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Notes and explanation of symbols

The following symbols are used in tables in the *Review*:

Three dots (...) indicate that data are not available or are not separately reported.

A dash (—) indicates that the amount is nil or negligible.

A blank space in a table means that the item in question is not applicable.

A minus sign (-) indicates a deficit or decrease, unless otherwise specified.

A point (.) is used to indicate decimals.

A slash (/) indicates a crop year or fiscal year, e.g., 1970/1971.

Use of a hyphen (-) between years, e.g., 1971-1973, indicates reference to the complete number of calendar years involved, including the beginning and end years.

Reference to "tons" mean metric tons, and to "dollars", United States dollars, unless otherwise stated.

Unless otherwise stated, references to annual rates of growth or variation signify compound annual rates.

Individual figures and percentages in tables do not necessarily add up to corresponding totals, because of rounding.

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On Argentine-Brazilian economic integration

*Daniel Chudnovsky**
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This paper analyses the genesis and evolution of the integration agreements between Argentina and Brazil in the analytical context of the various options for integration in the international economy.

The transformation under way in the world economy, in particular those associated with technological changes which replace both the products and the production processes and the forms of provision of services, call into question the validity of the advantages of specialization based on the mere availability of natural resources and cheap labour. It is thus clear that the inward dynamics of a role of this kind in the international market is dubious, sine it tends to accentuate the current introversion of Latin American industrialization, and that the competitiveness achieved by this means is short-lived.

In this respect, it is argued that the regional dimension can acquire decisive importance for rethinking the process of industrial reconversion. An expanded market would permit a reduction in the levels of protection accorded to many activities that no longer need it and would eliminate frivolous protectionism. At the same time, concerted efforts in technological areas would increase the feasibility of genuinely protecting the activities that are at the technological frontier; this policy is very common in industrialized countries and in some newly industrialized ones, and it helps to create dynamic competitive advantages.

The agreement between Argentina and Brazil posits novel methods of regional integration which are discussed in this paper, which also offers an evaluation of the scope of this bilateral integration.

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Introduction*

In November 1988 the Governments of Argentina and Brazil signed a Treaty of Integration, Co-operation and Development that aims at the establishment of a free-trade area between the two countries. Enacted into law by their respective Congresses in August 1989, the Agreement establishes a period of 10 years for forming a common economic area by gradually dismantling reciprocal trade barriers. The immediate background to this decision was the signing by the two Governments in July 1986 of a series of sectoral and instrumental agreements within the framework of the Programme of Integration and Economic Co-operation (PICE) between the Argentine Republic and the Federal Republic of Brazil.

Undoubtedly, these institutional milestones are the most significant in the process of integration of the two countries. In fact, the establishment of the various protocols of integration in 1986 constituted, above all, a far-reaching political decision that put an end to a history of rivalries and discord in bilateral political and trade relations. The public formalization of the agreements came as a surprise, and their signature was not preceded by a broad debate in either country; on the contrary, it was the debate's starting point. However, it is evident that PICE is part of a rapidly unfolding political and economic process.

The relatively recent change of political régimes with the replacement of military Governments by democratically elected civil ones, basically altered the logic of the political decision. It lessened somewhat the importance of the military issue, easing the weight of the geopolitical assumptions of confrontation between the two countries. It restated the social issue, opening the way for neglected demands for greater equality and better living standards. It redefined the international issue in terms of the need for solid new alliances to tackle adverse external economic conditions.

*Version of a document prepared for the Milan Institute for International Policy Research, July 1989.

There were common situations and developments in the domestic economic scene as well. The simultaneous introduction of the heterodox anti-inflationary policies known as the *Plan Austral* and the *Plan Cruzado* is perhaps the clearest evidence of this. However, there were more profound similarities. The external constraints, manifested basically in the heavy burden of debt service, shaped a common scenario of serious imbalances. In addition to the differences in the evolution of macroeconomic variables and the priority given to short-term policy instruments, the profound crisis of the 1980s had already unleashed in both countries, as well as in the rest of Latin America, a debate on the options for growth and income distribution.

In recent years the region as a whole has been deeply affected by the stagnation of sharp falls in the level of activity due to inflation which in some cases ran out of control and to a persistent decline in the investment rate. In this context the social indicators of development, including real incomes, employment levels and income distribution, have deteriorated in comparison with the previous decade. These facts are not the only justification for the term "the lost decade" as a description of what the 1980s have meant for Latin America. The delay in adopting current technological changes and the deterioration of manufacturing capacities as a consequence of the recession have widened the development gap with the industrialized countries and, even more importantly, will restrict domestic room for manoeuvre in the immediate future.

