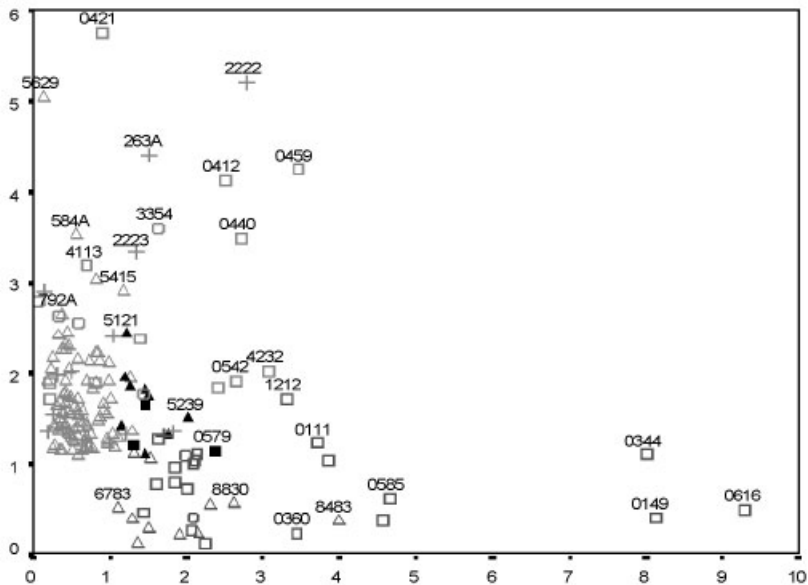


Figure 13. US-MERCOSUR and Brazil-US: *HTC* sets

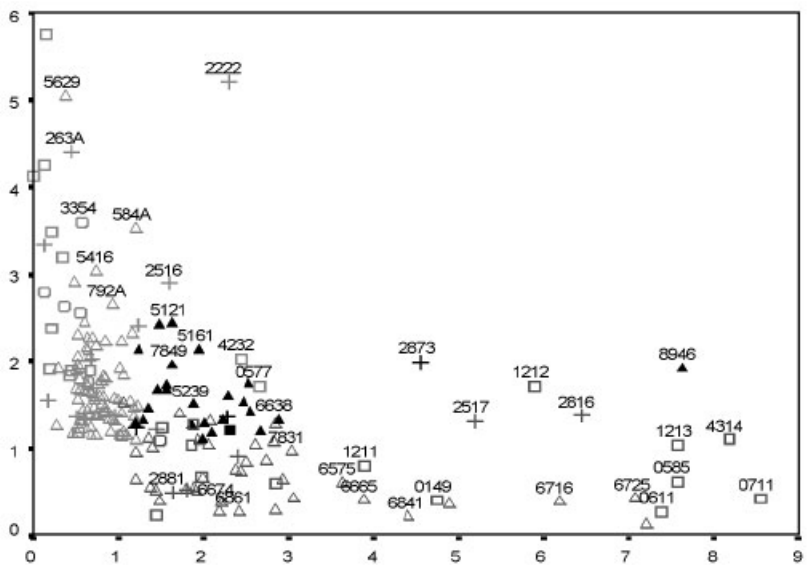


Figure 14. US-MERCOSUR and Paraguay-US: *HTC* sets

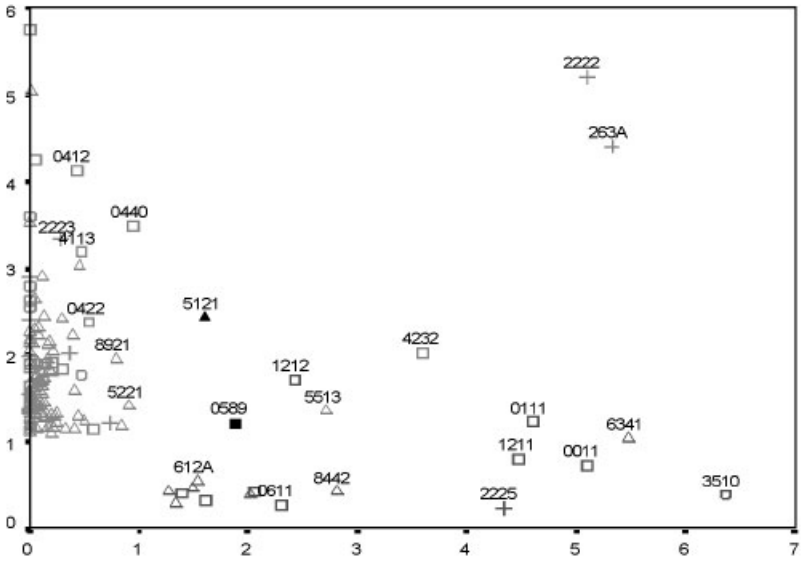
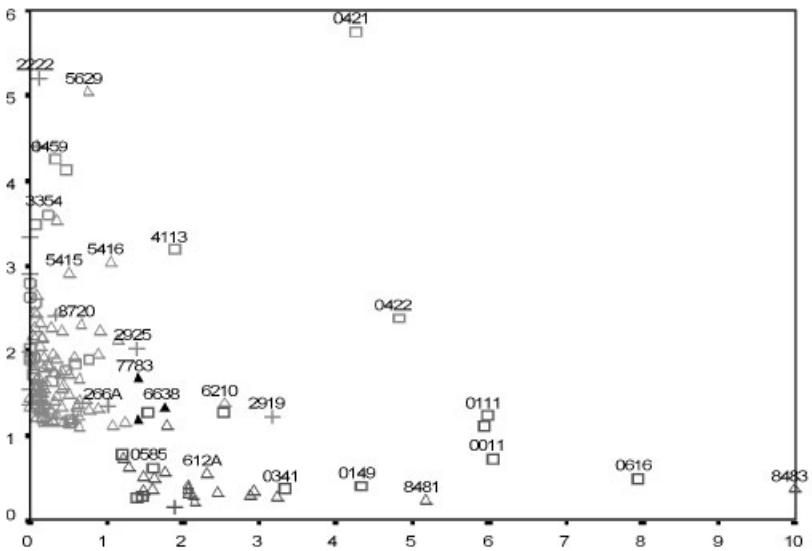


Figure 15. US-MERCOSUR and Uruguay-US: *HTC* sets



In the case of Argentina, the industries included in the *HTC* set represent approximately one-quarter of total exports. Almost 80% of the exports with high trade complementarity with the US market correspond to agricultural and fuel industries, with approximately equal shares.

Brazilian exports in the corresponding *HTC* set constitute nearly one-half of the country's total exports, and manufacturing industries have the greatest share among the industries with high trade complementarity with the US market (more than 60%).

The *HTC* set for exports from Paraguay to the United States represents a low share of its total sales to foreign markets (approximately 10%) with a majority proportion of agricultural industries (70%).

In the case of Uruguay, the exports with high trade complementarity constitute about one-quarter of total exports and are highly concentrated in agricultural industries, which make up more than three quarters in the *HTC* set.

Finally, the *HTC* set for exports from the United States to the MERCOSUR as a whole represents approximately one-half of total exports, and manufacturing industries dominate in the *HTC* set with a share of almost 90%.

The outcome from the trade complementarity analysis is also described by Tables 3, 4, and 5 that we introduce in the next section.

Trade Opportunities and Trade Perils

Tables 3, 4, and 5, summarize the outcome of the application of the proposed methodology to the case of the MERCOSUR–United States agreement. The columns show information by each country considered and consolidate the information for the MERCOSUR as a whole; the rows give information about the different sets of products. The first section in all these tables gives total exports and the other sections give the subsets of export products that result from applying the filters and definitions included in the three steps of the methodology; that is, the products in the high trade complementarity industries set, the sensitive products set, and the subsets of sensitive products classified taking into account the protection regime.

The information available for domestic production in each country at the product level rather limited the possibility of being able to differentiate the three protection regimes previously identified (see Section 2 and Section 3, “Measure of the Trade Protection Regime”). For almost every

Table 3. Results: Type of Products Set by Country

	Argentina	Brazil
Total exports		
Value (mill \$)	25187	52053
Industries (#SITC4)	470	468
Products (#HS 6)	4142	4250
Imposed Tariff	4.7	5.55
Big division (SITC1)	0	7
Big division share	0.38	0.24
High Trade Complementarity		
Export share	0.26	0.47
Industries (# SITC4)	46	85
Products (# HS 6)	323	799
Imposed Tariff	5.12	7.24
Big division (SITC1)	0	7
Big division share	0.38	0.27
Sensitive Products		
Export share	0.07	0.15
Industries (# SITC4)	23	35
Products (# HS 6)	86	168
Imposed Tariff	15.53	21.55
Big division (SITC1)	0	0
Big division share	0.48	0.32
Reduced Protection		
Export share	0.06	0.11
Industries (# SITC4)	20	25
Products (# HS 6)	47	61
Imposed Tariff	16.99	26.57
Big division (SITC1)	0	0
Big division share	0.53	0.44
Enhanced & Intermediate		
Export share	0.01	0.04
Industries (# SITC4)	10	64
Products (# HS 6)	25	8.53
Imposed Tariff	22.61	8
Big division (SITC1)	7	0.65

Source: Authors' preparation using data from LAIA, USITC, and Feenstra (2000).

Winners and Losers in a Free Trade Area Between the US and MERCOSUR

Paraguay	Uruguay	MERCOSUR	US
1034	2631	80905	680474
254	393	478	482
499	1873	4731	5091
3.04	5.87	5.2	9.89
2	0	0	7
0.56	0.46	0.27	0.52
0.11	0.27	0.40	0.47
19	36	123	134
34	204	975	1781
8.25	6.03	7.34	9.42
0	0	0	7
0.68	0.76	0.28	0.62
0.07	0.17	0.15	0.38
4	17	75	129
19	96	304	1686
13.11	9.13	18.58	11.66
0	0	0	7
0.77	0.77	0.38	0.57
0.06	0.13	0.11	0.38
8	7	33	129
12	16	80	1686
13.73	7.98	22.21	11.66
0	0	0	7
0.87	1.00	0.50	0.61
0.01	0.04	0.04	
	12	40	
6	80	160	
8.72	13.04	8.41	
8	8	8	
0.63	0.97	0.50	

relevant sensitive product, we were able to establish with precision whether it was a product in a reduced protection regime. Therefore, although it was possible to identify the group of products with expansion opportunities (they correspond to the products that are not under reduced protection), we could only establish a subset of the perils (see Figure 11). In other words, a product in a reduced protection regime constitutes a peril for the importer while a product in a not-reduced protection regime (enhanced or intermediate) constitutes an opportunity for the exporter, and could be a peril for the importer.¹⁹

The global results are presented in Table 3. Each set of products was characterized using the following variables of interest: share in total exports value, number of industries (SITC four digits), number of products (HS at six digits), imposed tariff for this particular set of products, and the big industry division with the greatest export share within the set.

For each group of products in Table 3 the corresponding imposed tariff is computed. The imposed tariff is the weighted average tariff that the producers in one country face in another country's market, the weights being the export shares of the first country. That is, we have the tariff imposed by the United States on each of the MERCOSUR members, and on the MERCOSUR as a whole, and the tariff imposed by the MERCOSUR on US exports. This variable is a good approximation of the market access restrictions in each of the product sets. Naturally, the sensitive products register the higher levels of protection. Brazilian exports in sensitive products are subject to the highest tariff restrictions on access to the US market. If we consider the whole MERCOSUR in relation to the United States we arrive at an amazing conclusion: in spite of the fact that the average US tariff is considerably lower than the MERCOSUR level, if the sets of products that are important from the bilateral trade perspective are considered, then to attain symmetrical market access conditions the United States would have to make greater tariff concessions than would the MERCOSUR.

The results obtained in the identification of each set of products are consistent and clear, so they validate the methodology. Unlike the global and synthetic objective of the computable general equilibrium models (see chapter III), in this case the details are relevant: we want to know which are the particular products with expansion opportunities, and which might contract their production levels. Each type of producer is associated with a different political position with respect to the trade agreement. From the

perspective of the political economy model we have in mind (Grossman and Helpman 1995), only producer interests can, with political contributions, influence the government in the definition of its unilateral stance on the type of free trade agreement preferred.

Our original conjecture when we set out to prepare this chapter was that, considering the asymmetry in market size between the two economies (MERCOSUR and the United States), exports from the United States to MERCOSUR would enter under a regime of reduced protection (US domestic production would be much greater than imports from MERCOSUR at the new prices prevailing under the FTA), but exports from MERCOSUR would enter the United States under a regime of enhanced protection (imports from the United States are much greater than domestic production in MERCOSUR at the prices prevailing under the FTA).

The main characteristics of the political economy of an agreement based on the conjecture above could be summarized in the following group of stances:

1. Export industries in MERCOSUR with sensitive products (MERCOSUR exports with trade complementarity and an expected increase in trade preference under the FTA) will be in favor of the agreement (MERCOSUR opportunities).
2. Import substitution industries and regional exporters in MERCOSUR, in sensitive products where the United States is the exporter, will be against the bilateral FTA (MERCOSUR perils).
3. US producers will be indifferent to the FTA; they will not gain by it, but nor will they lose.
4. Consumers in MERCOSUR countries will gain by the effect of FTA liberalization, and consumers in the United States will lose by the trade diversion associated with the increased price that MERCOSUR exports will have, and this translates into a loss of tariff income that is transferred to the smaller economy.

These results can be characterized as an extreme case of the protection regime typology developed by Grossman and Helpman (1995).

A first conclusion from a reading of Table 3 is that the original conjecture is correct in the case of exports from the United States to MERCOSUR. However, in exports from MERCOSUR to the United States, a sizeable subset of products could be entering under a reduced protection regime, and so those products would be perils to US producers. Therefore it is logical to expect opposition to the agreement by this group of US producers. In global terms, the possible FTA agreement between the United States and MERCOSUR is basically trade liberalizing in both directions. This does not mean, however, that trade diversion costs will not be incurred in the export flows from MERCOSUR to the United States in those manufacturing industries that will enjoy the protection of the bigger market, or that will eventually take advantage of trade reduction in the other market, as we shall see below.

Tables 4 and 5 present the main industries and products in each set, respectively. The profile by type of industry and product allows deeper analysis of the phenomenon in question. In the case of the United States, exports to MERCOSUR in the set of industries with high trade complementarity are concentrated in the big division 7 of the SITC classification (machinery and transport equipment). When the disaggregation level increases (see Tables 4 and 5), the described pattern of production is confirmed for the sets of sensitive products and there is reduced protection both at industry level (SITC, 4 digits) and at product level (HS, 6 digits). When it comes to industries, capital goods and telecommunications equipment stand out (see Table 4). The star products in the United States are transmission apparatus for telecommunications, and parts and accessories for transport equipment (see Table 5). There are no products under enhanced protection in the case of the United States, which confirms the original conjecture.

In the sensitive products set that has the United States as the importer, MERCOSUR exports are dominated by agricultural industries. In the subset of reduced protection, the export share of agricultural products is even greater. When the disaggregation level increases this pattern is confirmed, although some manufacturing industry exports which enter the US market under other protection regimes (enhanced protection or the intermediate case) could mean a peril for domestic production in the United States. Among agricultural products under reduced protection, those that stand out are frozen concentrated orange juice, unrefined sugar, and tobacco (see Table 5).

Brazilian exports account for the largest share in these three products in MERCOSUR. In Brazil, however, manufactured products loom large among the industries under reduced protection, as can be seen in Table 4, and in this respect the case of motor vehicles stands out because of their considerable export share.

When it comes to agricultural products, the total production in Argentina, Uruguay, and Paraguay justifies the assertion that a number of meat products should enter the US market under a reduced protection regime (see Table 5). This is also confirmed when the aggregation is by industry (see Table 5). In the case of Argentina, it can be seen that in the motor vehicles industry there are various products that would be cases of reduced protection.

With respect to the products that would benefit from protection in the US market without affecting it (enhanced protection) or partially reducing it (intermediate case), the outstanding industries for the MERCOSUR as a whole are textiles, clothing, and footwear. For Brazil, rubber products are also important, and for Argentina some products in the motor vehicles industry are important.

A comment is in order about the products under reduced protection in the US market in relation to those under reduced protection in the MERCOSUR market. In light of the assumptions of the theoretical reference, model we consider that the integrating region is small compared to the rest of the world, and therefore international prices are given. The assumption seems reasonable for those US exports that enter the MERCOSUR market under a reduced protection regime. However, this is not necessarily so when the exporter is the MERCOSUR. In this case, the increase in US imports that would result from trade barrier reduction could lead to an increase in the international price, which would mean a welfare improvement for MERCOSUR exporters. This could be the case in many of the agricultural products for which MERCOSUR exports have high trade complementarity with US imports, and the agreement would mean an improvement in market access conditions.

Table 2.1 in Appendix II presents more exhaustive results with respect to the sensitive products aggregated at the industry level. The industries are classified according to the protection regimes of their products, with information in each case about the volume of exports (in millions of US dollars), the imposed tariff, and the number of products

Table 4. Main Industries by Type of Set and Country

	Argentina		Brazil		
	SITC	Export	SITC	Export	
Total exports					
First industry	0813	2160	0711	2541	
Second industry	3330	1913	2222	2314	
Third industry	7810	1312	0813	2229	
High trade complementarity					
First industry	3330	1913	0711	2541	
Second industry	7821	580	7849	1571	
Third industry	0111	574	8510	1427	
Sensitive products					
First industry	7821	579	8510	1393	
Second industry	0111	574	7821	1254	
Third industry	1212	135	0585	1161	
Reduced protection					
First industry	0111	574	0585	1160	
Second industry	7821	422	0611	1070	
Third industry	1212	135	7821	1045	
Enhanced & intermediate					
First industry	7821	158	8510	1355	
Second industry	8481	5	625A	404	
Third industry	612A	5	7821	209	

Source: Authors' preparation using data from LAIA, USITC, and Feenstra (2000).

(HS six digits).²⁰ When the MERCOSUR is an exporter, the member countries with high trade complementarity with the US market are identified. The products in which MERCOSUR and the United States have simultaneously export and import specialization do not seem relevant in terms of volume of trade. The products in the motor vehicles industry are an exception to this.

Given the assumptions about political economy in the model, it was interesting in this study to analyze the effect that the possible FTA might have on producers' interests. It was assumed that there are n specific factors in the economy, one for each sector. The ownership of these factors is very

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Paraguay		Uruguay		MERCOSUR		
SITC	Export	SITC	Export	SITC	Export	USimp
2222	331	0111	344	0813	4466	168
263A	178	6512	202	2222	3104	61
0813	77	0422	194	7810	2884	84966
0111	46	0111	344	0711	2542	3322
0011	15	8483	39	3330	1913	50648
6341	7	0344	37	7821	1847	15325
0111	46	0111	344	7821	1834	14952
1211	5	8431	23	8510	1424	13932
8423	5	8510	18	0585	1277	511
0111	46	0111	344	7821	1467	2564
1211	5	0585	4	0585	1275	418
0611	5	0611	3	0111	1201	1758
8423	5	8431	23	8510	1386	13883
6521	2	8510	18	625A	404	3461
0544	1	8451	17	7139	373	2930

concentrated, so the objective function of each owner-producer of a specific factor in each sector will be to maximize the net benefits from the contributions he has to make to influence the decision that the government is going to make about how far to subscribe to the trade agreement (from not accepting it to subscribing to it completely with no restrictions). Therefore, from the point of view of the viability of the agreement, the only relevant interest to consider is that of the producers, acting either to defend their domestic market or seeking to export more to the new partner market.

Denominations, definitions, and an explicit methodology were established in order to identify each sector and product.

Table 5. Main Products by Type of Set and Country

	Argentina		Brazil	
	HS	Export	HS	Export
Total exports				
First product	270900	1913	090111	2538
Second product	230400	1907	120100	2314
Third product	100590	1280	230400	2215
High trade complementarity				
First product	270900	1913	090111	2538
Second product	870421	373	200911	1133
Third product	020130	346	260112	1071
Sensitive products				
First product	870421	373	200911	1133
Second product	020130	346	170111	1070
Third product	020230	201	640399	1002
Reduced protection				
First product	870421	373	200911	1133
Second product	020130	346	170111	1070
Third product	020230	201	240120	892
Enhanced & intermediate				
First product	870431	153	640399	1002
Second product	870120	5	401120	228
Third product	640610	5	401110	177

Source: Authors' preparation using data from LAIA, USITC, and Feenstra (2000).

For each country participating in the agreement, the industries in which that country would be relatively more inefficient (an importer), and those in which it would be relatively more efficient (an exporter), were determined. In this way, a first group of high trade complementarity industries was defined, those in which an expansion and/or contraction of production was expected to occur. An index of trade complementarity was used, and the specialization indicators of each country were adjusted to take account of the size of each economy.

Then, at a level of greater disaggregation, the trade policy information was processed on the level of products so as to determine the sen-

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Paraguay		Uruguay		MERCOSUR		
HS	Export	HS	Export	HS	Export	US imp
120100	331	510529	202	230400	4195	7
520100	176	020230	194	120100	3104	61
230400	73	100630	182	090111	2539	2825
020230	21	020230	194	090111	2539	2825
010290	15	020130	77	270900	1913	50648
020120	12	020120	65	200911	1137	291
020230	21	020230	194	200911	1137	291
020120	15	020130	77	170111	1119	796
020130	12	020120	65	240120	1030	478
020230	21	020230	194	200911	1137	291
020120	12	020130	77	170111	1119	796
020130	11	020120	65	240120	1030	478
620342	21	611010	9	640399	1005	5614
520812	12	640391	9	840991	373	2930
070200	11	620331	8	870431	264	9791

sitive products within the industries that had been identified. The collection of sensitive products was divided into two different groups: the perils and the opportunities.

A peril for a particular country occurs when the concession of improved access to its market for a product in which the other country has a comparative advantage results in the displacement of production oriented to the domestic (regional) market.

An opportunity for a particular country occurs when the gain in improved access for a product in which this country is an exporter and the other an importer leads to an expansion in the domestic supply of the exporter.

Given that, in the agreement being evaluated, one of the parties is a region made up of a group of countries, the only thing that has to be taken into consideration is that, in the case of the region-country, the region itself is considered as a domestic market.

An explicit link between the perils and opportunities definitions and the protection regimes typology was established. An opportunity which is not a peril for the other party is associated with a regime of enhanced protection. A peril without a corresponding opportunity is a case of reduced protection. In the intermediate case, a peril and an opportunity co-exist.

The discrimination of situations was done by comparing domestic offer in the exporting country with excess domestic demand in the importer, at the price which will prevail when the agreement is in force. The determination of the regime is a key factor for knowing the kind of distributive effects in each case, and in particular their influence on the objective function of the producers.

To sum up, the political economy of an eventual agreement can be summarized in the following characteristics:

1. Agricultural producers in the United States face a peril with respect to the constitution of an FTA with the MERCOSUR countries, while agricultural producers in MERCOSUR could have opportunities through an improvement in international prices due to liberalization and the resulting expansion in demand. In this situation, the cases of frozen orange juice, sugar, tobacco, and meat of bovine animals stand out.
2. There are no evident opportunities for US producers in the MERCOSUR because of the reduced size of the regional market. US exporters enter under reduced protection conditions, and international prices should not be significantly affected as a result of the agreement. On the other hand, producers of manufactures in the MERCOSUR face an evident peril in their domestic market and for their regional exports. The machinery and capital goods industries stand out, as well as some subsectors in the motor vehicle industry.

3. MERCOSUR opportunities, that is, those products that would benefit from protection in the US market, are concentrated in lighter manufactures in the footwear and clothing industries.

That is to say, MERCOSUR producers in agricultural industries in which the zone has significant comparative advantages and in subsectors of light manufacturing industries would have opportunities and would face resistance to the agreement from MERCOSUR producers in the heavier manufacturing industries of machinery and transport equipment. Meanwhile, in the United States various agricultural industries should be against the agreement. Although it is not a determinant from a political economy point of view, in general, the consumers in both parts would benefit from the agreement given its liberalizing character. Therefore, we expect a net aggregate welfare gain on both sides.

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NOTES

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3. The general analysis in this section closely follows that presented in Grossman and Helpman (1995), but we include a more explicit consideration of the traditional trade creation and trade diversion effects.
4. The different industries in the economy are denoted by an index $i=0,1,\dots,n$.

5. Thus, the domestic price ($\mathbf{T}i^z$) equals one plus the initial tariff rate on good i in country z .
6. This is not the usual import substitution situation, since the domestic market is not protected.
7. And areas 3 and 5 are bigger.
8. At price \mathbf{T}_i^A , country B 's supply continues to be insufficient to satisfy the import demand of country A . Another way to obtain this specialization is by making a suitable displacement of the demand curve to the left, given the initial supply curve. In general, there are infinite combinations of displacements of both curves that satisfy the enhanced protection condition, and turn good i into an export for country B .
9. And areas 1, 2, 3, and 4 are bigger.
10. And area 6 is bigger.
11. The first step considers less disaggregated trade data due to a reason of data quality. Every step could have been developed at the same disaggregation level. The adopted approach could mean the mis-selection of some irrelevant products, but not the exclusion of the relevant ones.
12. One country could have an export specialization and an import specialization in the same industry. That is, the intersection between the sets HTC^{AB} and HTC^{BA} is not necessary null.
13. In those cases we are assuming that strong adjustments are not expected.
14. In the case of the export specialization index the estimated equation was:

$$\ln XS_s^z = \beta_1 \ln GDP_z + \beta_2 \ln(GDP_z)^2 + \varepsilon_s^z$$

where GDP_z is country z 's gross domestic product (the average for the period 1990–1997). The sample used includes the countries from South America, North America, the European Union, and South East Asia. The results are not significantly biased due to sample selection or the eventual endogeneity of GDP. The GDP data were obtained from World Bank (2001).

15. There could be products that belong to an industry in HTC^{AB} but are not exported or imported. Those products cannot be sensitive. A reasonable alternative is to express the second and third condition as $X_C^k > \underline{X}$ and $M_C^k > \underline{M}$, where \underline{X} and \underline{M} are positive amounts of trade. This is also valid for the tariff condition, where it is possible to require $t_i^{AB} > \underline{t}$, with \underline{t} being a positive tariff. For this specific study we required a tariff greater than 2%.
16. The nonreciprocal trade preferences contained in the General Preference System (GPS).
17. Agriculture includes SITC 0, 1, and 4 (food and live animals; beverages and tobacco; and animal and vegetable oils, fats and waxes; respectively); raw materials include SITC 2 (raw materials from agricultural origin); fuels include SITC 3 (mineral fuels, lubricants, and related materials); manufactures include SITC 5 to 9

(chemicals and related products; manufactured goods classified by material; machinery and transport equipment; miscellaneous manufactured articles; and commodities and transactions not classified elsewhere, respectively). The version of the SITC classification employed in this paper is that used by Statistics Canada (see Feenstra 2000). Appendix III provides descriptions of industries and products codes.

18. We are including preferential trade (intra-MERCOSUR and intra-NAFTA) for the computation of trade specialization indexes. In the case of the small members of MERCOSUR, the regional destination could represent a high share even for the exports of products in which they are efficient producers.
19. For the classification of a sensitive product i into the reduced protection and not-reduced protection sets, the tariff in the importer market (A) was used to proxy the relative efficiency of the importer with respect to the exporter (B) (e_i^{AB} , see Section 3, "Measure of the Trade Protection Regime"). Then, considering this proxy and the import elasticity of the importer (\sum_{mi}^A), we computed the import demand of country A at the lower price of the exporter: $\tau_i^B(D_i^A \tau_i^B) - x_i^A \tau_i^B$. Finally, we compared the adjusted import demand with the exporter's total supply: $\tau_i^B x_i^B \tau_i^B$. If the supply is (smaller) greater than the import demand it is a (not) reduced protection case. In many reduced protection cases, B 's exports were greater than A 's imports, and, therefore, we did not need production data (in particular, for products in which the United States was the exporter, and agricultural products exported by MERCOSUR countries). We obtained some disaggregated production data from different sources: World Bank (Trade and Production Database), GTAP, and IBGE. The import elasticities were those provided by GTAP.
20. In Table II.1, IT is the imposed tariff; $ITMS$ ($ITUS$) is the imposed tariff faced by MERCOSUR (US) exports in the US (MERCOSUR) market.

APPENDIX I
ECONOMIC EFFECTS OF AN FTA:
ANALYTICAL EXPRESSIONS

1. Enhanced Protection

- Country *A*

$$\Delta W_i^A = \Delta TR_i^A = -(\tau_i^A - 1)x_i^B(\tau_i^A) \quad (I.1)$$

where Δ means variation; and W_i^A is the contribution of the industry *i* to country *A*'s welfare.

- Country *B*

$$\Delta \pi_i^B = \int_{\tau_i^B}^{\tau_i^A} x_i^B(p_i^B) dp_i^B = \int_{\tau_i^B}^{\tau_i^A} \pi_{ip}^B(p_i^B) dp_i^B = \pi_i^B(p_i^B) \Big|_{\tau_i^B}^{\tau_i^A} = \pi_i^B(\tau_i^A) - \pi_i^B(\tau_i^B) \quad (I.2)$$

where π are the producers' profits; and p is the producer price.

$$\Delta TR_i^B = (\tau_i^B - 1)x_i^B(\tau_i^B) \quad (I.3)$$

$$\Delta W_i^B = \Delta \pi_i^B + \Delta TR_i^B \quad (I.4)$$

- Zone (*Z*)

$$\Delta W_i^Z = (\tau_i^B - 1)x_i^B(\tau_i^B) + \Delta \pi_i^B - (\tau_i^A - 1)x_i^B(\tau_i^A) < 0 \quad (I.5)$$

2. Reduced Protection

- Country *A*

$$\Delta \pi_i^A = -\int_{\tau_i^B}^{\tau_i^A} x_i^A(p_i^A) dp_i^A = -\int_{\tau_i^B}^{\tau_i^A} \pi_{ip}^A(p_i^A) dp_i^A = -\pi_i^A(p_i^A) \Big|_{\tau_i^B}^{\tau_i^A} = -[\pi_i^A(\tau_i^A) - \pi_i^A(\tau_i^B)] \quad (I.6)$$

$$\Delta S_i^A = \int_{\tau_i^B}^{\tau_i^A} D_i^A(q_i^A) dq_i^A = \int_{\tau_i^B}^{\tau_i^A} -S_{ip}^A(q_i^A) dq_i^A = -S_i^A(q_i^A) \Big|_{\tau_i^B}^{\tau_i^A} = S_i^A(\tau_i^B) - S_i^A(\tau_i^A) \quad (I.7)$$

where S is the consumers' surplus; and q is the consumer price.

$$TC_i^A = [\pi_i^A(\tau_i) - \pi_i^A(\tau_i^A)] + [S_i^A(\tau_i) - S_i^A(\tau_i^A)] - (\tau_i^A - \tau_i)m_i^A(\tau_i^A) \quad (I.8)$$

$$TD_i^A = -(\tau_i - 1)m_i^A(\tau_i^A) \quad (I.9)$$

$$TD_i^A = -(\tau_i^B - 1)m_i^A(\tau_i^A) \quad (I.10)$$

$$\Delta W_i^A = TC_i^A + TD_i^A \quad (I.11)$$

$$\Delta W_i^B = \Delta TR_i^B = (\tau_i^B - 1)m_i^A(\tau_i^B) \quad (I.12)$$

$$Ar(6) - Ar(5) = (\tau_i^B - 1)m_i^A(\tau_i^B) - (\tau_i^B - 1)m_i^A(\tau_i^A) = (\tau_i^B - 1)[m_i^A(\tau_i^B) - m_i^A(\tau_i^A)] > 0 \quad (I.13)$$

$$\Delta W_i^Z = TC_i^A + TD_i^A + \Delta TR_i^B \quad (I.14)$$

3. Intermediate Case

• Country A

$$\Delta \pi_i^A = - \int_{\tau_i}^{\tau_i^A} x_i^A(p_i^A) dp_i^A = - \int_{\tau_i}^{\tau_i^A} \pi_{ip}^A(p_i^A) dp_i^A = - \pi_i^A(p_i^A) \Big|_{\tau_i}^{\tau_i^A} = - [\pi_i^A(\tau_i^A) - \pi_i^A(\tau_i)] \quad (I.15)$$

$$\Delta S_i^A = \int_{\tau_i}^{\tau_i^A} D_i^A(q_i^A) dq_i^A = \int_{\tau_i}^{\tau_i^A} -S_{ip}^A(q_i^A) dq_i^A = -S_i^A(q_i^A) \Big|_{\tau_i}^{\tau_i^A} = S_i^A(\tau_i^A) - S_i^A(\tau_i) \quad (I.16)$$

$$\Delta TR_i^A = -(\tau_i^A - 1)m_i^A(\tau_i^A) \quad (I.17)$$

$$TC_i^A = [\pi_i^A(\tau_i) - \pi_i^A(\tau_i^A)] + [S_i^A(\tau_i) - S_i^A(\tau_i^A)] - (\tau_i^A - \tau_i)m_i^A(\tau_i^A) \quad (I.18)$$

$$TD_i^A = -(\tau_i - 1)m_i^A(\tau_i^A) \quad (I.19)$$

$$\Delta W_i^A = TC_i^A + TD_i^A \quad (I.20)$$

• Country B

$$\Delta \pi_i^B = \int_{\tau_i^B}^{\tau_i} x_i^B(p_i^B) dp_i^B = \int_{\tau_i^B}^{\tau_i} \pi_{ip}^B(p_i^B) dp_i^B = \pi_i^B(p_i^B) \Big|_{\tau_i^B}^{\tau_i} = \pi_i^B(\tau_i) - \pi_i^B(\tau_i^B) \quad (I.21)$$

$$\Delta TR_i^B = (\tau_i^B - 1)x_i^B(\tau_i^B) \quad (I.22)$$

$$\Delta W_i^B = (\Delta \pi_i^B + \Delta TR_i^B) > 0 \quad (1.23)$$

- Zone

$$\Delta W_i^Z = \Delta W_i^A + \Delta W_i^B \quad (1.24)$$

APPENDIX II

Table II. 1 Main Opportunities and Perils

MERCOSUR EXPORTER					US EXPORTER						
REDUCED				NOT REDUCED				REDUCED			
US Perils					MS Opportunities (eventual) US Perils				MS Perils		
SITC	EXP	IT	CTRY	#HS	EXP	IT	CTRY	#HS	EXP	IT	#HS
0111	1201	8.26	A,B,P,U	6							
0412									3593	5.00	1
0421									416	8.09	2
0422									613	10.96	2
0440									4890	8.00	1
0481									251	15.14	10
0542									341	5.00	9
0545					3	13.02	A	5			
0546									591	13.38	15
0574									381	10.00	1
0575									375	10.00	1
0577									1008	10.00	13
0579									839	10.00	18
0585	1275	38.78	A,B,U	6	2	8.35	A,B	1			
0589									30	14.00	3
0611	1119	25.48	A,B,P,U	1							
0620	104	12.67	A,B	1							
0730	48	9.97	B	3	5	20.42	B	1			
1121	48	9.16	A	3							
1211	99	42.44	A,B,P	1							
1212	1030	53.07	A,B,P	1							
1213	46	68.36	A,B	1							
2331									1287	7.81	14
263A									2143	6.01	6
266A									947	11.55	19
2919									255	5.14	8
2929									213	7.29	16
3345									359	14.00	4
4113									473	6.02	6
4232									643	10.40	2
511A									2626	6.11	44
5121									941	9.82	25
513A									2356	8.41	59
514A									1606	9.35	25
5161									694	5.27	13

Winners and Losers in a Free Trade Area Between the US and MERCOSUR

MERCOSUR AND US EXPORTERS											
MS REDUCED AND US REDUCED						MS NOT RED. AND US RED.					
Common Perils						MS Opportunities. MS Perils and (eventual) US Perils					
EXMS	ITMS	CTRY	EXUS	ITUS	#HS	EXMS	ITMS	CTRY	EXUS	ITUS	#HS
12	2.67	A	197	10.00	1						
14	0.61	A	156	10.0	2	0	1.12	A	146	10.00	5
44	32.51	A,B	231	14.00	7	7	6.17	A,B	88	14.00	3
91	19.60	A,B,P	282	15.09	5	0	3.86	A,B,P	87	2.40	1
198	5.53	B	733	8.49	9	44	5.02	B	1470	5.77	16
9	5.53	B	38	4.17	2	36	4.50	B	224	6.89	1

Table II. 1 Continued

MERCOSUR EXPORTER					US EXPORTER						
REDUCED					NOT REDUCED						
US Perils					MS Opportunities (eventual) US Perils						
REDUCED					REDUCED						
SITC	EXP	IT	CTRY	#HS	EXP	IT	CTRY	#HS	EXP	IT	#HS
5162									412	7.02	28
5169									316	11.73	4
5221									647	5.32	21
5224									220	7.81	12
5225									505	6.29	18
5231									1734	8.74	97
5239									173	5.86	10
5415									443	5.95	7
5513									830	12.97	16
5530									2710	17.99	19
5542									1338	14.31	9
582A									4827	11.45	20
584A									711	10.18	10
591A									1631	12.72	5
5922	97	4.36	A, B	4							
5989									8221	8.97	52
612A	25	5.15	A, B, U	1	65	9.36	A,B,U	2			
6210									982	13.11	18
625A									351	13.61	10
6282									59	14.00	5
6289									1182	13.56	10
6428									1205	14.37	11
6521					14	8.27	B,P	7			
6575	3	8.96	B	2							
6577									378	15.61	12
6584	166	9.94	B	5	19	9.38	B	7			
6623									322	9.29	5
6638									101	13.94	10
6664					1	13.30	U	1			
6665					26	8.84	B	1			
6716	428	4.13	A, B	4	1	3.06	A,B	4			
6811									516	6.66	4
692A									820	14.58	9
6931									289	14.00	3
6953									772	18.00	25

Table II. 1 Continued

MERCOSUR EXPORTER					US EXPORTER							
REDUCED				NOT REDUCED				REDUCED				
US Perils				MS Opportunities (eventual) US Perils				MS Perils				
SITC	EXP	IT	CTRY	#HS	EXP	IT	CTRY	#HS	EXP	IT	#HS	
6954									1502	16.64	16	
6996									531	15.60	10	
712A									651	14.00	4	
7133									455	14.00	3	
7139									7545	16.41	8	
716A									3098	14.29	20	
7188									367	14.00	9	
7211									336	14.00	7	
7212									1678	14.94	12	
7213									87	14.00	3	
7219									450	14.00	8	
723A									7941	8.23	21	
7252									257	11.45	5	
7259									434	14.00	3	
727A									658	13.25	11	
7283									780	14.00	7	
7284									13514	13.02	39	
7361									1944	13.91	52	
7369									1693	12.94	5	
7371									187	8.50	4	
7413									1865	13.82	23	
7414									3838	14.87	11	
7416									1792	13.67	12	
742A									2593	14.03	11	
743A									2477	12.46	7	
7441									1037	14.00	8	
7442									4547	11.16	30	
7451									589	13.46	7	
7452									2788	12.81	27	
7493									902	14.03	3	
7499									1366	14.30	13	
7511									42	18.14	4	
7591									1375	13.01	4	
762A					1	4.37	B	1				
7641									4904	11.97	8	

MERCOSUR AND US EXPORTERS											
MS REDUCED AND US REDUCED						MS NOT RED. AND US RED.					
Common Perils						MS Opportunities. MS Perils and (eventual) US Perils					
EXMS	ITMS	CTRY	EXUS	ITUS	#HS	EXMS	ITMS	CTRY	EXUS	ITUS	#HS
						373	1.94	A, B	2801	15.20	1
154	2.50	B	392	18.00	1						
38	4.50		171	16.00	1	12	3.71	B	493	14.13	3

Table II. 1 Continued

MERCOSUR EXPORTER					US EXPORTER						
REDUCED					NOT REDUCED						
US Perils					MS Opportunities (eventual) US Perils						
REDUCED					REDUCED						
SITC	EXP	IT	CTRY	#HS	EXP	IT	CTRY	#HS	EXP	IT	#HS
7649									17493	8.77	28
771A									3236	15.86	11
7732									488	16.00	6
7742									1232	9.09	6
7752									741	20.00	6
7757									879	18.85	9
7781									1418	16.20	13
7782									702	17.19	9
7783									1980	17.47	13
7788									6073	13.04	32
7821									798	14.00	2
7822									1099	17.08	11
7849									28041	14.75	15
792A									9	20.00	2
8421					15	18.43	U	7			
8422					5	16.89	U	3			
8423					5	9.50	P	2			
8429					10	12.71	U	31			
8431					23	15.23	U	7			
8432					3	16.80	U	4			
8442	21	7.40	B	1	0	6.60	B	5			
8451					17	12.33	U	4			
8471					3	6.68	U	8			
8481					13	5.63	A,U	2			
8483	56	4.00	A	1							
8510	38	15.48	B	3	1386	9.02	B,U	17			
8720									8240	10.63	14
8745									758	13.24	7
8748									13410	12.16	39
8749									2574	11.89	9
8813									1876	11.63	20
8822									2242	9.02	32
8921									36	11.82	4
8946									248	20.00	8
895A									831	17.07	21
8982									211	16.74	10

MERCOSUR AND US EXPORTERS											
MS REDUCED AND US REDUCED						MS NOT RED. AND US RED.					
Common Perils						MS Opportunities. MS Perils and (eventual) US Perils					
EXMS	ITMS	CTRY	EXUS	TUS	#HS	EXMS	ITMS	CTRY	EXUS	ITUS	#HS
1467	18.99	A, B	1893	19.39	4	367	19.08	A, B	5988	20.00	4
156	2.00	B	240	16.00	1	0	1.07		62	9.57	1

APPENDIX III INDUSTRIES AND PRODUCTS DESCRIPTIONS

Table III. 1 Main Industry Descriptions

SITC	DESCRIPTION
0011	BOVINE ANIMALS INCLUDING BUFFLAO - LIVE
0111	MEAT FROM BOVINE ANIMALS - FRESH, CHILLED OR FROZEN
0344	FISH FILLETS - FROZEN
0711	COFFEE - ROASTED, UNROASTED, and DECAFFINATED
0813	OIL-CAKE & OTHER RESIDUES (EXCEPT DREGS)
3330	OIL & CRUDE OIL OBTAINED FROM BITUMIN. MINERALS
0544	TOMATOES - FRESH OR CHILLED
0585	JUICES - BOTH FRUIT & VEGET.(INCL.GRAPE MUST) UNFERMENTED
0611	SUGARS - BEET AND CANE, both RAW and SOLID
1211	TOBACCO - UNSTRIPPED
1212	TOBACCO,WHOLLY OR PARTLY STRIPPED
2222	SOYBEANS
263A	COTTON
3330	OIL & CRUDE OIL OBTAINED FROM BITUMIN. MINERALS
612A	LEATHER MANUFACTURERS - COMPOSITION LEATHER NES
625A	RUBBER TIRES, TIRE CASES, etc.
6341	LUMBER CUT LENGTHWISE - UNFINISHED
6512	YARN - WOOL OR ANIMAL HAIR (INCLUDING WOOL TOPS)
6521	COTTON FABRICS -WOVEN,UNBLEACHED, NOT MERCERIZED
7139	INTERNAL COMBUSTION PISTON ENGINE PARTS - OF 713.2-/713.8-
7284	MACHINES & APPLIANCES FOR SPEZIALIZED or PARTICULAR INDUSTRIES
7649	PARTS OF APPARATUS OF DIVISION 76-
776A	THERMIONIC, COLD and PHOTO-CATHODE VALVES, TUBES and PARTS
7810	PASSENGER CARS, FOR TRANSPORT OF PASSENGERS and GOODS
7821	MOTOR VEHICLES FOR TRANSPORT OF GOODS and MATERIALS
7849	OTHER MOTOR VEHICLE PARTS & ACCESSORIES
792A	AIRCRAFT & ASSOCIATED PARTS and EQUIPMENT
8423	TROUSERS, PANTS ETC. COMPOSED OF TEXTILE FABRICS
8431	COATS AND JACKETS OF TEXTILE FABRICS
8451	JERSEYS, PULL-OVERS, TWINSETS, CARDIGANS - KNITTED
8481	ARTICLES OF CLOTHING AND APPARELY - LEATHER ACCESSORIES
8483	FUR CLOTHING, ARTICLES MADE OF FURSKINS
8510	FOOTWEAR

Table III. 2 Main Product Descriptions

HS	DESCRIPTION
010290	LIVE BOVINE ANIMALS (EXCLUDING PURE-BRED FOR BREEDING)
020120	FRESH OR CHILLED BOVINE CUTS, UNBONED (EXCLUDING CARCASSES AND 1/2 CARCASSES)
020130	FRESH OR CHILLED BOVINE MEAT, BONELESS
020230	BONELESS, FROZEN MEAT OF BOVINE ANIMALS
070200	TOMATOES, FRESH OR CHILLED
090111	COFFEE (EXCLUDING ROASTED AND DECAFFEINATED)
100590	CORN (EXCLUDING SEED)
100630	SEMI-MILLED OR WHOLLY MILLED RICE
120100	SOY BEANS, WHETHER OR NOT BROKEN
170111	RAW CANE SUGAR (EXCLUDING ADDED FLAVORING OR COLORING)
200911	FROZEN ORANGE JUICE, WITH AND WITHOUT ADDED SUGAR OR OTHER SWEETENERS (EXCLUDING FERMENTED OR THOSE CONTAINING SPIRITS)
230400	OIL-CAKE AND OTHER SOLID RESIDUES, WHETHER OR NOT GROUND OR IN THE FORM OF PELLETS, RESULTING FROM THE EXTRACTION OF SOYA-BEAN OIL
240110	TOBACCO, NOT STEMMED OR STRIPPED
240120	TOBACCO, PARTLY OR WHOLLY STEMMED OR STRIPPED, OTHERWISE UNMANUFACTURED
260112	AGGLOMERATED IRON ORES AND CONCENTRATES ECSC (EXCLUDING ROASTED IRON PYRITES)
270900	PETROLEUM OILS AND OILS OBTAINED FROM BITUMINOUS MINERALS, CRUDE
271000	LUBRICATING PETROLEUM OILS OR BITUMINOUS OILS >70% (SITC 3345)
401110	NEW PNEUMATIC TIRES - COMPOSED OF RUBBER AND UTILIZED ON MOTOR CARS, INCLUDING ESTATE AND RACING CARS
401120	NEW PNEUMATIC TYRES, OF RUBBER, OF A KIND USED FOR BUSES AND LORRIES (EXCLUDING TYRES WITH LUG, CORNER OR SIMILAR TREADS)
510529	WOOL, COMBED (EXCLUDING THAT IN FRAGMENTS AND OPEN TOPS)
520100	COTTON, NEITHER CARDED NOR COMBED
520812	PLAIN WOVEN FABRICS OF COTTON, CONTAINING >=85 % COTTON BY WEIGHT AND WEIGHING >100 G TO 200 G PER M2, UNBLEACHED
611010	JERSEYS, PULLOVERS, CARDIGANS, WAISTCOATS AND SIMILAR ARTICLES, OF WOOL OR FINE ANIMAL HAIR, KNITTED OR CROCHETED (EXCLUDING WADDED WAISTCOATS)
620331	MEN'S OR BOYS' JACKETS AND BLAZERS OF WOOL OR FINE ANIMAL HAIR (EXCLUDING KNITTED OR CROCHETED, AND WIND- JACKETS AND SIMILAR ARTICLES)

- 620342 WOMEN'S OR GIRLS' JACKETS AND BLAZERS OF COTTON
(EXCLUDING KNITTED OR CROCHETED, WIND-JACKETS
AND SIMILAR ARTICLES)
- 640391 FOOTWEAR WITH, RUBBER, PLASTICS OR COMPOSITION LEATHER
OUTER SOLES, WITH UPPERS COMPOSED OF LEATHER, COVERING
THE ANKLE
- 640399 FOOTWEAR WITH RUBBER, PLASTIC OR COMPOSITION LEATHER
OUTER SOLES, WITH LEATHER UPPERS
- 640610 UPPERS AND PARTS THEREOF (EXCLUDING STIFFENERS AND
GENERAL PARTS MADE OF ASBESTOS)
- 760110 ALUMINIUM, NOT ALLOYED, UNWROUGHT
- 840991 PARTS SUITABLE FOR USE SOLELY OR PRINCIPALLY WITH SPARK-
IGNITION INTERNAL COMBUSTION PISTON ENGINES, N.E.S.
- 847330 PARTS AND ACCESSORIES FOR AUTOMATIC DATA-PROCESSING
MACHINES OR FOR OTHER MACHINES OF HEADING 8471, N.E.S.
- 852520 TRANSMISSION APPARATUS INCORPORATING RECEPTION
APPARATUS, FOR RADIO-TELEPHONY, RADIO-TELEGRAPHY,
RADIO-BROADCASTING OR TELEVISION
- 854213 MONOLITHIC DIGITAL INTEGRATED CIRCUITS AS METAL
OXIDE SEMICONDUCTOR CIRCUITS, OF MOS TYPE
(EXCLUDING SMART CARDS)
- 870120 ROAD TRACTORS FOR SEMI-TRAILERS
- 870421 MOTOR VEHICLES FOR THE TRANSPORT OF GOODS, WITH
COMPRESSION-IGNITION INTERNAL COMBUSTION PISTON
ENGINES OF A GROSS VEHICLE WEIGHT \leq 5 TON
- 870431 MOTOR VEHICLES FOR THE TRANSPORT OF GOODS, WITH SPARK-
IGNITION INTERNAL COMBUSTION PISTON ENGINES, OF A GROSS
VEHICLE WEIGHT \leq 5 TONS
- 870829 PARTS AND ACCESSORIES OF BODIES FOR TRACTORS, MOTOR
VEHICLES FOR THE TRANSPORT OF TEN OR MORE PERSONS,
MOTOR CARS...
- 870899 PARTS AND ACCESSORIES, FOR TRACTORS, MOTOR VEHICLES FOR
THE TRANSPORT OF TEN OR MORE PERSONS, MOTOR CARS.
- 880240 AIRPLANES AND OTHER POWERED AIRCRAFT OF AN OF AN
UNLADEN WEIGHT $>$ 15000 KG (EXCLUDING HELICOPTERS AND
DIRIGIBLES)
- 880330 PARTS FOR AIRPLANES OR HELICOPTERS, N.E.S. (EXCLUDING
THOSE FOR GLIDERS)

The Sectoral Impact of an Integration Agreement between MERCOSUR and NAFTA: The Case of the Petrochemical Industry

ANDRÉS LÓPEZ¹ AND GASTÓN ROSSI²

1. INTRODUCTION³

Negotiations aimed at establishing a Free Trade Area of the Americas (FTAA), which have been taking place in a scenario of increasing trade liberalization, began soon after the creation and/or deepening of several regional integration agreements on the continent, including the North American Free Trade Agreement (NAFTA), the Southern Cone Common Market (MERCOSUR), the Andean Community (CAN), and the Central American Common Market (CARICOM).

Parallel with the FTAA negotiations, the possibility of an agreement between MERCOSUR and NAFTA has also been discussed. The objective of this study is to contribute to the evaluation of the consequences of this kind of agreement from a sectoral point of view. In this case, we will focus our analysis on the petrochemical industry (PCI), which is a mature sector with a long history in MERCOSUR as well as in the NAFTA countries, and which is important in terms of production and foreign trade in both regions.

In Argentina, and even more so in Brazil, the PCI has reached relatively high levels of efficiency, and most plants in both countries operate with costs and on a scale in line with international standards. However, since the NAFTA countries are very well endowed in terms of the availability and cost of raw materials, and since US plants are among the world's largest, it might be expected that integration between NAFTA and MERCOSUR in this sector would mainly result

in higher exports from the former to the latter. This study will discuss this hypothesis, and evaluate the welfare and distributional impact of MERCOSUR–NAFTA integration in this industry.