The imbalances caused by financial transfers in connection with the foreign debt produced some structural changes. In fact, exports specialization, which is consistent with the chosen method of adjustment of the external sector, means in most cases the use of static comparative advantages and the release of exportable surpluses owing to declining domestic demand in industries producing intermediate goods by continuous production processes. The Latin American export boom in the 1980s was based on the availability of natural resources, cheap labour and high capital subsidies. In contrast, those goods that require skilled labour and incorporate technical progress suffered a systematic decline in the pattern of exports.

The transformations under way in the world economy, particularly the ones involving technological changes that replace both the products and the production processes and the forms of provision of services, call into question the long-term validity of the advantages of specialization based merely on the availability of natural resources and cheap labour. It is thus clear not only that the inward dynamics of this kind of role in the international market is dubious, since it tends to accentuate the current introversion of Latin American industrialization, but also that the competitiveness achieved is short-lived.

The regional dimension can then acquire decisive importance for rethinking the process of industrial reconversion. An expanded market would permit a reduction in the levels of protection accorded to many activities that no longer need it and would eliminate frivolous protectionism in a more gradual and controlled manner than in schemes for unilateral deregulation. At the same time, concerted efforts in technological areas in the context of economic integration would make it less troublesome and more feasible genuinely to protect activities that are at the technological frontier; this policy is very common in industrialized countries and in some recently industrialized ones and it facilitates the creation of dynamic comparative advantages.

In this respect, the experience of 30 years of integration initiatives in Latin America offers some useful lessons. There is a consensus among specialists that the most serious shortcomings lay in the excessively comprehensive nature of the schemes attempted, the stress on trade-oriented aspects and mechanisms, and the lack of consideration given to the parallelism of national industrial structures. Another negative factor was the supposed lack of relevant agents interested in integration, which would be both a cause and an effect of the relative failure of these attempts.

In relation to these topics the Argentine-Brazilian Agreement introduces novel elements both in the general conception of the scheme and in its main instruments. Taking into account the current difficult economic situations of both countries and the unsuccessful attempts to enhance integration through essentially trade agreements —first in ALALC and then in

ALADI—the programme in question, although ambitious in its general goals, is essentially pragmatic. In fact, it is set out in gradual and flexible stages, with a small group of projects at each stage. The protocols cover a variety of subjects, ranging from a clearly sectoral focus in the approach to integration in the manufacturing sector (for example, capital goods) or in joint technological programmes (biotechnology) to general criteria for the expansion of trade or investments (Investment Fund and Statute of Binational Enterprises).

To some extent the sectoral instruments were designed without considering the current industrial strategies prevailing in the two countries. In contrast to these strategies, the protocols include guidelines for a reindustrialization policy founded on the expansion of the market in order to generate new comparative advantages through technological modernization and intra-sectoral specialization. According to this concept, criteria of selectivity and gradualism are included in the instruments of protection, in contrast to what happens in the model of indis-

criminate openness. Those same criteria contrast, in turn, with the extensive and permanent nature of the protection structure of an excessively closed economy such as Brazil's. The agreement on the capital-goods sector, in particular, is an example of this new orientation.

This group of subjects is discussed throughout our paper with a view to evaluating the scope and evolution of the process of integration of Argentina and Brazil. The first section reviews and discusses the theoretical arguments about the establishment of areas of preferential protection and their potential advantages over unilateral trade deregulation. The conditions prevailing in the two countries as they undertake the project of setting up a free-trade area are examined in the second section. For this purpose, a comparative analysis is made of the production structure and its recent performance, the characteristics of bilateral trade are indicated, and the macroeconomic context of the integration programme is reviewed. The third section presents the main conclusions and indicates some necessary lines of research.

I

The theoretical foundations

1. *The received theories*

In the project on the economic integration of Argentina and Brazil the long-term objective is to create a common market—the most advanced form of economic integration—where the restrictions are removed both from trade in goods and services and from the movement of the factors of production. However, in the sectoral agreements, and even more so in the text of the Treaty on Integration, Co-operation and Development of November 1988, the fundamental frame of reference is that of a preferential trade agreement.¹

In a recent study that examines the advances in the theory of preferential trade agreements, it is noticeable that the theory of international trade has lagged far behind the current situation with respect to this type of agreement and that there are few contributions on the economic causes that prompt countries to set up customs unions.