In line with these objectives, Section 2 describes the main features of the PCI and the evolution and situation of the PCI in MERCOSUR and NAFTA. The potential effects of the integration between NAFTA and MERCOSUR are analyzed in Section 3, on the basis of a set of ten products that are representative of the industry as a whole. We describe the recent evolution of production and foreign trade in this set of products in both regions, and estimate an index of revealed comparative advantages for each of them. Then, the potential impact of the integration between MERCOSUR and NAFTA is analyzed using a simple comparative static framework from which welfare effects can be derived. The main conclusions of the study are presented in section 4.⁴

2. BACKGROUND

Basic Characteristics of the Petrochemical Industry

The main feedstocks of the PCI are natural gas and oil derivatives (ethane, propane, liquid petroleum gas, methane, naphtha, etc.), and these are employed to produce the so-called “basic petrochemicals,” which include olefins (ethylene, propylene, butylene, etc.) and aromatics (benzene, xylenes, toluene, etc.).⁵ These basic products are processed to obtain the so-called “intermediate petrochemicals,” which are either used for making “final petrochemicals” or have other industrial uses.⁶

Final petrochemicals are employed in a wide range of productive activities.⁷ The most diffused product family is the thermoplastics, which include low-density polyethylene (LDPE), linear low-density polyethylene (LLDPE), high-density polyethylene (HDPE), polystyrene (PS), polypropylene (PP), and polyvinyl chloride (PVC); these are usually called “commodity” thermoplastics. Other families of final petrochemical products include fertilizers (urea, diammonium phosphate–DAP), thermostables or thermosets,⁸ synthetic fibers (nylon, polyester, etc.), elastomers (synthetic rubber), detergents (DDB/ABL, tensoactives, etc.), solvents (acetone, carbon tetrachloride etc.), plasticizers, and engineering plastics.⁹

The PCI is highly capital intensive, and is subject to significant economies of scale.¹⁰ Capacity utilization ratios are also important in production costs;

the calculations of the effects of plant loading on profitability presented in Chesnais (1989) show that more than 80% of utilization is normally required to generate positive net returns on investment in this sector.

A high degree of intrafirm vertical integration is also typical of the PCI.¹¹ Among the main determinants of this are technological factors (high risks and the transportation costs of many basic products, coproduction constraints, etc.), economies of agglomeration, transaction costs (these are important given the highly specific nature of the invested capital in this sector), monopolistic power (transfer prices, upstream market distortions, barriers to entry, etc.), and primary rents (which can be absorbed by firms that can integrate the hydrocarbons extraction/refining stage with downstream petrochemical production). Horizontal integration is also important, because there are economies of scope in R&D, marketing, administration, and financing (Chudnovsky and López 1997).

The PCI is characterized by large and lumpy investments with long gestation periods. Production capacity increases and decreases in a modular fashion due to the presence of strong investment indivisibilities; hence, in the short term, sectoral supply tends to react more through movements of prices than of quantities (that is, the supply curve is highly inelastic in the short term). On the one hand, the steps involved in undertaking feasibility studies, preparing an investment project, and undertaking the project mean that investment involves a substantial amount of time (usually between three and five years). On the other hand, in periods of falling demand, firms try to maintain high levels of capacity utilization, which usually leads to surplus production that is placed on international markets. This happens in a context in which competition is largely oligopolistic, especially on the national and regional levels.¹²

Transnational companies (TNCs) play a key role in this oligopolistic competition, particularly since they control most of the technologies used in the PCI. In some cases, TNCs opt to exploit their technologies through licenses, and this is especially so in the case of firms that work exclusively on engineering and technological development. An alternative strategy is direct investment abroad, and this is usually preferred by firms that are in control of key technological assets and are at the same time petrochemical producers (this happens in the thermoplastic resins segment in particular). A number of factors affect the decision on how to exploit proprietary technological assets. These are the degree of

maturity of the processes and products involved; the ease of transport of the respective products; and the characteristics of the national markets where the strategy will be implemented, as well as those markets' openness to trade, to capital, and to foreign technology.

As was said above, scale economies (that is, plant size) are a key element for competitiveness in this industry. Another basic determinant is access to state-of-the-art technology. Costs are also determined by feedstock prices (feedstocks represent around 60% to 65% of the production costs of basic petrochemicals, a proportion that falls to 10% to 30% in the case of final petrochemical products). Capital costs also have great weight. Besides these factors, location decisions are also influenced by proximity to large markets and by infrastructure availability.

The production of basic petrochemicals is generally located in those regions where abundant feedstocks are available. International trade in this category of products is relatively small, since petrochemical production is generally undertaken in integrated complexes. Besides this, the transportation of some basic products such as ethylene is expensive because of technical restrictions. As a consequence, intermediate and final products are also often located where feedstocks are available (and international trade is greater than in basic products). However, as proximity to large markets is also important, most petrochemical production is undertaken in locations where both conditions are met.

In this scenario, "export-oriented" petrochemical projects are rare. Furthermore, international trade in the PCI is mostly "managed," since it is characterized by oligopolistic practices,¹³ regulations, and the frequent use of antidumping measures. Price setting depends largely on unabsorbed (excess) production on the part of the main producer markets. When prices are low, the need to maintain high levels of capacity utilization leads firms to engage in aggressive export policies, so dumping practices become habitual.

In this scenario, the PCI is subject to international price cycles that are determined by two factors: first, the price of raw materials; second, and more important, the balance between installed capacity and demand, which basically depends on the level of economic activity in developed countries but which is also increasingly connected to economic growth in Asian countries. The existence of price cycles reinforces the importance of pursuing vertical and horizontal integration strategies (since they give firms greater

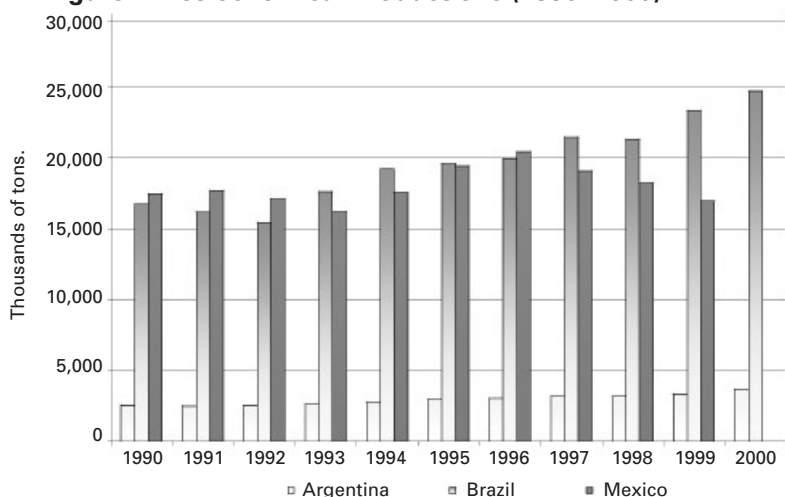
flexibility in their productive mix and soften the impact of price changes through the various stages of the supply chain) and/or of establishing long-term contracts between suppliers and users in the PCI value chain.

The Petrochemical Industry in NAFTA and MERCOSUR

Before describing the basic features of the PCI in NAFTA and MERCOSUR, it is important to take into account the great differences in size of the PCI in each of the countries under study. In the year 2000, production of the main plastic resins in the United States and Canada was from five to more than twelve times higher than in Argentina and Brazil. Petrochemical production in Brazil and in Mexico were relatively similar in the early 1990s, but since 1997 Brazilian production has clearly surpassed that of Mexico as a result of increasing production in the former and decreased production in the latter. Argentina's production is about six times lower than Brazil's and four times lower than Mexico's (Figure 1).

In terms of consumption, the differences are also huge. US demand for commodity thermoplastics (which is similar to that of Western Europe as a whole) is 5.6 times that of Canada and Mexico together, and 4.3 times that of Latin America, excluding Mexico (Figure 2). Resins consumption in Brazil and Mexico is 4.6 and 3.3 times higher than in Argentina, respectively.

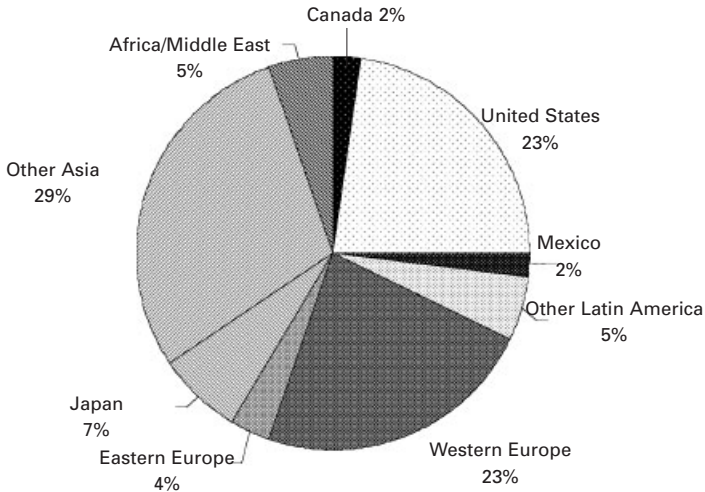
Figure 1. Petrochemical Productions (1990–2000)¹



1. Mexico data for 2000 not available.

Source: IPA, Abiquim and Instituto Nacional de Estadística, Geografía e Informática.

Figure 2. World Consumption of Commodity Thermoplastics, 2000¹



1. Includes LDPE, LLDPE, HDPE, PS, PP and PVC
Source: The Society of the Plastics Industry (SPI), Plastic Data Source.

Import tariffs are generally lower in NAFTA countries (especially in Canada and the United States) than in MERCOSUR,¹⁴ although differences are not very large (Table 1). Tariffs in Canada seem to be lowest among the countries under study, at least for the products chosen as representative of the PCI for this study (see below).

NAFTA

The PCI is very important in the three NAFTA countries, all of which have key natural competitive advantages due to the availability of cheap and abundant raw materials (natural gas and crude oil).

In Canada, where natural gas and, to a lesser extent, oil derivatives are the main petrochemical feedstocks, these advantages are complemented by having a large domestic market and easy access to the largest market in the world (the United States). Preferential access to foreign markets was enhanced by the commercial agreements signed first with the United States (FTA, 1989) and later with the United States and Mexico (NAFTA, 1994).¹⁵

In the 1990s there was considerable investment in this sector to meet the growing demand of both the Canadian and the US markets, so it comes as

Table 1. Import Tariffs. Ten Selected Products (2001)

Product	US	Mexico	Canada	Argentina Percentage	Brazil	Paraguay	Uruguay
Adipic Acid	10.6	13.0	8.0	4.5	12.5	12.0	12.5
SBR	0.0	14.7	0.0	8.8	12.0	11.0	10.9
Methanol	4.6	3.0	5.5	15.0	14.5	10.0	14.5
PVC	7.6	13.0	4.9	17.0	16.5	16.0	13.8
PS	6.5	16.3	7.0	17.0	16.5	16.0	14.0
HDPE	8.3	3.0	3.8	9.8	10.5	8.0	9.1
LDPE	8.3	3.0	3.8	17.0	16.5	16.0	13.8
PP	8.3	13.0	6.5	17.0	16.5	16.0	12.0
Ethylene	0.0	13.0	0.0	4.5	4.5	4.0	4.5
Urea	0.0	3.0	0.0	9.0	6.0	5.5	7.3
Average	5.4	9.5	3.9	12.0	12.6	11.5	11.2

Source: Authors' figures based on Base de Datos Hemisférica, Area de Libre Comercio de las Américas and Guía Práctica del Importador y Exportador (Argentina).

no surprise that the Canadian PCI has grown at a higher rate than the Canadian economy during the last decade (7% against 2.5%, respectively).

The growth of the Canadian PCI has been closely related to access to the US market. In the case of basic petrochemicals, Canadian exports increased from 34% of shipments in 1990 to 50% of shipments by 2000. While 57% of Canadian exports went to the United States in 1990, by 2000 this had jumped to 96%. Canadian imports also increased during this period, accounting for 10% of the domestic market in 1990 and 18% in 2000 (more than 90% of those imports come from the United States). In the case of plastic resins, exports grew from 30% of total shipments in 1990 to 82% in 2000, while imports captured 83% of total domestic consumption in 2000. In this case, trade with the United States clearly predominates; in the year 2000, 91% of exports went there and 91% of imports came from that country.¹⁶

This growth in Canada-US trade reflects rationalization and specialization in the petrochemical and plastic resins industry on a North American basis (intraindustry trade), and this is favored not only by tar-

iff dismantling but also by low transportation costs. In the case of plastic resins, these trends are also boosted by the fact that complex, higher-performance resins are generally not manufactured in Canada and must be imported from the United States; although investment in commodity resins is favored by access to low cost raw materials, this same advantage is much less critical in deciding where to locate an engineering resin plant, while factors such as technology access and market size are much more important in the latter case (Industry Canada 2002).

The US PCI has traditionally been among the world's most competitive, not only because of access to the world's largest market, the existence of plants of a scale to be internationally efficient, state-of-the-art technologies, and the presence of large and highly integrated firms, but also because of the availability of a vast and cheap supply of natural gas, which gives that industry a key cost advantage vis-à-vis those producers that depend on the use of naphtha.

The impact of NAFTA on the US PCI, besides the abovementioned increase in intraindustry bilateral trade with Canada (nearly 45% of resin imports in the United States come from Canada), has been a considerable growth in exports to Mexico. In fact, since the mid-1990s, Mexico has been the fastest growing market for resin exports from the United States. Therefore, the bilateral Mexico-US trade in the PCI shows a large surplus for the United States.

The first Mexican petrochemical plants were built in the 1940s, but it was only in the mid-1960s that the industry entered a sustained growth path. From then until the late 1980s, it was one of the most dynamic manufacturing sectors.¹⁷ Even though significant export flows were attained, especially in the 1980s, the main impulse for petrochemical production growth was domestic demand in the context of so-called import substitution industrialization.

The state has traditionally played an important role in this sector. *Petróleos Mexicanos* (PEMEX), the state oil company, has not only had the monopoly on the provision of raw materials for the PCI, but has also had exclusive rights to produce a number of basic, intermediate, and final products. Even if the list of products that can only be made by PEMEX has been reduced over the years, the state firm still retains a high market share in the PCI (PEMEX's share in sectoral production went down from 60% to slightly more than 40% between 1990 and 2000).

Since the mid-1980s, the Mexican PCI has been undergoing a process of deregulation and trade liberalization. This second factor, along with regional integration within NAFTA, has led to a large increase in imports, mainly from Canada and the United States (nearly 90% of thermoplastic resin imports come from the United States). While imports almost doubled in the 1990s, exports were harmed by competition from other countries with abundant raw material supplies. Sectoral production showed a stagnating pattern in the 1990s, since the small increases that were recorded between 1993 and 1997 were reversed in the last years of the decade.

In this scenario, recent strategies have been aimed at increasing private investment as well as at reorganizing PEMEX petrochemical assets in order to upgrade the level of competitiveness in the industry. The main competitive advantages of the Mexican PCI lay in its ample supply of crude oil and natural gas, the location of its main petrochemical facilities (which make it easy to export to the US and European markets), and the size and growth perspectives of the Mexican market. The main weaknesses are that some small-scale operations have obsolete technologies; there is lack of integration in the petrochemicals supply chain; and transportation facilities are deficient (Instituto Mexicano del Petróleo 2000).

MERCOSUR¹⁸

In the case of Paraguay and Uruguay, the combination of a small domestic market and a lack of raw materials means there is almost no domestic petrochemical production. Only in the case of Uruguay is there some local supply of a few products, including fertilizers and vinyl, acrylic, and polyester resins, whose production is mainly based on imported inputs. In Uruguay, with its lack of feedstocks and small domestic market, chemical production was negatively affected by integration into MERCOSUR and by trade liberalization.

As in many other producer countries, the PCI in Argentina and Brazil developed from broad state action that included the creation of regulatory frameworks aimed at controlling the entry of investors into the sector, the erection of high tariff and nontariff barriers, and the implementation of a combination of fiscal and financial incentives. These sectoral policies were implemented during the import substitution industrialization stage, and prevailed until the 1980s.

In Argentina, although the first petrochemical plants were installed in the 1940s, it was only at the end of the 1950s that the PCI really began to take off. The first stage lasted until the end of the 1960s, when the sector was run by a group of TNCs operating small plants for the domestic market. Sectoral development then surged with the creation of two large petrochemical poles in the 1970s. Although these poles included private (and mostly national) investors, they were mainly led by state firms. Unlike what happened in the previous stage, the plants that have opened since the 1970s have generally attained competitive scale, albeit at the lower end of the international range.

The combination of unsatisfied local demand and a favorable regulatory regime enabled the petrochemical industry to be one of the few manufacturing sectors that continued to grow in Argentina during the economic turmoil of the 1980s. More than \$1.2 billion (at 1980s prices) was invested in the petrochemical industry, twelve plants were opened, and the output of the PCI grew at an annual rate of almost 10% during the 1980s. Exports grew in volume by 8.5% per year, reaching almost \$400 million at the end of the decade. These exports were the result both of industry maturation (the scale and technologies of the new plants were internationally competitive) and national policies (subsidies), but a key factor was that the scale of plants had been planned in the 1970s on the basis of domestic demand forecasts that were not met, which forced petrochemical firms to export their production surplus.

In Brazil, the first attempts to break into petrochemical production date from the 1950s. Toward the mid-1960s, there were already some plants operating in São Paulo (largely owned by TNCs), as well as some units owned by the state oil company Petrobras (these plants were mostly small scale). It was only after the construction of the petrochemical pole in São Paulo (1964–69) that the Brazilian PCI gradually became a sector with international scale and modern technology. It was also then that the so-called “tripartite” model began to develop, with the participation of the state, Brazilian private capital, and foreign capital.

The rapid growth of the Brazilian economy since the mid-1960s generated fast growing demand for petrochemical products. This led the government to introduce generous promotion regimes, which resulted in the creation of the petrochemical poles of Camaçari (Bahia) and Triunfo (Rio Grande do Sul) in the 1970s and 1980s, respectively. Although they were set up to substitute imports, both centers began operations with a capac-

ity that exceeded domestic demand. This turned Brazil into an exporter of petrochemical products.

The development of the petrochemical industry in Brazil was more intensive than in Argentina during the import substitution stage, *pari passu* the better economic performance of the former. Hence, by the early 1990s, Brazilian petrochemical production was 6.5 times greater, consumption was seven times higher, and exports were almost three times greater than in Argentina. Differences were similar at the end of the 1990s in terms of production but lower in exports and apparent consumption.

In both countries, the old sectoral regulatory regime began to be dismantled at the end of the 1980s. Reforms included the elimination or reduction of subsidies, trade liberalization, and the privatization of state-owned firms. The MERCOSUR customs union was created in this context. For the petrochemical industry, the common external tariff (CET) did not differ much from the tariffs previously applied in Argentina and Brazil, although it was higher than those that existed in Paraguay and Uruguay. Consequently, between 1995 and 1999, the two latter countries made intensive use of the exceptions to the CET as a means of maintaining more favorable supply conditions from extra-MERCOSUR countries. At present, all petrochemical products are traded at a zero tariff within MERCOSUR, and extra-zone tariffs are generally aligned with the CET, although, as we have seen, national differences persist.¹⁹ As a result of these reforms, domestic prices of petrochemical products are now more closely aligned with international prices than they were during the import substitution industrialization stage.

Although structural reforms led to a profit squeeze for Argentine firms in the early 1990s (through the ceiling on domestic prices set by trade liberalization, and the increase in the price of raw materials due to the cut in subsidies), there were also beneficial, albeit gradual, effects, such as a reduction in labor and energy costs, an improvement in infrastructure and communications, and renewed access to the international capital market. These effects reduced both production and investment costs in the PCI. Thus Argentine firms, through rationalization and restructuring, together with some minor investment and technological changes, achieved a sharp increase in labor productivity. Improvements in quality control and environmental management were also important, although some problems persist in the latter area.

A similar process took place in Brazil. There was sectoral adjustment aimed at reducing production costs through small investment in “debottlenecking” and equipment modernization, and a sharp reduction in the labor force. Productivity gains also came from the reorganization of management as a result of mergers and acquisitions. This last factor also led to a reduction in commercial structure. Moreover, as in Argentina, there were improvements in quality control and environmental management.

Petrochemical production in Argentina grew from 2.55 million tons in 1990 to 3.67 million tons in 2000 (44%). While in the first half of the 1990s the annual growth rate of sectoral production was 1.7%, it jumped to 4.3% between 1995 and 2000, mainly as a consequence of new investment made after the acquisition by Dow Chemical and Solvay of the Bahia Blanca petrochemical pole plants. Growth was higher in final and basic petrochemicals, while intermediate production remained at the same levels as in the early 1990s.

Domestic consumption grew very rapidly from 2.37 to 5.3 million tons between 1990 and 2000 (123%), as a consequence of strong economic growth (which ended in 1998) and of the replacement of other materials by petrochemicals (Table 2). In contrast to production trends, consumption growth was faster in the first half of the 1990s than in the second half. A significant part of consumption growth was made up of imports, which in 2000 were almost six times higher than in 1990. Thus, the imports/consumption ratio grew from 17.1% to 45.0% in that period. In contrast, only in 2000 did petrochemical exports exceed 1990 levels. Hence, the petrochemicals exports/production ratio went from 22.8% in 1990 to 10% in 1993 and 20.4% in 2000. Final products, mainly thermoplastic resins, were the most dynamic product segments in exports as well as in imports.

As mentioned above, in recent years in Argentina there has been considerable investment in the plastic resins segment, and this has augmented domestic installed capacities in products such as polyethylene and PVC. These investments were planned in the mid-1990s in line with demand growth forecasts, but these were not met due to the economic recession that began in 1998. In this scenario, imports have fallen²⁰ and exports have increased considerably since 1999. As a result, the degree of openness of the plastic resins sector is currently very high. In

Table 2. Argentina. PCl. Production, Imports, Exports, and Apparent Consumption (1990–2000)

YEAR	Production	Imports	Exports	Apparent Consumption	Imports/ Consumption Ratio	Exports/ Production Ratio
	1,000 Tons.	1,000 Tons.	1,000 Tons.	1,000 Tons.	%	%
1990	2,549.1	405.2	581.8	2,372.5	17.1	22.8
1991	2,495.7	526.8	457.7	2,564.8	20.5	18.3
1992	2,536.3	761.6	433.2	2,864.7	26.6	17.1
1993	2,617.0	900.7	261.9	3,255.8	27.7	10.0
1994	2,731.2	1,289.6	372.2	3,648.6	35.3	13.6
1995	2,969.1	1,436.7	469.9	3,935.9	36.5	15.8
1996	3,052.5	2,462.6	486.7	5,028.4	49.0	15.9
1997	3,193.0	2,048.4	450.0	4,791.4	42.8	14.1
1998	3,196.0	2,279.6	489.9	4,985.7	45.7	15.3
1999	3,349.0	2,501.7	563.3	5,287.4	47.3	16.8
2000	3,671.3	2,387.4	750.2	5,308.5	45.0	20.4
Averages						
90–94	2,585.9	776.8	421.4	2,941.3	25.4	16.4
95–00	3,238.5	2,186.1	535.0	4,889.6	44.4	16.4
Annual Cumulative Growth Rates						
90–94	1.7%	33.6%	-10.6%	11.4%		
95–00	4.3%	10.7%	9.8%	6.2%		

Source: Authors' figures based on Anuarios del Instituto Petroquímico Argentino (IPA).

Table 3. Brazil. PCI. Production, Imports, Exports, and Apparent Consumption (1990–2000)

YEAR	Production	Imports	Exports	Apparent	Imports/	Exports/
	1,000 Tons.	1,000 Tons.	1,000 Tons.	Consumption	Consumption Ratio	Production Ratio
				1,000 Tons.	%	%
1990	16,732.7	1,245.6	1,638.0	16,340.3	7.6	9.8
1991	16,172.9	1,879.1	1,400.7	16,651.3	11.3	8.7
1992	15,441.3	2,115.8	1,559.1	15,998.0	13.2	10.1
1993	17,614.0	3,072.8	2,528.5	18,158.3	16.9	14.4
1994	19,204.8	3,355.5	1,753.8	20,806.5	16.1	9.1
1995	19,579.7	3,251.7	1,639.7	21,191.7	15.3	8.4
1996	19,958.3	4,028.9	1,606.0	22,381.2	18.0	8.0
1997	21,458.9	4,609.4	1,873.3	24,195.0	19.1	8.7
1998	21,323.7	4,984.0	1,581.5	24,726.2	20.2	7.4
1999	23,347.4	4,534.3	1,742.5	26,139.2	17.3	7.5
2000	24,709.0	6,933.2	1,782.4	29,859.8	23.2	7.2
Averages						
90–94	17,033	2,334	1,776	17,591	13.0	10.4
95–00	21,730	4,724	1,704	24,749	18.9	7.9
Annual Cumulative Growth Rates						
90–94	3.5%	28.1%	1.7%	6.2%		
95–00	4.8%	16.3%	1.7%	7.1%		

Source: Authors' figures based on Assoc. Brasileira da Indústria Química (ABIQUM).

2001, exports were around 40% of domestic production and imports were around 40% of apparent consumption (FIEL 2002). In that year there was a positive sectoral trade balance for the first time since the early 1990s, although unfortunately the increase in exports took place in an environment of overcapacity, weak demand, rising costs, and falling prices in international petrochemical markets.

Brazil is the main market for Argentina's plastic resins exports. Nonetheless, although 60% to 70% of those exports go to Latin American markets, domestic producers have made significant inroads in Asian and African markets (FIEL 2002).

The recent trends in the PCI in Brazil have been quite similar to those in Argentina. Domestic production increased from 16.7 to 24.7 million tons between 1990 and 2000 (almost 50%, Table 3). Growth was higher in the second half of the 90s (the annual growth rate was 4.8% between 1995 and 2000 compared to 3.5% between 1990 and 1994), and it was also higher in final products compared to intermediate and basic petrochemicals. Domestic consumption grew from 16.3 million tons to 29.9 million tons between 1990 and 2000 (83%). Unlike in Argentina, the consumption growth rate accelerated in the second half of the 1990s (7.1% vs. 6.2% between 1995–2000 and 1990–1994, respectively). Imports boomed from 7.6% to 23.2% of total domestic consumption (in 2000 they were 5.6 higher than in 1990). Exports did not show any apparent growth trend, so over the last decade the exports/production ratio went down from 9.8% to 7.2%.

Finally, as to the impact of MERCOSUR on the PCI in Argentina and Brazil, bilateral trade grew rapidly in the 1990s. Current bilateral trade is strongly weighted toward products that are locally manufactured in both countries, particularly thermoplastics, which means that intraindustry trade is high, and is structurally deficitary for Argentina.

MERCOSUR has meant that the petrochemical firms have a larger market in which to sell their products (an advantage that is more important for Argentina than for Brazil, given the difference in the size of their respective markets) and the possibility of replacing exports to extrazone countries (which can usually be done only by selling in bulk) with sales to clients within the region. This facilitates product differentiation and gives rise to better sales conditions.

3. AN ANALYSIS OF MERCOSUR-NAFTA INTEGRATION EFFECTS ON THE BASIS OF A SET OF REPRESENTATIVE PRODUCTS

The Patterns of Productive and Commercial Specialization of the PCI in MERCOSUR

In order to estimate the potential welfare effects of MERCOSUR-NAFTA integration in the PCI, we have chosen ten products that are representative of this sector (both in foreign trade as well as in production) for Argentina and Brazil, and we have also taken into account the need to include products that belong to the different stages of the PCI. The ten selected products are methanol, ethylene (basics), adipic acid (intermediate), polyvinyl chloride (PVC), polystyrene (PS), high and low density polyethylene (HDPE and LDPE), polypropylene (PP) (thermoplastics), styrene-butadiene rubber (SBR) (elastomers), and urea (fertilizers). In Argentina, this set of products accounted for nearly 36% of total PCI production and 45% of imports in the period 1995–2000, while in Brazil the values were 31% and 34%, respectively (Tables 4 and 5). The ten selected products amounted to 35% of total exports in Argentina and 38% in Brazil.

Production of the selected set of products grew considerably in Argentina, from about 870,000 tons in 1990 to 1,240,000 tons by the end of the decade (Table 4). However, production increased in only 5 of the 10 products under study.²¹ As a result of trade liberalization, imports in 2000 (measured in volumes) were almost ten times greater than in 1990, while exports increased at an annual average rate of 4.3% during the 1990s (exports increased in only 5 of the 10 selected products). Apparent consumption increased by 150% during the same period.

In Brazil, the performance of the selected products set was quite similar. Production increased from 4,930,000 tons at the beginning of the decade to 7,580,000 tons in 2000, while imports grew nearly 300%, and apparent consumption by 100% (Table 5). However, there are two main differences from Argentina. First, exports, after growing at an annual rate of 1.4% between 1990 and 1994, declined sharply in the second part of the 1990s, and as a result exports in 2000 were lower than in 1990. Second, production grew in all selected products.

Although the aggregate trade balance in the ten selected products is always negative for Argentina, in Brazil there is a change from the first

Table 4. Argentina. Ten Selected Products. Production, Imports, Exports, and Trade Balance (1990–2000)

YEAR	Production	Share of PCI total	Imports	Share of PCI total	Exports	Share of PCI total	Apparent Consumption	Share of PCI total	Trade Balance	Imports from NAFTA	Share of Total Imports
	1,000 Tons.	%	1,000 Tons.	%	1,000 Tons.	%	1,000 Tons.	%	\$ million	\$ million	%
1990	866.1	34.0	119.9	29.6	171.2	29.4	814.8	34.3	n/a	24.1	30.2
1991	867.5	34.8	194.9	37.0	141.3	30.9	921.1	35.9	n/a	33.4	25.6
1992	938.4	37.0	298.4	39.2	126.6	29.2	1,110.2	38.8	-49.1	43.6	33.5
1993	952.0	36.4	400.3	44.4	83.8	32.0	1,268.5	39.0	-115.9	47.4	27.4
1994	967.0	35.4	639.1	49.6	149.6	40.2	1,456.6	39.9	-152.0	33.9	13.8
1995	1,116.2	37.6	669.3	46.6	199.0	42.4	1,586.5	40.3	-153.3	74.8	23.1
1996	1,137.5	37.3	1,159.4	47.1	169.9	34.9	2,126.9	42.3	-310.3	132.3	30.1
1997	1,139.6	35.7	851.9	41.6	143.0	31.8	1,848.5	38.6	-373.6	109.2	24.2
1998	1,149.4	36.0	1,006.9	44.2	171.8	35.1	1,984.5	39.8	-297.4	105.9	26.9
1999	1,129.8	33.7	1,092.1	43.7	180.0	32.0	2,041.9	38.6	-276.0	76.4	20.9
2000	1,239.4	33.8	1,076.7	45.1	261.6	34.9	2,054.4	38.7	-257.2	92.8	22.0
Averages											
90–94	918.2	35.5	330.5	40.0	134.5	32.3	1,114.2	37.6	-105.7	36.5	26.1
95–00	1,152.0	35.7	976.0	44.7	187.6	35.2	1,940.4	39.7	-278.0	98.6	24.5
Annual Cumulative Growth Rates											
90–94	2.8%		51.9%		-3.3%		15.6%			8.9%	
95–00	2.1%		10.0%		5.6%		5.3%			4.4%	

Source: Authors' figures based on Anuarios del Instituto Petroquímico Argentino (IPA), INTAL and INDEC

Table 5. Brazil. Ten Selected Products. Production, Imports, Exports, and Trade Balance

YEAR	Production		Share of PCI		Share Exports		Share of PCI total		Share Apparent Consumption		Share Trade Balance		Imports from NAFTA		Share of Total Imports	
	1,000 Tons.	%	1,000 Tons.	%	1,000 Tons.	%	1,000 Tons.	%	1,000 Tons.	%	\$ million	%	\$ million	%	\$ million	%
1990	4,930.3	29.5	555.4	44.6	792.1	48.4	4,693.7	28.7	248.4	29.4	32.6					
1991	4,905.4	30.3	657.9	35.0	696.9	49.8	4,866.4	29.2	254.5	65.5	41.5					
1992	4,879.6	31.6	683.3	32.3	880.8	56.5	4,682.1	29.3	217.9	43.9	35.8					
1993	5,465.9	31.0	1,014.8	33.0	856.0	33.9	5,624.7	31.0	190.0	88.1	40.7					
1994	6,025.4	31.4	1,175.8	35.0	836.3	47.7	6,364.9	30.6	98.4	84.7	24.5					
1995	6,147.3	31.4	1,256.0	38.6	681.2	41.5	6,722.2	31.7	-73.0	139.3	25.3					
1996	6,040.8	30.3	1,420.3	35.3	599.5	37.3	6,861.6	30.7	-79.9	109.3	22.3					
1997	6,602.2	30.8	1,610.3	34.9	629.3	33.6	7,583.2	31.3	-37.8	104.8	21.9					
1998	6,708.6	31.5	1,547.3	31.0	654.6	41.4	7,601.4	30.7	-63.9	99.2	23.9					
1999	7,425.8	31.8	1,544.4	34.1	622.4	35.7	8,347.7	31.9	44.9	65.3	21.9					
2000	7,580.5	30.7	2,152.1	31.0	657.9	36.9	9,074.7	30.4	-124.1	101.9	17.3					
Averages																
90-94	5,241.3	30.8	817.5	36.0	812.4	47.2	5,246.4	29.8	201.8	62.3	35.0					
95-00	6,750.9	31.1	1,588.4	34.2	640.8	37.7	7,698.5	31.1	-55.6	103.3	22.1					
Annual Cumulative Growth Rates																
90-94	5.1%		20.6%		1.4%		7.9%					30.3%				
95-00	4.3%		11.4%		-0.7%		6.2%					-6.1%				

Source: Authors' figures based on *Anuarios de la Asociación Petroquímica y Química Latinoamericana (APLA)*, INTAL, UNCTAD TRAINS CD, and MERCOSUR-on-line

part of the 1990s (when trade surpluses were obtained) to the second part of the decade (a deficit appears in all years with the exception of 1999). It is interesting to note that NAFTA's share as an imports supplier decreases in both countries during the 1990s, a fact that is especially marked in the case of Brazil. A significant part of this decrease may be attributed to a rise in intra-MERCOSUR imports.

Among selected products, PP and HDPE were the most dynamic in the 1990s in Argentina; PP production increased more than 300%, while exports grew 270%. HDPE production increased 150% in the 1990s, in a context in which total imports grew from 5,900 tons in 1991 to 82,000 tons in 2000, and exports grew 150%.

An important aspect to note, which is common to all the selected products, is the remarkable increase in imported volumes. Methanol imports, for instance, passed from nearly zero at the beginning of the decade to 117,000 tons in 2000. Urea imports were 24 times greater in 2000 than in 1990, and in the case of HDPE and LDPE, the increases were 14 and 16 times, respectively. Only in the case of PP did the imports/consumption ratio fall during the 1990s. In this scenario, it comes as no surprise to find that, with the exception of SBR, PP, and PS, the rest of the selected products showed a trade deficit for most of the 1990s.

As to import origins, Brazil was the first or second supplier in seven of the ten selected products (adipic acid, SBR, PVC, PS, HDPE, LDPE, and PP) in 1999 (Table 6), while the United States and Mexico were significant providers of adipic acid, SBR, PVC, HDPE, LDPE, and ethylene.

In the case of Brazil, HDPE, PP, adipic acid, and ethylene were the most dynamic products. The production of HDPE showed a remarkable increase, growing from 320,000 tons at the beginning of the decade to 890,000 tons in 2000, and PP increased from 300,000 tons to 850,000 tons. Exports of HDPE grew from 84,000 tons to 234,000 tons, while PP exports doubled. Export dynamism was also great in SBR, jumping from 15,000 tons in 1990 to 81,000 tons in 2000.

With the exception of methanol and ethylene, imports of the remaining selected products grew notably as a consequence of trade liberalization (those two products were the only ones whose imports/consumption ratio did not grow in the 1990s). The most prominent example of this trend is the case of urea, whose imports grew from 56,000 tons in 1990 to 1,417,000 tons in 2000, a jump in the imports/con-

Table 6. Argentina. Ten Selected Products. Import Composition and Exports (1992 and 1999)

PRODUCT	1992	1999	1992/1999	1992		1999	
	\$ million	\$ million	% change	Main Import Suppliers	Share %	Main Import Suppliers	Share %
Adipic Acid ⁽¹⁾							
Imports	12.0	22.7	88.8	Brazil	94.1	Brazil	67.8
Exports	0.0	0.0		US	4.0	US	24.1
Trade Balance	-12.0	-22.7		Italy	0.9	Italy	4.9
SBR							
Imports	2.9	5.7	98.0	US	62.8	US	43.8
Exports	10.2	18.2	79.5	New Zealand	21.4	New Zealand	20.1
Trade Balance	7.3	12.5		Uruguay	4.3	Uruguay	10.1
Methanol							
Imports	0.3	9.7	3186.4	US	96.9	Chile	99.1
Exports	2.8	0.1	-95.5			US	0.6
Trade Balance	2.5	-9.5					
PVC							
Imports	21.9	37.5	71.6	Mexico	25.3	Brazil	41.9
Exports	8.9	18.6	108.8	US	20.1	US	24.9
Trade Balance	-13.0	-19.0		Belgium	18.4	Mexico	13.4

PS													
Imports	4.0	5.3	33.0										
Exports	3.3	13.2	298.1										
Trade Balance	-0.7	7.9											
HDPE													
Imports	26.9	88.0	227.1										
Exports	8.9	14.9	66.9										
Trade Balance	-18.0	-73.1											
LDPE⁽²⁾													
Imports	22.6	102.6	354.4										
Exports	28.0	20.9	-25.1										
Trade Balance	5.4	-81.7											
PP													
Imports	12.4	27.0	117.2										
Exports	21.1	26.9	27.2										
Trade Balance	8.7	-0.1											
Ethylene													
Imports	7.8	32.0	312.8										
Exports	1.0	0.0	-99.5										
Trade Balance	-6.8	-32.0											
Urea													
Imports	20.1	58.4	190.9										
Exports	0.1	0.2	195.1										
Trade Balance	-20.0	-58.2											

(1) Includes salts and esters.

(2) Includes LLDPE.

Source: Authors' figures based on UNCTAD TRAINS CD.

sumption ratio from 5.8% to 54.1%. Other products with high import dynamism were PP and PVC.

Nonetheless, a key difference with Argentina is that only three of the ten selected products (methanol, PS, and urea) showed a persistent trade deficit in the 1990s, while another four showed trade surplus during the whole decade (adipic acid, SBR, HDPE, and LDPE).

In 1999, Argentina was the first or second supplier for Brazilian imports of PVC, HDPE, LDPE, ethylene, PS, and PP (Table 7). It should be noted that in Argentina, Brazil is also a key supplier of all but one of the products mentioned above, which confirms the importance of intraindustry trade in this sector. As to the NAFTA countries, the United States is the first or second import supplier of adipic acid, SBR, PVC, HDPE, LDPE, and PP, while Mexico ranks first and second in PS and SBR, respectively.

To sum up, the production and consumption of the selected products grew strongly in Argentina and Brazil. In the context of trade liberalization, imports grew sharply in most products, while exports increased moderately in Argentina and stagnated in Brazil. However, the foreign trade balance in the PCI was structurally negative in Argentina in the 1990s, while it was more balanced in the case of Brazil. Finally, for both countries, imports from NAFTA and MERCOSUR account for a high proportion of total imports, but NAFTA's share decreased during the 1990s.

Petrochemical production in Paraguay and Uruguay is very low; hence it comes as no surprise to find negative trade balances in almost all products. Although available statistics reveal the existence of some export flows of petrochemical products from Paraguay and Uruguay, we must suppose that in most cases those operations are, in fact, re-exports of imports from extra-MERCOSUR countries (that is, export triangulation).

Before proceeding to an analysis of welfare effects in the next section, it is important to look at two elements that may be useful for the evaluation of competitiveness and specialization patterns in the PCI in MERCOSUR.

First, given that economies of scale are important for competitiveness in the PCI, we have constructed a table comparing plant scales in MERCOSUR to the NAFTA countries (Table 8). As expected, petrochemical plants in the countries under study generally exceed minimum economically efficient scales, although there are a few plants below that level, mainly in Argentina. Petrochemical plants in the United States are usually larger than in other countries. In many products, Brazilian plants compete quite well

with those of Canada, and often surpass those of Mexico. In Argentina there are smaller plant scales (although they are not too different from those in Mexico), but there are also many plants of a competitive scale.

The products in which the differences are greatest are methanol, PVC, PS, and adipic acid. In the first case, the largest US plant is seven times bigger than the largest Brazilian plant, and twenty times bigger than the largest plant in Argentina. In the other products mentioned above, the ratio oscillates between 4.25 times (for the largest PS plant in the United States compared to Brazil) and almost 8 times (for the same product in the United States in comparison to Argentina). The smallest differences in scale from the largest US plants are in urea in Argentina (1.7 to 1) and in LDPE in Brazil (1.3 to 1). To sum up, clear scale differences exist in favor of NAFTA plants, which are mainly in the United States. This could be a source of comparative advantages for petrochemical production in that region, especially vis-à-vis Argentina.

Second, the revealed comparative advantage (RCA) index²² can estimate the RCA of each product on the basis of its contribution to the total trade balance of the country under study. This index is positive for those products in which the country has a comparative advantage and negative otherwise, and its absolute value allows us to measure the intensity of the potential comparative advantage (or disadvantage) for each product. As can be clearly seen from the RCA formula, when the product in question has a trade surplus (deficit) and the total trade balance of the country is negative (positive), the RCA will have a positive value (negative). In those cases in which both trade balances have the same sign, the sign of the indicator will depend on the respective magnitudes of each.

The main objective of this analysis is to identify those products in which MERCOSUR countries have potential comparative advantages (disadvantages), and to match these results with those obtained for the NAFTA countries. In those cases where MERCOSUR countries have comparative advantages and NAFTA countries comparative disadvantages, it could be expected that an increase in exports from the former to the latter might take place in a scenario of trade integration. The opposite would occur if the pattern of comparative advantages were reversed.

In the case of Argentina, only three of the ten selected products seem to have positive, although low, RCA against the world (SBR, PS, and PP) (Table 9). In the case of Brazil there are five products in the same situa-

Table 7. Brazil. Ten Selected Products. Import Composition and Exports (1992 and 1999)

PRODUCT	1992		1999		1992/1999		1992		1999	
	\$ million	\$ million	\$ million	% change	Main Import Suppliers	Share %	Main Import Suppliers	Share %		
Adipic Acid ⁽¹⁾										
Imports	0.9	0.8		-7.5	U. Kingdom	58.1	US	61.4		
Exports	14.4	15.3		6.4	Germany	15.8	Germany	24.0		
Trade Balance	13.5	14.5			US	15.5	France	6.8		
SBR										
Imports	3.7	18.0		385.9	US	55.3	US	60.4		
Exports	24.4	55.7		128.3	Uruguay	12.1	Mexico	10.4		
Trade Balance	20.7	37.7			France	9.7	Spain	6.7		
Methanol										
Imports	38.0	23.8		-37.3	Soviet Union	28.1	Chile	90.5		
Exports	0.0	0.0			US	20.3	Saudi Arabia	8.2		
Trade Balance	-38.0	-23.8			Libya	19.0	US	0.8		
PVC										
Imports	21.4	40.1		86.9	Mexico	34.3	Argentina	22.3		
Exports	69.6	35.1		-49.6	Uruguay	19.0	US	14.9		
Trade Balance	48.2	-5.0			Argentina	14.2	Uruguay	11.2		

Table 8. Ten Selected Products. Scales of Main Petrochemicals Plants in MERCOSUR and NAFTA⁽¹⁾

PRODUCT	MINIMUM ECONOMIC SCALE	ARGENTINA		BRAZIL	
		Company	Capac	Company	Capac
Adipic Acid		No production		Rhodia (SP)	67.0
SBR	30.0	Pecom	53.0	Petroflex (RJ)	196.0
		Energía (SF)		Petroflex (RS)	96.0
Methanol	300.0	Resinfor	50.0	Prosint (RJ)	138.0
		Methanol (SF)		Metanor (BA)	89.0
		Repsol YPF (BA) (2)	25.0	Ultrafertil (PR)	9.9
				Fibra Nordes. (BA)	8.0
				Polyenka (SP)	6.4
PVC	50.0	Solvay	210.0	OPP Química (BA)	230.0
		Indupa (BA)		Solvay Indupa (SP)	210.0
		Imextrade (RN) (2)	49.0	OPP Química (AL)	185.0
				OPP Química (SP)	24.0
PS	30.0	Pecom	65.5	EDN-SUL (BA)	120.0
		Energía (BA)		Innova (RS)	120.0
		Plast (BA)	10.5	BASF (SP)	110.0
		Resigum (BA)	6.0	Resinor (SP)	1.3

(1) 1,000 Tons. / Year. (2) Currently not operative. (3) Indicates swing LLDPE / HDPE capacity. (4) Includes EVA. (5) Includes styrene.

Sectoral Impact of MERCOSUR/NAFTA Integration: The Petrochemical Industry

MEXICO		US		CANADA	
Company	Capac	Company	Capac	Company	Capac
No production		Solutia (FL)	386.0	DuPont (Ontario)	150.0
		DuPont (Victoria, TX)	345.0		
		DuPont (Orange, TX)	204.0		
		Inolex (VA)	30.0		
Negromex (Tamaulipas)	96.0	Ameripol-Synpol (TX)	335.0	Bayer Bubber Inc. (Ontario)	40.0
Quimir (Mexico)	12.0	Goodyear (TX)	240.0		
Negromex (Guanajuato)	n/a	Bridgestone/Firestone (LA)	180.0		
PPQ Pemex Petroq. (Indep.)	171.5	Borden Chem. & Plastics (FL)	1,005.0	Methanex (Alberta)	1,125.0
		Terra (TX)	852.0	Celanese Canada (Alberta)	776.0
		Lyondell (TX)	761.0	Methanex (British Col.)	517.0
		Millennium Petroch. (TX)	639.0		
		Clear Lake Methanol (TX)	609.0		
Primex (Tamaulipas)	70.0	Shintech (TX)	1,270.0	Oxy Vinyls (Ontario)	250.0
Mexichem (Tlaxcala)	37.0	OxyVinyls (TX)	898.0		
Mexichem (Puebla)	30.0	Shintech (LA)	590.0	Royal (Ontario)	208.0
Policyd (México)	n/a	Formosa Plastics (TX)	578.0	Oxy Vinyls (Alberta)	158.0
Policyd (Tamaulipas)	n/a	Georgia Gulf (LA)	513.0		
Primex (Puebla)	n/a	Georgia Gulf (MS)	454.0		
Polidesa (Tlaxcala)	50.0	ATOFINA Petroch. (LA)	510.0	Dow (Ontario)	
Mexichem (México)	n/a	Chevron Phillips Chem. (OH)	363.0	NOVA Chem. (Montréal)	
Poliolés (Mexico)	n/a				
Resirene (Veracruz)	n/a	BASF (IL)	345.0		136.0
Resirene (Tlaxcala)	n/a	NOVA (OH)	220.0		60.0
		NOVA (VA)	204.0		

Table 8. *Continued*

PRODUCT	MINIMUM ECONOMIC SCALE	ARGENTINA		BRAZIL	
		Company	Capac	Company	Capac
HDPE	30.0	PBBPolisur (BA) ⁽³⁾	270.0	Ipiranga Pet. (RS)	500.0
		PBBPolisur (BA) ⁽³⁾	120.0	OPP Química (BA)	200.0
		PBBPolisur (BA)	120.0	Politeno (BA)	195.0
				Polialden (BA)	160.0
LDPE	50.0	PBBPolisur (BA)	100.0	OPP Química (SP)	340.0
		ICI Argentina (SF)	19.5	Triunfo (RS)	150.0
		Garovaglio (BA) ⁽³⁾	15.0	Politeno (BA)	145.0
				Union Carb. (BA)	144.0
PP	50.0	Petroken (BA)	180.0	OPP Química (RS)	550.0
		Petroq. Cuyo (ME)	90.0	Polibrasil (RJ)	180.0
				Ipiranga Pet. (RS)	150.0
				Polibrasil (SP)	125.0
				Polibrasil (BA)	125.0
Ethylene	200.0	PBBPolisur (BA)	425.0	Copene (BA)	1,200
		PBBPolisur (BA)	275.0	Copesul (RS)	1,135
		Pecom Energía (SF)	28.0	PQU (SP)	500
		ICI Argentina (SF)	21.0		
Urea	300.0	Profertil (BA)	1,100	Petrobras (BA)	1,040
		Pecom Energía (BA)	200	Ultrafertil (PR)	610

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MEXICO		US		CANADA	
Company	Capac	Company	Capac	Company	Capac
PPQ PEMEX	100.0	Chevron Phillips (TX) ⁽³⁾	1,111.0	Dow (Alberta) ⁽³⁾	590.0
Petroq. (Veracruz)		Exxon Mobil (LA)	875.0	Imperial Oil (Ontario) ⁽³⁾	420.0
PPQ Pemex	100.0	Solvay (TX)	862.0	NOVA Chem.	386.0
Petroq. (Escolin)		Dow (LA) ⁽³⁾	816.0	(Alberta) ⁽³⁾	
		Exxon (Mont Belvieu, TX) ⁽³⁾	794.0	NOVA Chem.	270.0
		Exxon (Beaumont, TX) ⁽³⁾	703.0	(Ontario) ⁽³⁾	
		Equistar (TX)	694.0	Pétromont (Quebec)	270.0
		Formosa (TX)	649.0	NOVA Chemicals	205.0
				(Ontario)	
PPQ Pemex Petroq. (Veracruz)	240.0	Exxon Mobil (LA)	442.0	AT Plastics (Alberta) ⁽⁴⁾	140.0
PPQ Pemex Petroq. (Escolin)	51.0	Westlake Polymers (LA)	386.0	NOVA Chemicals (Ontario)	135.0
PPQ Pemex Petroq. (Tamps)	18.0	Dow (TX)	336.0	Dow (Ontario)	85.0
Indelpro (Tamaulipas)	200.0	Eastman (TX)	295.0		
PPQ Pemex Petroq. (Veracruz)	100.0	Chevron (TX)	281.0	Basell (Quebec)	193.0
		Atofina (TX)	998.0	Basell (Ontario)	189.0
		BP Chemicals (TX)	816.0		
		Exxon Mobil (TX)	816.0		
		Formosa Plastics (TX)	680.0		
		Basell North America (TX)	590.0		
PPQ Pemex Petroq. (Cangrejera)	500.0	Phillips (TX)	2,041.0	NOVA Chemical (Alberta)	1,545.0
PPQ Pemex Petroq. (Morelos)	500.0	Exxon Mobil (TX)	1,860.0	NOVA/Dow (Alberta)	1,270.0
PPQ Pemex Petroq. (Pajaritos)	182.0	Equistar (TX)	1,724.0	Dow (Alberta)	1,195.0
PPQ Pemex Petroq. (Escolin)	182.0	Dow (TX)	1,579.0	NOVA Chemicals (Ontario)	725.0
No Production		BP Amoco (TX)	1,406.0	Pétromont (Quebec)	295.0
		Shell (LA)	1,361.0	Inperial Oil (Ontario)	265.0
		Dow (LA)	1,134.0	Sakferco Prod. (Saskat)	930.0
		CF Industries (LA)	1,850.0	Agrium (Alberta)	750.0
		Unocal (AK)	1,043.0	Agrium (Redwater, Alberta)	720.0
		Triad (LA)	508.0		

Table 9. Argentina and Brazil. Ten Selected Products. Revealed Comparative advantage (RCA) Index (1999)

Product	Argentina	Brazil	MERCOSUR
Adipic Acid	-0.4330	0.1489	-0.0477
SBR	0.2777	0.3969	0.3590
Methanol	-0.1863	-0.2419	-0.2230
PVC	-0.3372	-0.0465	-0.1464
PS	0.2999	-0.4486	-0.1979
HDPE	-1.4018	0.7408	0.0182
LDPE	-1.1610	0.6132	0.0130
PP	0.0478	0.2252	0.1650
Ethylene	-0.2590	-0.0051	-0.0919
Urea	-1.1388	-0.7960	-0.9130

Table 10. NAFTA Countries. Ten Selected Products. Revealed Comparative Advantages (RCA) Index (1999)

Product	US	Canada	Mexico	NAFTA
Adipic Acid	0.0193	0.0815	-0.0160	0.0287
SBR	0.1004	-0.2040	0.2141	0.0567
Methanol	-0.1336	0.1115	-0.0710	-0.0830
PVC	0.2612	-0.4377	0.1111	0.1365
PS	0.1227	-0.1082	-0.0594	0.0652
HDPE	0.1495	0.6537	-1.0218	0.1472
LDPE	0.4619	0.6561	-0.9377	0.3757
PP	0.4908	-0.4633	-1.0146	0.1663
Ethylene	0.0174	0.0079	0.1240	0.0288
Urea	-0.2266	0.6558	-0.3419	-0.0504

tion (adipic acid, SBR, HDPE, LDPE, and PP), and RCA indexes are higher than in Argentina. Taking MERCOSUR as a whole, revealed comparative advantages exist only in SBR, HDPE, LDPE, and P (although two are very low).

When it comes to RCA indexes in the United States and Canada, there seems to be a complementary pattern in the productive specialization of both countries: in six of the ten considered products (SBR, PVC, PS, PP, methanol, and urea) the sign of the indexes are different in Canada and in the United States (Table 10). There is no product where both countries have revealed comparative disadvantages. In contrast, there are negative RCA indexes in seven of the ten selected products in Mexico. Taking NAFTA as an aggregate, only in urea and methanol are there negative RCA indexes (this is mainly a consequence of the great weight of the United States in the foreign trade of NAFTA's PCI).

Matching RCA indexes in MERCOSUR with the NAFTA countries we see that in the case of the United States there is no product in which an import-oriented specialization (that is, a negative RCA index) in that country coincides with an export-oriented specialization (that is, a positive RCA index) in the MERCOSUR countries. In the case of Canada, that kind of matching occurs in SBR and PP, in which both Argentina and Brazil have positive RCA indexes while Canada has an import-oriented specialization. The same happens for Argentina with PS. Finally, since Mexico shows an import-oriented specialization in most products under study, there several cases in which positive RCA indexes in MERCOSUR countries match negative RCA indexes in Mexico. However, it should be noted that the United States is far and away the biggest supplier in the Mexican market, and this would reduce the possibilities of significant export increases from MERCOSUR.

On the other hand, there are many products in which an import-oriented specialization prevails in MERCOSUR countries while NAFTA countries show an export-oriented specialization; hence, our analysis of welfare effects will be mainly focused on the impact of trade integration on MERCOSUR imports from NAFTA.

Finally, since the size and development level of the Mexican PCI are relatively similar to those in Argentina and Brazil, it is also pertinent to briefly analyze the evolution of the PCI in Mexico during the 1990s so as to highlight the impact of integration into NAFTA. The conclusions of

this analysis could also be useful in evaluating the potential impact of MERCOSUR-NAFTA integration in this sector.

As we have said, a main consequence of this integration in a scenario of stagnating production in Mexico was the rapid growth of imports from the United States (Figure 3). This evolution also occurs when analyzing the same set of ten products in Argentina and Brazil. The production of this set of products in Mexico grew at an annual rate of 1.1% between 1990 and 1994, to later decrease by 8.7% per annum (Table 11). The respective figures were 2.8% and 2.1% in Argentina (Table 4) and 5.1% and 4.3% in Brazil (Table 5).

The imports/consumption ratio jumped from 11% in 1990 to 21% in 1994 and 54% in 2000 (Table 11). In 1990, Mexican imports (measured in volumes) were nearly 55% of those in Brazil (315,000 tons against 555,000), whereas at the end of the decade the two values were practically equal at about 2,150,000 tons. Mexico's entry into NAFTA did not seem to lead to higher exports. After growing at an annual rate of 0.8% between 1990 and 1994, exports decreased by 8.6% annually in 1995–2000. One can conclude that in spite of the availability of abundant and cheap feedstocks, the Mexican PCI was adversely affected by trade liberalization with the United States and Canada. In the next section we try to evaluate the extent to which we could expect the same results in the case of MERCOSUR.

Figure 3. Argentina, Brazil and Mexico. Ten Selected Products. Production (1990–2000)¹

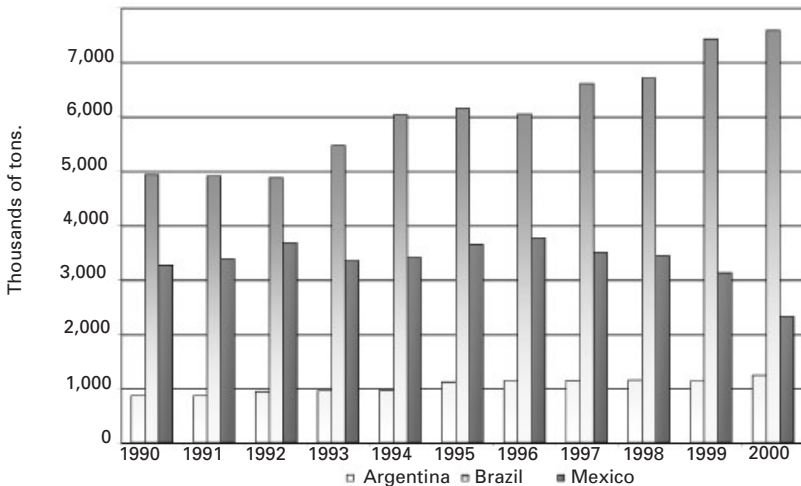


Table 11. Mexico. Ten selected products. Production, imports, and exports (1990–2000)

YEAR	Production	Total Imports	Total Exports	Apparent Consumption	Imports/Consumption Ratio	Exports/Production Ratio
	1,000 Tons.	1,000 Tons.	1,000 Tons.	1,000 Tons.	%	%
1990	3,269.2	315.4	651.0	2,933.7	10.8	19.9
1991	3,382.0	350.7	766.7	2,965.9	11.8	22.7
1992	3,677.3	366.1	733.2	3,310.2	11.1	19.9
1993	3,354.7	417.6	563.6	3,208.7	13.0	16.8
1994	3,408.9	732.6	671.0	3,470.5	21.1	19.7
1995	3,650.7	554.1	798.2	3,406.5	16.3	21.9
1996	3,766.0	853.4	865.6	3,753.8	22.7	23.0
1997	3,502.9	1,148.9	598.5	4,053.3	28.3	17.1
1998	3,439.1	1,512.0	634.5	4,316.6	35.0	18.5
1999	3,132.7	1,806.6	494.9	4,444.4	40.6	15.8
2000	2,321.3	2,131.8	507.9	3,945.2	54.0	21.9
Averages						
90–94	3,418.4	436.5	677.1	3,177.8	13.6	19.8
95–00	3,302.1	1,334.5	649.9	3,986.6	32.8	19.7
Annual Cumulative Growth Rates						
90–94	1.1%	23.4%	0.8%	4.3%		
95–00	-8.7%	30.9%	-8.6%	3.0%		

Source: Authors' figures based on *Anuarios de la Asociación Petroquímica y Química Latinoamericana (APLA)*.

Potential Effects of MERCOSUR-NAFTA Integration²³

The estimates of the welfare effects of MERCOSUR-NAFTA integration on the PCI were made on the basis of a computable partial equilibrium model, similar to that used in Hufbauer and Elliot (1994) and Sazanami, Urata, and Kawai (1995); the model supposes competitive markets but considers the local and imported varieties of each product as imperfect substitutes.²⁴ The exercise essentially aims at a static analysis of the impact of trade integration on the markets for the local and imported goods (whose supply curve we assume to be perfectly elastic) in each selected product. The fall in the imported good price (due to the elimination of tariffs on trade between NAFTA and the MERCOSUR-

SUR countries) increases demand for it, and this causes an inward shift in the demand curve for the domestic product, which, in turn, causes a rearrangement in the imported good market. In the new equilibrium, quantities are higher and prices are lower in the imported good markets (compared to the pre-integration situation), whereas quantities and prices are both lower in the domestic good markets. Efficiency gains arise when the increase in consumer surplus due to lower prices for local consumers is compared with the fall in the local producers' surplus (because of the decrease in price and sales volume) and the revenues received by the government (due to the dismantling of the tariff).

To undertake this exercise it was necessary to obtain the values of own and cross-demand and supply elasticities for each good. These estimates were made for Argentina²⁵ for the period 1984–2001: 52% of the estimated coefficients had the expected sign and turned out to be statistically significant. Those coefficients that did not have the expected sign or were not significant were replaced by the elasticity coefficients proposed in Hufbauer and Elliot (1994) (polyethylene resins) and in Sazanami, Urata, and Kawai (1995) (fertilizers, methane derivatives and polyethylene).

Most of the coefficients that did not have the expected sign or turned out not to be significant were those for local good demand and domestic supply. On this point we should note that if GDP is incorporated as an explanatory variable, local demand and supply both become more sensitive to variations in the level of economic activity than to changes in prices. In the case of local supply, this finding is consistent with the fact that short-term variations in prices have a limited impact on production volumes; hence, when prices fall, firms try to place production surpluses on international markets instead of reducing production. When prices increase, the possibility of raising production volumes is limited in the short term by installed capacities, since investment projects have long maturity periods. When it comes to petrochemical demand, the available evidence indicates that the evolution of economic activity (such as, for instance, dynamism in the construction sector in the case of PVC) has greater impact than short-term price variations. The estimated elasticities connected to imported good demand for each product generally give higher values than those for domestic good demand, thus showing greater sensitivity to price variations.²⁶

Table 12. Argentina. Ten Selected Products. NAFTA Integration Effects.
Base case, Minimum and Maximum Values

PRODUCT	Efficiency Gains (\$ million)			Domestic Output Change (%)			Imports Change (%)			Domestic Price Change (%)		
	Base Case (A)	Min.	Max.	Base Case (A)	Min.	Max.	Base Case (A)	Min.	Max.	Base Case (A)	Min.	Max.
Adipic Acid	0.21	0.12	0.27	-5.2	-6.4	-1.1	19.7	0.2	0.3	-11.9	-15.1	-4.0
SBR	0.05	0.02	0.07	-0.7	-1.8	-0.5	20.2	6.7	30.0	-11.9	-4.2	-4.0
Methanol	0.00	0.00	0.00	-2.3	-3.6	-1.7	30.7	10.9	56.2	-1.4	-3.9	-0.9
PVC	1.17	0.74	1.76	-1.7	-2.1	-1.2	128.4	81.4	192.8	-3.2	-5.5	-1.8
PS	0.01	0.00	0.01	-3.0	-3.8	-2.3	26.0	9.5	36.1	-1.9	-2.1	-1.3
HDPE	0.48	0.33	0.66	-9.3	-11.5	-3.6	50.1	33.9	68.9	-1.5	-7.5	-1.0
LDPE	1.13	0.60	1.82	-2.1	-2.6	-1.5	79.4	55.0	127.3	-4.8	-5.5	-1.8
PP	0.08	0.03	0.11	-0.5	-0.7	-0.2	23.7	9.5	31.8	-2.0	-1.3	-1.3
Ethylene	0.01	0.01	0.02	-0.9	-1.1	-0.7	3.2	2.0	4.6	-1.3	-3.4	-0.7
Urea	0.01	0.00	0.01							-2.4		
Ten Selected Products	3.16	1.86	4.73									

The base case columns in Tables 12 and 13. show the results obtained on the basis of our own estimates of the respective elasticities.²⁷ Besides this, we have built alternative scenarios on the basis of different combinations of supply and demand elasticity values, 25% below and above those of the base-case hypothesis, which are useful for a sensitivity analysis of our estimates; the minimum and maximum values obtained for each variable are given in the tables.²⁸

When analyzing the results obtained for Argentina in the base-case hypothesis, taking into account the available information on prices, quantities, and tariffs for the year 2000, it emerges that the most important welfare gains are in LDPE, PVC, and HDPE (Table 12). In the case of LDPE, the estimated gains are approximately \$1.1 million, as a result of a 9.3% decrease in local production and a considerable increase in imports from NAFTA (about 80%).

The results obtained for the case of PVC are similar. Efficiency gains amount to \$1.2 million, the expected fall in production is 2.3%, and the increase in imports from NAFTA is over 100%. NAFTA's share as origin of imports was already sizeable; it amounted to 40% of total imports in 1999.²⁹ In the case of HDPE, efficiency gains are about \$500,000, with an increase in imports from NAFTA of 50% and a production decrease of 3%.

The expected fall in domestic prices after trade integration is small in the three products mentioned above (none of them is higher than 5%, which is the value for LDPE). This shows that domestic prices are already relatively close to international ones. Brazil is the main import supplier of the three products, with shares in total imports in 1999 between 42% (for PVC) and 75% (LDPE), so it could be expected that to some extent the increase in imports from NAFTA countries would displace Brazilian suppliers.³⁰

For the rest of the products, efficiency gains are low (adipic acid,³¹ SBR, and PP) or practically null (methanol, PS, ethylene, and urea). The results for this latter group are explained by the fact that imports from NAFTA are quite low (PS and urea) or practically null (methanol), or because tariffs are already very low (ethylene).

Sensitivity analysis shows that the main conclusions of our analysis are not modified if different elasticity estimations are employed. While in the base-case hypothesis efficiency gains amount to \$3.16 million,

Table 13. Brazil. Ten Selected Products. NAFTA Integration Effects. Base Case, Minimum, and Maximum Values

PRODUCT	Efficiency Gains (\$ million)			Domestic Output Change (%)			Imports Change (%)			Domestic Price Change (%)		
	Base Case (A)	Min.	Max.	Base Case (A)	Min.	Max.	Base Case (A)	Min.	Max.	Base Case (A)	Min.	Max.
Adipic Acid	0.00	0.00	0.01	-1.6	-2.0	-1.2	9.8	6.0	14.3	-3.9	-5.3	-2.7
SBR	0.17	0.06	0.26	-5.3	-6.6	-1.1	20.8	12.8	30.9	-12.2	-15.5	-4.1
Methanol	0.00	0.00	0.00	-0.7	-1.7	-0.5	29.7	10.5	39.7	-1.3	-4.1	-0.9
PVC	0.57	0.36	0.85	-2.3	-3.5	-1.7	123.4	78.5	184.6	-3.2	-3.8	-1.8
PS	0.52	0.19	0.73	-1.6	-2.0	-1.2	25.3	9.3	35.0	-1.9	-5.4	-1.3
HDPE	0.48	0.33	0.66	-2.9	-3.6	-2.2	47.6	32.3	65.3	-1.5	-2.0	-1.0
LDPE	1.10	0.59	1.75	-9.1	-11.2	-3.5	76.6	41.0	122.4	-4.6	-7.4	-1.8
PP	0.24	0.10	0.32	-2.0	-2.5	-1.5	23.0	9.3	30.8	-1.9	-5.4	-1.2
Ethylene	0.00	0.00	0.00	-0.5	-0.7	-0.4	3.2	2.0	4.6	-1.3	-1.8	-0.9
Urea	0.11	0.01	0.11	-1.4	-1.8	-1.1	14.7	1.0	14.7	-3.8	-5.3	-2.6
Ten Selected Products	3.20	1.63	4.69									

the alternative estimates range from \$1.86 million to \$4.73 million (Table 12). In relative terms, these gains oscillate between 0.14% and 0.37% of the aggregated production value of the selected products.

When doing the same exercise for Brazil (Table 13), in the base-case hypothesis the products in which significant efficiency gains are found are the same as for Argentina (LDPE, PVC, HDPE), although PS is also included in this group. Highest integration benefits occur in LDPE, with estimated efficiency gains of \$1,100,000. The estimated growth in imports from NAFTA is approximately 75%, in a context of a 9.1% decrease in local production.

In the case of PVC, we estimate an increase in imports from NAFTA of over 120%, with efficiency gains near \$570,000, and a slight fall in local production (just over 2%). Estimated efficiency gains for PS are approximately \$520,000, with an anticipated increase in imports from NAFTA of 25% and a slight decrease in domestic production (less than 2%). In the case of HDPE, estimated gains are quite similar, but estimated import growth is nearly 50%.

As in the case of Argentina, it is expected that the increase in imports from NAFTA after trade integration would probably cause a reorientation of the import flows from the present supplier markets in favor mainly of the United States and Mexico.³² On this point, it is important to mention that for the four products with the largest estimated efficiency gains, Argentina was the first or second supplier of the Brazilian market in 1999.

For SBR, PP, and urea, the estimated efficiency gains are not especially large, at or under \$240,000, while for the rest of the products (adipic acid, methanol, and ethylene) they are nearly insignificant, due to the small share that NAFTA has in Brazilian imports. Only in the case of SBR does the expected fall in domestic prices exceed 10%, while in the rest of the selected products prices would not fall more than 4.6% (LDPE). These conclusions are similar to those obtained in the Argentine case.

Finally, as was seen in the estimates for Argentina, sensitivity analysis shows that there are only small differences among the results obtained for different hypotheses of own and cross-elasticities; efficiency gains rise from a low of \$1.63 million to \$4.69 million (Table 13). These gains may be estimated as ranging from 0.04% to 0.12% of the gross production value of the selected goods.

The RCA analysis *a priori* does not leave much room for optimism as to the possibility of a significant increase in PCI exports from MERCOSUR

Table 14. NAFTA Countries. Ten Selected Products. Exports, Imports, and Trade Balance (1999)

Product	Total Exports	Total Imports	Trade Balance	Imports from MERCOSUR	Share
	\$ million	\$ million	\$ million	\$ million	%
Adipic Acid ⁽¹⁾	120.9	76.0	44.9	7.8	10.2
SBR	319.3	254.9	64.4	8.3	3.2
Methanol	78.8	337.6	-258.9	0.0	0.0
PVC	799.5	653.5	146.0	0.8	0.1
PS	350.7	271.5	79.1	0.1	0.0
HDPE	1,088.5	999.3	89.3	0.6	0.1
LDPE ⁽²⁾	1,625.4	1,050.8	574.7	2.7	0.3
PP	1,070.3	921.5	148.8	0.3	0.0
Ethylene	67.1	5.9	61.2	0.0	0.0
Urea	370.2	624.4	-254.2	2.0	0.3

(1) Includes salts and esters.

(2) Includes LLDPE.

Source: Own figures based on UNCTAD Trains CD

to NAFTA. In any case, it is interesting to undertake the same kind of analysis as that above from the point of view of NAFTA as an importing region. At present, MERCOSUR's share in NAFTA imports is very low; it does not exceed 0.3% except in the cases of adipic acid and SBR. The absolute value of MERCOSUR's exports to NAFTA is also small; in 1999 exports of the ten selected products amounted to less than \$22 million (Table 14).

On the basis of the partial equilibrium analysis, our estimates show that exports of the ten selected petrochemical products from MERCOSUR to NAFTA could increase by around \$2 million a year (using information on prices and foreign trade flows for 2000), and, as might be expected, welfare gains in NAFTA countries would be almost null.³³ In contrast, NAFTA exports to MERCOSUR could go up nearly \$85 million.³⁴

4. CONCLUSION

The aim of this study was to estimate the potential impact of integration between MERCOSUR and NAFTA in the PCI. The core of the study is the analysis of the potential efficiency gains that could be derived from

the integration process on the basis of a computable partial equilibrium model. To this end, ten representative petrochemical products were selected, belonging to different steps in the productive process (basics, intermediates, and finals).

The estimated welfare gains were insignificant both in Argentina and in Brazil. Extrapolating our results for the selected products to the whole industry, we could estimate potential efficiency gains in a range between \$7.5 million and \$19 million in Argentina, and \$4 million and \$12 million in Brazil³⁵ (between 0.14% and 0.37% of the gross production value of the PCI in Argentina, and between 0.04% and 0.12% in Brazil). The expected fall in domestic prices is also very small (generally lower than 4%).

One of the reasons that may explain the smallness of expected efficiency gains is that the PCI in MERCOSUR is already operating with relatively low tariff barriers. Although in this study we have not estimated the impact of dismantling the nontariff barriers that exist in Argentina and Brazil, at present those barriers are very few, so even if we considered their dismantling, our general conclusions would essentially be the same. In this scenario, it is clear that redistributive effects (mainly from domestic producers to local consumers) predominate over efficiency gains.

The estimated increase in imports from NAFTA would displace not only local production in Argentina and Brazil (which would fall slightly in most cases) but also imports from other regions.³⁶ Besides, it is expected that intra-MERCOSUR imports would drop in a scenario of integration between MERCOSUR and NAFTA. Thus, one could expect that production in both Argentina and Brazil would fall not only as a direct consequence of the penetration of imports from the NAFTA countries, but also because of the displacement of exports that currently go to other MERCOSUR countries. This displacement of intra-MERCOSUR trade by MERCOSUR-NAFTA trade would take place mainly in the segment of final petrochemical products (thermoplastics, fertilizers, synthetic fibers, etc.), whose transport costs are generally lower than those of basic and intermediate petrochemical goods.³⁷

Would trade integration foster higher exports from MERCOSUR to the NAFTA countries? On the basis of the kind of welfare analysis that was employed in this study, the conclusion is that, given the low share of MERCOSUR in NAFTA imports, only very small increases in MERCOSUR PCI exports would take place. Considering information on

prices and foreign trade flows for the year 2000, exports from NAFTA to MERCOSUR would increase around \$85 million, while those from MERCOSUR to NAFTA would only increase \$2 million. This analysis is consistent with the fact that the comparison of plant scales, and our estimates of revealed comparative advantage (RCA) indexes, both reveal that the NAFTA countries (and especially the United States) seem to be better equipped than the MERCOSUR countries to compete in this industry.

These conclusions are clearly static in nature. What can be expected from a dynamic point of view? That is to say, what could be the long-term impact of MERCOSUR-NAFTA integration in the PCI? Since in both regions there is good feedstock supply, and given the fact that labor costs are not relevant for location decisions in this industry, one could expect a trend toward a concentration of petrochemical production in those regions with larger markets, lower capital costs, and easier access to technology. Since NAFTA's advantages in those aspects are very clear, it might be expected that future investments in this sector would tend to favor that region over MERCOSUR (and Argentina would probably be the country most affected by this shift). This outcome would be consistent with the experience of Mexico after its entry into NAFTA: booming imports and decreasing production.

However, one must also take into account that there are localization advantages that might help the MERCOSUR countries to keep attracting petrochemical investments. These advantages arise mainly from the fact that it is important for petrochemical suppliers to be close to users, since users often have specific requirements and demand technical assistance from suppliers. Hence, the need to be close to the customers might counterbalance NAFTA's advantages in other areas and impede a concentration of the PCI in that region. In this respect, MERCOSUR's possibilities to attract investment in this sector will grow *pari passu* the expected dynamism of the regional market.

Finally, since oligopolistic competition prevails in this industry, the results of MERCOSUR-NAFTA integration will also depend on strategic decisions made by the firms that lead this industry in both regions. On this point we should note that transnational corporations (TNCs) play a key role in this industry, and the strategic motivation of the TNCs will also have an influence on the long-term impact of MERCOSUR-NAFTA integration in the PCI.

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NOTES

1. Centro de Investigaciones para la Transformación (CENIT), Buenos Aires, Argentina.
 2. Centro de Investigaciones para la Transformación (CENIT), Buenos Aires, Argentina.
 3. Able research assistance by Ariana Sacroisky and Hernán Seoane is gratefully acknowledged.
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4. This is a shorter version of a working paper by the same authors, which contains a methodological and a statistical annex in which more detailed information on the analysis can be found.

5. Methanol and ammonia are also considered basic products.
6. Examples of intermediate petrochemicals are styrene, dimethyl terephthalate (DMT), terephthalic acid, vinyl chloride monomer (VCM), acrylonitrile, formaldehyde, adipic acid, phenol, etc.
7. Petrochemical products are never used directly by final consumers.
8. This group includes different types of resins (phenolics, alkyds, maleics, epoxy, polyesters) and aminoplastics (urea formaldehyde and melamine formaldehyde resins and compounds).
9. These are high impact and corrosion resistant polymers, and constitute one of the most advanced products of the PCI. The main ones include polycarbonates, polyacetals, polyphenylene sulphide, polyphenylene oxide, polyester ketone, polyamide-imide, polyamide, etc.
10. According to UNIDO (1981) the relationship between investment and plant capacity is given by a formula of the type:
$$IA/IB = (CA/CB)^n$$
where IA and IB are the investment costs for two plants A and B, and CA and CB are their respective capacities. Hence, the inverse of n would represent the economies of scale parameter, supposing a homogenous production function of the same degree as the inverse of n. For most petrochemical units the exponent “n” ranges between 0.6 and 0.8.
11. For instance, in the United States in 1990, only 3 of the main 20 ethylene producers (which accounted for almost all the country's production) were not integrated downstream. The 10 main ethylene consumers (which accounted for 2/3 of total US consumption) were integrated backwards.
12. Concentration levels have been increasing in many markets during the last decade, especially due to consolidations and mergers among petrochemical firms.
13. For evidence on noncompetitive practices in international petrochemical markets, see Bernhofen and Xu (2000).
14. In spite of having agreed on a common external tariff in 1995, MERCOSUR tariffs in this sector are similar but not identical for each country (in other words, the common external tariff operates mostly as a sort of “attractor” for each national tariff). This is also the case in many other activities.
15. Tariffs on synthetic resins traded between Canada and the United States were completely eliminated on 1 January 1993. Tariffs on resins between Canada and Mexico are already zero for some products, and will drop to zero for all products by 1 January 2003.
16. Data are from Statistics Canada/Industry Canada Business Integrated Database.
17. Data from PEMEX-ANIQ show that between 1960 and 1999, total apparent consumption in the Mexican petrochemical industry grew at an annual average rate of 12.0%. Domestic petrochemical consumption rose from 233 thousand metric tons in 1960 to 17.1 million metric tons in 1999. Domestic production

stood at 130 thousand metric tons in 1960, and rose to 14.1 million metric tons in 1999, growing at an annual average rate of 14.9%.

18. This section is mainly based on Hasenclever, López, and Oliveira (1999).
19. Some nontariff barriers for petrochemical products do exist in MERCOSUR countries. Nonautomatic previous authorization requirements for some basic and intermediate petrochemical products, as well as for petrochemical feedstocks, exist in Brazil. In Argentina and Brazil, antidumping measures are applicable on PVC imports from Mexico and the United States. In Brazil, antidumping measures have also been applied to imports of polycarbonate resins from Germany and the United States, and to imports of methyl methacrylate from Germany, France, Spain, and the United Kingdom.
20. It is important to take into account that even though imports obviously go down when demand falls and new domestic production capabilities appear, there are certain users who continue using imported products which are not available in Argentina, so domestic and imported production are not perfect substitutes.
21. There is no production of adipic acid in Argentina.
22. In order to estimate the RCA index, following Lafay (1988), we used the trade balances methodology, which compares the actual trade balance of each product (relative to the country's total foreign trade) with a theoretical trade balance that takes into account the total foreign trade in the product under study relative to the country's total foreign trade weighted by the ratio between the country's trade balance and the country's total foreign trade.
 RCA_{ij} is the revealed comparative advantage index of country i , for good j , in a specific moment of time; where X_{ij} are the exports (in monetary values) made by country i of good j , M_{ij} are the imports made by country i of good j , and X_i and M_i represent the total exports and imports (respectively) of country i :

$$VCR_{ij} = \frac{(X_{ij} - M_{ij})}{(X_i + M_i)} - \frac{(X_i - M_i)}{(X_i + M_i)} * \frac{(X_{ij} + M_{ij})}{(X_i + M_i)} ? * 1000$$

23. The welfare analysis was done only for Argentina and Brazil as there is almost no petrochemical production in Paraguay and Uruguay.
24. See Francois and Hall (1997) for a survey of partial equilibrium models.
25. The impossibility of doing the same exercise for Brazil arises from the difficulty in obtaining long-term series of domestic prices for the selected products. Therefore, elasticities were calculated for Argentina and were then applied to Brazil.
26. This finding seems to be inconsistent with the fact that there are some product specifications (for instance, certain grades of many thermoplastics) that are not produced locally, and so, in these cases, we would expect that price elasticity for the imported good would be low. However, it must also be taken into account that most consumers, at least in Argentina and Brazil, do not have stringent technical requirements. In this scenario, it could be expected that those consumers would have a preference for the domestic good (due to the presence of

- long-term relationships between suppliers and customers, which are important in terms of technical assistance, mutual confidence, etc.). On the contrary, the demand for the imported good is mainly dependent on its price.
27. Elasticities whose estimates did not have the expected sign were replaced by those proposed in the abovementioned studies.
 28. The whole set of results is presented in the complete version of this study.
 29. Authors' figures based on *Anuarios del Instituto Petroquímico Argentino* (IPA), INTAL and INDEC.
 30. Authors' figures based on *Anuarios del Instituto Petroquímico Argentino* (IPA), INTAL and INDEC.
 31. As Argentina does not have domestic production of adipic acid, the calculation was only made for imported good demand, in which NAFTA has a 70% share.
 32. Considering that Canada's share in imports of the selected products is very low.
 33. Since the estimated impact is insignificant, we have not included the respective results in order not to overwhelm the reader with too many tables.
 34. This analysis does not take into account the potential losses in intra-MERCO-SUR exports.
 35. Estimates in US dollars were obtained on the basis of information for 2000. Estimates for 2002 would surely be different since both the big recession in Argentina and the recent changes in exchange rates in Argentina and Brazil have had an impact on prices, production, and foreign trade flows in the PCI.
 36. Since almost no petrochemical production exists in Paraguay and Uruguay, in those cases it may be expected that the main effect of trade integration would be a change in the pattern of import suppliers.
 37. Besides, in general, both basic and intermediate petrochemicals are manufactured in integrated complexes, and their production is often totally confined to those complexes in the production of final petrochemicals.

The Sectoral Impact of an Integration Agreement Between MERCOSUR and NAFTA: The Case of Frozen Concentrated Orange Juice (FCOJ)¹

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1. INTRODUCTION

The member countries of MERCOSUR are currently involved in negotiations aimed at establishing free trade area agreements with NAFTA and with the European Union. Negotiations are also being held that could lead to the creation of a free trade area in the Americas (FTAA). The aim of this study is to assess the potential impact of these trade liberalization initiatives from a sectoral perspective.

The degree of support for or resistance to reductions in trade protection varies from sector to sector, depending on gaps in competitiveness and on the existing levels of protection, among other factors. Sectors in which producers perceive competitive gaps as being relatively small and where trade is already intense will probably resist liberalization less than other sectors. Sectors where competitive gaps are large and where trade barriers are currently high are natural candidates to put up considerable resistance. The sectoral perspective is therefore essential in order to identify potential business support for and/or resistance to further progress in current trade negotiations.

This study will examine the resource allocation and welfare implications of the lowering of barriers in the US market for frozen concentrated orange juice (FCOJ) imported from MERCOSUR and specifically from Brazil. Together, Brazil and the United States comprise over 90% of the world output of orange juice. Both countries are large producers, but

the Brazilians have attained production cost levels that US producers cannot match. Currently, Brazilian exports face high barriers in the United States, and this has led Brazil to lodge complaints with the WTO.

The combination of large efficiency gaps between producers and high barriers will presumably make the orange juice industry the locus of strong resistance to trade liberalization either in a MERCOSUR-NAFTA agreement or an FTAA. For this reason, we attempt to assess what the effects of trade liberalization would be in this sector. Section 2 presents an overview of the main features of the market and the current trade regime for orange juice, as well as the possible impact of liberalization in an FTAA and with the European Union. Section 3 describes the partial equilibrium model of imperfect substitute goods used to estimate the impact of trade liberalization on domestic production in the United States, on prices and quantities, and on welfare. In section 4 two possible scenarios for liberalization are designed, using versions of a small and a large country model.

2. TRADE FLOWS AND TRADE POLICY

Supply and Demand in the International FCOJ Market

The world market for fruit juice is very dynamic. Sales, which were showing an average annual growth rate of 5%, reached \$31 billion in 1998. Approximately half of that amount resulted from sales of orange juice.

World orange production is concentrated in four countries. Brazil is the biggest producer, with about 27 thousand rural production units, and is responsible for 34% of world orange production and 47% of the total orange juice production. The United States is the second largest producer. Table 1 shows data on the principal producers of oranges and FCOJ in 1999–2000.

The Brazilian orange juice industry is acknowledged to be the most competitive in the world: production costs are lower and the average productivity of orange groves has grown 30% over the last decade, reaching 599 boxes per hectare in 2002, well above levels achieved in several other countries. However, it is important to point out that average farm productivity in Brazil is lower than in the United States, with a yield around 2 boxes (40.8kg)/tree vs. around 3.5 boxes/tree. The two main reasons for this are that the area used in the United States is almost 100% irrigated, which means increased land productivity, and the United States produces more

Table 1. Oranges and FCOJ Main Producers

	Oranges*		FCOJ**	
	Thousand tons	%	Ton, 65° brix	%
Brazil	15,953	33.9	1,106,000	46.5
US	11,980	25.5	1,064,102	44.8
Mexico	3,100	6.6	44,000	1.9
Spain	2,828	6.2	45,500	1.9
Others	13,156	28.0	116,529	4.9
Total	47,017	100.0	2,376,131	100.0

Sources: *US Department of Agriculture, *World Horticultural Trade & US Export Opportunities*, February 2001.

** National Agricultural Statistic Service and US Department of Commerce, Bureau of Census, Florida Department of Citrus. Reports from US agricultural counselors and attachés and/or USDA/FAS estimates.

Hamlin fruit (a type of orange that permits greater volume of juice production, although the quality of the juice is inferior) than Brazil (53% of the US area, against 13% in Brazil). The equipment used is the same in both the Brazilian and US orange juice industries; thus there are no significant differences in productivity on that score. The lower Brazilian costs, therefore, are due to other factors, which are shown below in Tables 2–5.

Operational costs are significantly higher in Florida than in São Paulo (Table 2). Brazilian orange production does not utilize irrigation, and other farm inputs are considerably lower. Although Florida's operational costs are 90% higher than São Paulo's when measured per hectare, they are only 47% higher when measured per box. This is explained by the above-mentioned higher productivity per tree in Florida.

Another of the main factors responsible for Florida's considerably higher orange production costs is shown in Table 3, which compares picking and transportation costs for São Paulo and Florida. There is a scarcity of local workers in Florida, and the severe government restrictions on hiring foreign workers significantly raises the cost of labor, so the costs of orange picking and transportation are even higher than the operational costs.

In spite of operating with much lower productivity per tree, Brazilian orange producers have huge cost advantages over producers in Florida. The most important factors are operational differences in the cost of picking and transportation, which are mostly due to different labor costs. That is why, in 2001–2002, with prices per box at \$3.54, Florida producers

Table 2. Compared Operational Costs—São Paulo* and Florida**

	São Paulo	Florida
Insecticides	312.59	51.01
Fungicides	53.83	104.83
Herbicides	12.60	230.73
Fertilizers	214.23	306.62
Operations	333.41	768.27
Irrigation	0.00	372.03
Labor	129.83	178.33
Cost (\$/Ha)	1056.48	2011.82
Cost (\$/box)	1.27	1.87

Source: Pozzan, Muraro, and Ueta (2002). Brazilian data are collected by the Instituto de Economia Agrícola, São Paulo State Department. Florida data were published in *Budgeting Costs and Returns for Southeast Florida Citrus Production, 2000–2001*, October 2001 (University of Florida, Institute of Food and Agricultural Services; www.ifas.ufl.edu/pubs.html).

*2001/2002 harvest **2000/2001 harvest

Table 3. Compared Picking and Transportation Costs—São Paulo* and Florida**

	São Paulo	Florida
Picking and loading	333.33	1,635.52
Freightage	125.00	570.28
Cost (\$/Ha)	458.33	2,205.80
Cost (\$/box)	0.55	2.05

Source: Pozzan, Muraro, and Ueta (2002). Brazilian data are collected by the Instituto de Economia Agrícola, São Paulo State Department. Florida data were published in *Budgeting Costs and Returns for Southeast Florida Citrus Production, 2000–2001*, October 2001 (University of Florida, Institute of Food and Agricultural Services; www.ifas.ufl.edu/pubs.html).

*2001/2002 harvest **2000/2001 harvest

faced a loss of \$0.68 per box, while Brazilian producers, with sale prices of \$2.75, made a profit of \$0.84 per box. Florida producers are investing heavily in picking mechanization in order to reduce that cost disadvantage, but results will not be apparent immediately.⁶

Brazilian orange juice producers have used their cost advantages to become important players in world trade (see Table 6): 80% of FCOJ world exports (which amounted to 1.4 million metric tons in 2001) are Brazilian (Neves, Val, and Marino 2001; Marino, Nassar, and Neves 2003).

Table 4. Compared Taxes - São Paulo* and Florida**

	São Paulo	Florida
Property tax/	0.00	145.53
Water management		
DOC assessment	0.00	175.00
Fundecitrus/Funrural/Senar	75.33	0.00
Total/Hectare (\$)	75.33	320.53
Total/Box (\$)	0.09	0.30

Source: Pozzan, Muraro, and Ueta (2002). Brazilian data are collected by the Instituto de Economia Agrícola, São Paulo State Department. Florida data were published in *Budgeting Costs and Returns for Southeast Florida Citrus Production, 2000–2001*, October 2001 (University of Florida, Institute of Food and Agricultural Services; www.ifas.ufl.edu/pubs.html).

*2001/2002 harvest **2000/2001 harvest

Table 5. Compared Total Production Costs - São Paulo* and Florida**

	São Paulo		Florida	
	\$	%	\$	%
Operational Costs	\$1056.48	66.44	2,011.82	44.33
Picking and Transp. Costs	458.33	28.82	2,205.80	48.61
Taxes	75.33	4.74	320,53	7.06
Total (\$/Ha)	1590.14	100.00	4538.15	100.00
Total (\$/Box)	1.91		4.22	
Total (\$/Plant)	4.77		16.38	

Source: Pozzan, Muraro, and Ueta (2002). Brazilian data are collected by the Instituto de Economia Agrícola, São Paulo State Department. Florida data were published in *Budgeting Costs and Returns for Southeast Florida Citrus Production, 2000–2001*, October 2001 (University of Florida, Institute of Food and Agricultural Services; www.ifas.ufl.edu/pubs.html).

*2001/2002 harvest **2000/2001 harvest

Orange products are an important item in Brazilian exports, and make a significant contribution to earnings of hard currency (see Table 7). In 2000–2001, orange products contributed 2% of the total value of Brazilian exports. It is worth noting that 93.6% of total orange products are FCOJ. In 2001–2002, despite the fact that the volume of orange product exports in general (and of FCOJ in particular) grew, the share of those products in total exports, in value terms, went down (from 2% to 1.6%). The fall in the international price for FCOJ helps to explain this. Indeed, FCOJ has been facing low quotations, high stocks, and excess of supply in recent years.

Table 6. FCOJ Exports (thousand metric tons, 65° brix)

	1997/1998	1999/2000	2000/2001
Brazil	1,295	1,240	1,185
US	196	100	95
Spain	56	73	21
Mexico	45	37	33
Italy	28	31	30
Others	24	30	25
Total	1,554	1,511	1,389

Source: Agrianual (2002)

Table 7. Brazilian Exports of Orange Products

PRODUCT	2000/2001		2001/2002	
	Value (\$1000, FOB)	Volume (Tons)	Value (\$1000, FOB)	Volume (Tons)
Total Brazilian Exports	55,085,600		58,222,642	
FCOJ	1,033,646	1, 276.8	845,094	1,348.2
Fresh orange	15,248	75.8	27,538	139.6
Pulpwash	38,308	557.7	61,925	1,020.4
Essential Orange Oil	17,469	17.7	23,392	26.6
Orange Products	1,104, 671	1,927.5	957,949	2,534.8

Source: CONAB (Feb.2002); www.conab.gov.br

Table 8. Brazilian FCOJ Exports - 2000/2001

	EU	NAFTA	Asia	Others	Total
Tons	845,781	264,674	99,176	24,643	1,234,274
Share (%)	68.5	21.4	8.0	2.1	100.0

Source: Abecitrus

Table 9. FCOJ Imports - Metric Tons

	1997	1998	1999	2000	2001	%*
World	643,050	773,680	740,138	744,137	642,781	100
United States	286,588	396,997	408,884	396,677	265,504	41.3
Asia	89,719	70,356	83,034	60,571	91,876	14.3
Canada	87,684	71,423	68,811	71,823	72,869	11.3
France	26,869	47,285	62,703	62,958	56,863	8.8
United Kingdom	9,365	27,887	13,231	20,750	25,978	4.0
Germany	27,186	40,600	9,674	16,502	23,731	3.7
Norway	16,474	16,778	17,431	17,062	17,340	2.7
Saudi Arabia	11,912	12,143	12,143	0	15,274	2.4
Spain	17,861	25,632	8,768	17,994	13,301	2.1
Netherlands	19,743	21,915	11,448	5,416	10,691	1.7
Ireland	5,111	3,717	1,106	2,887	7,060	1.1
Sweden	5,839	2,321	4,699	2,800	4,753	0.7
Mexico	666	803	1,448	4,517	2,089	0.3
Austria	5,079	5,048	2,013	903	1,861	0.3
Italy	1,231	1,534	1,001	1,139	1,619	0.3

Source: USDA

* Percentage based on 2001 values.

FCOJ Tariff Protection

MERCOSUR's common external tariff (CET) for orange juice is currently 15%. However, given the high competitiveness of Brazilian production, tariff protection is not really necessary to prevent imports of orange products. This means that lowering tariffs can be used by Brazil as an important bargaining tool in current trade negotiations. On the other hand, in the European Union, the tariff applied to FCOJ imports from Brazil is around 35%. Brazil also faces high trade barriers on its FCOJ exports to the US market, with a per-unit tax equivalent of a 56.7% *ad valorem* tax.⁸ It competes directly with Mexican exports, which pay the equivalent of only a 30.7% *ad valorem* tax.

In addition, in the state of Florida, the Brazilian product pays an excise tax of 0.027 dollars per gallon (\$40/ton) as an equalization tax. This tax was challenged in court by importers, and as a result, in April 2002, the Florida Citrus Commission was ordered to propose a remedy. The court ruled that the equalization tax was unconstitutional

Table 10. FCOJ Imports - \$1000

	1997	1998	1999	2000	2001	%*
World	618,686	736,889	719,964	621,635	547,423	100
Developed Countries	489,354	622,902	585,335	523,572	425,007	77.6
United States of America	224,127	337,888	324,055	289,503	183,858	33.6
Asia	117,989	97,88	119,917	73,156	133,218	24.3
European Union	108,193	141,074	110,754	104,854	103,54	18.9
Canada	116,914	107,957	103,923	91,691	81,988	15.0
France	18,385	28,367	39,147	37,374	33,879	6.2
Saudi Arabia	22,564	23,912	23,912	0	24,549	4.5
Latin Amer & Caribbean	17,082	21,138	23,714	30,192	23,074	4.2
Germany	29,370	43,592	14,559	18,662	20,119	3.7
Norway	20,811	21,477	27,085	22,368	17,924	3.3
United Kingdom	12,207	21,475	16,203	16,871	15,616	2.9
Spain	11,751	14,677	11,263	10,356	6,976	1.3
Ireland	5,561	4,154	1,596	2,921	5,807	1.1
Netherlands	8,612	10,065	6,181	2,960	4,242	0.8
Sweden	7,031	3,108	5,113	1,482	1,961	0.4
Mexico	683	843	1,435	2,273	1,819	0.3
Austria	5,331	5,227	2,426	1,271	1,055	0.2
Italy	739	770	874	688	1,020	0.2

Source: USDA

* Percentage based on 2001 values.

because it illegally discriminated against foreign citrus products imported into Florida while exempting juice products imported from other states, mainly California. As a result of the court's ruling, the Florida legislature abolished tax exemption for domestic juice, with the new law taking effect in July 2002.

The most probable outcome of barrier reductions resulting from negotiations within an FTAA and/or with the European Union would be an increase in international prices and an increase in FCOJ imports.

The impact of liberalization should be different in the European market than in the United States. The European market is already saturated, and Brazil accounts for almost all FCOJ imports on that continent. On the other hand, there will be room in the US market for a

**Table 11. US Orange Juice Imports:
Main Countries of Origin: Jan-Dec 2001**

	Value* (\$)	%
Brazil	115,071,979	50.90
Costa Rica	39,897,513	17.65
Mexico	39,827,249	17.62
Honduras	5,302,565	2.34
Canada	4,214,873	1.86
Others	21,759,462	9.60
Total	226,073,641	100

Source: Florida Department of Citrus

*FOB cost of product

considerable increase in the Brazilian share of FCOJ sales after US and Mexican output adjusts to the new situation.

Overall, the global market for FCOJ can be considered as a textbook case of the impact of trade barriers on output, on trade, and on international price formation. In particular, a reduction in the trade barriers faced by Brazilian exports in the North American FCOJ market would induce an increase in international prices and imports. As a result, Brazilian exporters would benefit from higher prices and from an increase in their share of the American market.⁹ These issues will be addressed in the sections below, in a simulation using a partial equilibrium model.

3. THE THEORETICAL MODEL AND METHODOLOGICAL ASPECTS

Overview of the Partial Equilibrium Approach

In order to calculate the welfare and distributional effects of a reduction in trade barriers in the American FCOJ market and, for our purposes, the potential rise in Brazilian FCOJ exports to the United States, a version of Hufbauer and Elliot's (1994) partial equilibrium model of imperfect substitutes with perfect competitive markets is used.¹⁰

Compared to computable general equilibrium models, partial equilibrium models have two evident advantages: they are less complex and they are more transparent. Moreover, when the goal is the treatment of a single market at a very detailed level, a partial equilibrium model is often the only feasible way to proceed.

The different generations of partial equilibrium models share at least two common assumptions. First, the impact of a change in the market under investigation is assumed not to disturb related markets. However, this is not to say that the related markets are ignored. As Francois and Hall (1997) rightly stated, the price elasticity of demand included in these models is conceived to reflect underlying linkages between related markets, even though in the implementation of a partial equilibrium model such linkages are sterilized. Second, the income effects that arise from a trade policy change are not considered; as a consequence, the demand functions used in these models are represented as being dependent only on prices and not on income, which is treated as an exogenous variable.

Broadly speaking, partial equilibrium models can be classified according to the degree of substitutability of the domestic and imported good; the specification of the import supply function; and the choice of implementation of the model in a linear or nonlinear form.

The first distinction divides partial equilibrium models according to the degree of substitutability of the domestically produced and imported good in perfect substitutes and imperfect substitutes models. On the one hand, in the less complex perfect substitutes model, the imported and domestic goods are considered to be perfectly homogeneous from the consumers' point of view. In this case, the import demand function is simply defined as the difference between consumption and domestic production, and therefore all the analysis is conducted in the import market. Nevertheless, in spite of the attractiveness of these models, the assumption of perfect substitutes is generally not consistent with empirically estimated values of the price elasticity of demand (see Bowen, Hollander, and Viaene 1998).

On the other hand, in the imperfect substitutes model, the domestic and imported goods are considered to be nonhomogeneous in the eyes of the consumer. The practical consequence of this notion is that in these models there are two different demand functions, one for the domestically produced good and another for the imported good, both dependent on the internal prices of the domestic and imported goods. Therefore, when analyzing the impact of the reduction in tariffs, it is necessary to take into account the repercussions in the two connected markets.

The second important distinction in the context of partial equilibrium models has its roots in the assumption of the importance of the

foreign exporter country. If the exporter is a big player in the domestic and international market, it is tempting to assume that its supply schedule is flat, that is, perfectly elastic. Such a model is known as a *small country* model because it is understood that the importer country is unable to influence the prices of the imported good. In contrast, in a *large country* model, it is assumed that the importer country is large and therefore able to influence the prices of goods on world markets. If this is the case, the import supply function will be positively sloped, and thus the magnitude of the change in world price and volume of imports will depend significantly on the elasticity of foreign export supply.

The last difference between partial equilibrium models has to do with the particular mode of their computational implementation. Generally, the functions used in these models are supposed to have constant elasticity. All that has to be done is to solve the system of equations for prices and then use the solution to solve them for quantities.

If a linear approximation is chosen, all the equations can be easily derived in log form. This results in a simpler procedure to solve the problem. However, as Francois and Hall (1997) pointed out, using a linear model, even in a single market, leads to a linearization error that becomes larger when policy changes are significant.

The alternative procedure is to solve the equations in prices and quantities in a nonlinear system, that is, without using the equations in log form. Although in this way the linearization error is minimized, there is a higher degree of computational complexity.

The Structure and Implementation of Small and Large Country Models

Small Country Model

The main hypotheses of this model are the following:

- The supply schedule of the domestically produced good is positively sloped.
- The price elasticity of supply of the imported good is infinite, that is, it is assumed that the supply function is a flat schedule.
- The initial situation is an equilibrium state.

The system of equations is described below. The domestically produced good and its imported substitute are designated by the indexes d and m .

The first two equations of the model define demand and supply functions in the market of the domestically produced good:

$$D_d(p_d, p_m) = ap_d^{\epsilon_{dd}} p_m^{\epsilon_{dm}} \quad (1)$$

$$S_d(p_d) = bp_d^{\epsilon_s} \quad (2)$$

where D_d is the quantity consumed of good d ; S_d is the quantity of domestically produced good d ; p_d is the price of good d ; p_m is the price of good m ; ϵ_{dd} is the own-price elasticity of demand of good d ; ϵ_{dm} is the cross-price elasticity of demand of good d in relation to good m ; and ϵ_s is the price elasticity of supply of good d .

The following equation expresses the condition of equilibrium in the domestically produced good's market:

$$(3) \quad D_d(p_d, p_m) = S_d(p_d)$$

The last two equations characterize the market of the imported good. Equation 4 is a price equation that expresses the internal price in the import market, that is, the c.i.f. export price plus the tariffs. Equation 5 is the demand function for the imported good. The absence of the supply function is due to the assumption of a flat schedule for this curve.

$$(4) \quad p_m = p^*(1+t)$$

$$(5) \quad D_m(p_d, p_m) = cp_d^{\epsilon_{md}} p_m^{\epsilon_{mm}}$$

where p^* is the world export price; t is the level of tariffs; D_m is the quantity consumed of good m ; ϵ_{md} is the cross-price elasticity of demand for good m in relation to good d ; and ϵ_{mm} is the own-price elasticity of demand for good m .

The next step is to linearize these five independent equations, and the solution of the system of equations results in values for five endogenous variables, D_d, S_d, p_d, p_m and D_m :

$$(1) \quad \ln D_d = \ln a + \epsilon_{dd} \ln p_d + \epsilon_{dm} \ln p_m$$

$$(2) \quad \ln S_d = \ln b + \epsilon_s \ln p_d$$

$$\ln D_d = \ln S_d \tag{3}$$

$$\ln p_m = \ln[p^*(1+t)] \tag{4}$$

$$\ln D_m = \ln c + \varepsilon_{md} \ln p_d + \varepsilon_{mm} \ln p_m \tag{5}$$

Consequently, when the tariff level is exogenously changed, one can estimate the impact on the endogenous variables.

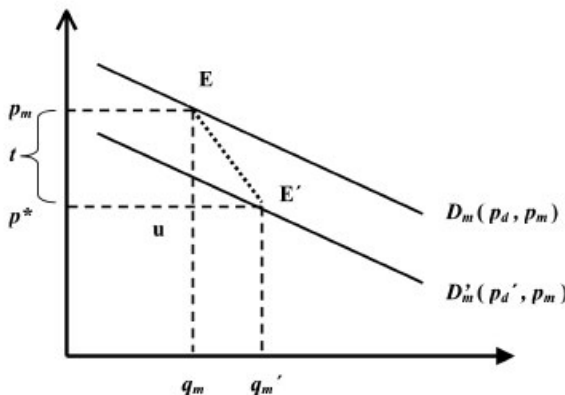
For the implementation of this model it is crucial to know the values of all exogenous variables, that is, all the elasticities, the initial quantities of domestic production and import, and the internal prices of the domestic and imported good.

The following graphs can clarify the standard procedures of evaluation. Graph 1 presents the market for the imported good; Graph 2 shows the market for the domestically produced good.