It should not be forgotten that few theoretical advances have been made in the orthodox tradition of international trade theory, with all its restrictive assumptions. Nevertheless, when account is taken not only of the arguments of that tradition but also of the most recent theoret-

¹These agreements, which are called customs unions in the theoretical literature, are instruments through which the member countries establish a common tariff for non-member countries and facilitate mutual trade by eliminating tariff and semi-tariff restric-

tions among themselves. If, instead of a common external tariff, each country keeps its own tariffs with the rest of the world, a free-trade area exists.

ical contributions that have disregarded some of the basic assumptions of the orthodox literature, a set of theoretical elements emerges that sheds light on the advantages and disadvantages of customs unions (Pomfret, 1986).

Before looking at them, it will be useful to make some observations on the orthodox theory of international trade and the recent contributions that have modified it in fundamental aspects.

In an orthodox approach free trade is clearly the desideratum in terms of international resource allocation. Therefore, the primary concern of the theory of this tradition is to try to verify the degree to which customs unions, regarded as a second-best alternative to unilateral economic deregulation, provide greater benefits than protection and are thus instruments that lead to free trade or are substitutes for it.

The orthodox theory of international trade assumes very restrictive conditions, such as perfect competition and constant yields to scale, and tries to explain trade patterns in terms of tastes, available technologies and, above all, the factors of production and the natural resources that each country has.

A substantial part of international trade is effected among industrial countries that possess similar factor endowments, where companies operate in oligopolistic markets, and growing returns are seen in production and marketing. Accordingly, in recent years contributions have been made which try to take this situation into consideration.

The so-called "new" theory of international trade associated with various authors, especially Helpman and Krugman (1985), has made contributions that incorporate oligopolistic competition and economies of scale in differentiated products as key explanations of trade patterns, especially between industrial countries. Later we will see that, as economies of scale in differentiated products constitute a decisive argument in favour of customs unions, the recent contributions help to formalize them in the respective theoretical models.

The greater realism of the "new" theory does not mean the abandonment of free trade as a theoretical desideratum, although other

authors provide at the same time strong arguments against it.

The incorporation of economies of scale and imperfect competition facilitates economies of specialization and therefore trade within industries, strengthening the arguments in favour of the benefits that free trade entails on the assumption that markets are efficient in allocating resources.

Nevertheless, other contributions to the "new theory" provide bases for government intervention in certain industries with a view to increasing national prosperity. In particular, the concept of "strategic trade policy" has been used to justify the need to protect certain companies or industries, such as those which are highly research and development intensive and which, through government intervention, can obtain monopolistic profits and thus increase the country's revenue. At the same time, the old concept of external economies has been reinstated and applied to cases in which companies with a large capacity for technological innovation are unable to take full advantage of the knowledge that they create and the significant external economies that they secure. Although on the basis of these arguments government intervention seems broadly justified and the advantages of free trade are diminished, according to Dosi, Tyson and Zysman (1989), the difficulties of devising effective government intervention and the unpredictable political consequences of unilateral intervention have prompted some of the main advocates of the "new theory" to conclude that, notwithstanding these arguments, free trade remains the desideratum (Krugman, 1987).

Leaving aside the discussion of the advantages and disadvantages of free trade, it is important to remember that the frame of reference for the new conceptual contributions and, more specifically, the orthodox theory of customs unions, has been the industrialized economies.² In the case of customs unions, the idea was to analyse the situation of industrialized countries that sought to enhance their efficiency through increased negotiated trade deregulation in the context of European integration.

²Analyses of the importance of the new theories for developing countries will be found in Stewart (1984) and Krugman (1988).

Although Argentina and Brazil are not industrialized countries and their context is therefore different from the European one, both have a significant manufacturing sector and are interested in modifying the existing trade patterns in order to make their economies more competitive, without this meaning that free trade is regarded as the desideratum. More specifically, at their current stages of economic development Argentina and Brazil are trying to reduce the protection enjoyed by key segments of their manufacturing and farming sectors, without necessarily proposing unilateral deregulation. In that fundamental aspect the problem is similar to the problem of the industrialized countries, and the theoretical contributions can suggest the advantages of such unions over the present situation of protection.

In the case of developing countries with a lesser degree of industrialization, another type of argument has been formulated in favour of economic integration. Rather than trying to modify the existing trade patterns, in this case the customs unions would be based on the need to introduce new production and trade patterns by advancing in the process of industrialization (Robson, 1980).

These arguments are also relevant for Argentina and Brazil, since they are seeking, through a customs union, not only to make their existing production more efficient but also to advance in the process of industrialization. This would imply the restructuring of existing sectors and, above all, the elimination of barriers blocking access to the branches of greater technological vigour.

Although based essentially on the situation in highly industrialized countries, both the contributions of "strategic trade policy" and other approaches founded on evolutionary theories of technological change could help to justify the integration of Argentina and Brazil as a means of facilitating access to industries with greater technological vigour.