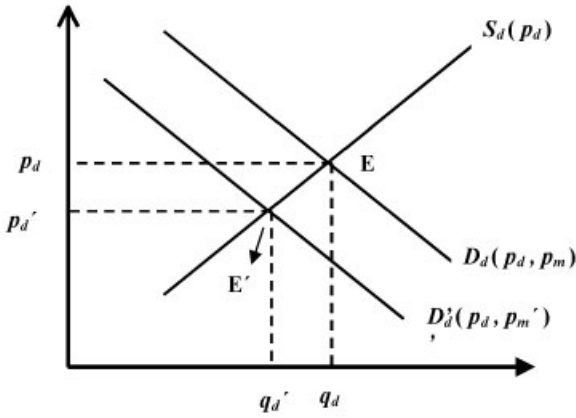
While the trade barrier is in place, equilibrium is achieved at point E. When the tariff is eliminated, the price of the imported good falls to the world price p^* . Hence, responding to a decreasing price of the imported substitute good, the demand schedule in the market for the domestically produced good declines (see Graph 2). This shift, and the resultant lower price of the domestically produced good, induce a shift in the schedule demand in the market of the imported good, and then this dynamic of adjustment ends.

It is important to understand how to compute the welfare effects using these graphs.

Graph 1. Effects of Removing a Trade Barrier in the Market for the Imported Good



Graph 2. Effects of Removing a Trade Barrier in the Market for the Domestically Produced Good



In Graph 1, when the trade barrier is eliminated the import price is lowered, and the quantity of the imported good increases. The rectangle $P_m, E, u,$ and p^* represents the government's tariff revenue loss. The consumers in this market have the benefit of an increase in quantity at a lower price. The trapezium $P_m, E, E',$ and p^* measures the consumer surplus gain in this market.

In Graph 2, the removal of the trade barrier induces a decrease in prices and quantities of the domestic good. In this market, there is only a distributional effect between consumers and producers, since the magnitude of the consumer surplus gain is exactly equal to the producer surplus loss. This area is represented by the trapezium $p_d, E, E',$ and p'_d .

Large Country Model

The implementation of a large country model is very similar to that of small country model. The main difference is in the assumption that the importer country is large and hence able to influence the prices of goods on world markets. As mentioned above, if this is the case, the supply function of the imported good will be positively sloped and therefore the magnitude of the change in world price and volume of imports will depend significantly on the price elasticity of the supply of the imported good.

The new system of equations is summarized below. As before, the domestically produced good and its imported substitute are designated by the indexes d and m .

$$\ln D_d = \ln a + \varepsilon_{dd} \ln p_d + \varepsilon_{dm} \ln p_m \quad (1)$$

$$\ln S_d = \ln b + \varepsilon_s \ln p_d \quad (2)$$

$$\ln D_d = \ln S_d \quad (3)$$

$$\ln p_m = \ln[p^*(1+t)] \quad (4)$$

$$\ln D_m = \ln c + \varepsilon_{md} \ln p_d + \varepsilon_{mm} \ln p_m \quad (5)$$

$$\ln S_m = \ln d + \varepsilon_{sm} \ln p^* \quad (6)$$

$$\ln S_m = \ln D_m \quad (7)$$

where D_d and D_m are the quantities consumed of goods d and m respectively; S_d and S_m are, respectively, the quantities produced of goods d and m ; P_d and P_m are the internal prices of goods d and m ; ε_s is the own-price elasticity of demand for good d ; ε_{dd} is the cross-price elasticity of demand for good d in relation to good m ; ε_{dm} is the price elasticity of supply of good d ; ε_{mm} is the own-price elasticity of demand for good m ; ε_{md} is the cross-price elasticity of demand for good m in relation to good d ; ε_{sm} is the price elasticity of supply of good m ; and p^* is the world export price; t is the level of tariffs.

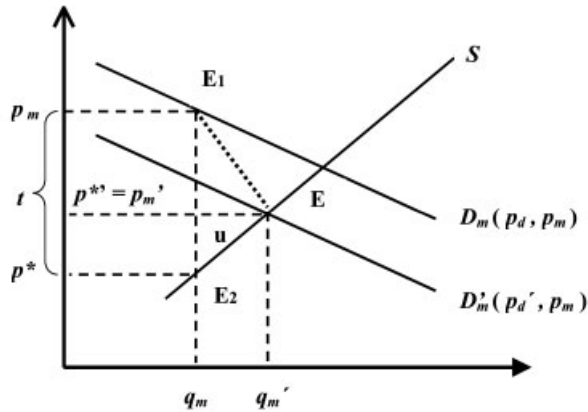
The first three equations of the model define demand and supply functions and the equilibrium condition in the market of the domestically produced good. The fourth equation expresses the internal price of the imported good. The last three equations represent demand and supply functions and the equilibrium condition in the market of the imported good.

This system of seven independent equations can be easily solved to generate values for seven endogenous variables, D_d , S_d , P_d , P_m , P^* , D_m and S_m . A change in the level of the tariff allows the new endogenous variables to be calculated. Needless to say, if the exercise imposes a complete elimination of the initial tariff, the value of the final internal price of the imported good (P_m') will be equal to the price received by the importer (P^*), and in this case the fourth equation is redundant.

As mentioned above, for the implementation of this model it is crucial to know the values of all exogenous variables, that is, the elasticities and initial quantities of domestic production and import, and the internal prices of the domestic and imported good.

Graph 3 represents the market for the imported good and the modifications that occur once the tariff is altered.

Graph 3. Effects of Removing a Trade Barrier in the Market of the Imported Good



Equilibrium is achieved at point E when the trade barrier is placed at its initial value. Since the supply curve is now upward, a wedge appears between the internal price and the price obtained by the exporter in this market, respectively, P_m and p^* .

When the tariff is completely eliminated, the subsequent decrease in the price of the imported good induces a fall in the demand schedule in the market for the domestically produced good. The modifications in terms of prices, quantities and welfare in the market for the domestically produced good are the same as before.

Conversely, the consequent decline in the price of the domestic good causes a shift to the left of and below the demand schedule of the imported good represented in Graph 3, by the new demand schedule D'_m . The final outcome is an increase in quantity, and the same price for the exporter and for the large country consumer. This new price prevailing for both the exporter and the large country consumer will lie between the initial prices P_m and p^* (Graph 3).

The final step involves understanding how to compute the welfare effects in the market for the imported good using Graph 3. In contrast to the small country model, once the importer country influences prices on world markets, the impact in terms of welfare of a tariff reduction will be distributed among three agents: consumers, government, and foreign exporters.

With the complete elimination of a tariff (the analysis is similar when the tariff is partially reduced), consumers gain with lower prices and larger quantities. The consumer surplus equals the area of the trapezium p_m, E_1, E', p^* . Exporters will also benefit from higher prices and increased quantities, and their surplus can be measured by the area of the trapezium p^*, E', E_2, p^* . Finally, the government loses tariff revenues equal to the area of the rectangle p_m, E_1, E_2, p^* .

Estimation of Elasticities and Calibration of Parameters

In the literature, the lack of estimates for all the elasticities needed could pose a serious problem in the implementation of a partial equilibrium model. Nevertheless, this difficulty may be overcome if at least some data are available. In the case of FCOJ, the price elasticity of aggregate demand for imports and the domestic good combined, as well as the elasticity of substitution between the domestic and imported products, are available in the seminal work by Hufbauer and Elliot (1994). Assuming that the demand structure is of the CES form, the estimates of the own-price elasticities of demand may be obtained using the following equations:

$$\begin{aligned}\varepsilon_{11} &= -[(1 - S_1) \times \sigma + (S_1 \times \varepsilon_T)] \\ \varepsilon_{22} &= -[(1 - S_2) \times \sigma + (S_2 \times \varepsilon_T)]\end{aligned}$$

where S_1 is the share in volume of the domestic product in consumption and S_2 is the share by quantity of imports in consumption; σ is the elasticity of substitution between the domestic and imported good; and ε_T is the price elasticity of total demand.

After calculating the values of the own-price elasticities of demand, the cross-price elasticities in the CES case can be obtained following a methodology proposed by Tarr (1990):

$$\begin{aligned}\varepsilon_{12} &= -\frac{-S_2(\varepsilon_T + \varepsilon_{22})}{S_1} \\ \varepsilon_{22} &= -\frac{-S_1(\varepsilon_T + \varepsilon_{11})}{S_2}\end{aligned}$$

Once all the elasticities are obtained, the next step can be taken. The calibration of the model consists in calculating the values of the constants in equations (1), (2), and (5) in the case of either the small or the

large country model. Besides this, in the case of the large country model, it is also necessary to include the calculation of the constant that appears in equation (6). The procedure for calculating the constants is easily performed with the initial values of quantities and prices, assuming that the start situation expresses an undistorted equilibrium. When this task is completed, the model is ready to be implemented.

4. RESULTS

In order to estimate the impact of tariff reductions in the US FCOJ market in terms of resource allocation and welfare implications, two different versions of a partial equilibrium model of imperfect substitutes are used, considering the domestic US FCOJ market both as a small country and as a large country. These results are presented in the following sections. Besides this, in both sections two different scenarios for the evaluation of the impact of liberalization in the US FCOJ market were constructed.

The first scenario investigates the effects of a complete elimination of the per-unit tax equivalent to a 56.7% *ad valorem* tax. The second scenario evaluates the impact of a partial reduction in the *ad valorem* tax to the same level as that applicable on Mexican exports of FCOJ to the United States. The second scenario is considered to be far more realistic because by joining the FTAA, Brazil will most probably benefit more from the same market access conditions than Mexico.

In spite of the hugeness of Brazilian FCOJ production, to consider the domestic US FCOJ market as a small country is not very realistic. Indeed, the United States is an important world player in the FCOJ market, as can be seen in Tables 9 and 10 of this study. Due to the large size of its own internal market and production of FCOJ, the United States is more likely to be able to obtain revenues at the expense of the FCOJ exporter countries by subjecting them to its commercial policy. Nevertheless, the small country exercise is still helpful as it has the merit of revealing the limiting case.

Small Country Model

Table 12 summarizes the initial values of prices and quantities in the years 1999–2000, and the values of all relevant elasticities.

Table 12. Initial Prices, Quantities, and Elasticities

Prices and Elasticities	Values
Import price of FCOJ (dollars/ton - 1999–2000)*	1,350
Domestic price of FCOJ (dollars/ton - 1999–2000)*	1,350
Quantity of domestically produced good (ton - 1999–2000)*	1,064,102
Quantity of imports of FCOJ from Brazil (ton - 1999–2000)*	252,398
Price elasticity of domestic supply**	1.0
Price elasticity of total demand**	0.5
Own-price elasticity of demand for the domestically produced good***	-0.8643
Own-price elasticity of demand for the imported good***	-2.0357
Cross-price elasticity of demand for the domestically produced good in relation to imported good***	0.3643
Cross-price elasticity of demand for the imported good in relation to domestically produced good***	1.5358
Elasticity of substitution between the domestic and imported good**	2.4

Sources: * Neves and Marino (2002)

** Hufbauer and Elliot (1994);

*** Authors' calculation.

It is important to point out that, in this study, the domestic FCOJ price is considered to be the same as the import price, tariffs included. This is because FCOJ is a relatively homogeneous good that is extensively traded on commodity markets. Hence, both the domestic and the import price are simply the price of FCOJ on commodity markets.

Table 13 presents the results in the scenario of a complete elimination of the per-unit tax in the FCOJ market equivalent to a 56.7% *ad valorem* tax. Besides computing welfare effects, the percentage changes in prices and quantities caused by the elimination of taxes are also estimated.

Contrary to the initial situation, the final outcome in terms of prices is a price for the domestic good that differs from the price of the imported one. This result is a consequence of the implementation of the model that establishes two distinct FCOJ markets (for the imported and for the domestically produced good). Nevertheless, as pointed out above, the final price on the commodity market will eventually be the same. The price adjustment process on the commodity market would be a fruitful area for further study.

Table 13. Scenario I - Complete Elimination of the 56.7% Tariff in the FCOJ market

Welfare effects	Values (in millions of dollars)
Consumer surplus gain	311.70
Producer surplus loss	115.63
Tariff revenue loss	123.29
Efficiency gain	72.78
Efficiency gain / Sales of the imported good (%)*	21.36
Change in the price of the domestic good (%)	-8.40**
Change in the price of the imported good (%)	-36.18
Change in the quantity of domestic good (%)	-8.40**
Change in the quantity of imported good (%)	118.06

* Sales of the imported good are measured in the initial situation, before liberalization. This value is calculated by multiplying the initial price of the imported good by the quantity of imports.

** The fact that the changes in the price and quantity of the domestic good are equal is due to a unitary value of price elasticity of domestic supply.

Table 14 summarizes the results in the scenario of the partial reduction of barriers to levels equivalent to a 30% *ad valorem* tax. It shows the welfare effects and the percentage changes in prices and quantities.

As expected, in both scenarios there are efficiency gains, and the distributional effects benefit consumers at the expense of local producers and government.

It is interesting to note that, even in this more realistic scenario, the increase in the exports of Brazilian FCOJ is substantial (38.3%). However, the rigid assumptions of a small country model mean that the magnitude of the welfare of Brazilian exporters is not altered. Thus, the increase in exports to the United States is possible by means of a reduction in Brazilian exports to other destinations.

Graphs 1 and 2 in the Appendix sum up the main results in terms of welfare and changes in prices and quantities in the scenarios of the partial and the complete elimination of tariffs.

Large Country Model

The initial values of prices and quantities in the years 1999–2000, and the values of all relevant elasticities, are the same as before. The only difference in this case is the presence of the price elasticity of supply of the import-

Table 14. Scenario II - Partial Reduction of the Tariff in the FCOJ Market to the Level of 30%

Welfare effects	Values (in millions of dollars)
Consumer surplus gain	119.74
Producer surplus loss	50.56
Tariff revenue loss	58.06
Efficiency gain	11.12
Efficiency gain / Sales of the imported good (%)*	3.26
Change in the price of the domestic good (%)	-3.58**
Change in the price of the imported good (%)	-17.04
Change in the quantity of domestic good (%)	-3.58**
Change in the quantity of imported good (%)	38.30

* Sales of the imported good are measured in the initial situation, before liberalization. This value is calculated by multiplying the initial price of the imported good by the quantity of imports.

** The fact that the changes in the price and quantity of the domestic good are equal is due to a unitary value of price elasticity of domestic supply.

ed good. It is important to note that the results in terms of welfare, prices, and quantities are very sensitive to the magnitude of this elasticity.

A recent paper by Camargo Barros, Bacchi, and Burnquist (2002) gives estimates of the supply export functions of several Brazilian agricultural products. However, specifically in the case of orange juice, the coefficients of the variables for explaining export quantities (export prices, the real exchange rate, and real Brazilian income) were not found to be statistically significant at a 10% probability level. According to the authors, this is due to the sector's main characteristics: the extremely rigid market structure, where supply is organized on the basis of formal contracts between agricultural producers and industry; the high degree of market concentration both on the seller's and on the buyer's side; and the fact that most FCOJ exporters are also traders that deal in the product in foreign markets. This does not mean that the supply export function is necessarily price inelastic. On the contrary, it is reasonable to conjecture that the model utilized by the authors does not fit that specific market, which suggests that further studies on this topic may be useful.

In this study, as a means of comparison, simulations are performed by adopting four different values for the export supply price elasticity of the

Table 15. Scenario I - Complete Elimination of the 56.7% Tariff in the FCOJ Market

Welfare effects	Values (in millions of dollars)			
	A	B	C	D
Consumer surplus gain	63.32	104.74	156.12	186.91
Producer surplus loss	27.65	44.64	64.42	75.59
Tariff revenue loss	123.29	123.29	123.29	123.29
Efficiency gain	-87.62	-63.19	-31.60	-11.97
Efficiency gain / Sales of the imported good (%)*	25.71	18.55	9.27	3.51
Welfare of the exporter	99.37	83.52	63.53	51.34
Change in the price of the domestic good (%)	-1.94	-3.16	-4.59	-5.41
Change in the price of the imported good (%)	-9.56	-15.14	-21.37	-24.76
Change in the quantity of domestic good (%)	-1.94	-3.16	-4.59	-5.41
Change in the quantity of imported good (%)	19.05	32.97	51.80	63.86
Change in the export price (%)	41.72	32.97	23.21	17.89

* Sales of the imported good are measured in the initial situation, before liberalization. This value is calculated by multiplying the initial price of the imported good by the quantity of imports.

Table 16. Scenario II - Partial Reduction of the Tariff in the FCOJ Market to the Level of 30%

Welfare effects	Values (in millions of dollars)			
	A	B	C	D
Consumer surplus gain	26.10	42.82	63.03	74.82
Producer surplus loss	11.63	18.91	27.53	32.46
Tariff revenue loss	42.21	40.61	38.66	37.51
Efficiency gain	-27.74	-16.70	-3.16	4.85
Efficiency gain / Sales of the imported good (%)*	8.14	4.90	0.93	1.42
Welfare of the exporter	35.21	29.08	21.58	17.17
Change in the price of the domestic good (%)	-0.81	-1.33	-1.94	-2.29
Change in the price of the imported good (%)	-4.09	-6.60	-9.52	-11.16
Change in the quantity of domestic good (%)	-0.81	-1.33	-1.94	-2.29
Change in the quantity of imported good (%)	7.52	12.58	18.96	22.80
Change in the export price (%)	15.61	12.58	9.07	7.09

* Sales of the imported good are measured in the initial situation, before liberalization. This value is calculated by multiplying the initial price of the imported good by the quantity of imports.

imported good. In the following tables, columns A, B, C, and D present the results when this elasticity is equal to 0.5, 1, 2, and 3 respectively.

Table 15 summarizes the results in the scenario of the complete elimination from the FCOJ market of the per-unit tax equivalent to a 56.7% *ad valorem* tax, with the estimate of the welfare effects and the percentage changes in prices and quantities caused by the elimination of tariffs.

Table 16 shows the welfare effects and percentage changes in prices and quantities in the scenario of a partial reduction of barriers to levels equivalent to a 30% *ad valorem* tax.

In contrast to the results of the small country model, the impact of a reduction in tariffs in the case of the more realistic large country model is a loss of welfare in the local economy, except in the case of a partial reduction of the tariff when the export supply price elasticity of the imported good is equal to 3. The reason for this is straightforward. When the importer country has the power to affect world prices, the taxes imposed in the market for the imported good are partially paid by the exporter country. So, in the scenario of complete elimination of tariffs, the government loses all its revenue, part of which is driven to the foreign exporter country.

Graphs 3 and 4 in the Appendix show the principal results in terms of welfare and changes in prices and quantities in the scenarios of the partial and the complete elimination of tariffs, with two different elasticity values: 0.5 and 2.0 (cases A and D, respectively).

The final result in terms of national welfare depends on comparing the government's losses with the gains incorporated by consumers. As a matter of fact, with unchanged price elasticity of total demand, the more elastic the supply of the imported good, the smaller the government's losses will be and the larger the consumer surplus. There is always a critical point in terms of the elasticity of supply of the imported good when losses turn into gains in terms of welfare.

5. CONCLUSIONS

The analysis of the potential impact of trade liberalization suggests that strong resistance is bound to arise in the US FCOJ market. Even in the scenario where trade liberalization maintains the levels of protection currently applied to Mexican exports, the Brazilian producers' cost advan-

tages would result in a sharp fall in prices, and consequently in losses for domestic producers. This is true both in the small country and large country models. On the other hand, potential gains for consumers, besides efficiency gains, are felt to occur in the small country model.

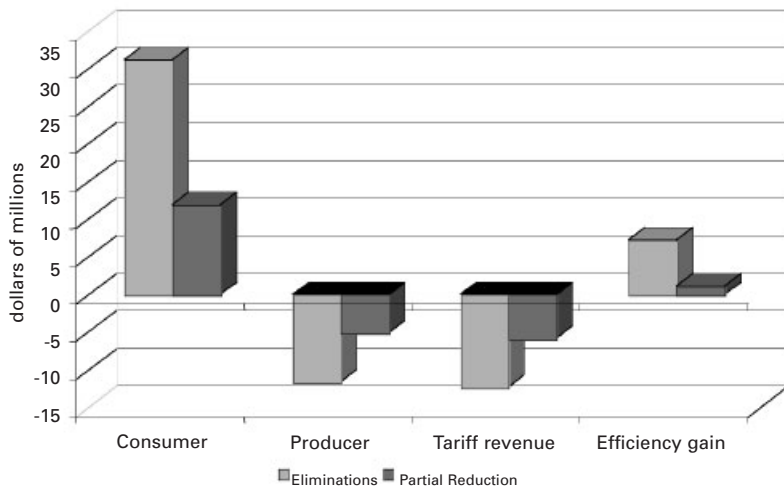
In the more realistic case of the large country model, tariff reduction will cause losses of welfare in the local economy. As explained above, when the importer country affects world prices, a tariff reduction represents a transfer of revenue from local government to foreign producers. Thus, in this case, the more inelastic the supply of the imported good or the greater the tariff reduction, the larger the exporter's welfare gain will be.

The results in terms of welfare and changes in prices and quantities are very sensitive to elasticity values. Although this could be thought of as a weakness in partial equilibrium models, they are still an important tool for evaluating alternative commercial policies. The great sensitivity of these models with regard to elasticity values also suggests that further sectoral studies that emphasize estimating the elasticities utilized in this kind of model would be valuable.

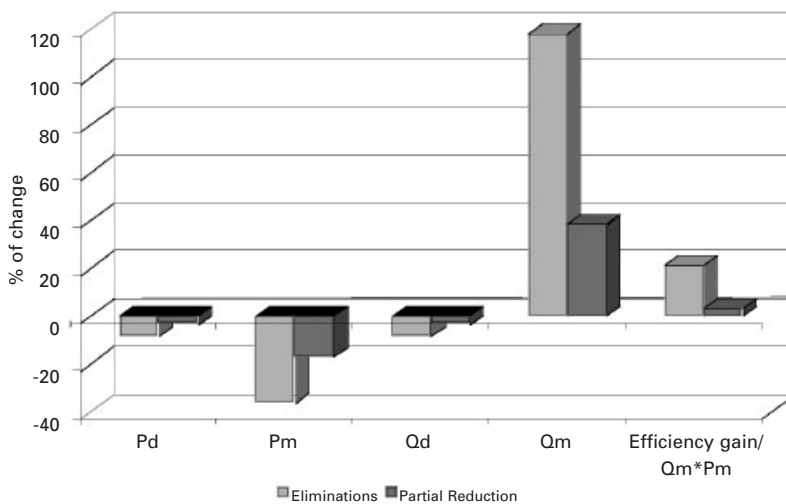
Finally, as mentioned in the introduction, sectors in which domestic producers perceive competitive gaps as being relatively large, and where trade barriers are currently high, are natural candidates to show strong resistance to trade liberalization. This seems certainly to be the case for the FCOJ market in the United States. Anticipating such resistance, Brazilian producers have been investing in the US market, building up orange juice processing capacity to become large buyers of both domestically produced and imported FCOJ. Foreign direct investment (FDI) is seen by Brazilian producers as an alternative way of circumventing trade barriers and entering the US market. FDI in this sector seems to demonstrate that Brazilian FCOJ producers do expect strong resistance to trade liberalization from their US counterparts.

APPENDIX

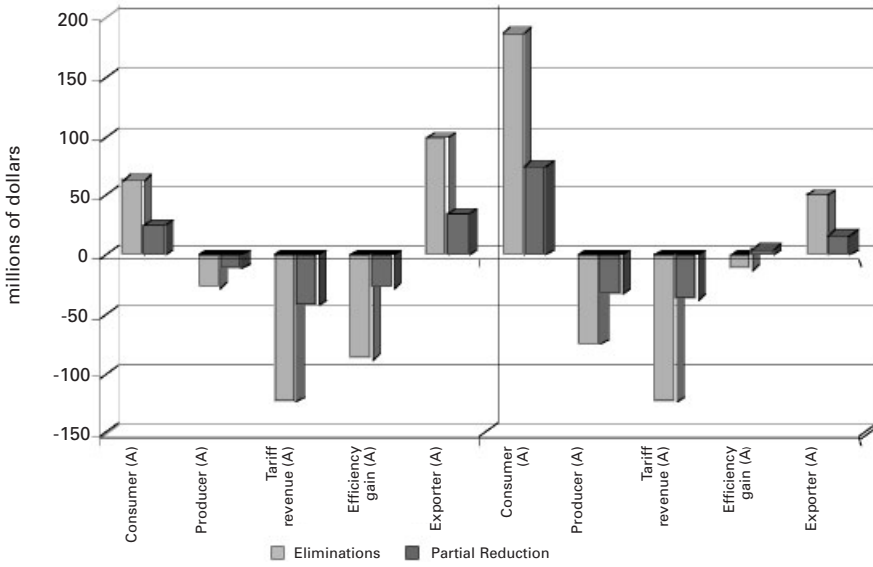
Graph 1. Welfare effects in two scenarios - Small country model



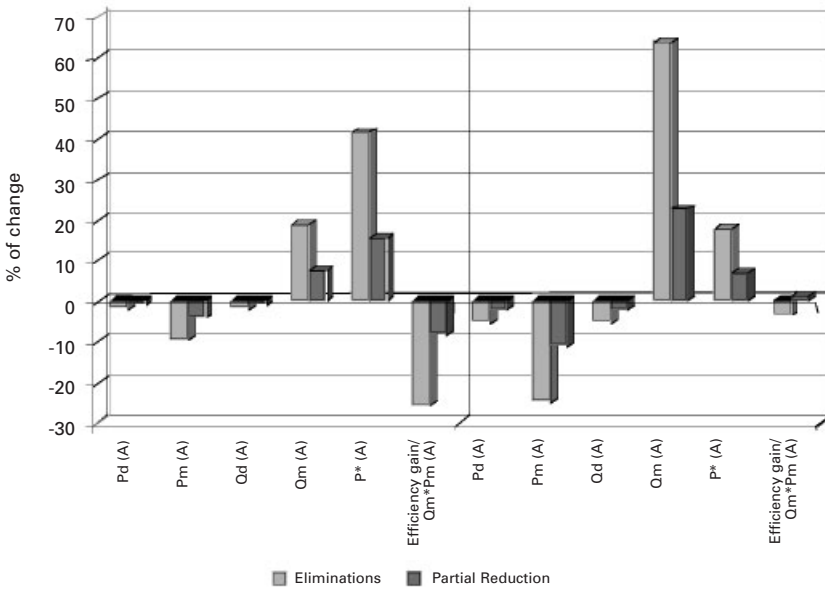
**Graph 2. Changes in prices and quantities in two scenarios
Small country model**



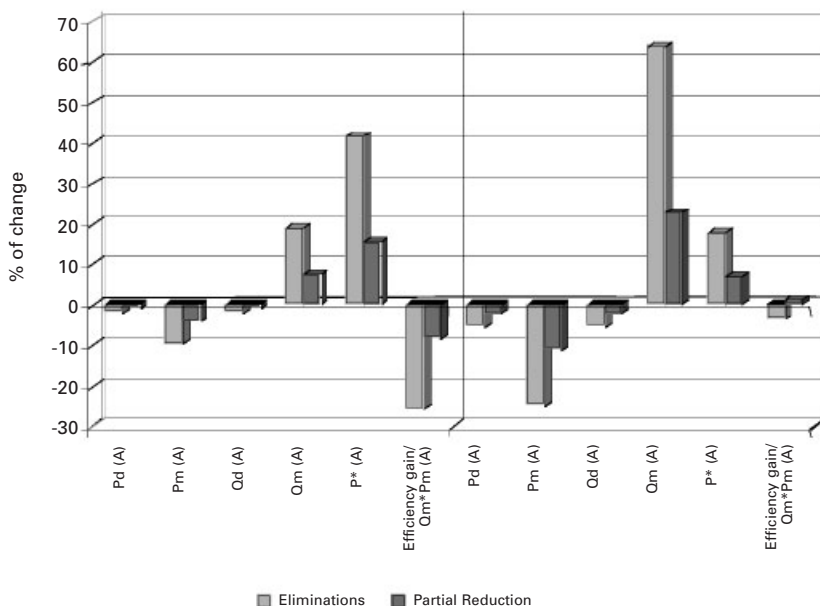
Graph 3. Welfare effects in two scenarios - Large country model



**Graph 4. Changes in prices and quantities
Large country model**



Graph 5. Changes in prices and quantities in two scenarios
Large country model



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NOTES

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2. Núcleo de Economia Industrial e da Tecnologia (NEIT), University of Campinas (UNICAMP), Campinas, Brazil.
3. Núcleo de Economia Industrial e da Tecnologia (NEIT), University of Campinas (UNICAMP), Campinas, Brazil.
4. University of São Paulo, Ribeirão Preto, Brazil.
5. Tax paid to the Citrus Department for local citric product marketing.
6. The reaction of Florida producers may possibly erode the competitive advantage of Brazilian supply, which is largely based on low labor costs.
7. Brazilian imports of orange products are almost nil; in 2001, these imports were only \$1.4 million and 1.1 million tons
8. It may be useful to explain how the per-unit tax adopted by the United States is translated into a percentage of the price of FCOJ, or into an *ad valorem* tax. The *ad valorem* tax imposed by the United States on orange juice imported from Brazil is calculated from the per-unit tax levied on *reconstituted* orange juice. In the American market, the per-unit tax is \$0.0785 per liter of *reconstituted* orange juice ready for consumption. This tax does not change when there are fluctuations in the prices of the product, therefore its *ad valorem* equivalent is higher when prices are low. The calculation of the *ad valorem* equivalent factor is based on two parameters: (1) the

average price of orange juice, and (2) the conversion factor of *concentrated for reconstituted* juice. In this study, Hemispheric Database/FTAA V.1.0. parameters were adopted, generating an *ad valorem* equivalent of 56.7% for FCOJ.

9. Moreover, in the short run, following an increase in international prices in the American market, one can imagine that part of Brazil's FCOJ production for the EU markets would drift to the United States. Therefore, the FCOJ international price in EU markets would increase as a consequence of the supply shortage, and this would benefit Brazilian exporters.

10. See also Berlinski (2001).

GATS Commitments and Policy Issues of MERCOSUR and NAFTA Countries

JULIO BERLINSKI¹

1. INTRODUCTION

International trade in services has become a new and important subject, and in the next few years, negotiations on the topic will involve the WTO, the FTAA, the European Community, and MERCOSUR. In the case of MERCOSUR, Resolución 73/98 of the Grupo Mercado Común provided the set of criteria to be used by the Services Group in specific negotiations within the context of the Montevideo Protocol (1997), which follows the general principles of GATS. In addition, the high share of services in the GDP of the MERCOSUR and NAFTA countries requires special consideration, since the principle of comparative advantage could be applied to them; previously, services had been considered as nontradable (Deardorff 1985).

In developing countries, the importance of liberalizing the service sector can be related to the potential contribution of efficient services to the economy, and the greater weight of services in the sectors leading economic growth. Domestic regulations could create barriers to international competition through monopolies and legal restrictions on cross-border entry or direct foreign investment. Domestic deregulation, while it does not determine the success of trade liberalization, is a necessary complement to it for new opportunities for trade and investments to be offered.

The characteristic feature of services is that restrictions on them are given by international commitments (GATS, regional, and bilateral agreements that are not uniform among different countries) and the asymmetry of domestic regulations. These domestic regulations are all

policies capable of restricting market access and discriminating between national and foreign suppliers. One of the principal problems of the empirical treatment of the service sector is lack of information. Available data (subsidies or regulations on some activity) do not reveal each industry's degree of protection. That is why the commitments negotiated in the Uruguay Round, and new protocols concerning telecommunications and financial services, were analyzed for the countries of MERCOSUR and NAFTA, and their specific and general impact on the number and restrictiveness of commitments were measured.

In the following section, the principal aspects of trade in services and GATS are discussed, with special attention to the commitments of MERCOSUR and NAFTA countries in the Uruguay Round, compared to the average of Latin American and OECD countries. Changes introduced by the new protocols in telecommunications and financial services are also analyzed. Section 3 deals with the discussion of some sectoral effects of the liberalization of services, particularly telecommunications, banking, and insurance in Argentina, Brazil, and the United States. A later section looks into negotiation issues.

2. MULTILATERAL AND REGIONAL AGREEMENTS IN THE SERVICE SECTOR²

Trade in Services

Table 1 shows international trade in goods and services for the MERCOSUR countries in 1998. The aggregate trade coefficients (exports plus imports as share of world totals) were 3.5% of world trade in goods and 3.1% of world trade in services. The coefficients for services were 1% for Argentina, 1.8% for Brazil, and substantially less for Paraguay and Uruguay.

In world trade, trade in services amounted to 25% of trade in goods. Argentina, Brazil, and Paraguay fall well below that figure in exports, which results in deficits in their balances of services. The export of services from Uruguay is proportionally high when compared to that of goods (49%). Argentina exports services mainly to do with foreign travel, Brazil concentrates in other areas, with commercial services featuring more prominently.

It is important to stress that measurement of the balance of payments uses residence criteria, and to that extent it underestimates the importance

Table 1. MERCOSUR Countries: International Transactions in Goods and Services, 1998
(millions of US dollars)

	Argentina		Brazil		Paraguay		Uruguay		World Total	
	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
Trade in goods	26,434	29,448	51,136	57,739	3,824	3,938	2,832	3,594	5,377,100	5,297,000
Trade in services	4,660	9,045	7,631	16,676	489	562	1,393	913	1,360,992	1,348,956
Transport	1,071	2,826	1,862	5,090	65	324	340	421	301,122	362,008
Travel	3,025	4,230	1,317	5,385	112	143	695	265	425,246	384,998
Others	564	1,989	4,452	6,201	312	95	358	227	634,624	601,950
Services / goods (%)	17.6	30.7	14.9	28.9	12.8	14.3	49.2	25.4	25.3	25.5
Goods / world total (%)	0.5	0.6	1.0	1.1	0.07	0.07	0.05	0.07		
Services/ world total (%)	0.3	0.7	0.6	1.2	0.04	0.04	0.1	0.07		

Source: IMF (1999)

of services according to the modes of provision used in GATS, especially in the area of factor services, in particular the mode of supply “Commercial Presence” mainly related to foreign direct investment, resulting in transactions among residents.

Table 2 shows goods and services trade balances for the NAFTA countries. The high share of US services exports stands out. This can be seen in the relative share of exports of services compared with exports of goods (38.9%) and the high share in world exports (19.2%); the corresponding relationship for relative imports is substantially lower. Canada and Mexico show more of a balance between exports and imports of services, and have lower shares of world exports (Canada 2.3% and Mexico 0.9%).

Argentina’s commitments in the Uruguay Round were 208 items out of a possible total of 620,⁶ and of these 136 were in the “no restriction” category either for market access (MA) or for national treatment (NT).⁷ It is interesting to compare these with Brazil’s figures (see Table 3), where the total number of commitments was 156, with 19 in the “no restriction” category for MA. The proportion of commitments with “no restriction” relative to negotiated commitments was high for Argentina, Paraguay, and Uruguay, but low for Brazil. This comparison is important

**Table 2. NAFTA Countries: International Transactions
in Goods and Services, 1998**
(millions of US dollars)

	Canada		Mexico		US	
	Credit	Debit	Credit	Debit	Credit	Debit
Trade in goods	217,238	204,614	174,459	125,374	672,210	917,180
Trade in services	30,922	35,677	12,064	13,067	261,170	181,000
Transport	5,932	7,974	1,432	1,604	45,510	50,260
Travel	9,357	10,800	7,899	4,267	83,380	57,820
Others	15,633	16,903	2,733	7,196	132,800	72,930
Services / goods (%)	14.2	17.4	10.3	10.4	38.9	19.7
Goods / world total (%)	4.0	3.9	3.2	2.4	12.5	17.3
Services/ world total (%)	2.3	2.6	0.9	1.0	19.2	13.4

Source: IMF (1999)

Table 3. MERCOSUR Countries: Market Access Negotiations in GATS
(commitments by country, 1994)

	Argentina	Brazil	Paraguay	Uruguay	Average Latin America
1) Number of commitments negotiated	208	156	36	96	119
2) Number of commitments negotiated without restrictions	136	19	18	67	49.1
3) Number of commitments negotiated / Total list of GATS (620), (%)	33.6	25.2	5.8	15.5	19.2
4) Number of commitments negotiated without restrictions / Number of commitments negotiated ((2) / (1), (%))	65.4	12.2	50.0	69.8	41.3

Source: Source: Prepared by the author based on data provided by Hoekman (1995); some results appear in his paper.

since by 1997 an agreement was reached⁸ (the Montevideo Protocol) about the trade liberalization of services in MERCOSUR, the basic approach of which is similar to GATS (i.e., gradual liberalization through commitments by the members to a positive list, with ambitious liberalization objectives to be reached within a 10-year period).

Table 4 shows that, in 1994 the number of negotiated commitments in the NAFTA countries was highest for Canada, the United States, and the OECD countries. The United States had the highest number of items with “no restrictions.” In relative terms (negotiated commitments/total list and items without restriction/negotiated items), the United States, Canada, and OECD countries show similar figures, with Mexico having the lowest shares.

General Characteristics of GATS

The main characteristics of GATS are: (1) rules, principles, and general agreements; (2) specific commitments on market access and national

Table 4. NAFTA Countries: Market Access Negotiations in GATS
Commitments by country, 1994

	Canada	Mexico	US	Average OECD
1) Number of commitments negotiated	352	252	384	330.4
2) Number of commitments negotiated without restrictions	186	79	221	188.9
3) Number of commitments negotiated / Total list of GATS (620), (%)	56.8	40.6	61.9	53.3
4) Number of commitments negotiated without restrictions / Number of commitments negotiated ((2) / (1), (%))	52.8	31.3	57.6	57.2

Source: Prepared by the author based on data provided by Hoekman (1995); some results appear in his paper.

treatment; (3) commitment to periodic negotiations to progressively liberalize trade in services; and (4) annexes that take into account some particularities of the sectors.

GATS explicitly included four modes of services provision (modes of supply) among members: (1) from the territory of one to the territory of another (cross-border supply); (2) in the territory of one to a consumer of another (consumption abroad); (3) commercial presence of a provider in the territory of another member (commercial presence); and (4) physical presence of persons of one member in the territory of another (presence of natural persons).

GATS rules cover all services provided under competition in commercial agreements among suppliers, excluding governmental activities. The specific commitments are only applied to the list of services included by each member. The number of negotiated commitments is far from comprehensive.

In the past, the GATT rounds had bilateral trade and the corresponding tariffs as their core. However, to a large extent trade in services is not

restricted by tariffs, and this makes the task of liberalizing services difficult. The complexity of identifying and quantifying trade in services required the introduction of rules. The rules of national treatment and most favored nation (MFN) have helped in identifying restrictions and determining reciprocity relations.

The MFN clause establishes that each member will immediately and unconditionally treat the services and suppliers of a member country no less favorably than the services and suppliers of any other country. The only way of departing from the MFN clause is given in the Annex on Article II Exemptions. The Council for Trade in Services would examine the persistence of the underlying reasons for those exceptions over a period of five years, and the exceptions would be removed by the end of a ten-year period, subject to negotiations. More than sixty GATS members identified exemptions, especially in audiovisual, financial, and transportation services.

National treatment is defined as treatment that is no less favorable for the services and suppliers of one country than the treatment of a local supplier. GATS introduced the concept of market access: each member will treat the services and suppliers of other members no less favorably than is laid down in the terms, limitations, and conditions agreed and specified on its list. Thus, market access and national treatment are specific commitments applied only to the positive list of members, and subject to the qualifications and conditions indicated.

The agreement mentioned several types of restrictions on market access that were forbidden. In sectors in which commitments to market access were made, no member would introduce limitations on the number of suppliers, the total value of assets or transactions, the number of operations, the amount of production, or the number of persons, or take measures restricting the provision of services related to foreign capital (either expressed as a limit on the size of share or on foreign investments values).

The main characteristic of GATT is nondiscrimination, and national treatment and MFN are the main instruments for attaining that objective. In GATS, national treatment and MFN also play important roles, but national treatment is only applied to the activities included on the positive list.

Other obligations and disciplines of GATS include: (1) transparency—each member will publish the GATS regulations and administrative practices of general application; (2) domestic regulations—each member will make sure that general devices affecting trade in services shall be reasonably

administered and, in sectors where a member has made commitments, they should not be annulled by domestic restrictions; (3) subsidies should be negotiated to eliminate distortions and eventually evaluate the need for compensation; (4) safeguard measures are allowed based on the principle of nondiscrimination; (5) general exemptions—members are allowed to protect public morality, order, health, security, consumer security and privacy; and (6) negotiation of specific commitments—GATS allows developing countries to negotiate fewer commitments than industrialized countries.

Commitments of MERCOSUR and NAFTA Countries in the WTO

The core of GATS is its members' specific commitments. The procedure is that each member identifies the services to be negotiated, that is, those which will be under the rules of market access (MA) and national treatment (NT); then measures that violate MA and/or NT are negotiated. Negotiations take place in a framework of eight dimensions: four "modes of supply" and two rules (market access and national treatment). In addition, there are some negotiated commitments on supply restrictions regardless of the sector ("horizontal commitments").

One of the main problems with the empirical treatment of services trade is the lack of information on prices and quantities. Available data (subsidies or regulations by activity) do not provide enough information on the tariff equivalent of each industry's protection. This problem of measurement was tackled by Hoekman (1995), among others,⁹ using a scheme of assigning values to each commitment. Commitments were classified into three categories: (1) "none," meaning that the country does not have any measure violating market access or national treatment for a certain mode of supply; such commitments were assigned the value 1; (2) "unbound," when the country did not negotiate commitments for a certain mode of supply: a 0 value was assigned; and (3) "other," meaning that a country introduced some kind of restriction on a mode of supply: this was given a value of 0.5. Once values had been assigned to each specific commitment under the four modes of supply and the two rules, these were totaled to give an approximation to a measure of services protection between countries: the higher the index the higher the assumed liberalization of services.¹⁰

The estimates presented in Hoekman's (1995) paper on the Uruguay Round had some interesting dimensions. (1) The number of negotiated

items as a share of the possible total was 47% for high income countries (HIC) and 16% for medium and low income countries (MLIC), while for the large developing countries (LADC) the measurement was 39%. (2) The “average coverage,” understood as the total assigned values according to the above mentioned criteria divided by the total number of possible concessions, was 36% for HIC, 10% for MLIC, and 23% for LADC. (3) The average coverage compared to the number of negotiated items, (2/1), was 76% for HIC, 64% for MLIC, and 59% for LADC.) Finally, the share of services with “no restrictions” in the total of possible commitments was 27% for the HIC, 7% for MLIC, and 15% for the LADC.

To sum up, it is not clear why countries negotiated a small number of items in the Uruguay Round since they could initially have introduced exceptions to the rules of market access and national treatment. One reason could be that they did not want to enter the deregulation process at an early stage because of transaction costs if there were policy reversals. Countries were more restrictive for market access, but there was a high correlation between market access and national treatment.

These indices vary considerably among countries and sectors. There are fewer commitments in transportation, postal services, and education. However, indices for business services, computer services, and construction are high. A positive relationship between commitments and per-capita income was also found.

GATS has some weaknesses, so there is room for introducing improvements: there is some lack of transparency, since the “unbound” concept does not provide enough information to be able to know the impediments to trade in services; no information is provided on noncommitted items; members could introduce prohibited policies for the purpose of negotiating them in future rounds; the agreement introduces minimal limitations on domestic policies, since the only one is national treatment; and several countries became members with a minimum number of commitments.

The Uruguay Round

For the MERCOSUR countries Table 5 shows the share of negotiated commitments with respect to the total listed in GATS.

The number of commitments negotiated by Argentina was higher than the average for Latin America and the other MERCOSUR countries, with the exception of those of Brazil for construction services. In tourism

Table 5. MERCOSUR Countries: GATS Market Access Negotiations for Selected Countries

Averages negotiated by sector and country, 1994

Type of Service	Argentina	Brazil	Paraguay	Uruguay	Average Latin America
1. Business Services	34.8	23.9		32.6	21.1
2. Communication Services	37.5	4.2		4.2	16.9
3. Construction and Related Engineering Services	80.0	100.0			26.3
4. Distribution Services	60.0	60.0			10.0
5. Educational Services					3.8
6. Environmental Services					1.6
7. Financial Services	94.1	76.5	35.3	17.6	44.5
8. Health Related and Social Services (Other than those listed under 1. Business Services)					7.8
9. Tourism and Travel-Related Services	100.0	25.0	75.0	75.0	67.2
10. Recreational, Cultural, and Sporting Services (other than Audiovisual Services)				20.0	8.8
11. Transport Services		14.3		2.9	8.4
12. Other Services not included elsewhere					
Mean	33.9	25.3	9.2	12.7	18.0
Standard Deviation	40.1	34.6	23.1	22.3	19.9

Source: Prepared by the author based on data provided by Hoekman (1995); some results appear in his paper.

Table 6. NAFTA Countries: GATS Market Access Negotiations for Selected Countries

Averages negotiated by sector and country, 1994

Type of Service	Canada	Mexico	US	Average OECD
1. Business Services	73.9	50.0	73.9	68.1
2. Communication Services	33.3	16.7	58.3	36.6
3. Construction and Related Engineering Services	100.0	80.0	100.0	82.2
4. Distribution Services	100.0	40.0	80.0	65.6
5. Educational Services		80.0	40.0	44.4
6. Environmental Services	100.0		100.0	70.8
7. Financial Services	94.1	94.1	94.1	88.9
8. Health Related and Social Services (Other than those listed under 1. Business Services)		50.0	25.0	15.3
9. Tourism and Travel-Related Services	50.0	75.0	100.0	72.2
10. Recreational, Cultural, and Sporting Services (other than Audiovisual Services)			80.0	37.8
11. Transport Services	40.0	11.4	22.9	27.0
12. Other Services not included elsewhere		1.0		0.1
Mean	49.3	41.5	64.5	50.8
Standard Deviation	43.1	35.2	34.8	28.0

Source: Prepared by the author based on data provided by Hoekman (1995); some results appear in his paper.

Table 7. MERCOSUR Countries: GATS Market Access Negotiations for Selected Countries

Indices of average liberalization negotiated by sector and country, 1994

Type of Service	Argentina	Brazil	Paraguay	Uruguay	Average Latin America
1. Business Services	3.5	1.2		3.5	2.3
2. Communication Services	3.5	2.5		2.5	2.4
3. Construction and Related Engineering Services	3.5	1.5			2.5
4. Distribution Services	3.5	1.8			2.3
5. Educational Services					1.3
6. Environmental Services					0.5
7. Financial Services	2.3	0.7	2.2	3.0	1.6
8. Health Related and Social Services (Other than those listed under 1. Business Services)					2.7
9. Tourism and Travel-Related Services	3.5	1.5	3.3	3.5	2.6
10. Recreational, Cultural, and Sporting Services (other than Audiovisual Services)				3.5	3.1
11. Transport Services		1.3		3.5	2.8
12. Other Services not included elsewhere					
Mean	3.3	1.5	2.6	3.4	2.2
Standard Deviation	0.5	0.6	1.0	0.3	0.7

Source: Prepared by the author based on data provided by Hoekman (1995); some results appear in his paper.

and financial services, Argentina negotiated even more commitments than the average for the OECD countries.

As for the NAFTA countries, Table 6 shows that Canada did not negotiate the sections of education, health, and cultural services, and Mexico did not negotiate in environmental services and cultural services. This is in contrast to the commitments of the United States in all sections, the lowest being in education, health, and transportation, a pattern similar to the average in the OECD countries.

GATS commitments are based on a positive list, but not all the items negotiated liberalize trade in services with the same intensity. Thus, when we look at those categories, liberalization commitments only cover items where specific negotiations took place. Table 7 introduces a measurement of the degree of liberalization for the negotiations that took place. As explained above, the estimate is based on the addition of the liberalization pattern across modes of supply according to the commitments made for each negotiated item. A value of 4 would mean that liberalization was complete.

It can be seen that, except for the financial sector where the coefficient was 2.3, Argentina made commitments almost without restrictions. It should also be taken into account that the most frequent value for mode of supply number four (presence of natural persons) was 0.5, which is mainly due to the fact that an economic necessity test was required.¹¹

Of Argentina's negotiating commitments, 73% were located at the end of the distribution representing higher liberalization, a value similar to the average for the OECD countries. Argentine behavior in the GATS negotiations was different from that of other countries in the region, especially Brazil. This is illustrated by the shape of the distribution: while a high proportion of Argentina's commitments had a liberalization degree higher than 2, Brazil signed its commitments with a similar proportion below the level of 2.

Table 8 helps to qualify the results in Table 6, as it measures the intensity of liberalization commitments for the NAFTA countries. The United States showed the greatest intensity (3.3), followed by Canada (3.1), and the OECD countries (3.0). Mexico showed the lowest average (2.5) and the highest standard deviation.

The New Protocols of Telecommunications and Financial Services

In order to make an approximation of the liberalization effect of nego-

Table 8. NAFTA Countries: GATS Market Access Negotiations for Selected Countries

Indices of average liberalization negotiated by sector and country, 1994

Type of Service	Canada	Mexico	US	Average OECD
1. Business Services	3.1	2.8	3.4	3.2
2. Communication Services	3.4	2.6	3.5	3.2
3. Construction and Related Engineering Services	3.4	2.0	3.5	3.2
4. Distribution Services	3.0	3.0	3.5	3.1
5. Educational Services		3.0	3.3	2.8
6. Environmental Services	3.5		3.5	3.2
7. Financial Services	2.4	0.8	2.8	2.3
8. Health Related and Social Services (Other than those listed under 1. Business Services)		2.5	3.0	2.6
9. Tourism and Travel-Related Services	3.0	2.3	3.3	3.2
10. Recreational, Cultural, and Sporting Services (other than Audiovisual Services)			3.4	3.3
11. Transport Services	3.2	2.8	3.1	3.1
12. Other Services not included elsewhere		3.0		3.3
Mean	3.1	2.5	3.3	3.0
Standard Deviation	0.4	0.7	0.2	0.3

Source: Prepared by the author based on data provided by Hoekman (1995); some results appear in his paper.

tiations in telecommunications and financial services for the MERCOSUR countries, a comparison was made in each case to the Uruguay Round commitments in market access (MA). That is why it is useful to estimate the aggregate impact of those changes for each of the countries mentioned; this is presented in Table 9. The discussion of items (1) to (5) is followed by a cross-country comparison of items (7) and (8), more specific liberalization measures, either for the total of possible items or for those negotiated services only.

In Argentina, telecommunication commitments increased total concessions from 208 to 232, with a relatively smaller increase, from 136 to 144, in items without restrictions (MA). The outcome was a slight decline in the relative importance of those items compared to the total under negotiation (from 65% to 62%).

In Brazil, commitments increased from 156 to 224, with a greater increase in “no restriction” items (MA), which went from 19 to 50. This meant an increase, relative to total negotiated items, from 12% to 22%.

Paraguay did not sign additional commitments after the Uruguay Round. The negotiations then involved 36 items for all modes of supply, with 50% of items with no restrictions. In Uruguay, the new concessions increased total commitments from 96 to 108, with an increase from 67 to 72 in MA of items with no restrictions. The outcome was a small decline in the relative importance of items without restrictions out of the total negotiated.

The initial gap between Argentina’s greater openness and the openness of the other countries is slowly closing. Commitments are 232 for Argentina, 224 for Brazil, and 108 for Uruguay (compared to 208, 156, and 96 for them in 1994). Modes of supply with no restriction is now 144 for Argentina and 50 and 72 for the others. To that extent, Argentina seems to have a more open policy on trade in services, but this ought to be confirmed by a detailed comparison of domestic regulations.

At this point it is appropriate to present the indices of relative coverage, since they provide a more precise measure of the openness of negotiated commitments. This is given in items 7 and 8 of Table 9.¹² Such indices consider the degree of relative liberalization for each mode of supply compared to total commitments (item 7) and negotiated commitments (item 8). In each case, the closer the index is to 100, the clearer are the signs of liberalization of total or negotiated commitments.