2. *The main contributions of the theory of customs unions*

The theoretical contributions that we consider to be most relevant to the present case related to:

- i) the advantages and disadvantages of cus-

oms unions as regards trade creation and diversion;

- ii) the arguments in favour of industrialization; and
- iii) the economies of scale and specialization.

The concepts of trade creation and diversion are certainly valuable as criteria for assessing the advantages of a customs union in accordance with the orthodox theory.

When for consumption purposes goods manufactured in country A are replaced by goods imported from country B, whose prices are lower than domestic prices, trade will be created. Trade diversion will take place when country B becomes a supplier of goods that it used to import from the rest of the world at lower prices.

As long as trade creation prevails over trade diversion, the customs union affords more prosperity than the former protection. Constant costs and unaltered terms of trade are assumed in the comparison of the two situations. However, on the import side, the potential benefits of a customs union that creates trade are less than those offered by unilateral deregulation. This holds good as long as country B produces at higher costs than the rest of the world.

On the other hand, it is unwise to assume that the terms of trade do not change (Wonnacott and Wonnacott, 1981). If that restrictive assumption is eliminated, a customs union helps to increase the exports of A by providing access to the market of B, a market protected by the common external tariff. "In other words, it allows us to enjoy the advantages of its protection, and this fact is likely to imply benefits that unilateral trade deregulation cannot provide. Unilateral deregulation allows us to have a more efficient economy, but it does not allow us to enjoy the advantages of the discriminatory protection afforded by the customs union." This explanation is provided by Dornbusch (1986, p. 18) in a valuable study specifically designed to evaluate the advantages of the integration of Argentina and Brazil, from Argentina's point of view.

A factor that complements the access to the market protected by the customs union is the lower transport costs of exporting to neighbouring country B as compared with trade with the rest of the world, even when it is likely that the exports to country B are less competitive. However, country B will be benefitted by the

increased imports from A only if that lesser initial competitiveness is offset by lower transport costs associated with the existence of the customs union. If these circumstances do not obtain, country B suffers from a diversion of trade that is reflected in lower tariff revenues. In that case the customs union has advantages only for country A, and this clearly makes the preferential agreement inoperable.

The weakness of the economic arguments in favour of customs unions is evident in the light of these facts, as long as other considerations, such as the goal of industrialization and economies of scale, are not introduced.

In the case of developing countries, Cooper and Massell (1965) argue that society is willing to tolerate inefficient industrial output in order, among other goals, to modify the terms of trade, increase employment, promote manufacturing, etc.

In a similar argument applied to the Latin American case, integration would be justified as a public or collective good, i.e., increased industrialization. Economies of scale, externalities, progress towards economic stability, and reduction of the vulnerability of commodity exports, among other factors, argue for the type of industrialization which, in the original ECLAC proposals, was aimed at regional import substitution (Fuentes and Villanueva, 1989).

Given the need for protection it is argued that a customs union reduces the costs without modifying the goal of industrialization. In this case the comparison would be between a customs union and protection, since by definition it is assumed that the countries involved want a certain degree of protection in order to continue their industrial development.

Apart from the goal of industrialization, the other crucial element in favour of a customs union is economies of scale, which are impossible to achieve in a relatively small national market.

In the light of these considerations, a customs union will then, according to Dornbusch, make it possible:

- i) to generate economies of specialization, so that within each manufacturing sector each country produces the goods for which it has the biggest comparative advantages (Argen-

tina for skilled-labour intensive products; Brazil for unskilled-labour intensive products);

- ii) to take advantage of economies of scale that are unobtainable in a national market;
- iii) to secure through the economies of scale and specialization, the efficient production of a larger variety of goods;
- iv) to stimulate greater competition than there would be in a protected domestic market.

These factors would give rise to increased trade within industries, thus enhancing the efficiency of the manufacturing sectors of both countries and making a customs union more attractive than protection.

It is worth considering whether these factors also render a customs union more advantageous than unilateral tariff reduction.

If it is assumed that the economies of scale and specialization and the lower transport costs makes the goods exported by country A to country B competitive with those produced in the rest of the world, the increased exports of A will not produce a diversion but will create trade in B, and a customs union will therefore be more beneficial not only than protection, but also than unilateral deregulation.

It is evident that in order to meet this condition it is essential to achieve economies of scale and specialization. If they do not materialize, then in purely static terms and with regard to economic prosperity, it seems difficult to think that a customs union will be better than a unilateral tariff reduction.

However, in the absence of economies of scale and specialization, it could be argued that the importance of other benefits of industrialization (creation of jobs, external economies, acquisition of industrial know-how) makes a customs union more beneficial than unilateral deregulation.

Finally, a free-trade area appears, since each country retains its own tariffs, to be a less solid arrangement than a customs union; its advantages over unilateral tariff reduction are therefore less clear. Nevertheless, given the enormous difficulties of negotiating a common external tariff, a free-trade area must be regarded as a second-best alternative to a customs union.

To sum up, if the assumptions of unaltered terms of trade and constant costs are eliminated, the advantages of a customs union are greater not only than protection but also than unilateral deregulation, since it facilitates trade creation in an expanded market protected against third countries.

In turn, if industrialization is introduced as a strategic goal or a collective good which warrants a certain amount of protection, a customs union reduces the relevant costs without sacrificing the collective good. Even if economies of scale and specialization are not attained, other benefits associated with the goal of industrialization make a customs union more advantageous not only than protection but also than unilateral tariff reduction.

In the case of Argentina and Brazil the goal of industrialization seems to be associated both with the restructuring of the existing branches and with the need for increased output in research and development intensive branches or branches where technological progress is very rapid.

Let us now examine the relevance of the theoretical contributions based on the situation of the industrialized countries for this type of strategy, in which the customs union is called upon to play a specific role.

3. *The protection of high-tech industries*

It has already been noted that the "strategic trade policy" suggested by the "new" theory of international trade provides powerful arguments for the protection of companies or industries with high research and development costs, generally called "high-tech". As they obtain high earnings and are able to pay high wages, the protection of domestic producers of these goods increases national prosperity at the expense of competitor countries.

In turn, the protection of this type of industry would give rise to external economies stemming from the fact that the companies that generate these innovations cannot take full advantage of the benefits, particularly of the know-how involved in product design, some-

times obtainable through reverse engineering, or of the skills of their personnel, who may move to other companies or institutions.

This type of argument has prompted a debate on how to decide when an industry is strategic and what kind of reaction government intervention as suggested here can generate in competing firms and countries (Krugman, 1987).

Apart from these issues, it has been pointed out that the *new* theory "basically concerns the problem of the best allocation of existing resources. Its models examine all the gains suddenly delivered by different patterns of resource allocation, determined by the market and pushed by the policy pursued" (Dosi, Tyson and Zysman, 1989, p. 11).

In order to overcome this fundamental limitation and comprehend the essentially dynamic nature of technological change, these authors introduce the concept of Schumpeter efficiency, which allocates resources to certain industrial branches on the grounds of their dynamic potential for growth and technological change, as has occurred in the Japanese case (Dosi, Tyson and Zysman, 1989).

These theoretical contributions undoubtedly offer more solid arguments for protecting the industries possessing the most technological vigour than the traditional argument of infant industry. Although conceived for the situation of developed economies, these arguments would serve also for newly industrialized countries that are trying to make inroads in the production of the more dynamic branches of international trade and give priority to the technological possibilities of the manufacture of this type of goods.

However, at the start of any analysis of the problem in developing countries a number of obstacles surface regarding how to obtain the technology for embarking upon the production of this type of goods, in view of the shortage of skilled personnel, the lack of financial resources and the rapidity of technological progress.

Moreover, given the speed of technological progress, the major barriers to entry, the fall in prices and the short useful life of the products in question, the classic conflict arises between the need for the rapid introduction of imported pro-

ducts, whose prices are constantly falling, on the one hand, and the increased costs of local production, on the other.

Aside from specific problems, it seems clear that in the framework of a customs union the barriers to entry and the conflicts between imports and local production would be less than in the case of unilateral action.

In other words, the costs of the protection that should be granted to the production of this type of goods would be less in an expanded market than if the action is taken by each country individually. The size of the expanded market provides a wider basis for absorbing research

and development costs and financing the costly investments in fixed assets and the manpower training required by the technologically most advanced industries.

In the light of all these theoretical arguments it could be concluded that a customs union will also be more beneficial than protection in the case of industries where technological change is rapid. However, owing to the nature of the development and production of this type of goods, this conclusion does not mean that a customs union is more advantageous than importing high-tech products from industrialized countries.

II

Conditions for the establishment of an Argentine-Brazilian free trade area

1. *The potential benefits*

At the beginning of the 1980s, using a stylized model of trade deregulation with conventional assumptions, an estimate was made of the potential benefits of a widespread process of integration among the six major Latin American economies (Cline, 1981). The initial assumptions were the previous absence of free trade inside the region, the removal of all types of barrier in intraregional trade and the retention of differentiated tariffs against third countries. The model estimated the benefits of trade creation and the costs of trade diversion from former and more efficient partners.