**Table 9. MERCOSUR Countries: Commitments
by Mode of Supply**

Market access in the Uruguay Round and after adjustment due to protocols of telecommunications and financial services

GATS 1994	Argentina				
Market Access (MA)	CBS	CA	CP	PNP	Total
(1) Total possible items	155	155	155	155	620
(2) Negotiated commitments	52	52	52	52	208
(3) "No Restriction" commitments	39	49	48	0	136
(4) = (2) / (1) x 100	33.5	33.5	33.5	33.5	33.5
(5) = (3) / (2) x 100	75.0	94.2	92.3	0.0	65.4
(6) = (3) / (1) x 100	25.2	31.6	31.0	0.0	21.9
(7) Average sectoral coverage (%)	25.2	31.6	31.9	16.8	26.4
(8) = (7) / (4) x 100	75.0	94.2	95.2	50.0	78.6
GATS 1994 and protocols	CBS	CA	CP	PNP	Total
(1) Total Possible items	155	155	155	155	620
(2) Negotiated commitments	58	58	58	58	232
(3) "No Restriction" commitments	41	55	48	0	144
(4) = (2) / (1) x 100	37.4	37.4	37.4	37.4	37.4
(5) = (3) / (2) x 100	70.7	94.8	82.8	0.0	62.1
(6) = (3) / (1) x 100	26.5	35.5	31.0	0.0	23.2
(7) Average sectoral coverage (%)	27.7	35.5	33.9	18.7	29.0
(8) = (7) / (4) x 100	74.1	94.8	90.5	50.0	77.4

Source: Author's estimates of the effects of the protocols of telecommunications added to the data provided by Hoekman (1995) for the outcome of the Uruguay Round. CBS: Cross Border Supply; CA: Consumption Abroad; CP: Commercial Presence; PNP: Presence of Natural Persons.

GATS Commitments and Policy Issues of MERCOSUR & NAFTA Countries

Brazil					Paraguay					Uruguay				
CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total
155	155	155	155	620	155	155	155	155	620	155	155	155	155	620
39	39	39	39	156	9	9	9	9	36	24	24	24	24	96
2	0	17	0	19	5	5	8	0	18	23	24	20	0	67
25.2	25.2	25.2	25.2	25.2	5.8	5.8	5.8	5.8	5.8	15.5	15.5	15.5	15.5	15.5
5.1	0.0	43.6	0.0	12.2	55.6	55.6	88.9	0.0	50.0	95.8	100	83.3	0.0	69.8
1.3	0.0	11.0	0.0	3.1	3.2	3.2	5.2	0.0	2.9	14.8	15.5	12.9	0.0	10.8
2.3	0.3	14.8	12.6	7.5	3.2	3.2	5.5	2.9	3.7	15.2	15.5	14.2	7.7	13.1
9.0	1.3	59.0	50.0	29.8	55.6	55.6	94.4	50.0	63.9	97.9	100	91.7	50.0	84.9
CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total
155	155	155	155	620	155	155	155	155	620	155	155	155	155	620
56	56	56	56	224	9	9	9	9	36	27	27	27	27	108
9	15	26	0	50	5	5	8	0	18	25	26	21	0	72
36.1	36.1	36.1	36.1	36.1	5.8	5.8	5.8	5.8	5.8	17.4	17.4	17.4	17.4	17.4
16.1	26.8	46.4	0.0	22.3	55.6	55.6	88.9	0.0	50.0	92.6	96.3	77.8	0.0	66.7
5.8	9.7	16.8	0.0	8.1	3.2	3.2	5.2	0.0	2.9	16.1	16.8	13.5	0.0	11.6
9.2	10.0	28.4	18.1	16.4	3.2	3.2	5.5	2.9	3.7	16.5	16.8	15.5	8.7	14.4
25.4	27.7	78.6	50.0	45.4	55.6	55.6	94.4	50.0	63.9	94.4	96.3	88.9	50.0	82.4

**Table 10. NAFTA Countries. GATS Commitments
by Mode of Supply**

Market access in the Uruguay Round and after the adjustment
due to protocols of telecommunications and financial services

Market Access (MA)	Canada				
GATS 1994	CBS	CA	CP	PNP	Total
(1) Total possible items	155	155	155	155	620
(2) Negotiated commitments	88	88	88	88	352
(3) "No Restriction" commitments	59	70	57	0	186
(4) = (2) / (1) x 100	56.8	56.8	56.8	56.8	56.8
(5) = (3) / (2) x 100	67.0	79.5	64.8	0.0	52.8
(6) = (3) / (1) x 100	38.1	45.2	36.8	0.0	30.0
(7) Average sectoral coverage (%)	47.4	50.6	46.8	28.4	43.3
(8) = (7) / (4) x 100	83.5	89.2	82.4	50.0	76.3
GATS 1994 and protocols	CBS	CA	CP	PNP	Total
(1) Total possible items	155	155	155	155	620
(2) Negotiated commitments	96	96	96	96	384
(3) "No Restriction" commitments	59	78	57	0	194
(4) = (2) / (1) x 100	61.9	61.9	61.9	61.9	61.9
(5) = (3) / (2) x 100	61.5	81.3	59.4	0.0	50.5
(6) = (3) / (1) x 100	38.1	50.3	36.8	0.0	31.3
(7) Average sectoral coverage (%)	50.0	55.8	49.4	31.0	46.5
(8) = (7) / (4) x 100	80.7	90.1	79.7	50.0	75.1

Source: Author's estimates of the effects of the protocols of Telecommunications and Financial Services added to the data provided by Hoekman (1995) for the outcome of the Uruguay Round.

CBS: Cross-Border Supply; CA: Consumption Abroad; CP: Commercial Presence; PNP: Presence of Natural Persons.

GATS Commitments and Policy Issues of MERCOSUR & NAFTA Countries

Mexico					US				
CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total
155	155	155	155	620	155	155	155	155	620
63	63	63	63	252	96	96	96	96	384
32	47	0	0	79	77	82	62	0	221
40.6	40.6	40.6	40.6	40.6	61.9	61.9	61.9	61.9	61.9
50.8	74.6	0.0	0.0	31.3	80.2	85.4	64.6	0.0	57.6
20.6	30.3	0.0	0.0	12.7	49.7	52.9	40.0	0.0	35.6
21.3	30.3	19.0	15.2	21.5	55.8	57.4	51.0	31.0	48.8
52.4	74.6	46.8	37.3	52.8	90.1	92.7	82.3	50.0	78.8
CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total
155	155	155	155	620	155	155	155	155	620
69	69	69	69	276	104	104	104	104	416
32	52	0	0	84	84	89	62	0	235
44.5	44.5	44.5	44.5	44.5	67.1	67.1	67.1	67.1	67.1
46.4	75.4	0.0	0.0	30.4	80.8	85.6	59.6	0.0	56.5
20.6	33.5	0.0	0.0	13.5	54.2	57.4	40.0	0.0	37.9
22.9	33.5	21.0	16.8	23.5	60.3	61.9	53.5	33.2	52.3
51.4	75.4	47.1	37.7	52.9	89.9	92.3	79.8	49.5	77.9

Argentina showed the highest value (29.0%) for item 7, followed by Brazil with 16.4%, a slightly lower value for Uruguay, and a very low value for Paraguay. Meanwhile, the degree of liberalization of the negotiations (item 8) was the highest for Uruguay (82.4%), followed by Argentina (77.4%), Paraguay (63.9%), and then Brazil with the lowest (45.4%).

In the same table, a comparison could be made between the different modes of supply. In all cases (except Uruguay) the higher relative value computed for commercial presence stands out. The difference with respect to the aggregate indices, as well as the difference between commercial presence and cross border supply, is highest for Brazil. This suggests protection of the domestic market and the provision of higher incentives for direct foreign investment.

The differences identified in the absolute and relative numbers of negotiated commitments indicate *a priori* that Argentina has a policy of greatest liberalization in MERCOSUR. It is a question for future research whether this pattern is a deliberate strategy that would also be reflected in a detailed analysis of domestic regulations.

It is important to compare the negotiations about market access among the MERCOSUR countries with those of NAFTA. For the latter, Table 10 shows that after the Uruguay Round, the additional effect on negotiated items due to telecommunications and financial services was small in absolute and relative terms. The pattern is of a higher number of negotiated commitments as well as higher shares for items without restrictions negotiated by the United States and Canada, compared to Mexico. The average measure for item 8 in Table 10 is 75% and 78% for Canada and the United States, respectively, compared with 53% for Mexico, without showing much of a greater liberalization commitment for commercial presence than for cross-border supply.

The Service Sector in Regional Agreements¹³

The achievement of GATS was modest in terms of improving the liberalization of service transactions. Since the Uruguay Round, two important negotiations have taken place: in telecommunications and financial services. As mentioned above, developing countries have included fewer commitments than those of the developed world. In mid-1998, the most important commitments had to do with financial services, telecommunications, business services, travel and tourism, and transport.

As to preferential treatment for regional integration agreements, Article V for services is similar to Article XXIV of GATT for goods. Article V stipulates three requirements in order to profit from the exception of Article II (MFN principle): that such preferential agreements cover substantially all trade, that all discrimination is removed, and that the overall level of barriers to trade is not increased. But, as expected, several of those areas require clarification, mainly as to the empirical content of those general criteria. This is important since GATS negotiations include most conventional trade in services similar to goods, and also trade in factors of production, especially in the area of foreign direct investment. For this reason, the measurement problems involved are relevant to all the required criteria: sectoral coverage, degree of discrimination, and the meaning of not increasing the present level of barriers.

Although liberalization at the multilateral level has been modest, at the regional level it has increased rapidly. In the Western Hemisphere, countries have achieved considerable integration, as exemplified by MERCOSUR and other preferential agreements. The liberalization of services was included in the preferential agreements of the 1990s, inspired by the Uruguay Round and NAFTA.

In the Western Hemisphere, two approaches were most important: MERCOSUR (following GATS) and NAFTA. As mentioned above, GATS establishes the gradual liberalization of service markets in successive rounds of commitments negotiated with a positive-list approach; for those specific commitments, market access and national treatment are defined. In the NAFTA agreement, trade in services of the cross-border or “commercial presence” modes of supply are liberalized of all restrictions, unless specified on the negative list. This approach does not require the negotiation of commitments because liberalization is guaranteed by the rules of the MFN and by national treatment, transparency, and free trade in all sectors.

MERCOSUR

In the Montevideo Protocol (1997) the member countries signed a commitment to completely liberalize trade in services. Similar GATS principles were used, there was agreement on complete liberalization in a ten-year period after ratification, and this would require the approval of at least three out of the four member countries, which has not yet taken place.

The protocol is aimed at liberalizing trade in services within the framework of Article V of GATS in order to give universal coverage with automatic incorporation of the yearly rounds. The defined modes of provision and rules of market access and national treatment are similar to those of GATS. The services included are those provided on a commercial basis, excluding those provided by the government.

In the protocol, the MFN principle is absolute, and no exceptions are allowed. Market access and national treatment are similar to GATS, and in the specific commitments exceptions could be made in the case of nonconformity. There are other rules about the recognition by the member countries of each others' certificates or education, promoting cooperation between national institutions (governments, professional associations, and colleges) in the member countries, and stimulating foreign investment and increasing the level and quality of the regional provision of services. Due to the absence of a safeguard clause, each member may modify specific commitments included on the lists during the implementation of the liberalization program.

As to the institutional framework, the Common Market Council would approve the outcome of specific negotiations, and would implement any modification or suspension. The responsibility for negotiations is in the hands of the council. The Trade Council would also apply the protocol, get information, and handle questions, while disputes would be dealt with in line with the mechanisms of MERCOSUR. The protocol allows general exceptions and exceptions that have to do with security, which is similar to GATS regulations.

The Annexes of the Montevideo Protocol and specific commitments (Decisión 9/98) have to do with financial services, land and water transport, air transport, and the movement of natural persons providing services. Lists of initial commitments that are marginally more extensive than the lists negotiated in GATS were made, and a Services Group was created to complete negotiations following the criteria of Resolución 73/98.¹⁴

Other Agreements

There are five subregional associations within APEC (Asia Pacific Economic Cooperation): ASEAN (Association of South East Asian Nations), CER (Australia and New Zealand), the Chile-Canada and Chile-Mexico free trade agreements, and NAFTA. With the exception of ASEAN, which

opted for services liberalization using the positive-list approach, which is similar to GATS, the other subgroups opted for the negative-list approach. With the negative-list approach, all service transactions can take place unless otherwise specified on a list of exceptions (MFN, quantitative restrictions, national treatment), including the provision of services through foreign direct investment, which receives explicit guarantees.

In ASEAN, in line with GATS rules, the sectors included in the liberalization are those in which the members have made commitments to market access, which covers seven of the twelve sectors. In the rest of the associations, there is a total coverage of services and, complementary to those commitments, rules corresponding to investments. Although all the agreements follow the rules of MFN and national treatment, in ASEAN the extension of national treatment to foreign provision is only applied to those sectors in which commitments were made. In ASEAN and CER, no provision is made for the use of quantitative restrictions, but there is provision in the other three agreements.

All the agreements require transparency, which means the publication of laws and regulations and, except for ASEAN, the possibility of making comments on proposals that affect trade in services. All the agreements also have rules about monopolies and exceptions that have to do with consumer protection, public health, and public morality. Because ASEAN is following GATS, there are norms about domestic regulations and safeguards. Future liberalization is a continuous process in ASEAN; the rest of the agreements have different clauses about removing existing restrictions, which vary from not anticipating a process of negotiations to provisions for the dismantling of quantitative restrictions.

Thus there are two forms of liberalization in the subregional agreements within APEC: the positive list and the negative list. It is not easy to reach conclusions about the suitability of either; the second provides more transparency about allowed items than the GATS approach, but this has to be set against the cost and time involved in generating such a negative list.

Finally, a services group for the FTAA started in 1996, and within two years it contributed to the transparency of the existing practices and agreements in the Western Hemisphere at the national and subregional levels. The task of the working group was to identify the agreements and their extent; improve basic information; complete an inventory of measures affecting trade in services; and select a modality of liberalization. All the participants

agree that the objective of negotiations is to establish a basis for the progressive liberalization of services. However, not all of them agree on the best way to negotiate the implementation of that objective. The two basic approaches are the GATS and NAFTA schemes mentioned above.

SECTORAL ISSUES OF MULTILATERAL AND REGIONAL COMMITMENTS OF THE MERCOSUR AND NAFTA COUNTRIES

Telecommunications

The Telecommunications Annex has several sections, but the main commitments are in the section on market access and the use of public telecommunication networks and services. Each member is required to secure access to and use of public telecommunications, transport, and services without discrimination (such as MFN, national treatment, and sector-specific usage) for all providers. It is important that this obligation should hold regardless of the member's commitments with respect to the specific lists. The annex does not deal with the possibility of market access (this is what the lists are for), but with access to the network for providers.

At the end of the Uruguay Round, a ministerial decision was adopted to extend negotiations in basic telecommunications. It was expected that the advantages of the reforms implemented by several countries would be taken into account. Negotiations started in 1994 under the auspices of the Negotiating Group of Basic Telecommunications (NGBT). In April 1996 (the supposed deadline), several governments made offers, but the general consensus was that the outcome was not satisfactory. Thus, negotiations continued up to early 1997 (under a new body, the Group of Basic Telecommunications). Then the Fourth Protocol was enacted in early 1998.

At the end of the negotiations several governments presented lists of commitments that were annexed to the Fourth Protocol. During negotiations, there was noticeable interest in establishing a regulatory environment for commitments to market access. Several participants suggested the development of rules governing interconnections, licenses, independence of the regulatory agent, and so on, which would be included in a text named the "Reference Paper." This document could be (partially or totally) accepted by each member; in early 1997 most of the countries accepted it.

Table 11. MERCOSUR Countries: GATS Commitments by Mode of Supply of Telecommunications

Market access and national treatment (Uruguay round and adjustment due to the telecommunications protocol)

GATS 1994 and protocols	Argentina					Brazil				
	CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total
Market Access (MA)										
(1) Total possible items	15	15	15	15	60	15	15	15	15	60
(2) Negotiated commitments	14	14	14	14	56	15	15	15	15	60
(3) "No Restriction" commitments	10	14	8	0	32	7	15	8	0	30
(4) = (2) / (1) x 100	93.3	93.3	93.3	93.3	93.3	100	100	100	100	100
(5) = (3) / (2) x 100	71.4	100	57.1	0.0	57.1	46.7	100	53.3	0.0	50.0
(6) = (3) / (1) x 100	66.7	93.3	53.3	0.0	53.3	46.7	100	53.3	0.0	50.0
(7) Average sectoral coverage (%)	80.0	93.3	73.3	46.7	73.3	70.0	100	76.7	50.0	74.2
(8) = (7) / (4) x 100	85.7	100	78.6	50.0	78.6	70.0	100	76.7	50.0	74.2
National Treatment										
1) Total possible items	15	15	15	15	60	15	15	15	15	60
(2) Negotiated commitments	14	14	14	14	56	15	15	15	15	60
(3) "No Restriction" commitments	14	14	14	0	42	15	15	9	0	39
(4) = (2) / (1) x 100	93.3	93.3	93.3	93.3	93.3	100	100	100	100	100
(5) = (3) / (2) x 100	100	100	100	0	75.0	100	100	60.0	0.0	65.0
(6) = (3) / (1) x 100	93.3	93.3	93.3	0.0	70.0	100	100	60.0	0.0	65.0
(7) Average sectoral coverage (%)	93.3	93.3	93.3	46.7	81.7	100	100	80.0	50.0	82.5
(8) = (7) / (4) x 100	100	100	100	50.0	87.5	100	100	80.0	50.0	82.5

Source: Author's estimates of the effects of the protocols of Telecommunications and Financial Services added to the data provided by Hoekman (1995) for the outcome of the Uruguay Round.

CBS: Cross-Border Supply; **CA:** Consumption Abroad; **CP:** Commercial Presence; **PNP:** Presence of Natural Persons.

The main reason for this Reference Paper (Cowhey and Klimenko 2001) was that government liberalization commitments were inadequate to guarantee real access to markets for foreign providers of services, mainly due to high concentration in the basic telecommunications sector. National regulations, such as the obligation to provide universal services, interconnection conditions, licensing criteria, and regulation procedures, could create sizeable indirect barriers to trade in such services.

The Reference Paper sets out rules for governments aiming to regulate the main provider that controls the essential facilities of public networks, that is, those facilities that cannot be substituted in the provision of a service. Governments have to ensure that the larger providers would not implement anticompetitive practices, such as cross subsidization or limiting technical information required by competitors. Governments have to secure the interconnection of competitors with the main provider without discrimination, and tariffs based on costs. Governments should secure universal services, with transparent and neutral behavior. The regulator should be independent of the operators. Governments should allocate scarce resources in transparent and nondiscriminatory ways.

The reform policies could be classified into two large groups: some countries (such as Chile), in order to attract investment, chose to introduce competitiveness immediately, combining late privatization with early liberalization; other countries (Argentina, Mexico) decided to introduce rapid privatization of the national operator with a monopolistic position in a given sector for some time, in exchange for which this operator would make certain investments and modernizations. Due to lack of experience since the implementation of the Agreement of Basic Telecommunications, frequent problems were found in interconnection (lack of information on marginal costs), and the rebalancing of tariffs caused by resistance to the entry of new competitors.

The protocol has lists of exceptions to the MFN clause, and some of the commitments have a “phase in” clause; that is, commitments would be implemented at a certain specified date. Each of the countries could have commitments negotiated during the Uruguay Round or related to the Fourth Protocol. In general, the early commitments mainly had to do with value-added services instead of basic telecommunications. Although the Fourth Protocol was oriented to basic telecommunications, several countries seized the opportunity to modify concessions on value added.

The telecommunications commitments of Argentina and Brazil are shown in Table 11; Paraguay and Uruguay did not sign any commitments. The share of items negotiated/total possible for market access by both countries was very high (93%, 100%); the number of nonrestriction commitments in MA was also large, with high relative shares compared to the negotiated items (57%, 50%), resulting in an extensive coverage index of liberalization commitments compared to those negotiated (item 8) of 79% and 74%. National treatment shows more open commitments, but, as mentioned above, there is a need for clarification about the relationship between market access and national treatment. Finally, no additional preferences seem to have been provided for commercial presence.

Argentina¹⁵

Argentina made concessions during the Uruguay Round as well as in the Fourth Protocol. In the former, the commitments covered only the subsectors of data transmission and value added; in the latter, commitments in basic telecommunications were included.

The differences introduced for market access included a “phase in” clause stipulating the elimination of restrictions after 8 November 2000, in most of the cases (except mobile services). The main services concerned were long distance domestic and international telephony (modes of provision 1 and 3), the subsector of data services (modes 1 and 3); the same commitment was made for international telex services. Commitments were also introduced in the subsector of international facsimile services (mode 3), and connections added to provide the service where the firms had the property and exclusive rights to international connection. The subsector of rented telephone circuits was introduced (mode 3); here the owner of the telephone licenses had a period of preferential installation (depending on the zone, from 60 to 180 days), and had the same conditions for the subsector of rented circuits for international voice and data services.

The subsector of mobile services commitments included mobile telephony, personal communications systems, “paging,” and data services. There was limitation on market access (mode 3), which made it clear that mobile telephones would be provided through a duopoly system. In the case of personal communication systems, the administrative authority would decide on the number of providers by area given present and future needs. The “Reference Paper” was also annexed as a commitment.

Table 12. NAFTA Countries: GATS Commitments by Mode of Supply of Telecommunications
Market access and national treatment (Uruguay Round and adjustment due to the Telecommunications Protocol)

GATS 1994 and protocol	Canada				
Market Access (MA)	CBS	CA	CP	PNP	Total
(1) Total possible items	15	15	15	15	60
(2) Negotiated commitments	15	15	15	15	60
(3) "No Restriction" commitments	7	15	7	0	29
(4) = (2) / (1) x 100	100	100	100	100	100
(5) = (3) / (2) x 100	46.7	100	46.7	0.0	48.3
(6) = (3) / (1) x 100	46.7	100	46.7	0.0	48.3
(7) Average sectoral coverage (%)	73.3	100	73.3	50.0	74.2
(8) = (7) / (4) x 100	73.3	100	73.3	50.0	74.2
National Treatment (NT)	CBS	CA	CP	PNP	Total
(1) Total Possible items	15	15	15	15	60
(2) Negotiated commitments	15	15	15	15	60
(3) "No Restriction" commitments	15	15	7	0	37
(4) = (2) / (1) x 100	100	100	100	100	100.0
(5) = (3) / (2) x 100	100	100	46.7	0.0	61.7
(6) = (3) / (1) x 100	100	100	46.7	0.0	61.7
(7) Average sectoral coverage (%)	100	100	73.3	50.0	80.8
(8) = (7) / (4) x 100	100	100	73.3	50.0	80.8

Source: Author's estimates of the effects of the protocols of telecommunications added to the data provided by Hoekman (1995) for the outcome of the Uruguay Round. CBS: Cross Border Supply; CA: Consumption Abroad; CP: Commercial Presence; PNP: Presence of Natural Persons.

GATS Commitments and Policy Issues of MERCOSUR & NAFTA Countries

Mexico					US				
CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total
15	15	15	15	60	15	15	15	15	60
6	6	6	6	24	14	14	14	14	56
0	6	0	0	6	14	14	7	0	35
40.0	40.0	40.0	40.0	40.0	93.3	93.3	93.3	93.3	93.3
0.0	100	0.0	0.0	25.0	100	100	50.0	0.0	62.5
0.0	40.0	0.0	0.0	10.0	93.3	93.3	46.7	0.0	58.3
20.0	40.0	20.0	20.0	25.0	93.3	93.3	70.0	46.7	75.8
50.0	100	50.0	50.0	62.5	100	100	75.0	50.0	81.3
CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total
15	15	15	15	60	15	15	15	15	60
6	6	6	6	24	14	14	14	14	56
6	6	6	0	18	14	14	14	7	49
40.0	40.0	40.0	40.0	40.0	93.3	93.3	93.3	93.3	93.3
100	100	100	0.0	75.0	100	100	100	50.0	87.5
40.0	40.0	40.0	0.0	30.0	93.3	93.3	93.3	46.7	81.7
40.0	40.0	40.0	20.0	35.0	93.3	93.3	93.3	70.0	87.5
100	100	100	50.0	87.5	100	100	100	75.0	93.8

Brazil¹⁶

Brazil did not make commitments on telecommunications during the Uruguay Round, but did make concessions in the Fourth Protocol, which are all the Brazilian commitments for that sector. Market access on voice telephone, data transmission, telex, telegraph, and facsimile provided by public and international services were open for mode 2 and for mode 1 (with restrictions on network facilities licensed in Brazil). Mode 3 was “unbound” except for a law that would be passed one year after the local enactment of this agreement, in which Brazil would schedule commitments on public telecommunications. Mode 4 was also unbound except as indicated in the horizontal section.¹⁷ The same services provided by nonpublic domestic and international services reproduce the commitments for modes 1, 2, and 4, with no restrictions in mode 3.

On value-added services (electronic mail, voice mail, on-line information and data retrieval and processing, electronic data, enhanced value added), market access concessions were open in modes 1, 2, and 3.

Analog/digital cellular mobile service was unbound for mode 1, unrestricted for mode 2, and mode 3 had some restrictions on the duopoly basis of provision, and a voting limit of 49% for foreign investment. Paging services were unbound for mode 1 and open for modes 2 and 3, and the conventional commitment was established for mode 4. Finally, satellite telecommunications and transport services were open for mode 1 (except that there has to be a representative office in Brazil); it was also open for modes 2 and 3 (with some conditions in mode 3 on the location of satellite stations in Brazil, and on the participation of foreign investment in voting being limited to 49%). Finally, the conventional commitment was agreed for mode 4.

The NAFTA Countries and the United States¹⁸

Table 12 shows the present commitments of the NAFTA countries on telecommunications. As expected, there were more signs of liberalization in Canada and the United States, while Mexico’s liberalization commitments out of the total possible (item 7 in Table 12) were less than those of Argentina and Brazil (see Table 11), but similar to them in negotiated commitments (item 8 of the same tables). There is no observed relative bias here concerning lower commitments of cross-border supply than for commercial presence. However, as mentioned above with reference to Table 11,

national treatment resulted in signs of liberalization greater than or equal to those for market access, which should be clarified during the Doha Round.

The commitments on market access that the United States signed at the Uruguay Round mainly covered those in telecommunications defined by the Federal Communications Commission as “Enhanced Telecommunications.” For all the subsectors in question (electronic mail, voice mail, on-line information and data base retrieval, electronic data interchange, enhanced/value-added facsimile services, code and protocol conversion, and on-line information and/or data processing) the commitments for the four modes of supply were the same. No restrictions were specified for modes 1, 2, or 3, while no commitments were made for mode 4, except for those specified in the horizontal section.

In the Fourth Protocol new commitments were added, introducing other subsectors (voice services, packet-switched data transmission services, circuit-switched data transmission services, telex services, facsimile services, and private leased circuit services). All of them received the same treatment—without restrictions in modes of supply 1 and 2. In mode 3 certain limitations on the exclusive relationship of some firms with “Inmarsat” and “Intelsat” were introduced, as well as limitations on the participation of foreign capital and persons applying for licenses for radio services. No commitments were established in mode 4 except for those to do with the horizontal section. Mobile services were introduced in the “other” category, with the same treatment as for the subsectors given above. Finally, the United States incorporated the “Reference Paper.”

Banking Services

At the end of the Uruguay Round, negotiations on financial services were interrupted, but the concessions on market access and national treatment were not considered satisfactory. Several exceptions to the MFN clause were also included. In this way the GATS annex on financial services and the decision on financial services adopted at the end of the Uruguay Round indicated that negotiations should be extended. The second round ended in mid-1995. The agreement was called “interim” because the outcome was not satisfactory. As a result of those negotiations, 29 members (including the European Union as one unit) increased their lists of commitments and/or reduced their exceptions to the MFN clause, and these changes were annexed as the Second Protocol. The

negotiations were reopened in late 1997, and there was agreement on a number of commitments. Several lists of commitments and exceptions to MFN from 70 members were annexed to the Fifth Protocol, which was open to agreement until early 1999. Then 52 members accepted the protocol and it was enacted in March of that year.

Mattoo (1999b) made estimates of the commitments of developing countries, covering 41 African countries, 25 Asian-Pacific ones, 7 in Eastern Europe, and 32 in Latin America. Financial services (all deposits and loans) and all kinds of insurance (life and others) were considered. Only the first three modes of supply were taken into account, because the fourth (the presence of natural persons) is of less weight. A high correlation between market access and national treatment was found.

The indices used followed Hoekman's criteria (1995), but assigned greater weight to commercial presence (0.85 for banking deposits and life insurance, and 0.75 for the rest of banking operations and insurance). Thus the liberalization indices for Argentina for financial services were 0.88 on deposits and 0.80 on loans, which can be compared to the Latin American average of 0.48 for the former and 0.45 for the latter. As to insurance in Argentina, the index was 0 for life insurance and 0.13 for other types, compared to 0.35 for the aggregate of Latin America in the first subsector and 0.31 in the second. Brazil showed indices of 0.21 for banking deposits, and 0.19 for loans, and registered 0.29 for insurance. In banking, Latin America showed more liberal commitments than the Asian countries, but the opposite was true for insurance. Liberalization of the three modes of supply was more common in banking services than in insurance, and the number of countries guaranteeing free access to foreign investors was higher in Latin America than in the Asian-Pacific region.

GATS had three types of results: making commitments at the *status quo* level, signing below the *status quo*, and promising future liberalization. A large number of the countries considered in the Mattoo (1999b) analysis were of the *status quo* type, but several countries committed below the *status quo*. The Mattoo and Schuknecht (1999) paper suggests at least two reasons for this: macroeconomic instability, and that the country already belonged to some trade coalition and wished to retain power in negotiations. There is also the case of the "grandfather" clause that benefited existing firms and maintained better conditions for them. In other cases the promise of future liberalization added credibility to those concessions.

The United States' commitments are connected with the alternative to signing commitments following the "Understanding on Commitments in Financial Services" ("Understanding")¹⁹. There, it is established that "Participants in the Uruguay Round have been enabled to take on specific commitments with respect to financial services under the General Agreement on Trade in Services, on the basis of an alternative approach to that covered by the provisions of Part III of the Agreement." Part III of GATS referred to Specific Commitments established in paragraph 2 (a to f), about the measures a member should not adopt or maintain concerning the commitments of a sector or subsector, except for cases specified in the commitment. In the Understanding some additional measures that could not be introduced are identified for a committed sector. Such measures correspond to the different modes of supply. In addition, the modes of supply are redefined establishing obligations for each subsector.

For market access and national treatment, the commitments of the Understanding tend to widen the obligations of the members when committing some sectors, and this includes the treatment of restrictions equivalent to nontariff restrictions on trade of goods. For example, it is established that "No Member shall take measures that prevent transfers of information or the processing of financial information, including transfers of data by electronic means, or that, subject to importation rules consistent with international agreements, prevent transfers of equipment, where such transfers of information, processing of financial information or transfers of equipment are necessary for conducting ordinary business of a financial service supplier."²⁰

Table 13 shows the commitments of the MERCOSUR countries to market access in the area of banking services. Higher coverage of commitments (items 7 and 8) for commercial presence compared to cross-border supply are very important for Argentina, Brazil, and Paraguay, thus there are similar gaps in Argentina and Brazil and a smaller difference for Paraguay. It should be mentioned that in Uruguay the opposite signs are found, which is presumably related to its more open cross-border tradition.

Table 14 shows that, for the NAFTA countries, most of the total possible items in banking services were negotiated (MA), but for every country there were a few items considered as of "no restriction." However, the observed pattern is different for each country (see, for example, item 8): in Canada, cross-border supply commitments were

Table 13. MERCOSUR Countries: GATS Commitments by Mode of Supply of Banking
Market access and national treatment (Uruguay Round and adjustment due to the Protocols of Financial Services)

GATS 1994 and protocols	Argentina				
Market Access (MA)	CBS	CA	CP	PNP	Total
(1) Total possible items	13	13	13	13	52
(2) Negotiated commitments	13	13	13	13	52
(3) "No Restriction" commitments	2	12	12	0	26
(4) = (2) / (1) x 100	100	100	100	100	100
(5) = (3) / (2) x 100	15.4	92.3	92.3	0.0	50.0
(6) = (3) / (1) x 100	15.4	92.3	92.3	0.0	50.0
(7) Average sectoral coverage (%)	15.4	92.3	92.3	50.0	62.5
(8) = (7) / (4) x 100	15.4	92.3	92.3	50.0	62.5
National Treatment (NT)	CBS	CA	CP	PNP	Total
(1) Total Possible items	13	13	13	13	52
(2) Negotiated commitments	13	13	13	13	52
(3) "No Restriction" commitments	2	12	12	0	26
(4) = (2) / (1) x 100	100	100	100	100	100
(5) = (3) / (2) x 100	15.4	92.3	92.3	0.0	50.0
(6) = (3) / (1) x 100	15.4	92.3	92.3	0.0	50.0
(7) Average sectoral coverage (%)	15.4	92.3	92.3	50.0	62.5
(8) = (7) / (4) x 100	15.4	92.3	92.3	50.0	62.5

Source: Author's estimates of the effects of the protocols of telecommunications added to the data provided by Hoekman (1995) for the outcome of the Uruguay Round. CBS: Cross Border Supply; CA: Consumption Abroad; CP: Commercial Presence; PNP: Presence of Natural Persons.

GATS Commitments and Policy Issues of MERCOSUR & NAFTA Countries

Brazil					Paraguay					Uruguay				
CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total
13	13	13	13	52	13	13	13	13	52	13	13	13	13	52
11	11	11	11	44	3	3	3	3	12	4	4	4	4	16
0	0	0	0	0	1	1	3	0	5	4	4	0	0	8
84.6	84.6	84.6	84.6	84.6	23.1	23.1	23.1	23.1	23.1	30.8	30.8	30.8	30.8	30.8
0.0	0.0	0.0	0.0	0.0	33.3	33.3	100	0.0	41.7	100	100	0.0	0.0	50.0
0.0	0.0	0.0	0.0	0.0	7.7	7.7	23.1	0.0	9.6	30.8	30.8	0.0	0.0	15.4
0.0	0.0	61.5	42.3	26.0	7.7	7.7	23.1	11.5	12.5	30.8	30.8	15.4	15.4	23.1
0.0	0.0	72.7	50.0	30.7	33.3	33.3	100	50.0	54.2	100	100	50.0	50.0	75.0
CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total
13	13	13	13	52	13	13	13	13	52	13	13	13	13	52
11	11	11	11	44	3	3	3	3	12	4	4	4	4	16
0	0	11	0	11	1	1	3	0	5	4	4	4	0	12
84.6	84.6	84.6	84.6	84.6	23.1	23.1	23.1	23.1	23.1	30.8	30.8	30.8	30.8	30.8
0.0	0.0	100	0.0	25.0	33.3	33.3	100	0.0	41.7	100	100	100	0.0	75.0
0.0	0.0	84.6	0.0	21.2	7.7	7.7	23.1	0.0	9.6	30.8	30.8	30.8	0.0	23.1
0.0	0.0	84.6	42.3	31.7	7.7	7.7	23.1	11.5	12.5	30.8	30.8	30.8	15.4	26.9
0.0	0.0	100	50.0	37.5	33.3	33.3	100	50.0	54.2	100	100	100	50.0	87.5

Table 14. NAFTA Countries: GATS Commitments by Mode of Supply of Banking
Market access and national treatment (Uruguay Round and adjustment due to Protocols of Financial Services)

GATS 1994 and protocols	Canada				
Market Access (MA)	CBS	CA	CP	PNP	Total
(1) Total possible items	13	13	13	13	52
(2) Negotiated commitments	12	12	12	12	48
(3) "No Restriction" commitments	5	5	0	0	10
(4) = (2) / (1) x 100	92.3	92.3	92.3	92.3	92.3
(5) = (3) / (2) x 100	41.7	41.7	0.0	0.0	20.8
(6) = (3) / (1) x 100	38.5	38.5	0.0	0.0	19.2
(7) Average sectoral coverage (%)	65.4	65.4	46.2	46.2	55.8
(8) = (7) / (4) x 100	70.8	70.8	50.0	50.0	60.4
National Treatment (NT)	CBS	CA	CP	PNP	Total
(1) Total Possible items	13	13	13	13	52
(2) Negotiated commitments	12	12	12	12	48
(3) "No Restriction" commitments	12	12	0	0	24
(4) = (2) / (1) x 100	92.3	92.3	92.3	92.3	92.3
(5) = (3) / (2) x 100	100	100	0.0	0.0	50.0
(6) = (3) / (1) x 100	92.3	92.3	0.0	0.0	46.2
(7) Average sectoral coverage (%)	92.3	92.3	46.2	46.2	69.2
(8) = (7) / (4) x 100	100	100	50.0	50.0	75.0

Source: Author's estimates of the effects of the protocols of telecommunications added to the data provided by Hoekman (1995) for the outcome of the Uruguay Round. CBS: Cross Border Supply; CA: Consumption Abroad; CP: Commercial Presence; PNP: Presence of Natural Persons.

GATS Commitments and Policy Issues of MERCOSUR & NAFTA Countries

Mexico					US				
CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total
13	13	13	13	52	13	13	13	13	52
13	13	13	13	52	13	13	13	13	52
0	0	0	0	0	0	0	0	0	0
100	100	100	100	100	100	100	100	100	100
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	34.6	0.0	8.7	46.2	46.2	50.0	46.2	47.1
0.0	0.0	34.6	0.0	8.7	46.2	46.2	50.0	46.2	47.1
CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total
13	13	13	13	52	13	13	13	13	52
8	8	8	8	32	13	13	13	13	52
0	0	8	0	8	13	13	2	0	28
61.5	61.5	61.5	61.5	61.5	100	100	100	100	100
0.0	0.0	100	0.0	25.0	100	100	15.4	0.0	53.8
0.0	0.0	61.5	0.0	15.4	100	100	15.4	0.0	53.8
0.0	0.0	61.5	0.0	15.4	100	100	57.7	50.0	76.9
0.0	0.0	100	0.0	25.0	100	100	57.7	50.0	76.9

higher (more open) than those of commercial presence, for the United States the two were similar, while for Mexico commitments were found only for commercial presence. Again, national treatment is greater than or equal to the market access indices.

The degree of detail of the specific commitments of the United States, especially when it comes to the different restrictions in individual states, is vastly different from the schedules of Argentina and Brazil. The intersection of different restrictions imposed by the US federal and states legislations are heterogeneous, in either cross-border supply or commercial presence restrictions.

In the schedules of Argentina and Brazil there is a lack of transparency in GATS as to the interaction of federal and provincial (state) constraints. In spite of this lack of information, it seems that the existing restrictions on local regulations in Argentina and Brazil will not reduce the extent of this apparent gap. The restrictions in the US schedule are so detailed that they should be the subject of further research into the FTAA negotiations.

For all these reasons, it was felt that a comparison of a smaller sector with more information on potential partners would provide better insight into the magnitude of this problem. Because there were more negotiated items in banking than in insurance, the latter was chosen. Then, in the next section, a comparison of the commitments of Argentina, Brazil, and the United States is made, providing an example of the potential complexity of negotiations in the FTAA on the reciprocity of commitments.

Insurance Services

Table 15 shows the commitments of the MERCOSUR countries to market access in insurance services. Only four items are involved. Brazil negotiated all of them, Argentina and Paraguay negotiated three items, and Uruguay only two. But the small countries had a more liberalizing attitude toward items without restrictions. What is common to all the countries is the restriction on the presence of natural persons. The pattern identified above, of higher relative commitments to commercial presence than to cross-border supply, was very clear for all the countries (MA, items 7 and 8), Brazil and Paraguay having the largest differences between the two. Here there is a difference from earlier cases, since, in the case of Brazil, national treatment commitments are more restrictive than those of market access.

Table 16 shows that, for the NAFTA countries, there is a greater coverage of negotiated items in insurance services for market access, but commitments with “no restrictions” were greatest for consumption abroad in Canada and the United States. Items 7 and 8 deal with the intensity of liberalization. The greatest concessions are in the consumption abroad mode for Canada and the United States. Mexico had greater commitments for commercial presence than for cross-border supply. Again the greater opening of national treatment would require further clarification during the Doha Round.

Argentina²¹

Argentina’s present commitments are those on the Uruguay Round lists. The country did not modify those commitments in either the Second or Fifth Protocol.

Argentina’s position in the GATS negotiations seems to contradict the unilateral deregulation implemented since 1992. This has to do with the statement in the schedule of 1994 that refers to “commercial presence”, and particularly to the stipulation that the establishment of new firms was suspended. The registry of firms in existence was closed until 1998, but in practice access was not closed. The acquisition of the license of an existing firm was used to get round the apparent GATS restriction. A question remains as to the negotiation strategy of the Argentine authorities in identifying a nonbinding restriction in the GATS schedule. The existing GATS commitments also provided a point of departure for the MERCOSUR negotiations.

In the GATS (1994), Argentina advanced in its unilateral liberalization, which had started in 1992. It formalized four categories for its commitments in insurance (which covered life, accident, health, nonlife, air and maritime transport) and reinsurance, without reference to related services and professions. With respect to mode of supply 3, “commercial presence,” Argentina stipulated that authorization for new firms was suspended. As to mode of supply 4, the presence of natural persons, in all cases the initial position indicates “unbound” “except for relevant horizontal agreements”. In mode 1 (“cross-border supply”), Argentina declared “unbound” in life and nonlife insurance, but without restrictions either in air and maritime transport or in reinsurance. In mode of supply 2 (“consumption abroad”), Argentina’s position copied that of mode 1. In conclusion, Argentina’s unilateral deregula-

tion resulted in the considerable liberalization of insurance and reinsurance, without this being reflected in the GATS commitments of 1994.

Brazil²²

In the Uruguay Round, Brazil classified its commitments into five categories of insurance and two of related services. Brazil divided the life and health categories, and used the categories of property and liability insurance, but did not include reinsurance. As to mode 3, at that time foreign participation was limited to 50% of total capital, but only one-third of the shares carried voting rights. Agents and brokers were limited to natural persons, and there were no restrictions on auxiliary services. In mode 1 Brazil restricted import insurance to domestically established firms, so the other kinds of insurance and the services of agents and brokers are “unbound”; the “no restrictions” category corresponded to the remaining auxiliary services. This is similar for mode 2.

Brazil participated in the two negotiations on financial services. In both of them, commitments were made and modifications toward greater liberalization were introduced. When a comparison is made between the commitments at the end of the Uruguay Round and those of the Second Protocol, the following differences can be identified: for freight insurance, the clause limiting the participation of foreign capital to 50% and one-third of the votes was replaced by limitations on the establishment of new firms (branches) and the participation of foreign capital; the reinsurance subsector was introduced; for auxiliary services, agencies, and brokers, the clause that limited mode of provision 3 to native persons was replaced by another which laid down that foreigners could be established as brokers, but the participation of foreign capital in domestic firms was restricted.

When the commitments in the Second and Fifth Protocols are compared, the following differences can be seen. No restriction for import insurance was established, but the provision required commercial presence. Insurance services were extended to subsectors of “body, machinery and civil liability insurance for vessels” and insurance for accidents at work. For insurance provided under commercial presence, corporations established in Brazil also need a presidential decree. The state monopoly of labor risks was made explicit, the market would be opened two years after the new legislation was passed. In reinsurance, the market would also be opened two years after the corresponding legislation was passed.

The United States²³

As far as market access is concerned, the US commitments in the Uruguay Round that had to do with “life insurance” and “nonlife insurance” received the same treatment. Restrictions on modes 1 and 2 were not included. Some limitations were introduced as to mode 3, for example, the prohibition on state enterprises (domestic or foreign) becoming insurance companies, with additional restrictions on foreign firms in certain states.²⁴ Some states²⁵ do not have procedures to provide licenses for foreign firms as subsidiaries unless those firms have first obtained a license in another state; in other cases this reservation is applied to branches.²⁶ There were also requirements for the composition of boards, which needed a minimum percentage of nationals, and this depended on the states in which the firms did their business.²⁷ In some states²⁸ the founders of insurance companies are required to be American (in different proportions). For mode 4 the traditional exception had to do with horizontal commitments.

In the “reinsurance and retrocession” subsectors, commitments under modes 1, 2, and 3, included restrictions regarding specific requirements in some states; for instance, for modes 1 and 2, firms from Nevada could acquire reinsurance only from insurance firms accepted in Nevada. For mode 3, restrictions on government-controlled firms and the impossibility of providing licenses to foreign subsidiaries and branches were introduced. In mode 4, again, exceptions from the horizontal section were specified.

The subsector of “services auxiliary to insurance” was divided into several activities: brokerage services, agency services, consultancy actuarial, risk assessment, and claim settlement services. In all of them, modes of supply 1 and 2 were committed without reservation, and, for mode 4, the exception to the horizontal section was included. As to mode 3, restrictions on the need to get licenses for “brokerage services” were introduced. In general, brokers can offer services in the majority of the states by getting a license as a “broker” or “agent,” although in some states²⁹ no license could be provided.

As to the Fifth Protocol, some commitments replaced those signed during the Uruguay Round and the Second Protocol. For the subsectors of “life insurance” and “nonlife insurance,” new limitations were included for mode 1.³⁰ The prohibition on government companies (domestic or foreign) providing financial services was extended to mode of supply 1 (up to then, the restrictions had only applied to mode 3). In mode 3, several reservations

were added: residence in the state for people running mutual insurance firms (this differs among states)³¹; a minimum of seven US citizens with residence in certain states³² could organize mutual insurance; in other states a minimum of 25 residents could constitute a mutual insurance firm.³³ No changes were introduced in mode 4.

The restriction in mode 1 on firms controlled by governments was also introduced for “reinsurance and retrocession” services. For the “services auxiliary to insurance” subsector, the restrictions on getting licenses affected modes 1 and 3, with regulations specifying restrictions in some states on providing licenses to nonresidents who did not obtain them in another state. As to “brokerage services,” the restrictions included earlier in national treatment for mode 4 were then included in market access for modes 1 and 3. In “agency services” and “consultancy actuarial, risk assessment and claim settlement services” similar changes to brokerage services were introduced.

In national treatment at the Uruguay Round, the “life insurance” and “nonlife insurance” subsectors received the same treatment. For “cross-border” provision, a tax was imposed on the premium paid to firms not registered under the laws of the United States (1% for “life” and 4% for “nonlife”). It is also mentioned in the schedules that some states and municipalities impose taxes on premiums to cover expenses in their jurisdiction. Mode 2 was not committed, while modes 3 and 4 were committed without restrictions.

The “reinsurance and retrocessions” subsector shows the same treatment as before for modes 2, 3, and 4, including the imposition of a 1% tax on premiums for mode 1. As to “services auxiliary to insurance,” mode 1 was committed without restrictions. Mode 2 was not committed, while restrictions were introduced depending on the activity (brokerage services, agency services, and consultancy actuarial, risk assessment, and claim settlement services) for modes 3 and 4. Certain states did not provide licenses for nonresidents, others provided licenses only for certain types of insurance, while others³⁴ charged higher taxes for licenses to nonresidents. As to “agency services,” in mode 3, licenses were required for certain types of insurance in some states.³⁵ In “consultancy actuarial, risk assessment and claim settlement services” a note was included in mode 4 requiring state residence in order to obtain a license.³⁶

In the Fifth Protocol (national treatment), for the “life insurance” and “nonlife insurance” subsectors, the tax imposed on premiums by certain

states and municipalities was removed. In addition, mode 2 was committed without restrictions. Mode 4 was not committed except for the horizontal concessions. For “reinsurance and retrocessions” the same changes were introduced as for modes 2 and 4, while for mode 1, the reservation included was that in the State of Texas, mutual insurance companies could not get reinsurance from foreign firms. “Services auxiliary to insurance” showed some changes in “brokerage services” under modes 1 and 3, license charges in some states³⁷ could be subject to higher rates for non-residents, and mode 2 was also committed. As to “agency services,” mode 2 was committed, while for mode 4 (with prior restrictions) the commitments included were those of the horizontal section. In “consultancy actuarial, risk assessment and claim settlement services,” the modification introduced was similar to that for “agency services.”

Synthesis of the Insurance Commitments in GATS of Argentina, Brazil, and the United States

A synthesis is given here of a detailed inventory and evolution of the commitments of Argentina, Brazil, and the United States in the area of market access. This was done by classifying these services into three large categories: life and nonlife insurance (LNL), reinsurance (REI), and auxiliary agents (AUX), and dealing with commitments made for modes of supply 1 (cross-border supply), 2 (consumption abroad), and 3 (commercial presence).

In Argentina, LNL is limited for modes 1 and 2, and open for mode 3, while REI is open for modes 1, 2, and 3, and AUX is limited. In Brazil, LNL, REI, and AUX are limited for mode 3, there are limitations on LNL in mode 1, REI is closed for modes 1 and 2, and AUX is closed for brokerage and open for the other auxiliary services in modes 1 and 2.

In the United States commitments are more comprehensive. In LNL and REI they are restricted in modes of supply 1, 2, and 3 by some state regulations and the limitations on government-owned firms, with additional limitations in mode 3 for mutual companies. Given those general restrictions, LNL is more open for modes 1 and 2 than for mode 3, and for REI there are limitations for modes 1, 2, and 3. AUX is more open for modes 1 and 2 and limited for mode 3.

Limiting mode of supply 1 (cross-border) and opening mode 3 (commercial presence) resembles tariff protection for goods, and this applies both to established firms and to foreign direct investment (tariff jumping). The

differences found in signs of liberalization may not reflect the real restrictions imposed by domestic regulations, since countries have tended to negotiate below the *status quo*, with higher liberalization commitments in domestic policies and regulations in a number of sectors. Those asymmetries between countries in the coverage and intensity of regulations will have important implications since they are the initial conditions of the Doha negotiation process, which should provide ways and means of closing the current gaps, taking into account country preferences and constitutional arrangements.

4. ON NEGOTIATION ISSUES³⁸

The FTAA agreement is one of the new generation since, apart from the trade issues themselves, it includes subjects such as domestic regulations, rules of common recognition of evaluation procedures, and conformity to sanitary and phytosanitary rules. However, limited experience in negotiating services, and the large number of issues pending (emergency safeguards, subsidies, government procurement),³⁹ means that the negotiation strategy has to be considered carefully.

The most important subject to tackle is the relationship between the MFN rules and pre-existing integration agreements. This has to do with the interpretation of Article V of GATS (exemptions to Article II of the MFN principle about regional trading agreements). Empirical content has to be provided for the requirements outlined there, for all trade, with all discrimination removed, and with the overall level of barriers not increased. This leads to the important subject of sequencing, since a larger commitment involving the FTAA in certain services will make it impossible to negotiate deeper commitments in some subregional frameworks.

Nonetheless, the important negotiation issue is the extent to which former preference margins could be maintained. The San José Ministerial Statement mentioned that individual countries or groups of countries could allow the organization of blocs with common commitments and interests. In addition, commitments in the FTAA could coexist with other commitments, meaning deeper integration. The San José statement also considered the difference in income levels of the economies involved. This might mean considering differences in negotiations as to the size of the economies as well as to the possibility of nonreciprocity vis-à-vis countries with higher income levels.

In methods and modalities, several criteria for formula and cluster approaches have been suggested.⁴⁰ The negotiating group on services announced that the modality for specific negotiations in the FTAA,⁴¹ should imply that the initial offer be comprehensive and in line with current laws and regulations, existing international obligations, and domestic access opportunities. As to commercial presence, investment offers may be submitted either to the services or to the investments negotiating group. Although those groups would continue to meet separately, the two groups may meet for the joint discussion of common issues.

The comparison between the commitments of the largest countries of MERCOSUR and the United States are good examples of the differences in commitments between different countries, and the asymmetries of the regulations within each country. This adds an important dimension to the relationship between federal and state governments, introducing additional heterogeneity in the restrictive nature of the commitments. But it is not known to what extent Argentina and Brazil, both federal governments, include important restrictions that are not transparent in their schedules of GATS commitments in their provincial (state) constitutions and domestic regulations. In addition, this might not be an exclusive feature of financial services only, it might cut across several commitments and therefore greater transparency is required in new schedules.

Early in 2001 there was a comparison of the negotiation positions of the United States and MERCOSUR that suggested several important subjects for the future agenda. On the one hand, the United States supports the position of including only commercial transactions in the negotiation of services, and excluding commercial presence, which should be treated in the chapter on investments. This follows the NAFTA approach, using the negative list as a liberalization procedure. On the other hand, MERCOSUR follows GATS-based negotiation criteria by including commercial presence in services and using the positive-list approach. In the US position, it is recognized that the MFN and national treatment rules should be applied flexibly in order to take care of sensitive sectors. But what is stronger in the US position are the rules on market access, which would also imply commitments on domestic regulations, including those concerning commercial presence.