In accordance with the arguments of the "new" theory of international trade, some of the benefits considered came from the utilization of economies of scale, greater employment of low-cost opportunity labour and saving of hard currencies. Other dynamic effects, such as investments made necessary by consequent production increases and the stiffening of competition in the respective domestic markets, were not taken into account, which is why a certain underestimate of the benefits is assumed. This exercise revealed vigorous creation of trade and

estimated that the net social returns were in excess of 1% of the aggregate GDP of the six countries.

The static benefits of integration rise in geometric proportion to the initial level of the tariff, and their volume in absolute terms is directly related to each country's share in the imports of its regional partners. Both factors are more significant for Argentina and Brazil than for any of the other four countries included in the model, so that it comes as no surprise that the bulk of the estimated benefits is concentrated in these two countries and that they are in turn the main source of the overall gains to the group in question. According to the results obtained by Cline, in a possible scheme of intraregional deregulation 90% of the benefits of trade creation and 68% of the net social benefits would be contributed by the participation of Argentina and Brazil.

The distribution of the benefits introduces an equally interesting perspective of analysis. The model calculates that the benefits of integration would represent 1.34% of GDP for Argentina and 0.45% for Brazil. This difference is due to the fact that the opening up of the regional market would produce a noticeably higher

growth of Argentine exports over those of Brazil. In other words, the static benefits are higher for countries capable of entering the expanded Brazilian market. Under these conditions Argentina obtains additional benefits associated with the increased use of labour, saving of foreign exchange and use of economies of scale.

As Cline suggests, the estimated values are subject to criticism in respect of the initial assumptions and the parameters adopted for measuring the combined effect of trade diversion and creation. But the exercise is undoubtedly pertinent in at least two directions. First, it indicates the possibility open to the countries of Latin America to obtain both static and dynamic economic benefits through integration. Second, it underlines the importance of the contributions of Argentina and Brazil to the generation of these benefits. This particular hypothesis is based not only on the relative size of the two economies but also, and essentially, on the degree of development of their production apparatus, the leadership that they exercise in intrazonal trade and the existing bilateral complementarities.

The combined share of Argentina and Brazil accounted for between 75% and 80% of total trade within ALADI in the last 15 years. Their bilateral trade, in turn, averages between 20% and 25% of intrazonal trade, while the share of their ALADI partners is slightly over 20% of Argentina's total foreign trade and around 10% of Brazil's. These facts support the argument, widespread throughout Latin America, that the success of the bilateral integration programme under way will have dynamic effects on regional trade and production (Tavares de Araujo Jr., 1987).

The probable existence of production complementarities between the two countries is of vital importance for evaluating the feasibility of the Agreement. This question, however, is not a simple one. The evaluation cannot be reduced to a mere analysis of available supply and, consequently, the potential *diversion* of trade. Firstly, the possibility of substituting one trade partner for another depends on the technical characteristics of the product traded, on the existence of marketing channels and, more generally, on the financing and supply conditions that affect the relative competitiveness of the product in question. Secondly, and fundamentally, the expanded

market permits best use to be made of economies of scale and specialization and promotes the spread of technological and organizational externalities, modifying the terms of trade that would result from a static view that only considers the endowment of factors.

Still, the notion of trade *diversion* can be useful for estimating a sort of "natural" path in the formation of a free trade area, in the absence of the effects of restructuring of the production apparatus associated with the hypothesis of trade *creation*. It must be assumed that diversion is the dominant trend in the initial stage. A point underlined in one of the first works on the Argentine-Brazilian Integration Agreement is that the hypothesis of trade diversion is directly linked to a pattern of *intersectoral* complementarity, according to which the main items of bilateral trade would be Argentine exports of agro-foods and Brazilian exports of manufactures (Tavares de Araujo Jr., 1987).

This author summarizes several assessments made by the General Secretariat of ALADI which, on the basis of 1980-1984 trade, project the expansion of bilateral trade attributable to diversion from third countries of reciprocal exports and imports totalling over US\$1 million effectively made in that period. These calculations reveal an increase in bilateral trade of around 150%, which would take place under conditions of relative balance, although with deficit trends for Brazil. But the truly significant results are that 80% of Argentina's potential exports is concentrated in farm and agro-industrial goods and that 80% of Brazil's additional exports would be of processed metal goods.

In fact, as will be seen below, bilateral trade answers predominantly to a pattern of intersectoral specialization. An interesting fact is that, even in that framework, there are still significant prospects for expanding reciprocal trade. The greater benefits would come not only from saving of hard foreign currency but also from better prices, not taken advantage of until now due to defects in the supply channels. In the case of wheat, for example, Brazil imports from third-party suppliers at prices higher than Argentina's. Moreover, if account is taken of the potential increases in demand associated with changes in income distribution or, as Tavares de

Araujo suggests in the case of grain in Brazil, the cutback in excessive subsidies for certain domestic operations, there would also be an effect of trade *creation*, even when use is being made of static comparative advantages.

However, the search for dynamic effects of production restructuring associated with economies of scale and specialization, with a priority for industrialization, and with the capacity to introduce technical progress that stems from technological selection and acquisition of know-how, against a background of greater competition, leads to the exploration of potential intrasectoral advantages. In this hypothesis the possibilities for trade creation depend directly on the dynamic *production* of new comparative advantages. "The point of departure of this discussion is the common challenge for the growth prospects of both economies: the challenge of training to keep pace with shifts in the world technological frontier and, at the same time, to ensure conditions of international competitiveness for one's industrial capacity" (Tavares de Araujo Jr., 1987, p. 15, our translation).

A comparative analysis of certain structural features and of the recent performance of the Argentine and Brazilian economies, particularly the industrial sector, and of the prospects and problems that both face, should provide valuable material for evaluating the feasibility and usefulness of a free trade area between the two countries.

2. *A comparison of production profiles: performance complementarities and asymmetries*

A market expanded by the establishment of an Argentine-Brazilian free trade area would bring together an estimated population of 170 million, somewhat more than 40% of the total population of Latin America, with a past annual growth rate of 1.6%. The aggregate GDP of the two countries is around US\$430 billion, of which an average of about 25% is provided by the industrial sector. Together, Argentina and Brazil account for nearly 50% of total regional production and more than 50% of the manufacturing product, while their per capita product is about US\$2 500, clearly higher than the regional aver-

age. Consequently, this is a potentially suitable market for undertaking an expanded process of integration.

However, the size differences between the two partners are substantial. Brazil's population is 4.5 times bigger than Argentina's and its total GDP four times bigger, with an approximate 5 to 1 ratio in the manufacturing sector. The tendency in the last 20 years has been for these gaps to grow steadily wider, while the difference in per capita income in Argentina's favour declined from 125% in 1970 to barely 13% in 1987. These facts underline two important points for the implementation of the Integration Agreement. Firstly, from a static point of view the *absolute* differences in size make the advantages of an expanded market more evident for Argentina. Secondly, the similarity of per capita income (*relative* size) suggests the existence of comparable demand profiles, which would favour the use of economies of scale through specialization within industries. There are obviously substantial differences both in the average income of the many regions of Brazil and Argentina and in personal income distribution; this restricts the comparable levels of demand to only a few partial markets.

The structure of sectoral production is also similar in the two countries and its long-term evolution reflects a relatively stable pattern. More than one-third of total production is concentrated in the agricultural sector and manufacturing; and although the latter has a somewhat larger relative weight in Brazil, the sectoral distribution is fairly similar. The fact that in both countries the industrial sector generates around 25% of the total product suggests that there is an objective base for the development of an intrasectoral specialization strategy. However, there are appreciable differences in the vigour of the two economies. Since the 1970s Argentina has tended to mark time, especially in the industrial sector, while the Brazilian economy has exhibited periods of vigorous expansion. However, in the economic cycle of the 1980s they share a common trait: both are passing through phases of deep recession associated with the external-debt crises and the consequent adjustment (Chudnovsky, 1988; Botzman and Porta, 1989).

The path of their respective investment rates reflects the characteristics of their pro-

cesses of accumulation. Although the Brazilian economy is exhibiting much greater vigour, there has been a strong introversion in both countries in recent years (table 1). The decline of the investment coefficient to levels close to—and in some years even lower than—replenishment levels indicates a deterioration of the production capacity, in particular in the manufacturing sector. Within this framework two other factors of importance for the Agreement's future must be stressed. On the one hand, both countries have a mature industrial structure, whose performance is dependent on the reconstruction of the investment process. On the other hand, the greater vigour of the Brazilian economy can operate as a "locomotive" factor in a hypothesis of the reconversion of Argentina's industry.

Throughout these years some considerable changes have been taking place in the composition of manufacturing output. In both countries the consolidation of the intermediate-goods sector stands out: basically paper, iron and steel, and petrochemicals. Brazil has made substantial progress in the domestic production of capital goods, a sector which, like basic industry, was vigorously promoted in the industrialization strategy based on major projects financed with external resources adopted in the 1970s. This progress has diminished the importance of the automobile sector, the axis of industrialization in the 1960s. In Argentina, on the other hand, although it started with a similar pattern, the production of non-durable consumer goods continues to head up the industrial structure, and it is very significant that during the recent process of relative de-industrialization it is this segment that has had the highest growth rates.