As to the effect of services liberalization on goods, the results of a hypothesis for Argentina were presented in Berlinski and Romero (2001) and Berlinski and Soifer (2002). The hypothesis dealt with the case in which all

Table 15. MERCOSUR Countries: GATS Commitments by Mode of Supply of Insurance
Market access and national treatment (Uruguay Round and adjustment due to the Protocols of Financial Services)

GATS 1994 and protocols	Argentina				
	CBS	CA	CP	PNP	Total
Market Access (MA)					
(1) Total possible items	4	4	4	4	16
(2) Negotiated commitments	3	3	3	3	12
(3) "No Restriction" commitments	1	1	0	0	2
(4) = (2) / (1) x 100	75.0	75.0	75.0	75.0	75.0
(5) = (3) / (2) x 100	33.3	33.3	0.0	0.0	16.7
(6) = (3) / (1) x 100	25.0	25.0	0.0	0.0	12.5
(7) Average sectoral coverage (%)	25.0	25.0	37.5	37.5	31.3
(8) = (7) / (4) x 100	33.3	33.3	50.0	50.0	41.7
National Treatment (NT)					
(1) Total Possible items	4	4	4	4	16
(2) Negotiated commitments	3	3	3	3	12
(3) "No Restriction" commitments	1	1	0	0	2
(4) = (2) / (1) x 100	75.0	75.0	75.0	75.0	75.0
(5) = (3) / (2) x 100	33.3	33.3	0.0	0.0	16.7
(6) = (3) / (1) x 100	25.0	25.0	0.0	0.0	12.5
(7) Average sectoral coverage (%)	25.0	25.0	37.5	37.5	31.3
(8) = (7) / (4) x 100	33.3	33.3	50.0	50.0	41.7

Source: Author's estimates of the effects of the protocols of financial services added to the data provided by Hoekman (1995) for the outcome of the Uruguay Round.

CBS: Cross Border Supply; CA: Consumption Abroad; CP: Commercial Presence; PNP: Presence of Natural Persons.

GATS Commitments and Policy Issues of MERCOSUR & NAFTA Countries

Brazil					Paraguay					Uruguay				
CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total
4	4	4	4	16	4	4	4	4	16	4	4	4	4	16
4	4	4	4	16	3	3	3	3	12	2	2	2	2	8
0	0	1	0	1	1	1	3	0	5	1	1	1	0	3
100	100	100	100	100	75.0	75.0	75.0	75.0	75.0	50.0	50.0	50.0	50.0	50.0
0.0	0.0	25.0	0.0	6.3	33.3	33.3	100	0.0	41.7	50.0	50.0	50.0	0.0	37.5
0.0	0.0	25.0	0.0	6.3	25.0	25.0	75.0	0.0	31.3	25.0	25.0	25.0	0.0	18.8
31.3	12.5	75.0	50.0	42.2	25.0	25.0	75.0	37.5	40.6	25.0	25.0	37.5	25.0	28.1
31.3	12.5	75.0	50.0	42.2	33.3	33.3	100	50.0	54.2	50.0	50.0	75.0	50.0	56.3
CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total
4	4	4	4	16	4	4	4	4	16	4	4	4	4	16
4	4	4	4	16	3	3	3	3	12	2	2	2	2	8
0	0	3	0	3	1	1	3	0	5	2	2	2	0	6
100	100	100	100	100	75.0	75.0	75.0	75.0	75.0	50.0	50.0	50.0	50.0	50.0
0.0	0.0	75.0	0.0	18.8	33.3	33.3	100	0.0	41.7	100	100	100	0.0	75.0
0.0	0.0	75.0	0.0	18.8	25.0	25.0	75.0	0.0	31.3	50.0	50.0	50.0	0.0	37.5
12.5	0.0	75.0	37.5	31.3	25.0	25.0	75.0	37.5	40.6	50.0	50.0	50.0	25.0	43.8
12.5	0.0	75.0	37.5	31.3	33.3	33.3	100	50.0	54.2	100	100	100	50.0	87.5

Table 16. NAFTA Countries: GATS Commitments by Mode of Supply of Insurance
Market access and national treatment (Uruguay Round and adjustment due to the Protocols of Financial Services)

GATS 1994 and protocols	Canada				
Market Access (MA)	CBS	CA	CP	PNP	Total
(1) Total possible items	4	4	4	4	16
(2) Negotiated commitments	4	4	4	4	16
(3) "No Restriction" commitments	0	3	0	0	3
(4) = (2) / (1) x 100	100	100	100	100	100
(5) = (3) / (2) x 100	0.0	75.0	0.0	0.0	18.8
(6) = (3) / (1) x 100	0.0	75.0	0.0	0.0	18.8
(7) Average sectoral coverage (%)	50.0	87.5	50.0	50.0	59.4
(8) = (7) / (4) x 100	50.0	87.5	50.0	50.0	59.4
National Treatment (NT)	CBS	CA	CP	PNP	Total
(1) Total Possible items	4	4	4	4	16
(2) Negotiated commitments	4	4	4	4	16
(3) "No Restriction" commitments	3	1	0	0	4
(4) = (2) / (1) x 100	100	100	100	100	100
(5) = (3) / (2) x 100	75.0	25.0	0.0	0.0	25.0
(6) = (3) / (1) x 100	75.0	25.0	0.0	0.0	25.0
(7) Average sectoral coverage (%)	87.5	62.5	50.0	50.0	62.5
(8) = (7) / (4) x 100	87.5	62.5	50.0	50.0	62.5

Source: Author's estimates of the effects of the protocols of telecommunications added to the data provided by Hoekman (1995) for the outcome of the Uruguay Round. CBS: Cross Border Supply; CA: Consumption Abroad; CP: Commercial Presence; PNP: Presence of Natural Persons.

GATS Commitments and Policy Issues of MERCOSUR & NAFTA Countries

Mexico					US				
CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total
4	4	4	4	16	4	4	4	4	16
4	4	4	4	16	4	4	4	4	16
0	0	0	0	0	0	3	0	0	3
100	100	100	100	100	100	100	100	100	100
0.0	0.0	0.0	0.0	0.0	0.0	75.0	0.0	0.0	18.8
0.0	0.0	0.0	0.0	0.0	0.0	75.0	0.0	0.0	18.8
12.5	0.0	50.0	0.0	15.6	50.0	87.5	50.0	50.0	59.4
12.5	0.0	50.0	0.0	15.6	50.0	87.5	50.0	50.0	59.4
CBS	CA	CP	PNP	Total	CBS	CA	CP	PNP	Total
4	4	4	4	16	4	4	4	4	16
4	4	4	4	16	4	4	4	4	16
1	0	4	0	5	0	4	3	0	7
100	100	100	100	100	100	100	100	100	100
25.0	0.0	100	0.0	31.3	0.0	100	75.0	0.0	43.8
25.0	0.0	100	0.0	31.3	0.0	100	75.0	0.0	43.8
25.0	0.0	100	0.0	31.3	50.0	100	87.5	50.0	71.9
25.0	0.0	100	0.0	31.3	50.0	100	87.5	50.0	71.9

services would be provided at international prices, and the implications for factor rewards and consumer benefits were measured. This exercise was illustrative of the interrelation of protection on outputs of goods and inputs of services, where the greater international efficiency of services would increase output rewards. Then, if tariff protection on goods were not reduced, there would be a discriminatory solution for the consumer, since the differential value added from the greater efficiency of services would be captured (exclusively or shared) by producers of services, or by their main users.

Finally, the large size of most of the firms involved in the provision of services will result in some market power, and this requires the existence of independent regulators to ensure fair treatment for consumers. This means that domestic deregulation becomes a necessary condition for providing new opportunities for trade and investment. In addition, there are measurement problems in services due to their intangibility and to asymmetric information; for this reason, it is difficult to know the current degree of protection in each service activity, or to evaluate the impact of a change in regulations.

5. CONCLUSION

The special characteristic of services is that international restrictions on them are based on commitments like those of GATS and similar agreements, which are not uniform among countries, and on the asymmetry of domestic regulations.

The purpose of this study was first to identify the commitments of the MERCOSUR and NAFTA countries in the Uruguay Round. Then, by adding the effects of the more recent commitments in telecommunications and financial services, the present signs of liberalization were measured. Next, a detailed comparison of present GATS commitments was made for selected MERCOSUR and NAFTA countries (Argentina, Brazil, and the United States) in telecommunications, banking, and insurance services. Finally, some reflections on negotiation issues were presented.

One of the main problems in the empirical treatment of the trade in services is lack of information. The available information (subsidies or regulations for each activity) does not allow us to know the degree of the industry's protection. This problem was tackled here by using an approach used previously by Hoekman (1995), the purpose of which was to evaluate the degree of liberalization.

In addition to the openness of the negotiations in some countries of MERCOSUR, an asymmetry among modes of supply was identified, and this liberalization was greater for commercial presence than for cross-border supply, especially in the cases of Brazil and Paraguay. However, confirmation of those signs requires a comparative analysis of the corresponding domestic regulations that would provide more information about the nature of the asymmetries in modes of supply. The dispersion of commitments among MERCOSUR countries would also require regional negotiations toward a convergence of national positions, which would need the support of domestic regulators.

It is important to compare the NAFTA countries' negotiations with those of MERCOSUR. For the former, the additional effect due to telecommunications and financial services in the negotiations after the Uruguay Round was small in absolute and relative terms. The pattern that emerged was that more commitments were negotiated, and items with no restrictions had a higher share for the United States and Canada compared to Mexico, which did not show greater liberalization commitment for commercial presence than for cross-border supply.

The number of commitments in telecommunications negotiated by Argentina and Brazil (Paraguay and Uruguay did not sign any commitments) was considerable, and there was no bias toward commercial presence. The number of nonrestriction commitments was also high. There were more commitments in national treatment, but the relationship between market access and national treatment in the GATS negotiations needs to be clarified. Finally, among the NAFTA countries, signs of the liberalization commitments were greatest in Canada and the United States, while Mexico's commitments out of the total possible were less than those of Argentina or Brazil.

The MERCOSUR countries' commitments in banking services were greater for commercial presence than for cross-border supply, and were important for Argentina, Brazil, and Paraguay. It should be said that Uruguay showed the opposite signs, presumably because of its more open cross-border tradition. As to the NAFTA countries, a number of the total possible items were negotiated, but with very few items considered as "no restriction." The observed pattern is different for each country: in Canada, cross-border supply commitments were greater (more open) than those for commercial presence, for the United States the two were similar, while Mexico only had commitments in commercial presence.

As to insurance, among the MERCOSUR countries, Brazil negotiated all the items, while Argentina, Paraguay, and Uruguay made commitments on fewer items. But a detailed analysis of the negotiations showed a more protective attitude in Brazil than in Argentina. The earlier pattern identified in this paper of more commitments in commercial presence than in cross-border supply was very clear for all the countries, Brazil and Paraguay having the largest differences between the two. The NAFTA countries show greater coverage of negotiated items, but commitments with “no restrictions” were high for consumption abroad in Canada and in the United States, while the most frequent mode of provision in Mexico was commercial presence. Then, for Canada and the United States, the highest coverage of concessions was in consumption abroad, and Mexico showed higher commitments for commercial presence than for cross-border supply.

For the United States, the detailed specifications about restrictions mainly involving state regulations for insurance were an important source of heterogeneity in restrictions on market access and national treatment. This, in addition to restrictions on government-owned and mutual firms, constituted the main source of the restrictions identified. Then, by making transparent similar restrictions by provincial (state) legislations in Argentina and Brazil, those restrictions should become an important issue in the FTAA negotiations.

The important issues involved in the FTAA are: the type of agreement and the negotiation methods; the coverage of commitments in light of the present asymmetry and the different constitutional organization of the countries involved; the exceptions to the MFN principle and the treatment of pre-existing commitments (bilateral, regional, multilateral); the restrictions imposed by domestic regulations and the possibility of regulatory cooperation; the different specific or generalized use characteristics of the services involved; the different intensity of commitments for various modes of supply; the interaction between the negotiation of goods and that of services; and the size of the firms engaged in the provision of services and the effect on their market power.

All this shows the need for further research into the effect on the trade in goods and services of the liberalization and deregulation of services. Experience also shows the importance of identifying specific services before using general rules that might be desirable for the sake of simplicity. For this reason, the task ahead is to provide detailed information in

order to identify particular domestic regulations, as this would prove important for the negotiating agenda.

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NOTES

1. Instituto and Universidad Torcuato Di Tella, Buenos Aires, Argentina, berlin@utdt.edu. The efficient assistance of A. Lazzarich and F. Schlichter, as well as detailed comments on preliminary versions by M. Vaillant, G. Licandro, and S. Stephenson, are gratefully acknowledged. The opinions expressed herein are the author's.
2. The general issues in this section are based on Hoekman (1995), Mattoo (1999a), and Stephenson (1999).
3. The balance of payments identifies the transactions between residents and nonresidents of a country. In defining residence the Manual of the International Monetary Fund uses several indicators.
4. This relates to the provision of services from one member established in the country of another.
5. See Karsenty (2000) for a detailed discussion.

6. This involves 155 sectors of GATS services regarding 4 modes of supply (cross border supply, consumption abroad, commercial presence, presence of natural persons).
7. Market access refers to nondiscrimination against suppliers entering the market (domestic or foreign). National treatment refers to nondiscrimination between domestic and foreign suppliers. But Feketekuty (2000) points out that national treatment (NT) is independent of market access (MA), except when a restriction discriminating MA results in a limitation to NT. On the other hand, Low and Mattoo's (2000) point of view is that the overlapping between MA and NT is not identified, therefore the area of definition of NT is poorly defined.
8. But not ratified by MERCOSUR's trade partners.
9. See for example the different cases discussed in Findlay and Warren (2000).
10. Given the lack of information regarding weights, either by detailed providers or by mode of supply, those aggregate figures should be read with caution and interpreted as preliminary signals to be confirmed by domestic regulations.
11. An economic necessity test relates to regulations stipulating that foreign providers may enter the market only if domestic providers are unable to satisfy demand. The movement of natural persons supplying services is most frequently affected by the need to pass some kind of test.
12. For sectoral coverage, following Hoekman (1995), commitments were valued with extremes of 0 when "unbound" and of 1 for negotiations without restrictions. The intermediate value (0.5) represented relative restrictions. Item 7 of Table 9 represents average sectoral coverage; that is, compared to total possible concessions. Item 8 is the outcome of dividing item 7 by item 4 in the same table (the latter indicates the proportion of items negotiated compared with total items). This way, item 8 indicates the degree of liberalization of the negotiated items.
13. Based on Stephenson (1999; 2000a, b), Peña (2000), and Stephenson and Prieto (2002).
14. In the third round of negotiations finished in December 2001 (Document MERCOSUR/CMC/DEC.10/01), several lists of specific commitments were approved. The idea was that those negotiations would be considered for approval when the Montevideo Protocol is approved. A comparison of the WTO commitments with the effect of those potential concessions did show important increases in MERCOSUR commitments for every country.
15. The commitments were included in the document GATS/SC/4/Suppl.1/Rev.1.
16. The commitments were detailed in the document GATS/SC/13.
17. The horizontal section (horizontal commitments) usually consists of policies that restrict the use of a mode of supply by foreign suppliers across all sectors.
18. The commitments for the United States were taken from documents GATS/SC/90 and GATS/SC/90/Supplement 2.

19. Document LT/UR/U/1. In November 1995, 27 countries accepted the “Understanding” as a basis for making commitments, the benefits of which are extended to countries which did not sign it.
20. The different definitions used in the Understanding may introduce a bias into the comparison between the schedules of the MERCOSUR countries, which did not sign the understanding, and others, such as Canada and the United States, which did.
21. Present commitments are included in GATS/SC/4.
22. The commitments of the Uruguay Round were taken from document GATS/SC/13, those of the Second Protocol from GATS/SC/13/Suppl.1/Rev.1, and the commitments of the Fifth Protocol from GATS/SC/13/Suppl.3.
23. The commitments for the United States were taken from documents GATS/SC/90, GATS/SC/90/Suppl.1 and Suppl.3.
24. Alabama, Arkansas, Colorado, Connecticut, Delaware, Georgia, Hawaii, Idaho, Kansas, Kentucky, Maryland, Nevada, New York (“Non-life” firms are authorized, while firms dealing with “Life” and “Health” are not), North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Washington, West Virginia, Wyoming.
25. Minnesota, Mississippi, and Tennessee.
26. Arkansas, Arizona, Georgia, Hawaii, Kansas, Minnesota, Nebraska, New Jersey, North Carolina, Oregon, Pennsylvania, Tennessee, Utah, Vermont, Wisconsin, Wyoming and West Virginia.
27. The percentages are: 100% in Louisiana; in Washington (“mutual life companies with the majority of the board resident in the State”); 2/3 in Oklahoma and Pennsylvania (“stock and mutual companies”); it is required that the majority are US citizens in California (for mutual insurer companies operating only in California), Florida (for “stock and mutual insurers”), Georgia (for “stock and mutual insurers with resident in the state”), Idaho (for “stock and mutual insurers”), Indiana, Kentucky, Mississippi, Ohio (for “legal reserve life insurers”), Oregon, New York, South Dakota (except if more than 1000 persons have the right to vote for the board of directors and the majority of voters reside out of the state, or less than 1% of the shares are owned by state residents), 7 members in Tennessee (for “mutual life insurance companies”); 3 residents in Illinois (for “stock, mutual, or legal reserve insurers”) and Missouri (for “life and accident”).
28. For “stock and mutual insurers”: 100% in Hawaii, Idaho, South Dakota and Washington; 2/3 residents in Arizona and Georgia; the majority in Alaska, Florida (for “stock and mutual insurers), Arkansas (majority for mutuals and stocks), Kansas (for “all life insurance companies and mutual insurers other than life”), Kentucky (for “mutual or stock insurers”); Maine (life, health, and accident and mutual aid associations with state residency for mutuals), Missouri (13 minimum with overall majority residency in the state), Montana (“stock or mutual insurers”), Texas (life, health, accident and mutual aid associations with

- state residency for mutuals), Wyoming (for “reserve stock and mutual insurers”).
29. Florida, Iowa, Kentucky, Michigan, Minnesota, Mississippi, Oregon, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.
 30. Commitments could be changed after three years, in which case the negotiation of some compensation might be required.
 31. Arkansas (insurance mutual and agricultural firms), California (district mutuals on fire insurance), Idaho (all mutuals), Kansas (all mutuals), North Dakota (all mutuals), Minnesota (urban mutuals, and fire insurance mutuals in rural areas), Mississippi (all mutuals), Montana (insurance mutuals of agriculture firms), Vermont (insurance cooperatives of fire insurance), Wyoming (insurance mutuals of agricultural exploitations).
 32. Alaska, Arizona (a minimum of 10 US citizens is required, the majority of them being residents of the state), Arkansas, California, Delaware, Florida, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Jersey, North Dakota, Oklahoma (a minimum of 10 US citizens is required, the majority of them being residents of the state), Oregon, Pennsylvania, South Dakota, Virginia, Vermont, Washington, West Virginia, and Wyoming.
 33. Arizona, Arkansas, California, Delaware, Georgia, Idaho, Indiana, Kentucky, Maine, Maryland, Mississippi, Montana, Pennsylvania, South Dakota, Tennessee, Vermont, Virginia, Washington, and Wyoming.
 34. Alabama (all except for life, accident and health), Arkansas (property, casualty, surety and marine), Louisiana (property and casualty), and New Mexico (property and casualty).
 35. Florida (general lines, life and health), Hawaii (property and operations), Kentucky (general lines, life and health), Louisiana (life and health), New Mexico (life and health), Ohio (all except life and casualty), and Rhode Island (all except general lines).
 36. California (for adjusters, life and disability insurance analysts), Georgia (for inspection when not accompanied by a licensed resident adjuster), Illinois (for non-resident public adjusters who are licensed in a state which does not permit equal treatment to Illinois residents), Mississippi (for independent adjusters), and Nevada (for appraisers and adjusters).
 37. Alaska, Arizona, Arkansas, California, Colorado, Georgia, Indiana, Louisiana, Maine, Massachusetts, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Utah, and Vermont.
 38. This section draws on Da Motta Veiga and Halperin (2001).
 39. For a detailed discussion of pending issues see Sauv e (2002).
 40. See OECD (2001), chapters 3 and 4.
 41. Document FTAA.TNC/20/Rev.1

Negotiating the FTAA Between the Main Players: The United States and MERCOSUR

FERNANDO MASI* AND CAROL WISE**

1. INTRODUCTION¹

For some forty years, beginning with the creation of the General Agreement on Tariffs and Trade (GATT) in 1946 and up until the mid-1980s, the United States has pursued a two-pronged trade strategy based on unilateralism and multilateralism. The more recent shift toward bilateralism (Canada-US Free Trade Agreement) and regionalism (North America Free Trade Agreement) since 1985 is largely a reflection of the exhaustion of this uni/multilateral strategy in achieving US trade goals, as witnessed in the slow and tedious pace that befell the Uruguay Round negotiations. Now, since the passage in July 2002 of the Trade Promotion Authority (TPA—previously called “fast track”) by the US Congress,² it appears that bilateralism, regionalism, and multilateralism will simultaneously prevail over US commercial policy. In terms of how this multifaceted trade stance will affect Latin America, this chapter analyzes the current and most critical juncture for a US regional strategy: the ability of the Bush trade policy team to negotiate constructively with MERCOSUR, the other key player in the hemisphere, whose participation and collaboration is essential for the successful completion of a 34-member Free Trade Area of the Americas (FTAA) agreement.

Since the launching of formal negotiations in April 1998, the FTAA process has been put to considerable test. External shocks, antiglobalization protests, mounting domestic political instability in Latin America, and a marked antipathy toward the deepening of trade liberalization in the

US Congress all dampened the prospects for completing this ambitious deal by the targeted 2005 deadline. The main issues at stake on the FTAA negotiating agenda—market access, services, investment, agriculture, and trade remedy laws—were also the most acrimonious for the US Congress. But with a Republican majority in both houses, it appeared that other barriers to the completion of the FTAA on the US side, including the resolution of differences over how to properly address the environmental and labor market effects of trade liberalization, could finally be overcome.

However, during 2001 a series of economic and political events converged to inject a fresh dose of uncertainty into the FTAA process. On the economic front, the unprecedented growth and dynamic productivity rates that had prevailed in the United States from 1994 to 2000 came to a halt. As always, a slowdown in North America augurs recession for the rest of the hemisphere and this period was no exception. Yet, this particular slowdown came at a point when all of the countries but Mexico were still struggling to recapture the 5% to 6% regional growth rate that had finally been achieved by 1997. The fact that exports from Central and South America to the US market had nearly doubled from 1991 to 2001 was testimony to the progress that had been made in expanding regional markets;³ still, trade ties had not been strengthened to the extent that this could help counter other troubling economic trends in the hemisphere.

On the political front, and in the aftermath of the September 11 attacks on New York City and Washington, US foreign policy had understandably succumbed to security concerns. When the Bush administration and the US Congress did return to the question of trade policy, the post-September 11 debate had become decidedly protectionist. Whereas previous commercial policy disagreements in Congress had been weighted toward trade-related issues, such as the need for labor and environmental standards in future agreements or the private sector's insistence on the right to litigate against dumping and unfair subsidies from abroad (see Destler and Balint 1998), Congress now turned its attention to tariffs, subsidies, and other barriers to shield US producers from further competition. For instance, in December 2001 the House of Representatives finally passed the TPA bill with just a one-vote margin, but only because of last-minute concessions made to agriculture and textile-producing states.

Given this context of escalating protectionism, economic slowdown in Latin America, and ongoing security concerns on the part of US policy-

makers, the question of trade preferences and strategic policy choice vis-à-vis the FTAA is perhaps even less clear than when the negotiations started. The pressures from continued international economic volatility and the apparent weakening of political will for deeper liberalization throughout the hemisphere have rekindled earlier predictions concerning the futility of the FTAA project altogether.⁴ However, those who champion the FTAA argue that, if anything, the steady stream of external economic and political shocks, combined with the favorable trade gains achieved thus far from liberalization and subregional integration, have strengthened the resolve of hemispheric leaders and policymakers to see the FTAA negotiations through to a successful finish.⁵

In this chapter we set aside these largely rhetorical debates and instead approach the FTAA as a work in progress. In doing so, we stick with the old adage that “actions speak louder than words.” From the standpoint of the United States, we analyze the double innuendo concerning diplomatic gestures toward a hemispheric integration project, on the one hand, and the clear preference for bilateral (Chile) and minilateral (NAFTA, the Central American Free Trade Agreement [CAFTA]) negotiations on the other. We also analyze how these mixed signals emanating from the United States, including the disturbing rise of protectionism in largely uncompetitive sectors like steel and textiles, have shaped trade policy responses and negotiating strategies in South America, particularly within MERCOSUR. Although the United States has anointed the FTAA as the most viable venue for hemispheric integration at this particular historical juncture, its *actions* in this arena suggest a more ambivalent stance toward the FTAA that has prompted its South American trade partners to realistically assess their options.

In Section 2 we explore the dynamics that have underpinned the shift in US trade policy since the mid-1980s, with an emphasis on US interests and strategies toward MERCOSUR as well as the patterns of cooperation and conflict that have evolved in US-MERCOSUR relations since the launching of the FTAA process. In Section 3 we offer a more detailed analysis of the perceived and actual costs and benefits intrinsic to US-MERCOSUR relations, including subsections that address these same questions for Brazil, Argentina, and the smaller MERCOSUR economies, respectively. In Section 4 we project ahead and discuss the fate of MERCOSUR, and what this represents for Argentina and Brazil, in

particular. In Section 5 we conclude by reviewing the alternative scenarios for negotiating the FTAA, using the current juncture in US-MERCOSUR relations as our main departure point. Before proceeding, we reiterate that the FTAA is still a very fluid concept from the standpoint of the main players. As such, the ability and willingness of the two main actors, the United States and a Brazilian-led MERCOSUR, to bridge the gap between rhetoric and reality will condition its outcome.

2. US TRADE POLICY TOWARD THE HEMISPHERE

The FTAA: US Interests and Strategy

Different interpretations have been offered for the US initiative of launching an FTAA at the 1994 Miami Summit of the Americas. A first view casts the proposal as the continuation of a shift in US trade policy toward Latin America articulated by the former Bush administration's 1990 Enterprise for the Americas Initiative (EAI). The EAI signaled a post-Cold War redefinition of US interests in Latin America, and as such it built upon the "Washington Consensus," an ambitious set of market prescriptions meant to pull Latin America out of its decade-long recession via trade liberalization, deregulation, and privatization (Williamson 1990).

"Trade not aid" was the EAI's motto, and as proof the initiative offered symbolic levels of US bilateral debt relief, a US\$300 million multilateral fund to help finance privatization in the region, and the creation of a free trade zone that would span the entire Western Hemisphere. The announcement of the EAI, unthinkable even a decade earlier, was also a reflection of the widespread unilateral trade liberalization undertaken by many Latin American countries over the course of the 1980s. It was assumed that reciprocal market opening by the United States toward its southern neighbors would naturally follow, and thus allow for the creation of the proposed regional bloc to help confront the rise in trade protectionism across Europe and Asia.

A second interpretation for the launching of the FTAA has to do with US concerns about securing the institutionalization venues necessary to increase the flow of US exports and foreign direct investment (FDI) into Latin America. This expansion of US trade and investment southward has been significant since the implementation of market reforms and the liberalization of Latin American trade beginning in the mid-1980s.

Although most of this expansion has been concentrated in Mexico, Central and South American markets have become increasingly important as a destination for US exports and FDI. This marks a departure from the recent past, whereby the South American countries, and especially the members of MERCOSUR, have been more oriented toward Europe in terms of trade and FDI. Thus, the FTAA could be interpreted as a means for the United States to expand on the considerable foothold it had gained in the Mexican market by way of NAFTA.

Seen in this light, the FTAA could also be interpreted as a defensive tool for the United States in the sense that it could help to avert discrimination against exporters and foreign investors based in the United States. In other words, breaking down trade and investment barriers, especially in the South American countries, would permit US firms to avoid discrimination in the context of existing or pending free trade agreements (FTAs) among Latin American countries, and between them and the European Union or East Asian countries.

This last interpretation of the US stance toward hemispheric integration has been coined by some as the “New Monroe Doctrine” of the 21st century. In line with our second interpretation, that of the FTAA as a natural enlargement of NAFTA, a corollary would be the US pursuit of the FTAA as a kind of new “Manifest Destiny” toward the southern half of the Western Hemisphere, but with the purpose of promoting trade and investment and opening new markets for the United States. However, and in contrast to much earlier visions of manifest destiny, new markets for the United States in the hemisphere would no longer be limited to just selling agricultural and industrial goods.

Rather, since comparative advantage for the United States has come to rely primarily on trade in services and high tech products, the prompt liberalization of Latin barriers would pave the way for a major incursion of US companies into the region. Hence, US interests in gaining deeper access to Latin American markets, especially in South America, have been concentrated in these more sophisticated areas—defined as “new trade issues” by the Uruguay Round and the World Trade Organization (WTO). From the outset, the US position has been that the FTAA would only be meaningful if it reached beyond what the WTO has thus far accomplished with regard to these new trade issues: steeper liberalization in traded services and investment, the liberalization of government pro-

curement, the quick and comprehensive enforcement of intellectual property rights, and even the inclusion of labor and environmental issues on the trade negotiating agenda.

Finally, US objectives in the hemisphere must be considered in light of the difficulties that have surrounded efforts to launch a new “Millennium Round” at the WTO. For some, the gradualist and piecemeal nature of hemispheric integration under the auspices of the FTAA seems more promising for the United States at this point in time (see, for example, Weintraub 2001). This is not to suggest that multilateralism has been or will be superseded by regionalism. Rather, since the launching of the GATT’s Uruguay Round negotiations in 1986, multilateralism and regionalism have simultaneously moved forward in a complicated pattern. The European Union (EU) is the example, *par excellence*, of this very pattern. There, the gradual consolidation of the internal regional market and the periodic granting of preferences via the accession of new members to the EU have induced all outsiders, and especially the United States, to fight to keep the GATT/WTO framework alive and relevant.

But then the United States has had its own share of frustrations with multilateralism. As mentioned earlier, it was the prolonged impasse at the Uruguay Round that prompted the United States to pursue the NAFTA negotiations with Canada and Mexico; in turn, and similar to the EU scenario, NAFTA’s ability to advance in areas that had eluded agreement at the Uruguay Round (dispute settlement, intellectual property rights) provided new pressures and incentives for the completion of the GATT negotiations and the creation of the WTO in 1994 (Hart 1999; Odell 2000). Further down the line, it is quite likely that the very launching of the FTAA negotiations could provide similar incentives for negotiating breakthroughs at the multilateral level. In a paradoxical way, this appears to be what happened with the recent and long overdue willingness of the United States and the EU to negotiate the reduction of agricultural barriers at the WTO (Sing 2004). It was the intransigence of both on this front that led to the collapse in 2003 of the WTO ministerial meeting in Cancun, Mexico, as Brazil and India led the charge in refusing to negotiate at all without the inclusion of agriculture (Narlikar and Tussie 2004). Faced with the potential collapse of the WTO and the FTAA negotiations, the United States finally conceded on agriculture in order to breathe life back into both of these trade arenas. The Europeans then followed suit, at least in principle (Becker 2004).

From these different interpretations of US interest in hemispheric integration we would emphasize two main points. First, the FTAA has been viewed by the United States as a means of strengthening its own bargaining position vis-à-vis Europe and the East Asian countries. This is so in a direct sense, as the United States continues to seek greater access to European and Asian markets, and as it pursues these same goals toward Asia and Europe within the WTO's multilateral framework. The US quest for greater trade and investment access in these other regions has been coupled with new liberalization initiatives, such as US participation in the forum for Asia-Pacific Economic Cooperation (APEC), and negotiations for bilateral free trade agreements with countries in the Middle East and Southeast Asia.

Second, it is important to remember that the FTAA is the only regional process that promises to accelerate Latin America's global ties while retaining the United States as the main hub. In essence, the FTAA would relegate the Latin American countries to spokes and thus allow for the deepening of market liberalization and reforms in Latin America without retaining the complicated patchwork of subregional preferences that has evolved since the resurgence of regional initiatives in the Western Hemisphere in the early 1990s.

The FTAA: US Leadership and Confrontation with MERCOSUR

Obviously, the achievement of these last two overriding US objectives with regard to the FTAA will require strong US leadership to implement and accelerate the process of hemispheric integration—something that has heretofore been lacking. For instance, because of domestic policy gridlock in the United States, the hemispheric Summits of the Americas in Miami (1994) and Santiago (1998) were dominated by themes other than trade. To the chagrin of those Latin American participants in search of greater access to the US market, these summit agendas focused instead on strengthening democracy, combating drug traffic and terrorism, eradicating poverty, and preserving the environment. In both instances—Miami and Santiago—the trade issue was included on the FTAA agenda at the last moment at Latin America's insistence and with some reluctance on the part of the United States.⁶

Until very recently, this weak US commitment toward free trade in the hemisphere resulted in an integration pattern that basically concentrated US

efforts at deepening trade and investment liberalization on the North American region. The Central American bloc, although an enthusiastic supporter of the FTAA, was basically left to flounder, as was the Andean Community, where not much concrete progress has been made on a sub-regional project (see, for example, Edwards 1998; IADB 2002:33). This was not the case with MERCOSUR, where considerable integration advances and Brazilian leadership rendered MERCOSUR the main counterweight to the formidable NAFTA bloc to the north.

At the outset, a Brazilian-led MERCOSUR shunned the notion of US hegemony and preferred to act as an independent subregional trading bloc. Quickly, Brazil's own visions for the FTAA were superimposed on its MERCOSUR partners. First, was Brazil's insistence on a "gradualist" approach to hemispheric integration, and one that allowed more time (along EU lines) for the completion and internal consolidation of MERCOSUR's goals. Second, was Brazil's proposition to first enlarge MERCOSUR by forming a South American Free Trade Agreement (SAFTA) that would give Brazil and its southern partners more bargaining power vis-à-vis the United States at the FTAA negotiating table.

Although Brazil's goal of a SAFTA has proved elusive, gradualism has certainly prevailed. The unexpected slowness that has surrounded the FTAA process has enabled Brazil to become the hub of the South American regional integration process akin to the role that the United States now plays within North America. Although some have interpreted this gradualism as Brazil's lack of enthusiasm toward the completion of the FTAA (Nofal 1997; Hirst 2002), it did allow MERCOSUR the breathing space necessary to implement its own initiatives, to diversify its trade ties, and to win some important concessions from the United States in the interim.

For example, by the end of 1994, the MERCOSUR countries had set up a tariff schedule for convergence into a customs union, showing their commitment to a deep pattern of subregional integration. At the same time, intratrade flows among these countries increased significantly until the onset of the Brazilian devaluation shock of January 1999. Despite the severity of the Brazilian crisis, MERCOSUR was still consolidated to the extent that it was able to negotiate a free trade agreement with the European Union. By the time of the Belo Horizonte Trade Ministerial Meeting (1997) that preceded the 1998 Santiago Summit of the Americas, the Brazilian strategy was triumphant in that the United States

was forced to make important concessions in these negotiations so as to keep the FTAA alive.

First, the United States had to give up on its initial position of negotiating the FTAA solely through bilateral deals and as a simple extension of NAFTA. Rather, it was decided that the FTAA would be built on existing bilateral and subregional trade agreements.⁷ Second, the US proposal of an “early harvest” or the implementation of partial agreements for tariff reductions was replaced by a “single undertaking,” which meant that no agreement could be reached or tariff reductions implemented until all issues were negotiated.⁸ Third, the United States had to agree to confine environmental and labor issues outside of the trade negotiating groups.

The 1998 Santiago Summit had one important achievement: setting up the year 2005 as the deadline for ending all negotiations and starting a timetable for tariff reductions and a work plan for the liberalization of services, investment, and government procurement. This decision worked in favor of the US strategy of keeping the FTAA alive. However, the US government would have preferred to move more quickly in the direction of trade liberalization. The absence of fast-track authority became a big liability for the United States in pursuing this goal, and MERCOSUR’s increasingly independent strategy became another hurdle to overcome.

In actuality, and in light of the numerous concessions that had been extracted from the United States by 1998, MERCOSUR began to emerge as a “stumbling block” for the FTAA in the eyes of some US policymakers. The US State Department declared MERCOSUR a “threat to hemispheric regionalism” (Carranza 2000:124), and former Clinton administration US Trade Representative Charlene Barshefsky commented prior to the Santiago Summit that the proliferation of bilateral and subregional trade agreements in Latin America—in which MERCOSUR was very active—was not necessarily a positive development. In Barshefsky’s own words: “We do want to ensure that the United States remains at the center of a constellation of trading relationships. The FTAA launch helps us reassert that central role, but the acceleration of subregional integration is something I think we have to look at very carefully” (*ibid.*).

Apart from working with Congress to obtain the fast-track negotiating authority, the US government would continue to work in disarming MERCOSUR as a deep integration project, attempting to isolate Brazil from the rest of its partners. While maintaining its commitment toward

achieving a multilateral regional agreement, the United States would also turn to bilateralism: it would send signals to the Central American and Caribbean countries for proposed free trade agreements; it would dangle the prospect of permanent preferential access to the US market before the Andean countries;⁹ it would restart negotiations for a free trade agreement with Chile; and it would tempt Argentina and Uruguay to negotiate outside of the MERCOSUR framework.

This combination of a regional multilateral “commitment” and frenzied bilateralism has been interpreted by some as reticence on the part of the former Clinton administration (1992–2000) to move quickly with the implementation of the FTAA. First, at least in the eyes of some US politicians, a hemispheric free trade area could compel the United States to offer financial assistance to countries that are not important in terms of US economic interests, and this would detract from their own domestic constituents. Second, not all of the 34 countries participating in the FTAA negotiations had signed on to the market reforms advocated by the “Washington Consensus.” Thus, the United States made clear that it would be reluctant to open its market to those countries that did not adopt credible market reforms. This, in fact, became a main justification for the United States proceeding on a case-by-case bilateral basis (Bélanger 1999:104).

Leading MERCOSUR’s strategy, Brazil called for a summit of South American heads of state, and the launching of negotiations with the Andean countries for a free trade agreement by the year 2002.¹⁰ It would also propose complementary regional projects to integrate South America in terms of energy and physical infrastructure. MERCOSUR’s negotiations with the European Union for a free trade agreement were accelerated, so as to coincide with the pace of the FTAA negotiations. At the same time, Brazilian authorities emphasized that the FTAA made no sense if US nontariff barriers were not lifted, if US antidumping regulations remained, and if US subsidies for domestic agricultural production were not reduced.¹¹ To further clarify Brazil’s position before the FTAA, its Minister of Foreign Relations, Celso Lafer, declared that MERCOSUR, for Brazil, was destiny, but the FTAA was only one of several options.¹²

Any visions of South American solidarity had waned by the late 1990s, as both Brazil and Argentina were adversely affected by difficult external shocks emanating from Asia and Russia, and the Andean Community countries experienced their own share of severe economic and political

crisis (Shifter 2004). By the time of the Brazilian financial crisis and devaluation of January 1999, MERCOSUR had sunk into an economic impasse. As the Argentine government struggled against a highly unfavorable shift in the bilateral terms of trade, policymakers there turned their attention to the FTAA and proposed to advance the timetable for those negotiations (to begin in 2003 instead of 2005). Similarly, a newly elected government in Uruguay argued that the FTAA would bring more benefits to MERCOSUR than a free trade agreement with the European Union. With this weakening of prospects for a strong negotiating bloc in South America some feared the “dilution” of MERCOSUR’s previously established negotiating goals within the FTAA.

More recently, as the TPA was finally approved by the US Congress in July 2002 and the final announcement of the completion of a US-Chile free trade agreement was made, the US negotiating position vis-à-vis MERCOSUR has been boosted. However, we reiterate the contradictions inherent in (1) the Bush administration’s opting for bilateral “successes” prior to clarifying how the United States actually intends to broach the numerous gaps in its relationship with Brazil and the Southern Cone countries, and (2) granting significant concessions to domestic steel and textile producers, not to mention the mammoth increase in subsidies for US farmers, in order to secure necessary Congressional support for the TPA legislation. Executive-level decision-makers in the Office of the US Trade Representative insist that these means will eventually justify the ends, that is, a fully completed FTAA by 2005. If so, the “means” must quickly come to include a more concise US-MERCOSUR discussion on something as basic as how to proceed.

Although the outcome of the TPA battle was not entirely satisfactory from the standpoint of free trade, the coalition dynamics that crystallized in the United States around the TPA campaign do shed some light on the possible path forward for the passage of the FTAA. As we see it, those sectors that were adamantly in support of the TPA legislation are also likely to rally around the FTAA. The coalition that prevailed in winning the TPA vote was comprised of an unorthodox blend of agricultural interests and powerful representatives of the chemical, electronics, and high-tech sectors;¹³ the latter have been especially quick to point to Latin America as the market that offers the most promising prospects for increased trade and investment. What do these apparently diverse groups have in common? All are highly dependent on exports,

all were hit especially hard by the recession that began in mid-2000, and all see their future success as hinging on access to and expansion into foreign markets.

3. THE FTAA: THE DISTRIBUTION OF COSTS AND BENEFITS

Some Troubling Asymmetries between the United States and MERCOSUR

As can be seen in Table 1, the Western Hemisphere is fraught with vast differences in population, wealth, and per-capita GDP. In fact, the unifying factor is the low tariff levels that now prevail, whereby no one country's average weighted tariff exceeds much more than 20%. But the data on trade between the United States and the rest of the hemisphere reveal some particularly troubling asymmetries. In terms of the economic stakes for the United States, as of 2001 its share of world trade was 2.5 times larger than its share of trade with the Western Hemisphere; moreover, 65% of US trade with Latin America (exports plus imports) is confined to Mexico (see Table 2). MERCOSUR accounts for 20% of US exports to Latin America and 15% of its imports (Schott 2001:94–95). Although NAFTA comprises major trade operations in the Western Hemisphere, only 12% of all NAFTA exports are directed toward the rest of the region outside of North America (Bulmer-Thomas 1998:251). MERCOSUR is the second

Table 1. FTAA Negotiating Partners

Country	Population (million)	GDP in \$		Avg. tariff (%)
		(billion)	(per capita)	
United States	272.9	9,299.2	34.1	2.5
Canada	30.6	644.7	21.1	3.6
Mexico	97.4	483.5	5.9	12.5
NAFTA	400.9	10,472.4	26.1	
Brazil	168.1	542.0	3.1	16.6
Argentina	36.6	283.1	7.8	12.9
Uruguay	3.3	21.8	6.4	10.0
Paraguay	5.4	11.7	2.1	8.7
MERCOSUR	213.4	858.6	4.0	

Table 1 continued

Country	Population (million)	GDP in \$		Avg. tariff (%)
		(billion)	(per capita)	
Venezuela	23.7	102.2	4.3	10.9
Colombia	41.5	86.4	2.2	12.4
Peru	25.2	56.0	2.1	20.2
Ecuador	12.4	13.6	1.1	10.4
Bolivia	8.1	8.4	1.1	9.7
Andean Group	110.9	266.6	2.4	
Guatemala	11.1	18.0	1.6	5.7
Honduras	6.3	5.4	0.8	5.7
El Salvador	6.2	12.2	1.9	4.3
Nicaragua	4.9	2.3	0.5	8.5
Costa Rica	3.6	15.2	3.9	4.3
Dominican Republic	8.4	17.0	1.8	13.6
CACM	40.5	70.1	1.8	
Jamaica	2.6	7.9	3.1	19.2
Trinidad/Tobago	1.3	6.9	5.0	20.4
Guyana	0.9	0.8	1.0	n.a.
Suriname	0.4	1.1	2.5	n.a.
Bahamas	0.3	4.6	15.0	n.a.
Barbados	0.3	2.5	9.8	n.a.
Belize	0.2	0.7	3.1	n.a.
St. Lucia	0.2	0.6	3.7	n.a.
Antigua/Barbuda	0.1	0.6	9.4	n.a.
Dominica	0.1	0.3	3.7	n.a.
Grenada	0.1	0.4	3.8	n.a.
St. Vincent/Grenadines	0.1	0.3	2.9	n.a.
St. Kitts/Nevis	0.0	0.3	7.2	n.a.
CARICOM	6.7	27.0	4.0	
Chile	15.0	67.4	4.6	10.9
Haiti	7.8	4.3	0.6	n.a.
Panama	2.8	9.6	3.4	8.0
Total	798.0	11,731.0	14.7	

Note: Population and GDP for 1999; average tariffs, latest year available.

Source: J. P. Morgan Securities Canada, Inc., Global Data Watch, Morgan Guaranty Trust Company, April 13, 2001, p.13.

Table 2. US Merchandise Trade with Western Hemisphere Nations, 1991–2001
(In millions of dollars and percentage of world total)

	World	WHem	NAFTA	LAC	C/S Am	Canada	Mexico	Brazil
1991								
Exports	414,083	148,395	118,782	63,257	30,153	85,678	33,104	6,106
Imports	491,020	156,036	124,540	62,988	31,496	93,048	31,492	6,842
Total	905,103	304,431	243,322	126,245	61,649	178,726	64,596	12,948
% World		33.7%	26.9%	13.9%	6.8%	19.7%	7.1%	1.4%
2001								
Exports	718,762	322,282	264,490	158,973	57,792	163,309	101,181	15,790
Imports	1,145,927	418,345	350,939	199,610	67,406	218,735	132,204	14,467
Total	1,864,689	740,627	615,429	358,583	125,198	382,044	233,385	30,257
% World		39.7%	33.0%	19.2%	6.7%	20.5%	12.5%	1.6%

Source: Destler (2004: 400).

Notes: Exports and imports are adjusted to balance of payments basis, excluding military.

most important group of countries in terms of trade share in the Americas, but it is much less dependent on NAFTA and the US market.

US investment ties to the region follow a similar, albeit weaker, pattern than those for trade. In line with the trend over the entire Post-World War II era, the bulk of US foreign direct investment is still located in the industrial bloc countries and more recently in emerging East Asian markets. Only 13% of US FDI is directed toward Latin America, and most of these investments are concentrated in Mexico and Brazil (Schott 2001:95). In short, at least at first glance, MERCOSUR is of marginal economic significance for US trade and investment in Latin America. That said, could there be major future gains for the United States in MERCOSUR once the FTAA is fully established?

Even though US trade with Latin America has been heavily concentrated in Mexico, the United States did increase its participation in South American trade, and especially with the MERCOSUR countries, during the 1990s. Similarly, FDI from the United States in Latin America tripled during the same period, and now represents one-fourth of all FDI in the MERCOSUR countries (Chudnovsky and López 2002:9). This increase in US trade and investment flows to South America is a direct reflection of the liberalization initiatives simultaneously undertaken in most South American countries. Some estimates show that if this trend continues, Latin America could become the principal market for US exports by 2010 (Hufbauer and Stephenson 2004:15–18). If so, the FTAA would clearly represent significant gains for US exporters and investors active in the MERCOSUR countries, especially in the larger internal markets of Brazil and Argentina.

What are the most important issues at play in terms of US interests in the opening of the MERCOSUR economies? Below, we review the benefits for the United States from the standpoint of MERCOSUR as a whole. In the following subsections we then review the perceived costs and benefits of hemispheric integration from the standpoint of Brazil and Argentina, respectively; the final subsection analyzes these same issues for Uruguay and Paraguay, the smaller economies in MERCOSUR.

Benefits to the United States

In terms of US interests, a prime concern is that MERCOSUR's Common External Tariff (CET) is much higher than average tariffs in the United States.¹⁴ As Table 1 shows, average tariffs in Brazil alone are considerably

higher. MERCOSUR tariffs are set high to provide temporary protection to those capital goods and high tech industries in which the United States is extremely competitive, meaning that US investors stand to reap major gains as they increase their ability to access these markets via the FTAA. In addition, US exports of traditional manufacturing goods and even of agricultural commodities to South America could replace up to half of MERCOSUR's exports, even though the latter became more competitive in manufacturing exports during the 1990s.¹⁵ Furthermore, the liberalization of services and government procurement as part of the FTAA would give US companies precisely the leverage they are seeking to displace domestic competition from MERCOSUR firms. Finally, another US gain is in the area of intellectual property rights, for which MERCOSUR and most South American countries will not obtain full enforcement capacity until the medium term; they will thus continue to be vulnerable to US trade sanctions.¹⁶

What about the ostensible costs for the United States? Arguments within the United States against the FTAA echo those posed more than a decade ago during the NAFTA negotiations. The FTAA's most vociferous opponents are trade unions, environmental organizations, and those private sector interest groups that represent obsolete or noncompetitive segments of the agricultural and manufacturing sectors (sugar, tobacco, fruits, vegetables, textiles, footwear, and steel are the most sensitive products). Nevertheless, the econometric evidence shows that the losses for these sectors under a fully implemented FTAA would not be significant, and in no way would they detract from US net gains with the opening of MERCOSUR and the other South American economies (Estevadeordal and Robertson 2004:479).

However, even though these domestic interest groups in the United States are the vocal minority, and they have clearly gained political leverage on Capitol Hill, it helps to remember that they did fail in their efforts to thwart the TPA bill. This renewed round of US protectionism for these products has hit MERCOSUR the hardest, as the TPA bill unilaterally offers duty-free access to the US market for these goods from the Andean countries and the Caribbean and Central American nations, but not from MERCOSUR (see US Department of Commerce 2002:4). At this point it is important to clarify that bilateral negotiations between the United States and these other regional groupings will basically amount to the granting of standing access to the US market in sensitive sectors on a permanent basis. In contrast, the US-MERCOSUR relationship is one in which there is no

pre-existing privileged access (for example, CBI, ATPA) to the US market for these Southern Cone countries. Hence, the stakes are higher in the sense that both the United States and the MERCOSUR countries are seeking mutual access to many sensitive sectors for the first time.

Another sore spot for US trade policymakers has been the issue of how to appease more recently mobilized special interests that have succeeded to an unprecedented extent in linking labor rights and environmental concerns with the FTAA. As in the case of NAFTA, where these groups were able to extract special side agreements for labor and the environment from the Clinton administration, these same lobbies have argued against the FTAA because of the laxity of environmental regulations and labor law infractions in Latin America. Arguing that US investors will move southward in search of weaker norms surrounding labor and the environment, this “blue-green” coalition in the United States is demanding strict rules on both issues for US market access. Even though the US Trade Act of 2002 does not establish trade sanctions in response to allegations of environmental pollution and labor exploitation, a main deal-breaker was the TPA stipulation that labor and environmental issues would be given the same consideration as other negotiating objectives. Yet, as with the NAFTA side agreements, compliance on labor and environmental issues under the TPA is still nonbinding and nonenforceable for the countries involved in any given complaint.

On balance, and despite intense lobbying by these various special interest groups, the perception of the majority of US business associations—including farmers—is that their gains under the FTAA will outweigh their losses. Entrepreneurs in the National Association of Manufacturers (NAM), for instance, are pushing the Bush administration to pursue trade liberalization in the hemisphere, and to do so at an accelerated pace. NAM and the Business Roundtable, another umbrella organization that represents assorted US business interests, are especially anxious to open markets for their products in Argentina, Brazil, and Chile, which they regard as the most promising for US industrial exports.¹⁷ As with their ultimate victory in securing the NAFTA bill, other US business organizations, like the American Chemistry Council, the Electronics Industry Alliance, and the seventeen associations that comprised the High-Tech Coalition on TPA, are acting as counterweights to those sector-specific groups intent on thwarting the FTAA before the US

Congress. This explains the recent TPA victory, and renewed efforts by the Bush trade policy team to follow through on earlier trade commitments toward Latin America, including MERCOSUR.

One of the principal criticisms that the MERCOSUR countries have toward the United States within the FTAA process concerns the high US protection for goods in which the former has achieved the most competitive gains. These include agricultural commodities and traditional manufactured products, some of which fall squarely within the TPA's "sensitive products" category. A second MERCOSUR concern is related to US domestic subsidies for farm products, which work to depress international prices for agricultural commodities.¹⁸ The 2002 Farm Bill provided US producers with such a daunting array of domestic subsidies that the WTO has already ruled against the United States in pricing disputes filed by Brazil in the cotton sector, for example. On a more positive note, the language of the 2002 TPA bill instructs the former US president to pursue the "reduction of barriers to trade in goods, services, investment, and US agricultural products." Moreover, upon passage of the TPA, former US Trade Representative Robert Zoellick issued a sweeping proposal to curb farm subsidies and agricultural tariffs, and petitioned the WTO to strive for the removal of tariffs on all industrial and consumer goods by 2015 (Destler 2004:397–98).

From MERCOSUR's standpoint, however, US actions still speak much louder than these untested proclamations. The combination of the latest US Farm Bill, the safeguards recently imposed on steel imports, and the propensity of the US Congress to defend antidumping regulations have understandably led the MERCOSUR countries to doubt the US commitment to market opening within the FTAA. The Brazilian government, in particular, has made clear that if the most dynamic markets in the FTAA remain closed, the FTAA would become useless, and even undesirable.

Although the United States has shown a major interest in the liberalization of services, investment, and government procurement—the aforementioned new trade issues—the MERCOSUR countries have emphasized the importance of market access for merchandise as the key condition for establishing reciprocal and fair trade opportunities with the United States. Market access worries aside, even if all trade barriers to the US market and farm subsidies were negotiated in MERCOSUR's favor, significant asymmetries would still remain between the two markets (see

Tables 1 and 2; and Bustillo and Ocampo 2004). This, we presume, is why the United States finally agreed to negotiate the reduction of barriers at the WTO in those sensitive sectors that have threatened to shut down the Doha Round and the FTAA process altogether (Sing 2004).

But significant asymmetries are also part of MERCOSUR, in which Brazil towers over its partners. Yet, traditional asymmetries based on GDP, population and territorial size, trade weight, and other factors are not necessarily insurmountable. As the integration experience of the European Union has shown, such hurdles can be mitigated and eventually reduced through the proper kinds of compensatory mechanisms.¹⁹ Competitiveness, however, is a different matter altogether. MERCOSUR's main exports to the United States are agricultural commodities and traditional manufacturing products, mostly agroindustrial goods. In terms of MERCOSUR exports to other Latin American countries, more capital intensive and higher value-added types of manufacturing products tend to dominate. Thus, in line with the dictates of economic integration theory (Frankel 1997:1–48), a main goal for these leading MERCOSUR countries will be to generalize this more dynamic trade profile to the US market—something the United States has heretofore been reluctant to allow.

Comparing Argentina and Brazil in the 1990s, the former has mostly increased exports with traditional comparative advantage (agroindustrial), while the latter has also developed dynamic comparative advantages, especially in terms of capital goods. Although Argentina has increased its exports through preferential access to the MERCOSUR market, and Brazil has continued to favor its domestic market, both economies are still relatively closed. Thus, integration theory also tells us that the postliberalization adjustments for these more highly protected economies will be considerable (Lawrence 199:23–46).

Brazil: The Debate over Gains and Losses

In Brazil, the clear leader of the FTAA process from the south, different views have prevailed among entrepreneurs, economic analysts, and policymakers concerning the advantages and limitations of implementing the FTAA. Exporters of agricultural commodities, agroindustrial companies, and steel and petroleum producers are in favor of the FTAA and the opening of trade with the United States. This support is conditioned by projections for a sizable increase in sales originating from these sectors

once tariff and nontariff barriers in the US market are reduced. Entrepreneurs and firms that represent other industrial sectors, such as chemicals, automobiles, and machinery, do not share this enthusiasm.

Representatives from this second group argue that they will continue to operate at a serious disadvantage once the Brazilian economy is opened to US exports. A key factor that works against competitive gains for these sectors is the steep cost of doing business in Brazil (the *Custo Brazil*), including high taxes, high interest rates, limited access to risk capital, and expensive yet inefficient physical infrastructure. These sectors fear that the FTAA will erode the measured progress they have made thus far and perhaps force Brazil back into the position of a more traditional agricultural commodity exporter.²⁰

Another angle on this debate lies in the possibility of increasing Brazil's competitive advantage by strategically strengthening the healthy level of intrafirm trade that now exists between the US and Brazilian economies (Erzan and Yeats 1992:125). As the Mexican case under NAFTA has shown (Buitelaar, Padilla, and Urrutia 1999), the regionalization of intrafirm trade can foster a dynamic pattern of restructuring based on specialization, economies of scale, and technological upgrading. Certainly US subsidiary firms that operate in Brazil would benefit greatly from the FTAA, especially in terms of a freer flow of imports from their US headquarters into Brazil (40% of imports of these subsidiaries come from the United States; see Baumann and Carneiro 2002:164). However, in contrast to NAFTA, most of these US companies are still not specialized in those goods that have underpinned the success of Brazil's exporting sectors. Thus, although engaged in intrafirm production, the export markets for Brazilian cross-border firms are quite diversified, and not necessarily oriented toward the United States (only 21% of all exports of these subsidiaries were directed toward the US market in 2000; *ibid.*:160).

For the above reasons, others in Brazil do not always share the same optimism for the FTAA as those Brazilian exporters operating in the agricultural and traditional manufacturing sectors. For example, Rubens Ricupero, a Brazilian Secretary of UNCTAD, argues that the main difficulty for the country's exporters is less a matter of lowering trade barriers and more a problem of weak export supply. He also points out that Brazil's exports are still concentrated in intermediate goods where prices

on international markets have remained depressed. More worrisome, according to Ricupero, is the fact that Brazil's export pattern has undergone few changes in the last twenty years. Again, a lack of competitiveness is the real problem and not just US protectionism (Ricupero 2000:4–8). The question remains as to whether Brazilian leaders can seize the FTAA as an opportunity and rise to the challenge of modernizing and transforming the country's trade and productive structures—including a more strategic effort at strengthening cross-border production and intrafirm ties between Brazil and the United States.

Unfortunately, those Brazilian exporters who oppose the FTAA could also be approaching it as a so-called “negative incentive,” meaning that Brazil's absence from this regional project would translate into a missed opportunity to increase exports to important segments of the US market for all concerned parties. Research conducted by two Brazilian economists on Brazilian exports before and after NAFTA has shown a decreasing share of Brazilian sales to the United States since the beginning of the 1990s (Baumann and Franco 2001), and this has been used to bolster the anti-FTAA side of the debate in Brazil. Not surprisingly, Canada and Mexico gained the most vis-à-vis Brazil in selected products. However, their research also shows that this US market replacement of Brazilian goods in favor of Canada and Mexico was in motion even before the launching of NAFTA; in other words, preferential market access to the United States is not the sole determinant of export competitiveness.

The actual econometric estimates on the costs and benefits for Brazil's further liberalization within the FTAA are literally all over the map. Depending on the various assumptions made and the methodologies employed, those models that have been run to date have produced results that range from highly pessimistic to rather benign. For example, in the former category, Marcelo de Abreu reports that Brazilian exports to the US market would rise by 9%, while corresponding imports from the United States would increase by 23% (Abreu 2004). However, in reviewing the broader econometric literature on Brazil and the FTAA, Albert Fishlow argues that “it is not obvious that the reduction of Brazilian protection under the FTAA will lead to especially great difficulties. Certain sectors will be harmed initially, but many of these have already adjusted to the much greater level of imports that have flowed into Brazil in recent years as tariffs have been lowered” (Fishlow 2004:290–91).

Yet, Brazil's exports as a percentage of GDP are still just 10%, compared to 27 % for Chile or 22% for Mexico (Fishlow 2004: 295; Wise 2004: 92). On these grounds alone policy elites and some within the country's powerful trade ministry continue to assert that the liberalization process that started in the 1990s must continue in order to promote Brazil's competitive position in international markets. The good news is that there is finally some consensus within elite policy circles in Brazil that the FTAA should not be rejected; however, they also insist that the FTAA negotiations should be approached with an eye toward balancing the hemispheric free trade process with the "defense of national interests." Celso Lafer, Brazil's former Minister of Foreign Relations, has declared that the FTAA will only be acceptable to Brazil if trade barriers are lifted in the United States and if Brazilian industries are not exposed to "predatory competition."²¹

Rubens Barbosa, Brazil's Ambassador to Washington until early 2004, concurs that Brazil's competitiveness will not be determined by preferential tariffs within the FTAA. Rather, he suggests that the key issue is better coordination between the domestic private and public sector to reduce the *Custo Brazil*. This, Barbosa argues, is the most direct route toward making national industries more competitive and attracting investment in capital-intensive export-oriented sectors. The bottom line for Brazil is that the FTAA negotiations and tariff reductions should keep pace with a process of strengthening the competitiveness of Brazil's manufacturing sector (Barbosa 2001:22–27).

In light of all this, negotiations within the different committees of the FTAA are moving so slowly that it is difficult to imagine the agreement's completion in 2005. The Bush administration has saved some face since the collapse of the WTO talks in Cancun by agreeing that agricultural concessions will now be made at the multilateral level, which would open the way for these same advances at the FTAA negotiating table. Yet, as important as this recent breakthrough is in terms of Europe and the United States committing to the reduction of agricultural barriers at the WTO, it will easily take another two to three years to complete a legally binding global treaty along these lines (Sing 2004). It is thus not surprising that the Lula administration in Brazil has made clear that its priorities, in the following order, are to pursue its trade goals via the Doha Round, to revive and strengthen MERCOSUR, and then to tackle the FTAA (Fishlow 2004:292–95; Oliveira 2004). Even though the co-chairing of

the final phases of the FTAA by the United States and Brazil was designed in order to add the necessary boost to the FTAA negotiations as they entered their final phase, this hit an impasse.

Despite direct negotiations between former US Trade Representative Robert Zoellick and Brazilian trade minister Celso Amorim for a more flexible and accommodating FTAA strategy at the Miami trade ministerial meeting in November 2003, this new “spirit of Miami” did not even survive the next round of vice-ministerial meetings in Puebla, Mexico, in early 2004. As Brazil’s co-chair of the FTAA negotiations, Adhemar Bahadian, described it:

The new formula was commensurate with what all countries could and wished to do. It did provide enough flexibility for us all to negotiate rights and obligations that we were ready to accept among the 34 [nations] and at the same time allowed those countries that so wished to go beyond and agree to additional commitments, through plurilateral agreements....Miami called for flexibility and we had to strive to preserve it....We did not succeed in Puebla....Notwithstanding the fact that we were going nowhere before Miami, drowned by brackets, some of the negotiators still seem to resist to adapt to new times.²²

Argentina: The Perceived Costs and Benefits

Despite the implementation of important commercial policy reforms since the late 1980s, Argentina’s trade integration with the rest of the world has changed very little in the postliberalization period. In line with Argentina’s historical export profile, its foreign trade remains concentrated in agricultural commodities—including agroindustries—and this pattern has continued regardless of the country’s active participation in MERCOSUR (30% of all Argentine exports have been concentrated in MERCOSUR, mainly Brazil, in the 1990s; see Pastor and Wise 1997).

In terms of US–Argentine commercial relations, trade between the two countries has grown nearly twice as fast as world trade in the 1990s, but this is mainly for Argentine imports of US goods. In fact, in the context of a steady surplus in its trade balance, Argentina has consistently run trade deficits with the United States in the 1990s. Argentine exports to the United States mainly consist of low value-added products, which have been concentrated in mineral oils, leather, and certain food and beverage

products (see Bouzas, Gosis, Soltz, and Pagnotta 2002). Thus, lifting US trade barriers would probably imply important gains for these Argentine goods, prompting some producers in those sectors to pressure for an acceleration of the FTAA negotiating schedule.

Other responses on the part of those most affected have ranged from apathy to neutralism. The implementation of strict liberalization and privatization programs in Argentina in the early 1990s, and the lack of a strategic public policy framework to facilitate private sector adjustment to market opening, has hampered the ability of Argentine industries to restructure and compete on a par with their Brazilian counterparts. Thus, because of a prolonged and severe adjustment, some industrial associations in Argentina have taken a completely passive stance in discussing the costs and benefits of the FTAA. Although the FTAA could perhaps increase the chances for Argentina to become a more serious player in global markets, it would be difficult to speak of a visible pro-FTAA coalition in Argentina prior to the Brazilian devaluation of 1999.

This all changed in the aftermath of Brazil's devaluation, when approximately 30% of Argentine trade was suddenly hit with a highly adverse 20% rise in the bilateral exchange rate (Wise 2000). The flood of Brazilian goods into the Argentine market under a much cheaper Brazilian currency further exacerbated Argentina's lack of trade competitiveness and provoked multiple trade disputes between the two partners. It was at this point that the larger hemispheric integration process began to emerge as a plausible alternative to Argentine dependence on the Brazilian market within MERCOSUR, and Argentine policymakers became more actively oriented toward the FTAA.

In 2001, for example, the Argentine government proposed the acceleration of the FTAA negotiations, and the return of MERCOSUR to a free trade area where each country would determine its own external tariff.²³ MERCOSUR's high common external tariff (CET) was more expedient for Brazil than for any of the other members, although Brazil's MERCOSUR partners continued to support its bid to maintain a high CET versus the Argentine proposal to eliminate it altogether. This led some Argentine economists to consider the negotiation of a bilateral agreement with the United States as the most effective way for Argentina to access the US market, leaving the larger issues of industrial restructuring and trade competitiveness up to the FTAA project (Carrera 2001). Although this crisis-driv-

en contemplation of the Argentine government to exit MERCOSUR and engage alone in negotiating with the United States or within the FTAA was subsequently dropped, some Argentine economists have argued that these options still would not have solved the country's trade problems.

For instance, Argentine integration expert Roberto Bouzas (2002a:10) points out that the negotiation of a quick free trade agreement with the United States or NAFTA could never be limited to a unilateral decision by Argentina. Witness Chile's frustrating decade-long wait to accomplish just this. It is, in other words, a false dilemma for Argentina to choose among the pursuit of an FTA with North America, remaining in MERCOSUR, and/or joining the FTAA. This is because MERCOSUR, according to Bouzas, has been Argentina's main policy orientation for some fifteen years, and because Argentina is so embedded in its own sub-regional scheme it has little real choice but to approach the FTAA negotiations from its own regional vantage point. At this current juncture, Bouzas identifies two main strategic issues that Argentina must resolve: (1) how to construct a negotiating position that best encompasses and defends Argentine commercial interests, broadly defined; and (2) how to more specifically articulate these interests and organize a domestic coalition that can move forward a more competitive trade project for Argentina.

Another Argentine economist, Jorge Carrera, aptly points out that Argentina's proposal for a bilateral free trade agreement with the United States would only be accepted by the latter for strategic reasons, that is, "trade not aid" (2001:1). And, as we see it, there is little structural logic to a US-Argentine FTA. Why? First, as Carrera reminds us, Argentina already represents a very open market for US exports, as its Intellectual Property Law complies fully with US demands, and its very open Investment Law has allowed the United States to become the principal foreign investor in Argentina. Thus, in contrast to Brazil, Argentina has already conceded on those issues of most concern to outsiders looking to penetrate that market. Additionally, Carrera cautions that the economies of Brazil, Chile, and Mexico are more complementary with US markets, while Argentina's comparative advantage lies in those very sectors that compete most with US producers.

When all is said and done, and regardless of the specific integration strategy that Argentina pursues, the country needs to take much bolder steps to become more competitive (De la Balze 2002). This brings us

back to our earlier point: trade competitiveness cannot be reached solely through tariff reductions. As the Argentine economy continues on the long road to recovery from the 2001 crisis and collapse of the Convertibility Plan, we would argue that MERCOSUR is still the best platform for achieving the competitive gains that will be essential for the country to succeed in the international market. From this should follow a more advantageous set of negotiations within the FTAA, which does not preclude further integration with the EU.

Our last point has been confirmed by the work of Guillermo Rozenwurcell, an Argentine economist and policymaker, who has conducted a compelling set of simulation exercises that test alternative outcomes for Argentine and Brazilian trade under various contingencies. For example, Rozenwurcell found that the rate of growth of exports and GDP for each country would be very favorable over time if MERCOSUR continues to exist; however, these same variables turn negative if Argentina or Brazil reaches an agreement with NAFTA separately regardless of MERCOSUR. The worst scenario for Argentina and Brazil is the rupture of MERCOSUR, which would basically throw the FTAA project back into the option of each Latin country seeking to negotiate a bilateral deal with the United States. But the main loser in terms of trade and GDP growth under this last scenario would be Argentina, as Brazil could rely on its larger and more competitive market, one that is more complementary to the United States than that of Argentina (Rozenwurcell 2001:24).

The Smaller Economies

Although Argentina and Brazil have had their own struggles due to differing degrees of competitiveness within MERCOSUR and with respect to the position of each vis-à-vis the United States, the case of the other countries in MERCOSUR is another story altogether. Given the small size of their domestic markets, a higher degree of economic openness, and a much stronger dependence on their neighboring countries, MERCOSUR has been crucial for the growth of exports from Paraguay and Uruguay during the 1990s. This is especially so in terms of the promotion of nontraditional manufacturing products, as nearly half of the exports of these smaller countries have been directed toward Brazil and Argentina (see Masi and Bittencourt 2002:382–84).

A free trade agreement with the United States would probably imply lower costs for Paraguay and Uruguay, even though much larger asymmetries prevail between the United States and these countries than in the case of Brazil and Argentina (see Table 1). Closer integration with the United States would also mean more favorable opportunities for export growth, especially in terms of agricultural commodities and agroindustrial products. However, it is unlikely that these countries could develop an export pattern of industrial goods with dynamic comparative advantage toward the US market: first, because the export profiles of Paraguay and Uruguay to the developed world rely so heavily on a specialization in agricultural commodities; and second, because industrial exports to the developed countries demand economies of scale and a mature manufacturing sector, and progress toward these goals has been minimal in both of these smaller countries. At the same time, the production chains of Brazil and Argentina are less demanding for these smaller countries, and this means that industrial and nontraditional exports from Paraguay and Uruguay stand a better chance of developing within MERCOSUR, at least in the medium term.

Despite these structural realities, until very recently Uruguay's negotiating position within the FTAA favored an accelerated timetable, similar to Argentina's stance, while Paraguay has supported Brazil's more gradualist approach. As the Brazilian government has assumed a more dynamic leadership role under the Lula administration and in the context of co-chairing the FTAA negotiations, and as new presidents have been recently elected in Argentina and Paraguay, this calculus has shifted. More than ever before, the mood of the smaller economies and Argentina is toward united support for MERCOSUR's revival under Brazilian leadership and for the Brazilian position at the FTAA. The latter, in turn, has been secured by Brazil's commitments to revamp, deepen, and better institutionalize MERCOSUR itself.

Beginning in late 2003, the Council of Permanent Representatives to MERCOSUR was established under the directorship of former Argentine president, Eduardo Duhalde. Similar to the EU model, the purpose here is to provide a forum for the discussion of trade and investment, but also for the coordination of political, economic, and social policies to unite the four member countries in ways more profound than a simple integration scheme. As part of this effort at renewal,

MERCOSUR's most authoritative institutional entity, the Council of the Common Market, agreed to offer special adjustment support to Paraguay and Uruguay, both of which are still struggling to recover from the shocks of the Argentine crisis. Both countries will now have the right to temporary exemptions in adhering to the CET, and they will have access to a newly created compensation fund to assist them in their efforts to adjust to further liberalization.

4. MERCOSUR'S FATE: WHAT THIS MEANS FOR ARGENTINA AND BRAZIL

It can only be in the best interests of the United States to negotiate with a MERCOSUR bloc that is strong economically and back on a solid reform track in terms of promoting growth and fighting poverty. MERCOSUR has basically muddled through since Brazil's 1999 devaluation and seems just now to be recapturing the earlier sense of purpose and cohesiveness that had been established amongst the four main partners. Apart from the need to more fully complete structural adjustment programs across MERCOSUR, the bloc's very survival now depends on whether its members can define basic common policies and advance the institutionalization of this regional project. From the outset, MERCOSUR's problems have stemmed from the divergent interests of Brazil and Argentina and in particular the insistence of policymakers and political elites in each country to graft their own domestic policy preferences onto MERCOSUR. Time will only tell whether the latest round of initiatives will bridge these differences in any sustainable way.

From the start, Brazil seems to have regarded MERCOSUR as an opportunity to extend its own industrial and strategic trade policies in a regional setting. This has clearly impeded the use of MERCOSUR as a forum within which concessions must be made around a whole package of trade-related economic policies, and it has slowed all previous efforts to create EU-style supranational bodies to govern MERCOSUR. Since Brazil accounts for about 78% of the regional market (see Table 1), MERCOSUR's progress has been determined by how many and what type of concessions Brazil has been willing to make. Increasingly, MERCOSUR became a political platform for Brazil, and one that has enabled it to develop a more autonomous foreign economic policy in dealing with different blocs in the international market.

Similarly for Argentina, MERCOSUR offered an economic opportunity to support the decade-long Convertibility Plan that began in 1991, which relied on a fixed exchange rate and a much deeper strategy of trade liberalization than Brazil had contemplated. Over the course of the 1990s, MERCOSUR came to account for one-third of Argentina's total trade. Consequently, Argentine policymakers were more inclined to push for the acceleration of macroeconomic harmonization and the institutionalization of MERCOSUR toward a more complete customs union. However, in the absence of such achievements, Argentina's heightened economic dependence on MERCOSUR also became a conduit for the quick transmission of economic shocks, the biggest example being Brazil's 1999 devaluation.

Hindsight shows that Argentina's liberalization program quickly opened the way for an unprecedented increase in trade and capital flows, thus transforming the country into an "emerging market" virtually overnight. Unfortunately this fast international exposure of Argentina was not translated into a comprehensive trade strategy that would position the country as a global player, or allow it to bring forward an autonomous foreign policy as in the case of Brazil. Paradoxically, Brazil's opposition to building common policies and supranational institutions made it difficult to advance the MERCOSUR project beyond a free trade zone. Despite Brazil's insistence to the contrary, MERCOSUR basically remained stalled at this FTA stage until the shocks of 2001–2002 hit.

Although still recent, it appears that the very magnitude of the Argentine crisis—including the abandonment of its currency board in 2002 and the devaluation of the peso—has had a stimulating effect on MERCOSUR. The macroeconomic chaos that followed helped to jumpstart debates over the need for closer policy harmonization within MERCOSUR.²⁴ Also, the Brazilian government sent some signals that it was finally willing to compromise on the institutionalization front, as this is perhaps the only way to truly relaunch a languishing MERCOSUR. Returning to the premises of the initial Brazil–Argentina bilateral integration agreements of 1985 and 1988,²⁵ the Brazilian government and the domestic business sector have advocated that MERCOSUR as a bloc now seek to forge production chains in new markets such as China, India, and Russia so as to improve its overall export competitiveness.

The Lula administration in Brazil has added its own qualifiers, with the executive branch stating that there will be no progress in MERCOSUR's

external negotiations until MERCOSUR is strengthened in terms of economic growth and social welfare, and the participation of civil society and political parties is firmly embedded in the integration process.²⁶ At the same time, the Brazilian foreign minister has stated that if Brazil wants to take the lead in “reinventing” MERCOSUR, it should offer meaningful concessions on market access and institutionalization. Although seemingly incompatible at the outset of Lula’s term, this characteristically ambivalent Brazilian attitude toward trade integration is moving forward in its own way.

According to Giambiagi and Markwald (2002:71), some within Brazil’s diplomatic sector now argue that MERCOSUR is essential for strengthening Brazil’s negotiating capacity within the FTAA. However, this same sector argues that the MERCOSUR agenda should be limited to certain trade agreements without paying attention to the fate and status of MERCOSUR in the post-FTAA era. For others, MERCOSUR is an enduring project meant to live beyond the FTAA, even to the extent of becoming a “regional power.” This implies the advancement of MERCOSUR to a common market stage, which would render it much more attractive for FDI, industrial specialization, and as a competitive force in third markets. This latter vision will depend on economic harmonization and the partial surrender of national sovereignty to supranational decision-making entities—exactly the tone of the recent rhetoric coming out of the Southern Cone. As always, the question remains whether this rhetoric will translate into reality.

5. THE UNITED STATES VIS-À-VIS MERCOSUR: SOME ALTERNATIVE SCENARIOS FOR NEGOTIATING THE FTAA

Since the 2002 approval of the TPA, the US government has concentrated on the possibilities for completing several bilateral deals now being negotiated with other Latin American countries. Although the FTAA’s market access negotiations started in May 2002, they are progressing at a snail’s pace and with numerous difficulties encountered in each of the nine committees. Moreover, former US Trade Representative Zoellick reiterated that US trade agreements and negotiations in the Western Hemisphere will only be possible for those nations (such as Mexico and Chile) that have implemented deep liberalization reforms and produced concrete competitive gains. He has also pointed to the efforts of the Central American countries as an exam-

ple of serious engagement with the implementation of market reforms, and hence the launching of US negotiations for an FTA with that region.²⁷ As mentioned previously, in December 2002 the United States and Chile reached an historical FTA that was implemented on January 1, 2004 and will eliminate all trade tariffs by 2008 at the latest.²⁸

Even though the FTAA represents potential gains for US exporters and investors in Latin American markets, it has periodically been viewed by the US policy establishment as a bargaining chip for strengthening US leadership within multilateral negotiations (WTO), rather than an economic opportunity in and of itself (see Aggarwal and Espach 2004). Thus, for the United States the combined strategy of regionalism and multilateralism has been instrumental in strengthening its bargaining position vis-à-vis the European Union and Japan. But regionalism, at least in the US view, does not necessarily mean concentration in one geographic area or negotiating with small groups of states.

Before approval of the TPA, the United States announced FTA negotiations with Jordan, Vietnam, and Laos. After the TPA was secured, Washington launched new trade negotiations with the Sub-Saharan countries, Southern African nations, and Australia. The FTA with Chile and US willingness to negotiate an FTA with Central America are further variations on this same theme. In sum, the Western Hemisphere is clearly important for US trade policy as far as the NAFTA bloc is concerned, as total NAFTA trade now accounts for some 33% of all US trade (see Table 2). Further south, where total non-NAFTA trade between the United States and Latin America accounts for barely 7% for Central and South America combined, or 1.6% for Brazil (versus Mexico's 12.5%), it seems that the Washington policy establishment will still need some convincing of the importance of the FTAA as a venue for trade expansion (Destler 2004). Meanwhile, US actions in numerous other regional settings reflect its conviction that trade goals can be pursued at varying multilateral and bilateral levels and at different velocities.

Nevertheless, as the FTAA negotiations were supposed to have shifted into "high gear" in mid-2002, it is difficult to ignore that the United States does seem to be placing more emphasis on trade opening through bilateral agreements than on focused pursuit of the FTAA according to the designated timetable. There are some justifiable reasons for this: financial instability in the MERCOSUR region and political economic turmoil in the Andean bloc have no doubt alerted the United States

to the double-edged risks of closer integration with South America, on one side, or outright abandonment, on the other. Indeed, in its efforts to straddle the costs and benefits of closer ties with the Western Hemisphere, the United States has renewed preferential market access for the Andean countries (ATPA) and even increased the list of products within this act. In the case of MERCOSUR, Argentina and Uruguay have benefited through the expansion of the US General System of Preferences (GSP) for certain imports from those countries.²⁹

Although these US gestures fall short of offering the opportunity for full-blown trade negotiations outside of the FTAA framework, as in the case of Chile and Central America, they also detract from the alternative scenario: the concentration of US attention on pursuing the dynamic, albeit latent, possibilities intrinsic to the FTAA project. Jeffrey Schott, a US trade analyst, has recently noted that there is a “fragile optimism” surrounding the FTAA negotiations, but not just because of recent economic crises and political turmoil in the Latin American countries. Rather, Schott is especially cautious about the willingness of the United States to lift most trade barriers and negotiate antidumping laws any time soon (Schott 2002:34). But Schott also provides his own counterfactual to this rather pessimistic scenario: the recent passage of the TPA and, as the tariff rates in Table 1 suggest, the limited resort to protectionism in Latin America despite the acute political instability and economic turmoil of late. From this we conclude that, despite all the difficulties, open trade is still the most preferred option for the region (*ibid.*:35–36).

To summarize, a completion of the FTAA negotiations by 2005 will depend on:

- the political willingness of the United States and Brazil to forge ahead with the more flexible negotiating framework agreed upon in the Miami ministerial meeting of 2003;
- strong and constructive US engagement in providing support for the restructuring of Argentina’s mammoth debt arrears;
- the pace and differing importance that the United States assigns to bilateral and multilateral negotiations in the hemisphere;

- the prospects for the recently announced breakthrough deal in agricultural liberalization to become a reality at the WTO; and
- the definition by its members of how MERCOSUR fits into the bigger regional integration scheme, including the kinds of extraregional relations that would be most beneficial for each within the MERCOSUR/FTAA context.

Each one of these factors weighs in on the different scenarios presented below for the future path of US-MERCOSUR relations.³⁰ Although integration theory tells us that scenario one, that is, the full coupling of North and South, would be the most beneficial in terms of dynamic and welfare gains, thus far some combination of scenarios two and three have firmly prevailed. Thus, we begin with the most idealistic and least likely scenario, and end by emphasizing some of the positives that can still be gleaned from the less optimal bilateral strategy that has thus far taken hold in the realm of the FTAA.

Scenario One: The Full Coupling of North and South America under the FTAA

In line with the core arguments of this chapter, this scenario would place the onus on US-Brazilian leadership and it would require concrete progress on the other points mentioned above (a stronger US role in lining up multilateral financing to support the restructuring of Argentina's debt arrears; authentic progress in reducing agricultural subsidies and barriers at the WTO; and a more assertive stance on the part of the MERCOSUR countries in defining and pursuing their position toward the FTAA). As the most recent economic simulations verify that Brazil and Argentina stand to realize the highest productivity gains through closer integration with the US economy, this should be the focus of US policy toward the region.

Although this scenario may seem a tall order given the frailties of the FTAA process to date, it helps to remember that NAFTA was also considered an idea before its time when it was initially proposed in 1990. Just as the three NAFTA partners pragmatically tackled each of the obstacles to North American integration, this same pragmatism could be rallied for the FTAA under the leadership of the United States. What is left now is

for the hegemonic leaders of each of the two main blocs to tackle the issues that have thus far separated them—which will require a clearer articulation of each side’s respective goals for the FTAA. With economic recovery now on Brazil’s horizon, the Lula administration could seize this opportunity to accomplish those policy goals within MERCOSUR that are essential for advancing the FTAA. For a US administration that has yet to achieve a single foreign policy triumph, the FTAA represents the opportunity to do just this.

Scenario Two: The Deepening of MERCOSUR with the FTAA Focused on Central America, Chile, and the Caribbean

In essence, this scenario represents the flip side of scenario one, whereby MERCOSUR’s response to heightened bilateralism by the United States would be to accelerate its own process of subregional integration toward the customs union and to eventually forge a common market. Although this would clearly require more macroeconomic coordination and institutionalization within MERCOSUR, Brazil seems to have now realized that the inducements for such compromise are considerable. Not only are there multiple export-oriented projects underway to promote complementary specialization and productivity gains under this scenario, but MERCOSUR could also maintain greater autonomy in setting the pace for negotiating with the United States within the FTAA process.

But this scenario is strongly predicated on the sustainable economic recovery of all four MERCOSUR countries, especially Argentina, not to mention Brazil’s honoring of earlier promises to forge ahead with policy harmonization and the deeper institutionalization of MERCOSUR. Even in the event that these conditions are met, this scenario of a stronger MERCOSUR and a slower pace for the realization of the FTAA is not the best option for the United States. In this regard, the United States would do well to encourage MERCOSUR to accelerate negotiations within the “4+1” scheme approved by the MERCOSUR countries in 2001. As a show of good faith, the United States could begin by engaging in serious bilateral negotiations with Brazil, including the provision of greater market access for Brazil’s most important export products to the United States and NAFTA.

Scenario Three: An FTAA Built on Bilateral Pacts

With the completion of negotiations for a Chile-US FTA and a US-Central American FTA, this scenario of an FTAA built on bilateral pacts has become the definitive approach on the part of the United States. However, there are two reasons why this is not necessarily the most desirable state of affairs. First, it is already distracting the United States from the leadership role it must continue to play in energizing the FTAA negotiations, and thus slowing progress on the regional project. Second, although bilateral deals may be an effective short-run strategy for smoothing over the hemisphere's enormous asymmetries in terms of development levels and competitiveness, they do little to resolve the more pressing problems that the region now faces—the need to liberalize trade in agriculture, and the strengthening of US-MERCOSUR relations, especially the US-Brazil relationship, as the finalization of the FTAA now hinges on the joint leadership of these two countries.

Then again, just as the US reliance on a bilateral strategy in the mid-1980s in the form of completing a Canada-US FTA worked to reignite multilateral negotiations (the Uruguay Round) and to trigger a new subregional accord (NAFTA), today's bilateralism could serve as a similar catalyst. This is especially so with the conclusion of FTAs between countries that do not represent high opportunity costs for the United States precisely because of their economic vulnerabilities. For example, US negotiations with El Salvador and Costa Rica in Central America, the Dominican Republic and Trinidad Tobago in the Caribbean, and Ecuador and Bolivia in the Andean region all fall under this category. However, bilateralism on its own will not add up to much more than a piecemeal approach. Inevitably, the two key challenges of reaching an agreement on agricultural market access and incorporating the bigger Southern Cone economies more directly into US trade negotiations via the FTAA must be addressed.

For the time being, Fishlow notes that given “these circumstances, why not a bilateral pact between the United States and Brazil, or, much more probably, with MERCOSUR? In principle, this arrangement... would allow Brazil to bypass the WTO-plus requirement that the United States currently insists on in its FTAA negotiations; it is consistent with the differentiation of tariff offers among groups of Latin American countries thus far made by the United States...by embracing a strategy of bilateral advance with Brazil and MERCOSUR, the United States

would transform the postponement of the FTAA and the Doha round from a negative to a positive signal” (2004:294).

6. CONCLUSION

Not surprisingly, and despite the numerous angles and intricacies that we have covered here, the fate of the FTAA now lies in the abilities of US and Brazilian negotiators to hammer out differences that have divided “North and South” since the founding of the GATT. With its incredible competitive edge in “new” trade issues like services, intellectual property, and the high-tech sectors, the United States has doggedly pushed for an FTAA negotiating agenda that targets deep liberalization in these areas while offering little in return. Brazil, by far the largest and most industrialized country in Latin America with enormous comparative advantages in natural resources, has similarly sought increased access to the US market in agricultural and manufactured goods, while stubbornly hedging on any serious discussions of liberalizing within these newer trade categories. Domestic politics in both countries have hampered the ability of political leaders and trade policymakers: in the United States, it is the declining traditional sectors (agriculture, textiles, steel) that have staunchly resisted exposure to lower priced imports from Latin America; and in Brazil it is an entrenched elite that fears competition in those new trade sectors (services, investments, high-tech) in which the country remains vulnerable.

But despite the series of impasses that led up to this current standoff between Brazil and the United States, in its own quixotic way, the FTAA process has moved forward. Although hindsight has already shown that the 2005 completion date was overly ambitious, the negotiating apparatus and bureaucratic machinery are indisputably in place. Brazil and the United States both seem intent on tossing the ball back into each other’s court, each daring the other to make the first move in broadening the trade negotiating agenda. One outcome of this jockeying has been the lining up of the other MERCOSUR members in favor of the Brazilian position, which we see as a necessary condition for the successful completion of the FTAA agreement. In turn, this increased cohesion on the MERCOSUR side has been met with some concessions at the multilateral level, especially with regard to the recent verbal

commitments made by the United States and the European Union to enter into good-faith negotiations toward the reduction of agricultural subsidies and barriers at the WTO.

There is, however, still some high-decibel white noise surrounding the FTAA process. Apart from the political difficulties encountered in quickening the pace of reciprocal market access in both old and new sectors, the basic question of how to proceed remains a work in progress. We have already expressed our misgivings over the US tendency to rely too heavily on bilateral approaches to hemispheric integration, especially given that such negotiations to date have mainly amounted to the offering of more permanent market access to those subregional groupings (Central America, Andean Community) that have previously received these same perks but on a temporary and renewable basis. MERCOSUR is the one subregion in which no previous deals have been cut with regard to accessing the US market, and hence the one bilateral route that does indeed make sense from the standpoint of the United States and Brazil. It appears, though, that both countries are intent on pursuing the least direct route toward this path. As Lula and his team now push to re-set the FTAA clock to a gradual mode that ostensibly offers all kinds of plurilateral and *à la carte* options for the weaker Latin American countries, and the Bush administration seeks to keep the FTAA process from derailing altogether, there is still plenty of time for both sides to find their way to a win-win strategy that mutually embraces bilateral advances.

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NOTES

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2. The Trade Promotion Authority (TPA) bill, part of the larger Trade Act of 2002, was renewed through 2007 and marked a major victory for the Bush administration. The spirit of TPA is essentially the same as the earlier "fast-track" legislation—a term that was dropped by the Bush trade policy team due to accusations by antiglobalization groups that fast track assigned too much unchecked decision-making authority to the office of the executive. However, like fast track, the TPA bill established expedited procedures for the US Congress to accept or reject trade deals negotiated and submitted by the president, but deprived lawmakers of the opportunity to change or amend the agreements in any way. For more details on TPA see <http://waysandmeans.house.gov/hearings>.
3. The trade figures cited in this section are from Destler (2004:400–404).
4. A particularly pessimistic view can be found in Smith (1999:41).
5. Perhaps the most thorough and articulate defense of the FTAA to date can be found in Salazar and Robert (2001).
6. Authors' conversation with Richard Feinberg, North-South Center, Miami, January 2001
7. There were ten bilateral treaties and four custom union agreements in the hemisphere at this time.
8. Nine negotiating groups were created within the Trade Negotiations Committee (TNC): market access (agriculture); subsidies and antidumping; standards and technical barriers to trade; services; investment; competition policy; intellectual property; government procurement; and dispute resolution.
9. Preferential access to the US market for the Andean countries was called ATPA,

- and eligibility was awarded to those Andean countries that credibly implemented US policies to combat coca cultivation and drug trafficking.
10. By 1998, MERCOSUR had signed free trade agreements with Chile and Bolivia that enabled each to become associate members (i.e., participation as observers within the various institutional bodies of MERCOSUR). However, Peru, Ecuador, Colombia, and Venezuela had yet to reach an agreement with MERCOSUR to negotiate historical preferential accords under the umbrella of the Latin American Integration Association (LAIA).
 11. See F.H. Cardoso's speech at the Third Summit of the Americas in Quebec City, April 2001. *Resenha UNIR*, 17 Maio 17 2001.
 12. Editorial, *Gazeta Mercantil*, 15 March 2001.
 13. See, for example, Hess (2001); Chappell (2002); Meyers (2002); and statement by Secretary of Agriculture Ann M. Veneman on Introduction of Trade Promotion Authority Legislation in the House of Representatives, 13 June 2001 (<http://waysandmeans.house.gov/hearings>).
 14. Although MERCOSUR's CET ranges from 0 to 20 %, the CET for the auto sector currently stands at 35 %. The bloc is also riddled with numerous national exceptions to the CET. Personal communication, Thomas O'Keefe, director, MERCOSUR Consulting Ltd, Washington, DC, 17 September 2004.
 15. According to a study by LAIA, intraregional trade in South America has been increasingly concentrated in manufacturing and nontraditional products, while South American exports to the United States are mainly those based on natural resources. See, ALADI (2001) and Vaillant (2001).
 16. Besides, the MERCOSUR countries cannot compete with northern industrialized countries in terms of R&D; as is well known the latter monopolizes technological innovation and inventions.
 17. *Gazeta Mercantil Latinoamericana*, 12 March 2001.
 18. Brazil and Argentina are the second and third most important producers of grains (soybean, maize, and wheat) in the world.
 19. The applicability of the EU compensation mechanisms toward the Western Hemisphere are discussed at length by Pastor (2001); also see Stevens (2004).
 20. *Gazeta Mercantil Latinoamericana*, 19 Febrero 2001.
 21. Entrevista C. Lafêr: "Chanceler ataca os críticos da ALCA," *Correio Braziliense*, 16 Abril 2001.
 22. Speech by Ambassador Adhemar Bahadrian, Brazilian Co-Chair of the FTAA negotiations, at the conference "The Business of the Americas: Examining Issues of Growth and Trade in the Hemisphere," Council of the Americas and Hemisphere, Inc., Atlanta, Georgia, 20 May 2004.
 23. *Gazeta Mercantil Latinoamericana*, "Argentina acha possível antecipar a ALCA," 29 January 2001; *Valor Econômico*, "Brasil discorda do projeto de Cavallo para o MERCOSUL," 27 March 2001.

Negotiating the FTAA Between the Main Players

24. Progress in this important area was stalled because the Argentine peso's peg to the US dollar was so out of step with the more flexible exchange rate policies that prevailed in Brazil and the rest of MERCOSUR.
25. The Sarney-Alfonsín agreements of 1985 and 1988.
26. At the FTAA Trade Ministerial meeting in Quito, Ecuador (November 2002), it was agreed that all countries should start an exchange of market access offers within all negotiating groups between 15 December 2002 and 15 February 2003, so as to meet the FTAA's negotiating timetable. The Brazilian government hinted that it would like to postpone the exchange of these offers for market access.
27. See USTR speeches and testimonies (www.ustr.gov), and Robert Zoellick's address, "Trading in Freedom: The New Endeavor of the Americas," at the Miami Herald's Sixth Annual Americas Conference, Miami, 14 October 2002. In the case of Central America, he referred specifically to El Salvador and the Dominican Republic. The US-Central American FTA negotiations were officially launched in January 2003.
28. *El Mercurio*, Santiago, "Chile sella histórico pacto con Estados Unidos," 12 Diciembre 2002.
29. GSP is a tool used by developed countries to unilaterally open their markets to selected developing countries in specific product areas. In the case of the United States, the Trade Act of 2002 retroactively renewed its GSP program until 31 December 2006, but with the stipulation that beneficiary countries help the United States to combat terrorism and the abuse of child labor. For more detail see the website of the USTR (www.ustr.gov).
30. For a broader set of alternative scenarios see Peña (2003).

FTAA: Assessments and Perceptions of the Brazilian Government and Production Sectors

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1. INTRODUCTION

The proposal to set up a Free Trade Area of the Americas (FTAA), which was launched in 1994 during the Miami Summit of the Americas, prompted widespread discussion in the main countries on the continent about the type of integration involved and the timing of the implementation of the pact. For the United States, the FTAA proposal reflected a shift in trade strategy, with less commitment to multilateralism, and a reorientation of its negotiation efforts toward bilateral or plurilateral initiatives focused on the Americas. In Brazil, an almost unanimous opinion firmed up between government authorities and the production sector that the nation's economy, which was still adapting to the trade deregulation process, was not yet ready to commit to broader preferential trade schemes and harmonized regulatory structures with the United States as the main partner.

As a result of this attitude, Brazil's negotiating stance has been characterized by a lack of initiatives and by measures designed to postpone this process, all of which reflects a political preference for non-engagement. This strategy carries the risk that Brazil might be marginalized in the process, and that has to be weighed against the risks involved in full support of the proposal to establish the FTAA.

Against the background of this dilemma, this study examines the prospects and challenges of the FTAA implementation process for the Brazilian economy, and discusses the perceptions in the Brazilian gov-

ernment and production sectors of the risks and opportunities in the negotiations. The next section reviews the precedents leading to the FTAA integration process, particularly the new wave of regionalism that swept through the Americas in the 1990s prompted by the advent of the North American Free Trade Agreement (NAFTA) and the launch of the Americas integration project. Section 3 analyzes the political will of the two largest countries on the continent, the United States and Brazil, as well as how the integration processes that they head up have shaped the FTAA negotiations. The next section analyzes trading standards between Brazil and the FTAA countries, in addition to trade relationships between Brazil and the United States. Section 5 discusses the perceptions of the Brazilian government and production sectors of the effects of the FTAA on the local economy. The sixth and final section presents the latest results of the negotiation process, especially the main characteristics of the Brazilian and US market access offers, and summarizes the main conclusions of the study.

2. BACKGROUND

The New Regionalization Cycle in the Americas

From the mid-1980s onwards, various bilateral or subregional initiatives put the question of integration back on the economic policy agenda of the American nations, despite some political friction and a number of economically ineffective experiments undertaken during the decades when the import substitution model ruled supreme in Latin America.

Although the resurgence of this subject was linked to the worldwide spread of the phenomenon of regionalization, in the case of the Americas it is connected to two specific processes and is directly influenced by them. The first is the rising importance of unilateral mechanisms and bilateral relationships for implementing US trade policy objectives. The second is the commercial deregulation process and the review of economic regulation structures at the domestic level that was underway in the countries of Latin America.

The initial trend reflects the alterations that were taking place from the 1980s onwards in the economic policy underpinning US trade strategies. These changes weakened US support for multilateralism, with the result that negotiating efforts concentrated on bilateral or minilateral initiatives.

The weakening US commitment to multilateralism was not only limited to more evident willingness to negotiate bilateral and minilateral agreements. It was also accompanied by a strengthening of the legal and institutional framework that the United States was setting up against “unfair trade practices,” and, from 1988 onwards, pressure on its trade partners to agree to talks focused on implementing policies in areas free from obligations that had been accepted under the General Agreement on Tariffs and Trade (GATT), where at times trade links were open to discussion (Kahler 1993).

The outcome of these processes was that US support for regionalism was shaped by the perception that the functional aspects of this movement were designed not only to seek alternatives to multilateral talks but more importantly to deploy “aggressive unilateralism” and “threats of retaliation” as negotiating methodologies. This means that, among other dimensions of the situation, US domestic law and unilateral trade policy mechanisms, together with the political make-up of domestic interests that are allegedly affected by the talks, are hierarchically superior to commitments undertaken in the bilateral or minilateral negotiations, even when these talks involved setting up a free trade area.

Reflecting the primacy of unilateralism and the political composition of domestic interests, the model for dealing with national diversity in terms of rules and legislation urged by the United States was based on “asymmetric harmonization” (Kahler 1993). Consequently, in the process of implementing the regional agreements, the contents of discussion agendas tend to be defined by domestic interest groups in the most developed country, and a harmonization strategy or “institutional convergence” (Bouzas and Ros 1995) is benchmarked to the standards and rules of that country.³

The second process shaping the cycle of new regionalism in the Americas consists of structural reforms and trade deregulation implemented by the Latin American countries after the second half of the 1980s. The preferential tariff structures instituted by various countries in Latin America fall within this drive to overhaul its development model, striving for international acceptance represented by import substitution.

Various factors shape the attitudes and feelings of the politically dominant economic groups, in interactive rather than exclusionary ways, in terms of preferential tariff structures and particularly the prospects for talks with the United States:

- ways of including criteria based on liberal paradigms in the economic management of the various countries;
- scope and diversification levels of local production structures; and
- economic links between various countries and the United States, and more specifically the density and structure of bilateral trade flows.

It is no coincidence that in Brazil, a country with a widely diversified industrial structure that adopted a selective deregulation and industrial promotion strategy, talks with the United States are perceived as being extremely risky. This perception of risk is linked to the effects of the competitive clash between the two economies and also to the prospect of a loss of autonomy in the deployment of domestic policies.⁴

In contrast, countries battling with somewhat unsophisticated production structures and trade flows that are concentrated on links with the United States tend to approach these talks from the standpoint of positive incentives and opportunities for preferential access to its massive markets.

Appearance and Development of the FTAA Project

The Enterprise for the Americas was launched by the Bush Administration in 1990; it is the first strategic movement in the United States designed to bring Latin America back into the fold of its foreign policy in a scenario in which economic competition among the leading capitalist countries followed in the wake of political clashes between radically different social models.

This enterprise included some political and economic components, but by the time of the Summit of the Americas in Miami in 1994, the 34 countries in the Americas (excluding Cuba) were focusing their attention on the idea of setting up a Free Trade Area of the Americas (FTAA), to be negotiated through to 2005. The plan of action approved in Miami was drawn up in greater detail and developed at subsequent ministerial meetings. At the meeting held in Denver in 1996, the ministers defined the establishment of theme-based working groups.

As a core principle, it was acknowledged that this agreement should be fully in line with the rules of the World Trade Organization (WTO) and compatible with the idea of open regionalism. It was also agreed that it would include subjects that were closely connected to trade in goods and materials, as well as “new” issues, such as investment, services and gov-

ernment purchases. Adherence to the pact would necessarily mean accepting this set of provisions and obligations.

At the various ministerial meetings, and still today, Brazil and the United States have polarized the debate. The compromise solutions reached for building up the FTAA are proving insufficient to eliminate the idea of “two-tier integration” through extending the integration of the existing subregional blocks while setting up hemispheric working groups to study the introduction of regulatory measures across the continent.

3. CONDITIONING FACTORS IN THE FTAA NEGOTIATING PROCESS

Political Will as an Expression of FTAA Priority in the Foreign Policy Strategies of Brazil and the United States

The determination and the level of commitment and political will with which the national players have become involved in the FTAA discussion process generally reflect two factors. The first has to do with the balance of domestic political forces from within civil society and their representation in government, and the second has to do with the level of priority that the hemisphere-wide integration process has been given on national foreign agendas. There is no doubt that the involvement of the various countries in the FTAA project, and their consequent level of commitment, have always been shaped not only by the proposed integration models but also by the scope and timing of the discussions. Furthermore, it should be stressed that, whichever integration model is under discussion, the two factors mentioned above mutually interact. This is because the play of domestic political forces and their parliamentary representation may raise or lower the priority ranking that the executive authority confers (or may confer) on specific items on the foreign agenda, just as the executive authority may wield arguments demonstrating to the representatives of civil society the advantages that the country would gain as a result of certain specific options adopted in the conduct of its foreign policy.

Although somewhat simplified, this analytical scheme may be used to examine the levels of commitment and political will in the hemispheric integration process in the two leading countries in that process, the United States and Brazil. From the standpoint of both countries, it is possible to work with the hypothesis of “conditional priority.”

There is widespread awareness in Brazil that the FTAA project is competing with other initiatives on the nation's foreign agenda. Brazilian diplomacy has reaffirmed that its foreign policy should focus on a set of actions designed to consolidate its position as a global trader; reinforce multilateralism through obtaining guarantees on compliance with (and the extension of) the commitments undertaken through the talks to be held under the WTO/Doha Round; consolidate the MERCOSUR integration process, its current crisis notwithstanding, as a factor in giving the region's production sector a keener competitive edge and thus boosting national bargaining power in international discussions; expand the bilateral and unilateral agreement networks with trading partners in Latin America and other markets in Africa (particularly South Africa) and the Far East (particularly China); and establish a trade agreement between MERCOSUR and the European Union.

Furthermore, it has never been generally agreed among the various production segments in Brazil that the FTAA negotiating process would necessarily be beneficial. There is still much resistance to the idea of implementing the FTAA among domestic market-driven segments as well as some export-driven sectors that lack the scale to compete with larger producers in the region. The former urges a position that differs from the export sector, whose performance has been affected by trade barriers thrown up in the US market. The exporters tend to be upbeat in terms of the possibility that the implementation of the FTAA will pave the way for an across-the-board review of US trade policy, which would provide leverage for a considerable upsurge in exports to that market. In addition, the states of northern Brazil are also urging more significant progress in the talks, as they are at a disadvantage in the MERCOSUR integration process due to their geographical location. In the 1990s, for instance, the Pará State Federation of Industries even supported the idea of talks on a trade pact between that region and the United States as a kind of trial balloon for the full FTAA.

There is no doubt that significant progress has been made in Brazil in terms of preparing studies and assessments of the costs and benefits resulting from the implementation of the FTAA, particularly through the efforts of the National Confederation of Industry (CNI—Confederação Nacional da Indústria). The CNI launched a wide-ranging mobilization process in Brazil's production sector in order to establish a forum for discussions with the government; it also sponsored studies on the sectoral impact of the

FTAA. This initiative created synergies between the government and private enterprise that prompted a shift in perception about the ability of the negotiators at the discussion table to handle the Brazilian position; it also took into account the “resistance and interest” in the production sector, which sought protection for potentially affected sectors while simultaneously upgrading the access conditions to the US market for specific segments.

In the United States, the optimism that followed President Clinton’s December 1994 launch of the proposal to establish the FTAA soon gave way to a more realistic view, among government and private US agents, of the stumbling blocks and difficulties that the proposal would have to face before the full establishment of a free trade zone in the hemisphere.

This is similar to what occurred in the 1995 “Tequila Crisis,” when rising trade deficits with Mexico and Canada built up an awareness in US society that the opportunities and benefits generated by the North American Free Trade Association (NAFTA) were falling below expectations.

The US Congress also became more sensitive to discussions of trade pacts and their impact on jobs and the environment; to a large extent, this prompted changes in the congressional representation that underpinned the coalition between the wing of the Republican Party not lined up behind free trade and the Democratic Party sectors supported by trade unions and environmental entities.

The new weight of political representation in the US Congress and the 1996 presidential campaign virtually gridlocked the possibility of the president obtaining fast-track authority for the FTAA talks. Even after President Clinton was re-elected, he did not find Congress very receptive to the fast-track authority he was requesting, and the election of a Republican administration headed by George W. Bush made fast-track authority approval no easier to obtain.

The Trade Promotion Authority (TPA), the new name for the fast-track mechanism, was finally passed in August 2002. It conferred a negotiating mandate on the president that included mechanisms and rules with the potential to introduce a series of restraints that would hobble the FTAA talks. For example, agricultural production is a sector in which reduced restraints on trade would be welcomed by the MERCOSUR nations, but most agricultural products are included on the list of some three hundred items excluded from the talks under examination by the US Congress.

Another problem is the inclusion of the TPA under what is known as the “killer amendment.” This allows Congress to assess separately any decision taken by the president in international talks that could be deemed to weaken US trade protection tools, particularly as regards dumping, subsidies, and safeguards. The United States has been guilty of a certain amount of backsliding, a number of protectionist measures have been deployed since the Bush administration approved safeguards imposed against imported steel, and higher agricultural subsidies were introduced through the Farm Bill. In this context, the new TPA and the protectionist approach of the Republican administration may hamper the progress of the FTAA negotiations as they move into their decisive phase.

Another initiative parallel to the FTAA talks was the discussion tabled between the United States and MERCOSUR (“4+1”), under the auspices of the Rose Garden Agreement, signed in 1991. The US Trade Representative’s Office and the Ministers of the Economy and Foreign Affairs of the MERCOSUR nations decided in September 2001 to sign a commitment to complete the FTAA by January 2005. This re-established the functions of the Council on Trade and Investment (set up by this agreement) and developed a work program designed to identify mechanisms to facilitate market access between the two regions in the areas of agriculture, manufactured goods, e-commerce, and investment.

Integration Models Headed by Brazil and the United States

Over the next few years, the FTAA negotiating process will be largely dependent on the respective integration projects headed by Brazil and the United States. In terms of the proliferation of bilateral and subregional preferential initiatives in the Americas, only MERCOSUR and NAFTA have presented themselves as paradigmatic integration schemes, which makes them suitable integration models on a continent-wide scale. In particular, analyses are required to investigate whether the differences and similarities between the integration strategies of MERCOSUR and NAFTA may result in future deadlock in the negotiating process.

There are some notable similarities between MERCOSUR and NAFTA in terms of integration concepts, objectives, and mechanisms. In both there is a marked economic and political imbalance between the “big country” and its partners. This asymmetry of size translates into the capacity of the

“big country” to determine the scope of the agenda, the timing of the talks, and the essential characteristics of the integration model under discussion. In the case of NAFTA, where the policy agenda was extremely important for the United States, this characteristic was reflected in the high priority assigned to an asymmetric harmonization methodology for rules and laws. In the case of MERCOSUR, where Brazil has been systematically “undermining” the idea of negotiating policies, particularly those with a strongly selective sectoral bias, discussions focused largely on market access, resulting in a premature and flawed customs union. For both MERCOSUR and NAFTA, questions to do with the economic and social cohesion of the integration processes, and more particularly with the interests of the less developed countries, have received only secondary attention.

There are also many important differences between the two. The NAFTA integration model blended the introduction of a limited free trade zone (based on a wide-ranging set of rules of origin detailed by sector) with the implementation of common disciplines or agreements in the services and investment area and in intellectual property, labor, and environmental rules (Machado 1993).

The United States is urging the adoption of a discussion standard (based on the activities of the working groups) to pave the way for the implementation of a free trade area, using the national commitments accepted during the Uruguay Round of GATT as the starting point for establishing WTO-plus schemes, whose framework should be along the general lines of the terms defined by NAFTA.

Resistance by the United States to including questions of economic development and assistance for industrial sectors affected by integration during the NAFTA talks reappeared during the FTAA implementation process. Although it admitted that the FTAA would have to deal with the problems of the smaller economies, the United States stressed that the agreement should be limited to identifying certain domestic adjustments and mechanisms that the smaller economies should implement so that they could accept full-partner commitment in the FTAA.

In terms of the MERCOSUR integration project, particular attention was paid to talks on access to consumer goods markets. In fact, these talks reflected a preference for an easier path, reproducing a trade-based model that could be interpreted as a consequence of resistance by Brazilian negotiators to adopting harmonized rules and implementing supranational insti-

tutions, introducing compensation or assistance mechanisms for smaller partners and procedures that would undermine sovereign powers for policy administration (particularly in the commercial and industrial areas).

This same model also served as a benchmark for the renegotiating process of earlier bilateral agreements between the MERCOSUR partners and the Latin American Integration Association (LAIA) nations. These talks tended to emphasize the issue of market access and the review/extension of the “legacy” listings of products discussed as the starting point for implementing the free trade zones within at least ten years.

Almost a decade has gone by since the customs union was established. Looking at the current crises slowing the discussion processes, and the relative failure of the negotiating authorities to define fresh agreements between the MERCOSUR and the other LAIA countries, all these factors together seem to have undermined the establishment of a clear identity for this economic bloc. Given a somewhat limp learning curve and lacking experiments and experiences in harmonizing policies or establishing common tools at the regional level, a network of trade pacts preserving the commercial interests of this economic bloc against the LAIA member nations might well undermine the negotiating capacity and bargaining powers of MERCOSUR during the FTAA negotiating process.

4. TRADE BETWEEN BRAZIL AND THE FTAA COUNTRIES AND THE DEVELOPMENT OF TRADE RELATIONS BETWEEN BRAZIL AND THE UNITED STATES

From 2000 onwards, Brazil's trade balance with the FTAA nations once again began to post surpluses, reflecting an upturn in the trend noted since 1995 (Table 1). This kept pace with the performance of the balance of trade between Brazil and the United States, its main regional partner, reflecting to a marked extent the shift in Brazil's foreign exchange policy in late 1999, when the band system was replaced by a floating foreign exchange scheme. This about-turn in the balance of trade was also spurred by flagging exchange rates that lowered the costs of Brazilian exports, generally those with less technological content, while increasing import prices.

The relatively recent devaluation of the Brazilian real against the US dollar that followed the shift in Brazil's foreign exchange system func-

Table 1. Brazil: International Trade (\$ millions)

	1-US			2-MERCOSUR		
	Exp. (a)	Imp. (b)	(a)/(b)	Exp. (a)	Imp. (b)	I(a)/(b)
1990	7594.3	4393.0	1.73	1320.2	2319.6	0.57
1991	6264.4	4938.2	1.27	2309.4	2268.4	1.02
1992	6932.8	4538.7	1.53	4097.5	2228.6	1.84
1993	7843.3	5062.3	1.55	5386.9	3378.3	1.59
1994	8816.2	6674.4	1.32	5921.5	4583.3	1.29
1995	8682.8	10519.5	0.83	6153.8	6843.9	0.90
1996	9182.6	11818.4	0.78	7305.3	8301.5	0.88
1997	9276.2	13706.1	0.68	9046.6	9517.0	0.95
1998	9747.3	13505.3	0.72	8878.2	9427.7	0.94
1999	10674.8	11726.8	0.91	6777.9	6718.9	1.01
2000	13180.5	12894.3	1.02	7733.1	7794.1	0.99
2001	14189.6	12896.8	1.10	6363.7	7010.0	0.91
2002*	6864.0	5001.7	1.37	1481.5	2877.5	0.51
	3-Other FTAA			FTAA Total (1+2+3)		
	Exp. (a)	Imp. (b)	I(a)/(b)	Exp. (a)	Imp. (b)	I(a)/(b)
1990	2889.5	1847.4	1.56	11804.0	8559.9	1.38
1991	3478.6	2158.2	1.61	12052.4	9364.8	1.29
1992	4448.9	2104.2	2.11	15479.2	8871.4	1.74
1993	4860.1	2250.6	2.16	18090.3	10691.1	1.69
1994	4988.2	2789.2	1.79	19726.0	14046.8	1.40
1995	4947.3	4548.6	1.09	19783.8	21912.0	0.90
1996	4767.2	4833.9	0.99	21255.1	24953.9	0.85
1997	5984.7	5276.0	1.13	24307.5	28499.1	0.85
1998	5767.1	4523.3	1.27	24392.6	27456.3	0.89
1999	5062.2	3911.0	1.29	22514.9	22356.6	1.01
2000	6579.6	5173.1	1.27	27493.2	25861.4	1.06
2001	7412.7	4144.3	1.79	27965.9	24051.1	1.16
2002*	3874.9	1780.3	2.18	12220.4	9659.5	1.27

Source: Secretaria da Receita Federal (2002)

*January/July

Table 2. Brazil: Import and Export Share in Selected Markets (%)

(%)	US		MERCOSUR		Other FTAA		Total FTAA	
	Exp. (a)	Imp. (b)	Exp. (a)	Imp. (b)	Exp. (a)	Imp. (b)	Exp. (a)	Imp. (b)
1990	24.2	21.3	4.2	11.2	9.2	8.9	37.6	41.4
1991	19.8	23.5	7.3	10.8	11.0	10.3	38.1	44.5
1992	19.4	22.1	11.4	10.8	12.4	10.2	43.2	43.2
1993	20.3	20.0	14.0	13.4	12.6	8.9	46.9	42.3
1994	20.2	20.2	13.6	13.9	11.5	8.4	45.3	42.5
1995	18.7	21.1	13.2	13.7	10.6	9.1	42.5	43.8
1996	19.2	22.2	15.3	15.6	10.0	9.1	44.5	46.8
1997	17.5	22.9	17.1	15.9	11.3	8.8	45.9	47.6
1998	19.1	23.4	17.4	16.3	11.3	7.8	47.7	47.6
1999	22.2	23.8	14.1	13.7	10.5	7.9	46.9	45.4
2000	23.9	23.1	14.0	14.0	11.9	9.3	49.9	46.3
2001	24.4	23.2	10.9	12.6	12.7	7.5	48.0	43.3
2002*	27.4	22.3	5.9	12.8	15.5	7.9	48.8	43.0

Source: Secretaria da Receita Federal (2002)

*January/July

tioned as the main factor shielding domestic output in a situation of shrinking tariff protection measures ushered in by the trade deregulation process that is currently under way. The Brazilian Federal Revenue Bureau's estimates of average rates (the tax calculated on the basis of the face value of the Common External Tariff for each type of merchandise imported divided by the taxable value) and of the real value (tax actually paid, divided by the taxable value) dropped from 16.38% and 6.31%, respectively, in 1998 to 12.79% and 5.11% in 2000.

FTAA countries played a leading role in Brazil's foreign trade, with approximately one-half of Brazil's exports and 43% of its total imports resulting from commercial transactions with countries in the region (Table 2). Brazilian regional trade is also very highly concentrated: in 2000, seven nations (United States, Argentina, Mexico, Chile, Paraguay, Venezuela, and Uruguay) absorbed almost 90% of Brazilian exports to FTAA markets and just seven countries (United States, Argentina, Venezuela, Canada, Chile, Mexico, and Uruguay) account-

Table 3. Brazil: Export Structure by Different Types of Products (%)

	Basic Products				Semimanufactured Products			
	US	MERCO- SUR	Others	Total FTAA	US	MERCO- SUR	Others	Total FTAA
1995	8.0	3.7	2.6	14.3	20.7	2.6	3.1	26.5
1996	8.5	4.3	2.7	15.4	22.3	2.7	4.5	29.5
1997	7.9	3.8	2.5	14.3	24.0	3.7	4.7	32.4
1998	7.4	4.5	3.5	15.3	24.2	3.6	5.2	33.0
1999	9.2	3.7	3.4	16.2	26.0	2.6	4.2	32.9
2000	7.5	3.6	4.3	15.3	28.7	2.3	3.9	34.9
2001	5.4	2.9	4.9	13.1	24.7	2.5	4.4	31.6

	Manufactured Products				Total			
	US	MERCO- SUR	Others	Total FTAA	US	MERCO- SUR	Others	Total FTAA
1995	22.8	21.5	17.0	61.3	18.7	13.2	10.6	42.5
1996	23.1	24.8	15.3	63.1	19.2	15.3	10.0	44.5
1997	20.8	27.9	17.8	66.5	17.5	17.1	11.3	45.9
1998	23.1	27.2	16.6	66.9	19.1	17.4	11.3	47.7
1999	27.3	22.3	15.8	65.5	22.2	14.1	10.5	46.9
2000	29.3	21.7	17.5	68.5	23.9	14.0	11.9	49.9
2001	34.3	17.3	19.1	70.8	24.4	10.9	12.7	48.0

Source: Secretaria da Receita Federal (2002)

ed for some 95% of Brazilian imports from the region. The importance of the region in Brazil's foreign trade is confirmed in its exports of manufactured goods (Brazilian Ministry of Development, Industry and Foreign Trade [MDIC] criteria), particularly products with higher added value. The figures in Table 3 show that manufactured goods are overrepresented in Brazilian exports to the United States, which absorbed 34.3% of such exports in 2001 and 24.4% of total exports. The same trend can be seen in sales to other FTAA countries (FTAA, except MERCOSUR and the United States), which accounted for 19.1% of manufactured goods and 12.7% of total exports.

Table 4. Brazil - FTAA Trade: Number of Export/Import Companies by Country and Shares Held by the Twelve Largest Companies in Imports/Exports by Country (2000)

	Number of Companies		C12* (%)	
	Exporters	Importers	Exporters	Imports
NAFTA				
United States	4698	12438	32.74	25.50
Canada	1081	2002	31.52	33.83
Mexico	1653	11442	56.53	40.13
MERCOSUR (expanded)				
Argentina	5888	4791	26.09	43.73
Paraguay	2933	402	17.00	54.86
Uruguay	4132	1499	17.43	27.59
Chile	2871	1151	26.96	56.68
Bolivia	2223	114	27.59	95.23
Andean Community (except Bolivia)				
Peru	1437	291	32.38	76.83
Columbia	1239	352	37.91	85.35
Venezuela	1665	270	39.71	93.77
Ecuador	824	132	41.79	69.02
CARICOM				
Antigua & Barbuda	33	1	74.47	100
Bahamas	76	20	92.52	96.73
Barbados	122	8	73.39	100
Belize	37	4	73.09	100
Dominica	33	1	65.81	100
Dominican Republic	538	41	36.91	76.2
Grenada	40	2	73.3	100
Guyana	99	3	53.84	100
Jamaica	211	11	57.54	100
Santa Lucia	49	1	98.98	100
St. Kitts & Nevis	6	1	100	100
St. Vicente & Grenadines	45	1	63.47	100

	Number of Companies		C12* (%)	
	Exporters	Importers	Exporters	Importers
Trinidad & Tobago	293	20	76.68	99.91
CACM				
Costa Rica	561	95	56.16	89.24
El Salvador	322	15	54.06	99.93
Guatemala	519	13	35.08	99.47
Honduras	313	20	43.56	97
Nicaragua	150	2	46.31	100
Others				
Panama	585	167	38.95	69.46
Haiti	143	3	55.93	100
Puerto Rico	556	134	46.52	73.12
Suriname	153	1	47.31	100

Source: Secretaria da Receita Federal (2002)

*January/July

Brazil's exports to the FTAA countries are clustered in a significantly small number of companies. In 2000, the twelve companies with the highest sales volumes to the United States accounted for 32.7% of exports to that country. Similarly, the twelve main companies with the highest volumes in the six other major importer nations accounted for 26.0% of Brazilian exports to Argentina, 56.5% to Mexico, 26.9% to Chile, 17.0% to Paraguay, 39.7% to Venezuela, and 17.4% to Uruguay (Table 4).

Exports by sector are also fairly tightly concentrated in a limited number of companies. In the year 2000, in the six main export sectors (with sales of over \$1.5 billion) that together made up 51% of Brazil's exports to the region, the top eight companies accounted for 64.4% of exports from the auto assembly sector, 45.5% from the basic metallurgy sector, 45.0% from the machinery and equipment sector, 34.6% from the food and beverages sector, 29.5% from the chemical products sector, and 25.7% of exports from the wholesale sector. In two of these sectors (vehicles, machinery and equipment), all eight companies were multinationals (Table 5).

An analysis of the businesses importing from the FTAA countries shows that the twelve largest companies accounted for the following shares from the seven major exporting countries: 25.5% from the United

Table 5. Brazil: Sectors with Exports to the FTAA of Over \$1.5 Billion (FOB)
Assorted Indicators (2000)

CNAE Sectors	No. of export companies	Sector share of exports to the FTAA (%)	Sector share of exports	
			4 largest companies	8 largest companies
34- Manufacture and assembly of automotive vehicles	423	14.7	50.8	64.4
27- Basic metallurgy	315	10.2	32.1	45.5
24- Manufacture of chemical products	852	8.4	20.1	29.5
29- Manufacture of machinery and equipment	1223	6.3	29.4	45.0
51- Wholesale trade	2161	6.1	18.2	25.7
15- Manufacture of food and beverage products	619	5.7	25.8	34.6

Source: Secretaria da Receita Federal (2002)

Table 6. Brazil: Sectors with Imports from the FTAA of Over \$1.25 Billion (FOB)
 Assorted Indicators (2000)

CNAE Sectors	No. of import companies	Sector share of imports to the FTAA (%)	Sector share of imports	
			4 largest companies	8 largest companies
51- Wholesale trade	4477	12.0	24.5	32.8
24- Manufacture of chemical products	1144	13.7	17.1	25.4
23- Manufacture of coke and oil refineries	3	13.3	100.0	100.0
34- Manufacture and assembly of automotive vehicles	302	8.1	51.5	73.5
15- Manufacture of food and beverage products	941	7.5	18.0	27.5
32- Manufacture of electronic material	270	6.8	66.5	77.9
29- Manufacture of machinery and equipment	796	4.9	28.0	32.4

Source: Secretaria da Receita Federal (2002)

States, 43.7% from Argentina, 33.8% from Canada, 40.1% from Mexico, 56.7% from Chile, 93.8% from Venezuela, and 27.6% from Uruguay. Companies are even more tightly clustered for imports from countries in the Andean Community and the CACM (Table 4).

In the most important import sectors, the eight main companies accounted for 100% of imports in the coke and oil products sector, 77.9% in the electronic materials sector, 73.5% in the auto assembly sector, 32.8% in the wholesale sector, 32.4% in the machinery and equipment sector, 27.5% in the food and beverages sector, and 25.4% in the chemical products sector. In the chemical products and machinery and equipment sectors, all eight of the main importers were multinational companies (Table 6).

A significant characteristic of Brazilian trade with the FTAA countries is the considerable weight of intrafirm trade, in which volumes are tending to rise as globalization spreads worldwide, paralleling the global sourcing strategies adopted by multinational companies. Recent data issued by the Brazilian Federal Revenue Bureau on major export sectors (CNAE classification) show that intrafirm trade accounted for 90% of regional foreign sales in 2000 from the main exporter company in the auto assembly sector, 94% in the wholesale trade sector, and 20% in the food and beverages sector (Table 7).

In 2000, 86.3% of regional imports by the largest chemical products importer consisted of intrafirm trade; for the largest importers in the automotive vehicle manufacture and assembly sector and in the machinery and equipment manufacture sector, this proportion reached 98.6% and 98.9%, respectively (Table 8).

It is worth recalling that intrafirm trade is relatively immune to price shifts and foreign exchange variations over the short term, as it takes place through transfer prices that are established according to the firm's global strategy. Moreover, if integrated with global sales networks, intrafirm trade may also benefit greatly from special tax incentive schemes, such as drawbacks. The regional importance of intrafirm trade and the practice of charging transfer prices may undermine the efficacy of customs tariffs and other trade policy tools, such as preferential agreements and safeguards. This is why the Brazilian Federal Revenue Bureau recommends that the topic be taken under consideration in the tax reduction process for the FTAA.

All of these data show that Brazil's foreign trade with the FTAA countries is highly concentrated in just a few countries, especially the United

**Table 7. Brazil - FTAA Trade/Intrafirm Trade for the Largest Exporter
Company in the Sector (2000)**

CNAE Sectors	Share of sector exports	Intrafirm trade: share in company exports (%)			Others
		Head Office/branch	Among branches	Total	
34- Manufacture and assembly of automotive vehicles	27.5	0	90.1	90.1	9.9
51- Wholesale trade	6.8	0	94.5	94.5	5.5
15- Manufacture of food and beverage products	9.1	0	20.3	20.3	79.7

Source: Secretaria da Receita Federal (2002)

**Table 8. Brazil - FTAA Trade
Intrafirm Trade for the Largest Importer Company in the Sector (2000)**

CNAE Sectors	Share of sector imports	Intrafirm trade: share in company imports (%)			Others
		Head Office/branch	Among branches	Total	
24- Manufacture of chemical products	6.5	61.4	24.9	86.3	13.7
34- Manufacture and assembly of automotive vehicles	22.9	14.3	84.3	98.6	1.4
15- Manufacture of food and beverage products	8.1	0.0	21.8	21.8	78.2
29- Manufacture of machinery and equipment	12.0	98.9	0.0	98.9	1.1
32- Manufacture of electronic materials	32.4	4.9	0.0	4.9	95.1

Source: Secretaria da Receita Federal (2002)

States. They also reflect a considerable business concentration for both exports and imports by country and production sector. Finally, they suggest that a significant portion of the trade exchanges take place on an intrafirm basis, indicating the importance of multinationals in regional trade, where transfer prices are tending to become more important.

In view of this, and particularly of the leading role played by the United States in Brazil's regional trade, the FTAA talks should be assessed as to their effects on trade between Brazil and the United States and, no less important, with other countries in the region (except MERCOSUR). Under these circumstances, discussions under the aegis of the FTAA generally focus on three core concerns from the Brazilian standpoint. One is the inclusion on the agenda of matters of interest to Brazil that have long encountered strong resistance or somewhat inflexible positions on the part of the United States (antidumping laws, agricultural subsidies, and intellectual property rules). Another is the question of introducing new topics, such as labor and environmental standards and concern over their future deployment as protectionist tools, particularly by the United States. Finally, there is the matter of talks on the timing of reciprocal concessions on market access, particularly with regard to goods (Paiva Abreu 2002).

Discussions on market access for goods have long included the question of the tariff protection structures enacted in Brazil and the United States. As is well known, Brazil's average tariff is higher than that of its main trading partner. However, recent studies focus more specifically on the tariff load that is actually charged on tradable goods by the two countries. For instance, an analysis by the Brazilian Embassy in Washington indicates that the average US tariff on the fifteen main products imported from Brazil to the United States hovers around 45.6%, while the average Brazilian tariff on the fifteen main products imported from the United States is only 14.3%. Although these figures may be somewhat inaccurate (the calculation of the average US tariff includes the surcharge quota on important products, such as tobacco and sugar), they do show that the idea that Brazil is a protectionist country compared to the more liberal United States is very relative (Paiva Abreu 2002).

Studies that take the average tariff as a basis, weighted by the volumes of tradable goods, strengthen this perception. However, they are unable to capture with much accuracy the constraints imposed on trade by these tariff structures, as the weighted tariff calculation is *ex post*, meaning that

it is based on trade undertaken with tariffs. Other studies draw attention to trade constraints imposed by peak tariffs allowed under US trade policy. Still in the area of tariffs, calculations by Brazil's Federal Revenue Bureau show that in 2000 the real average rate for Brazilian imports from the United States (8.57%) was higher than the real average rate for all the FTAA countries (5.11%). It is also noted that, taking the 2000 tariff structure as a benchmark, tax exemptions (the difference between the tax calculated and that actually paid) reached 60% for the NAFTA countries, which was significantly lower than the figure for the MERCOSUR (97%) and the LAIA countries (80%–90%). This suggests that the NAFTA countries, particularly the United States, would be the main beneficiaries of the introduction of a Free Trade Area in the region.

Regardless of the results of the political shift underway, and even of the effects on the future course of Brazil's trade policy, some starting points for Brazil's negotiating position will become clearer in the course of domestic discussions. One point is based on evidence that discussions about the level of protectionism imposed by the United States include issues that extend beyond a simple comparison of tariff structures with peak tariffs, nontariff barriers, and quotas that are common in US trade policy. This underscores the fact that Brazil's support for the FTAA depends to a large extent on alterations in the US economic protection policy that would pave the way for significant US concessions in fields such as agricultural subsidies, antidumping legislation, and protection for products rated as sensitive. This strengthens the perception that a US strategy based on "something for nothing" offers little possibility of success (Paiva Abreu 2002).

A second point is based on the understanding that it will be hard to reach agreement on the tariff reduction schedule. On the one hand, this reflects a perception that a full tariff reduction process would most probably trigger a significant upsurge in Brazilian imports, offset by only a modest expansion of exports (Carvalho and Parent, 2000). On the other hand, this is also supported by an awareness that many of Brazil's industrial sectors are not yet properly geared up to deal with free competition and trade barriers. This is the reason that so many studies (often sponsored by government agencies and business associations) assess the competitive edge of production chains and sectors, and analyze the effects of dismantling the protection schemes for portions of their domestic markets and the leverage for their export activities.

Due to the heterogeneous nature of Brazil's industrial structure, there are massive variations in the level of support for the FTAA project from the many different sectors. However, in addition to suggesting that the tariff-removal timing issue remains complex, these initiatives also indicate that the Brazilian government has become more sensitive to the demands of the business sector.

Another point of agreement that emerges from an analysis of talks on the FTAA is that any breakdown in progress—whether prompted by the resurgence of protectionist policies in Brazil or imposed by the inflexibility of US concessions in fields of interest to Brazil—would require some compensatory strategy, should the agreement be firmed up without Brazil, in order to reduce the negative effects of trade distortions, particularly with regard to the LAIA countries. In this case, Brazil's efforts should focus on negotiating bilateral trade agreements with countries where its interests are under the biggest threats.

In view of speculation that the positions adopted by the new administration will be more rigid in the field of deregulation policies, and of the asymmetry of interests under dispute in the FTAA, deadlocked negotiations are quite possible. This becomes even more likely should the matters of interest to Brazil fail to make progress at other negotiating levels, such as in the new round of talks at the WTO. There is clear evidence of this trend in the specialized analyses of this topic, as well as in what business leaders and government authorities say. In this scenario, systematic surveys and analyses of Brazil's negotiating position for the FTAA that focus on the leading players (opinion-shapers, government authorities, business leaders, and professional associations) are of crucial concern for the studies currently under way.

5. IMPACTS OF THE FTAA: RECENT PERCEPTIONS OF THE BRAZILIAN GOVERNMENT AND PRODUCTION SECTORS

During the last quarter of 2002, with Brazil's new government already elected, some indication of its position on the FTAA talks appeared in various venues, including published studies analyzing the consequences for domestic industry of trade deregulation, and statements by senior government officials who took office in January 2003. Among these studies are the

Table 9. Group 1 - Chains Facing Minor Threats

	Share (2000)		Trade Balance (total sum 1996/2001)		
	(%)		\$ million		
	Industry Billings	Foreign Companies	Total	Aladi*	Nafta
Coffee	0.6	15.0	13,472	531	2,388
Pulp and Paper	3.9	37.1	7,086	2,131	-376
Citrus Fruits	0.9	31.0	7,119	46	1,272
Leather/ Footwear	1.9	8.8	11,560	419	6,872
Steel	4.3	35.0	37,702	3,913	7,730
Textiles/ Clothing	4.2	22.5	-5,341	-90	-425

Source: Secretaria da Receita Federal (2002)

*January/July

findings of a simulation of the commercial impact of the FTAA on Brazil's balance of trade, which was commissioned by the São Paulo Federation of Industries (FIESP). The initial figures show that Brazil would lose over \$1 billion a year in foreign trade from 1 January 2006 onwards, which is the date scheduled for the FTAA to become effective (FIESP 2002).

In addition, there are the findings of a multi-institution survey organized by the Ministry of Development, Industry, and Foreign Trade and the Ministry of Science and Technology (MDIC 2002) that analyzes the effects on Brazilian industry of the discussions on an FTAA. This survey diagnoses the competitive edge for twenty production chains⁵ and proposes strategies to make Brazilian producers more competitive on both domestic and international markets. Minister of Development Sérgio Amaral said the conclusions of the study were a guide for discussions in greater depth with trade unions, business associations, and academic organizations, as well as a tool for shaping an industrial policy, should this strategy be adopted by the incoming government. The fact that this study was coordinated by a group of economists known to be critical of and prudent about trade deregulation makes its findings even more significant, as they indicate positions that will certainly carry some weight in intragovernmental discussions on the nature of the Workers' Party administration's trade policy.

Table 10. Group 2 - Chains with Severe Competitive Shortcomings

	Share (2000)		Trade Balance (total sum 1996/2001)		
	(%)		(\$ million)		
	Industry Billings	Foreign Companies	Total	Aladi*	Nafta
Capital Goods	4.9	60.2	-29,044	5,471	-9,097
Petrochemicals	6.6	40.9	-17,322	1,282	-7,826
Plastics	4.1	39.7	-1,995	769	-1,001
Shipbuilding	0.07	60.0	443	2	-14

Source: NEIT-IE-UNICAMP (2002).

* Including MERCOSUR and excluding Mexico

On the question of the effects of trade deregulation on Brazilian industry, this study divided the chains under analysis into four main groups. The first consists of chains that are not particularly threatened by the FTAA, so it would open up significant trade opportunities in coffee, pulp and paper, citrus fruits, leather and footwear, steel, and part of the textile/clothing chain.⁶ In general, these chains are rated as more competitive; they generated trade surpluses from 1996 through 2001 (Table 9).⁷ Significant nontariff barriers are imposed on some of them, which affects many of the products rated as sensitive by important trading partners, such as the United States. For this group of products, the study proposes aggressive political negotiations in order to guarantee broader access to foreign markets through lowering both tariff and nontariff barriers. As to a policy for enhancing competitiveness, it suggests action designed to boost the added value of export products, while supporting corporate internationalization.

The second group includes chains characterized by severe competitive shortcomings with chronic trade deficits. These are nondifferentiated capital goods, petrochemicals, processed plastic products, and shipbuilding. This last category is potentially competitive, but the industry was virtually scrapped during the 1990s. For this group, the study suggests extreme caution for schedules to lift tariff barriers, underpinned by solid competitiveness policies, in order to bridge gaps in the time frames of the protection mechanisms (Table 10).

Table 11. Group 3 - Chains with Location-Specific Opportunities and Threats

	Share (2000)		Trade Balance (total sum 1996/2001)		
	(%)		\$ million		
	Industry Billings	Foreign Companies	Total	Aladi*	Nafta
Wood/Furniture	2.1	12.2	6,210	489	1,914
Ceramics	0.7	19.0	1,036	520	406
Cosmetics	1.9	65.0	-426	240	-166

Source: NEIT-IE-UNICAMP (2002).

* Including MERCOSUR and excluding Mexico

The third group consists of chains in which threats and opportunities are either location-specific or counterbalance each another. These are wood/furniture, ceramic finishings and coatings, and cosmetics. The two first categories posted trade surpluses, while the last on the list has a moderate deficit (Table 11). From the standpoint of the study, these chains are not particularly sensitive to the outcome of the rounds of talks on deregulation, and they require precise, selective competitiveness policies and negotiating action. These might include incentives to adopt strategies of product differentiation (for instance, development of design and trademarks in the case of furniture, cosmetics, and ceramics), or ownership/environment policies (in the case of wood/furniture).

The fourth group consists of chains in which multinational companies have a significant presence, and where intra-firm trade predominates: auto assembly, pharmaceuticals, communication equipment, and consumer electronics. These trade flows depend heavily on the international strategy of the foreign companies controlling these chains (Table 12). From the standpoint of the study, political priority is assigned to urging higher profiles for local branches in the global production networks of multinational corporations, in order to prune shortfalls that account for much of Brazil's trade deficit. The cautious lifting of tariff barriers, local content policies, or managed trade, together with policies providing support for technological development, are viewed as important but insufficient when the foreign companies lack negotiating capacity.

Table 12. Group 4 - Chains in which Intra-firm Trade Predominates

	Share (2000)		Trade Balance (total sum 1996/2001)		
	Industry Billings	Foreign Companies	Total	Aladi*	Nafta
	(%)		\$ million		
Auto Assembly	9.4	86.5	-3,302	3,837	5,562
Communication Equipment	3.2	90.0	-13,330	-1,483	-6,177
Consumer Electronics	1.4	50.0	-6,678	551	-809
Pharmaceuticals	2.5	66.2	-13,341	193	-3,566

Source: NEIT-IE-UNICAMP (2002).

* Including MERCOSUR and excluding Mexico

In general, this study urges the adoption of a relatively cautious trade deregulation policy. Its conclusions rank the threats and opportunities resulting from a probable removal of trade barriers. The threats are arranged according to four criteria:

1. The possibility that a substantial increase in imports from the NAFTA countries (threat due to rising competitive pressures) might trigger a process of deindustrialization and denationalization for some segments of Brazilian industry. This would include the capital goods and petrochemical chains, as well as manufactured plastics, pharmaceuticals, cosmetics, consumer electronics, and certain links in the pulp and paper and wood/furniture chains. For all such chains, this study urged that the deregulation process should be postponed, along with the introduction of solid industrial policies and in-depth discussions involving foreign multinationals.

2. The threat of lower Brazilian exports to the Latin American countries (except Mexico), due to probable increases in the shares held by the United States and Canada in these markets. The Brazilian plastics processing and capital goods chains are under threat, as well as petrochemicals, pharmaceuticals, auto assembly, and consumer electronics, which currently channel significant portions of their exports to these markets.

3. The possibility under the aegis of the FTAA of more important regional markets extending negotiated preferences to third-party countries, particularly in Asia, that are significant competitors of Brazil. This would offset any possible gains resulting from the FTAA, with the most significant impact on the chains with the best chances of stepping up their presence on the US and Canadian markets (leather/footwear, coffee, steel, and part of the textile chain).

4. The possibility of the FTAA skewing foreign direct investments, as trade integration might well reshape the strategies of multinational companies with branches producing goods in Brazil. This possibility affects chains such as pharmaceuticals, auto assembly, and communication equipment.

On the opportunities side, the study draws attention to four factors:

1. Higher exports by more competitive chains (group 1) would depend almost entirely on lower tariff and nontariff barriers, as well as on guarantees that preferences obtained at the regional level would not be extended to nonregional competitors.

2. The settlement of trade disputes in the field of agribusiness is more likely to succeed in multilateral talks (WTO) than under regional treaties, such as the FTAA.

3. Increased exports of products manufactured by multinational companies established in Brazil depend on direct discussions with these corporations, in order to ensure a significant position for their Brazilian subsidiaries in their global production networks.

4. Gains are possible, although improbable in the short term, for chains whose scale of production is a significant factor, as these chains also have the most severe problems with competitiveness.

A summary of the main findings of each of the competitiveness studies underscores the possible impact of the FTAA on trade flows, and notes the nature of the policies (trade, industrial, and foreign capital) rated as high priority for enhancing the competitive edge of Brazilian chains in the region. These are presented below:

Plastics processing. Priorities: protective trade policy and industrial policy focused on restructuring the chain⁸.

Hampered by severe competitive shortfalls, this chain posts a trade deficit with the NAFTA countries, with the share of its revenues held by foreign companies hovering around 40% (2000). The tariff barriers faced by Brazilian exports (FTAA) are not a problem, but the nontariff barriers are. For instance, technical and environmental requirements in the United States are more stringent than in Brazil, and product certification in Brazil is not recognized there. Enhancing the competitiveness of these chains depends on the technological updating of the machinery and molds segment, which lags well behind best international practices. The study forecasts that imports would tend to rise with the FTAA, with negative effects on local industry, and it notes that this chain should be covered by an industrial policy focused on restructuring and modernization⁹ before exposing it to free trade through the establishment of the FTAA. Consequently, the study urges that upholding a protective trade policy should be ranked as high priority. In 2002, the average common external tariff (MERCOSUR) was 16%.

Petrochemicals. Priorities: protective trade policy and industrial policy focused on restructuring the chain.

Hampered by severe competitive shortfalls, this chain has a deficit with the NAFTA countries, with the share of its revenues held by foreign companies hovering around 40% (2000). The study forecasts that the FTAA would result in a very considerable increase in Brazilian exports, as Brazil currently imposes tariff barriers on many goods, whose rates vary from 6.7% to 11.7%. It also notes that intrafirm trade in this chain is determined by the global location strategies of major international producers, and that the low level of internationalization among Brazilian companies curtails export performance. In this context, the study assigns high priority to implementing industrial policies focused on restructuring and modernizing the chain, as well as on foreign capital policies (attraction and regulation). It also urges high priority for upholding a protective trade policy.

Capital goods. Priorities: protective trade policy and industrial policy focused on restructuring the chain

Hampered by severe competitive shortfalls, this chain has a considerable commercial shortfall with the NAFTA countries, with the share of its revenues held by foreign companies hovering around 60% (2000).

Brazilian exports to the FTAA countries do not face tough barriers (tariff and nontariff), while Brazil still imposes considerable tariff barriers. The competitive edge of Brazil's production sector at the international level is poor, due to the inadequate scale of its units of production, an atrophied suppliers and parts segment, and technological shortfalls and limitations in the fields of management, sales, and after-sales services outside the country. The study forecasts that the FTAA would trigger a sizeable upsurge in imports, with a limited impact on Brazilian exports and negative effects on the production chain (breakdown and drop in the Brazilian-made content ratings of products). As a result, this suggests that exposure to a free trade context should be preceded by industrial policies aimed at the restructuring and modernizing the chain, and an ongoing protective trade policy should be rated a high priority.

Cosmetics. Priorities: protective trade policy not rated as high priority.

This chain has a minor trade deficit with the FTAA, and the share held by foreign companies in its revenues is around 65%. The import rates imposed by Brazil vary from 15.5% to 19%, which are far higher than those imposed by the other FTAA countries. Brazilian industry is competitive, having been very dynamic over the past decade, but it is very dependent on imported products. The study forecasts that trade deregulation under the aegis of the FTAA would spur trade flows (imports and exports), which should not have a big impact on industrial structure.

Consumer electronics. Priorities: defining a foreign capital policy (attraction and regulation); a trade protection policy is important but not high priority.

Intrafirm trade is considerable in this chain, which posts a trade deficit with the NAFTA countries. The share held by foreign companies in its revenues hovers around 50% (2000). At the moment, Brazil deploys a protective structure that includes tariff barriers (rates on products vary from 8% to 21%) and nontariff barriers (hybrid analog transmission system, digital standard not defined, etc.). There are tariff-type barriers imposed on trade with the FTAA countries (0%–14%, depending on the country and the product) and nontariff barriers, particularly with the United States (technical barriers). The Brazilian chain is subject to constraints due to the inadequate scale of its production units and poor technological innovation capacity. The study forecasts that the FTAA would trigger a

considerable upsurge in Brazilian imports, paralleling a significant increase in exports to some Latin American countries. The study concludes that the trade balance would tend to worsen, although it is difficult to estimate to what extent. Because of the reasons outlined above, the study concludes that an industrial policy that encourages the modernization of the production sector should be implemented prior to trade deregulation. Under these circumstances, it adopts the view that a protective trade policy is important. It also draws attention to the need to define a foreign capital policy (attraction and regulation).

Pharmaceuticals. Priorities: industrial policy focused on modernizing the production sector and foreign capital policy.

Intrafirm trade is substantial in this chain, there is a trade deficit with the NAFTA countries, and the share of revenues held by foreign companies is in the area of 66% (2000). The study claims that the trade deregulation policy adopted by Brazil during the 1990s resulted in severely distorted trade flows, with a prevalence of imports from countries where the headquarters of multinational laboratories are located in their local subsidiaries. As a result, local production by subsidiaries or Brazilian companies was replaced by imported drugs and finished medications from head offices or third parties. This process was accompanied by an increase in intrafirm trade, the specialization of local production, and a halt in activities that were more technology-intensive. Consequently, from the standpoint of the study, changes prompted by Brazil joining the FTAA that could effect the pharmaceutical industry have already taken place or are still occurring. This diagnosis underscores the fact that the FTAA would have little impact on this chain.

Auto assembly. Priorities: foreign capital policy.

Intrafirm trade is considerable in this chain, with trade between Brazil and the FTAA **posting a surplus**, and the share in its billing held by foreign companies hovering around 87%. Brazil imposes sizeable tariff constraints on vehicles and **auto-spares**. The Brazilian chain may be rated as modern and competitive in terms of plants and production processes, despite constraints imposed by the scale of economic and technical units in some specific products. The study forecasts that trade deregulation under the aegis of the FTAA would result in a minor increase in imports and a sig-

nificant upsurge in exports (vehicles **and auto-spare**s). However, it stresses that export performance would depend heavily on drawing up a foreign capital policy.

Pulp and paper. Trade protection policy not ranked as high priority.

Trade deregulation poses only minor threats to this chain, with Brazil-NAFTA trade posting modest deficit and the share in revenues held by foreign companies hovering around 37% (2000). This industry is competitive at the international level for products using short fibers derived from eucalyptus. The study forecasts that the FTAA would boost exports of short-fiber wood pulp, as well as certain types of paper (printing, writing, and packaging). It also forecasts an increase in imports of bleached long-fiber wood pulp, as well as some types of paper from the United States and Canada. It concludes that the FTAA would be beneficial for this chain, due to its comparative advantages in the production of short-fiber wood pulp, encouraging exports and fresh investments.

Wood and furniture. Priority: trade promotion policy.

With Brazil-NAFTA trade posting surpluses, and the share in revenues held by foreign companies hovering around 12% (2000), the rates imposed by FTAA countries on products in this chain vary from zero to 24.3%. Brazilian furniture is not very competitive due to problems of scale and a limited export tradition. The study forecasts that trade deregulation under the FTAA would have minor effects on timber imports and substantial effects on furniture exports (Canada and the United States). Exports of timber and furniture should increase modestly. The study notes that a modernization policy addressing the furniture segment would be significant for enhancing the competitive edge of Brazilian products at the international level, and consequently suggests that implementing a protection policy may be required.

Communication equipment. Priorities: foreign capital policy.

Intrafirm trade is considerable in this chain, which posts a trade deficit with the NAFTA countries, and the share in its revenues held by foreign companies is in the region of 90% (2000). The United States and Canada do not impose any tariff protection, while Mexico does (rates of 18% to 23%). Nontariff (technical) barriers are important in the United States

and Canada. Brazil's communication equipment chain has some weak points that have to do with its need to import large volumes of semifinished goods. The study forecasts that trade deregulation could raise imports considerably, particularly in finished goods, although it would not result in any significant increase in exports; it suggests that for more important items of communication equipment, trade policy issues are related to foreign capital policy.

Textiles/clothing. Priorities: considerable trade protection for some links in the chain, such as clothing; for other links, trade protection is not necessary.

With Brazil-NAFTA trade posting a deficit, and the share in revenues held by foreign enterprises at around 22% (2000), Brazil faces tariff and nontariff barriers (mainly quotas) in FTAA markets. The following links in this chain are competitive: cotton, spinning, weaving, knits and household linens (bed, table, and bath items). Due to the heterogeneity of the chain, there are problems in its final links, particularly in clothing. This study forecasts that the FTAA would open up commercial opportunities for competitive links, particularly in the cotton, knits, and weaving segments, while threatening less competitive segments, such as clothing. The Brazilian Association of Textile Industries (ABIT- Associação Brasileira de Indústrias Têxteis), which represents producers in more competitive sectors, supports the view that the industry is ready for trade deregulation.

Coffee. Priorities: trade promotion policy.

The share of revenues held by foreign companies in this chain is around 15%, there is a trade surplus with the NAFTA countries, and there are no tariff or nontariff barriers in the United States or Canada. Brazilian output is competitive, and the study forecasts that the effects of the FTAA on trade flows would be modest as there are no significant barriers. However, any increase in exports would depend heavily on trade promotion policies.

Ceramic finishes. Priority: trade promotion policy.

The share held by foreign companies in this chain is in the region of 19%, and there is a trade surplus with the NAFTA countries. Brazil imposes tariff barriers (average rate 15%), as do many of the FTAA countries (rates between 8% and 20%). Recent modernization processes have enhanced the competitive edge of Brazilian products on international markets. The

study forecasts that the FTAA agreement would have minor effects on imports and exports, and that the expansion of the share held by Brazilian exports in important markets, such as the United States, depends more on trade promotion policies than on lower tariffs.

Citrus products. Priority: trade promotion policy.

The share of revenues in this chain held by foreign companies is around 31%, there is a trade surplus with the NAFTA countries, and the products face considerable tariff barriers. This chain is competitive, and has a generous share of world trade. The study forecasts that the FTAA would have no significant impact on Brazilian imports, and could well benefit Brazil in the long term due to the keener competitive edge of Brazilian output compared to the United States, which ranks as the second highest producer worldwide.

Leather and footwear. Priority: trade promotion policy.

The share of revenue in this chain held by foreign companies is around 8.8%, and there is a sizeable trade surplus with the NAFTA countries (2000). In terms of competitiveness, the leather and footwear segments are well prepared to join the FTAA. The study forecasts that Brazilian imports should remain stable, even with the FTAA, while exports would benefit considerably; this would be reflected in a significant upsurge in footwear exports and the stabilization of leather exports. The study notes that a reduction in the tariff imposed by the United States would have significant effects on volumes exported to that market.

Steel products. Priority: trade promotion policy.

The share of revenue in this chain held by foreign companies is around 3.5%, and there is a significant trade surplus with the NAFTA countries (2000). Brazilian exports face considerable nontariff barriers (safeguards, countervailing duties, and the risk of antidumping lawsuits). The competitive advantages of this chain are still rooted in low labor and iron ore costs, while its main disadvantages are high financial costs and expensive coal. The study forecasts that Brazilian exports would tend to remain stable with the FTAA, with a possibility of increased exports to Latin America, particularly in products with higher added value. The main barriers to Brazilian exports are nontariff in nature.

6. CONCLUSION

The findings of the studies mentioned above (São Paulo State Federation of Industries, Ministry of Development, Industry, and Foreign Trade, Ministry of Science and Technology) indicate an awareness that the FTAA negotiations will be complex, and will feature defensive positions grounded on diagnoses of the frailty of some sectors of Brazilian industry. This also firms up the hypothesis that talks of interest to Brazil, such as those in the area of agribusiness, are more likely to succeed through multilateral discussion. Added to this is the refusal of the United States to discuss points rated as sensitive, and this series of obstacles makes it improbable that the talks will keep to schedule. Under these circumstances, in the trade talks area, the positions adopted by Brazil's new government do not seem to indicate any radical change from those of its predecessor's. However, this will certainly speed up a trend that is already apparent, and can be summed up as the idea that a something-for-nothing strategy adopted by the United States will have limited chances of success. This is reflected in comments by Brazilian leaders, such as Minister of Foreign Affairs Celso Amorim, who feels that these talks should dovetail commercial interests with the economic development policies to be implemented by the new administration. The minister went on to say that these talks are just beginning, as the United States has not yet indicated any flexibility in areas of interest to Brazil.¹⁰

In mid-February, the US government disclosed its first negotiating proposal for the FTAA. Although it is not yet possible to make any detailed assessment of this proposal, one point that has attracted attention is the "plurilateralization" of the types of access opening up in the goods market: the CARICOM, Central American, CAN, and MERCOSUR markets will be treated differently for agricultural produce and manufactured goods, at least during the transition period. For instance, the immediate cut in import taxes would reach 91% for tariff items exported by the CARICOM countries, and only 58% for exports from the MERCOSUR nations. The percentage of tariff-exempt goods would reach 85% for the CARICOM countries and 50% for the MERCOSUR nations. For the proposed access to the manufactured goods market in the MERCOSUR, the proposals submitted by the US government are in fact worse than the conditions that prevail today: 63% of the products exported to the United States by the countries in this bloc are already exempt from import taxes.

The US proposal does far more than confer preferential treatment on countries that are relatively less developed. The bottom line is that if the proposal were implemented it would turn the idea of an FTAA into a network of preferential agreements whose immediate impact on regional trade flows might well not be negligible. This means that, in the form that has been tabled, the US proposal not only fails to improve access conditions to its markets, but in fact encourages switching suppliers and perhaps even shifting MERCOSUR exports to the US market¹¹. Moreover, it should be borne in mind that an FTAA that follows the general format of the proposal presented by the United States may well siphon off investments in the MERCOSUR nations to other countries that are not only closer in geographical terms, but also offer easier access conditions to US markets.

It is a fact that none of the subjects of interest to the MERCOSUR countries was covered in the US proposal: the elimination of peak tariffs, cutting funding allocated to agricultural assistance programs, and changes in the application criteria for antidumping measures, antisubsidies, and safeguards. Furthermore, if the recent trade agreement negotiated between the United States and Chile is taken into consideration (through which the United States offered few concessions in the agricultural area while obtaining wide access to the Chilean market in the government procurement and services area), in addition to the draft bilateral agreement with Uruguay, it seems clear that the United States is using the FTAA talks as a way of isolating Brazil and Argentina, while exposing the weak points of the integration process within the MERCOSUR.

The first joint proposal submitted by Brazil and the MERCOSUR for lifting constraints on imports of agricultural produce and industrial goods under the FTAA to a large extent reflects the defensive stance of the countries in this region, particularly Brazil, throughout the negotiating process. This proposal, which was rated as “minimalistic and correct” by Brazil’s Minister of Foreign Affairs Celso Amorim, calls for the elimination of tariffs within ten years for only 36% of MERCOSUR imports from other countries in this bloc. The access offered to the MERCOSUR market does not specify partners, but puts forth an “infant industry clause” that would be valid for imported products or goods manufactured on a small scale within the bloc, subject to *ad valorem* tariffs of under 3.5%. According to the MERCOSUR negotiators, this tool would guarantee sufficient headroom for the countries to provide protection for fledgling

industrial sectors, even after the agreement is signed in 2005. There is no doubt that the market access proposal presented by the Brazilian negotiators in this first round of talks consolidates a defensive stance in the FTAA negotiating process. This confirms that the government headed by President Luis Inacio 'Lula' da Silva is continuing the strategy urged by his predecessor, whereby opening up the Brazilian market to other countries on the continent would effectively depend on the concessions offered by the United States in areas and subjects of interest to Brazil.

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NOTES

1. Professor at the Economics Institute, Rio de Janeiro Federal University, and Consultant (Funcex).
2. Professor at the Economics Institute, Rio de Janeiro Federal University, and Consultant (Funcex).
3. On the other hand, issues such as the establishment of mutual recognition agreements for rules and standards, and the implementation of mechanisms for easing

- adjustment costs in the less developed economies, receive scant attention in this model, in contrast to the system urged by the European Union.
4. These comments reflect the fact that the regionalization process in the Americas was the first to result in a broad-ranging trade pact among developed and developing countries (NAFTA), and that the scope and contents of this agreement accurately reflect the idea that minilateral negotiations are subordinate to the objectives and methods of US trade policy.
 5. Auto assembly, capital goods, biotechnology/agribusiness, healthcare complex, coffee, coating and finishing ceramics, citrus fruits, shipbuilding, cosmetics, leather/footwear, consumer electronics, pharmaceuticals, information technology, wood/furniture, pulp and paper, petrochemicals, plastics, steel, communication equipment, and textiles/clothing. In 2000, the revenues brought in by these chains (other than biotechnology/agribusiness, biotechnology/healthcare complex), accounted for 53.2% of the revenues posted by Brazilian industry.
 6. This chain lacks competitiveness in the synthetic fibers and clothing segments.
 7. Other than the textiles/clothing chain.
 8. Alterations in equity, mergers, and acquisition, setting up hubs and other networks; building up links among suppliers, producers, customers, etc.
 9. Technological modernization, training the labor force, etc.
 10. *O Globo*, 22 December 2002.
 11. This is why some members of Brazil's new government are urging a return to bilateral talks with the United States, with a strategy of emphasizing the points of interest on which Brazil is not willing to yield, should a trade agreement in fact be negotiate



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