These changes are directly related to changes in the external role of the industrial apparatus. During the 1960s and 1970s policies based on import-substitution models predominated in both countries and were generally applied in a context of strong protection of the domestic market. In the mid-1970s there was a basic shift in the implementation of industrial policy. Argentina introduced temporary trade and financial deregulation accompanied by a sharp over-devaluation of the local currency. The subsequent introversion in manufacturing development was a consequence of the abrupt

Table 1

ARGENTINA AND BRAZIL: EVOLUTION
OF GROSS DOMESTIC PRODUCT
AND INVESTMENT, 1961-1988

(Cumulative annual percentages)

Variables	1961- 1970	1971- 1980	1981- 1983	1984- 1987	1988
Total GDP					
Argentina	4.1	2.6	-2.9	0.6	-0.5
Brazil	6.1	8.7	-1.7	6.2	-0.3
Manufacturing GDP					
Argentina	5.2	1.6	-3.9	-0.6	-5.5
Brazil	6.9	9.0	-5.7	6.8	-2.5
Gross investment					
Argentina		3.7		-8.5	
Brazil		9.3		-2.7	
Investment rate (I/GDP, percentage)					
Argentina		21.7		15.2	
Brazil		23.9		16.6	

Source: 1960-1987: Inter-American Development Bank (IDB), *Progreso económico y social de América Latina, 1988 Report*, Washington, D.C.
1988: ECLAC, *Economic Panorama of Latin America 1988* (LC/G.1531), September.

abandonment of the path of maturation followed up till then. In Brazil, on the other hand, a policy of promoting the intermediate- and capital-goods sectors was combined with a strategy of large export subsidies.

A comparison of export structures reveals the magnitude of these changes. In 1970 81.5% of Argentina's exports were made up of farm products and their industrial derivatives, and this share stood at 71.3% in 1985 with no appreciable changes in the industrial contribution. In Brazil, meanwhile, the share of the farming complex in exports fell from 77.6% to 42.3% in the same period. The vigour of manufacturing exports not based on natural resources is clearly greater in Brazil: between 1970 and 1985 its contribution to total exports rose from 10% to 40%; and in Argentina, from 14% to 18%. In both countries, on the other hand, iron and steel and petrochemical exports grew significantly (table 2).

Within the framework of this changing profile of specialization and external financial res-

triction imposed by the debt crisis, the degree of openness of the industrial sector has been modified in the same direction in the two countries. The exports coefficient has grown and the imports coefficient has decreased, always more markedly in Brazil. The two economies are relatively closed to international competition, yet on average not very export-oriented. In Argentina the clearest changes are concentrated in the intermediate-goods sector, in particular the branches of paper, iron and steel and basic chemicals. In Brazil the trend is more uniform for the entire industrial system, with significant changes in the metal-working complex and the branches of textiles, garments and footwear, besides the basic industries.

This situation highlights some common interests for the establishment of a free trade area. From the Argentine standpoint Brazil is a large consumer market, capable of generating prospects for increased production capacity and agricultural and manufacturing exports and helping to ease the problems of scale that afflict many branches of production. At the same time it is a partner endowed with an appreciable industrial and technological capacity, with a very diversified export apparatus. It could thus function as a new frontier for a re-industrialization strategy by stimulating new investments and

increasing, in that context, the feasibility of restructuring production. In turn, the crisis of foreign and domestic debt, the difficulties of the public sector, the slackening of private investment, and the need to restructure the industrial apparatus to cope with international competition would stimulate Brazil's interest in a partner like Argentina with which it could tackle jointly the new domestic and international situation.

In relation to the potential co-operation between the two countries, although Argentina's consumer market is much smaller, it has other attributes that suggest an initial complementarity for the process of integration. Its agricultural and agroindustrial production is highly competitive and would help to bring down the prices of some key items in the Brazilian family basket and facilitate joint efforts in other markets (Villalobos, 1988). Likewise, Argentina still has a greater relative abundance of skilled labour, a factor that would favour development efforts in sectors of production which make intensive use of this type of labour. Thus, even in this context of deterioration and reduction of manufacturing capacities, there are some branches making intensive use of skilled labour and with short production turns that are currently competitive in international markets. This base would make

Table 2

LATIN AMERICA, ARGENTINA AND BRAZIL: COMPARISON OF EXPORT PROFILES

(Percentages)

	Latin America			Argentina			Brazil		
	1970	1980	1985	1970	1980	1985	1970	1980	1985
Commodities	59.6	54.3	47.5	59.5	49.0	49.3	64.2	30.3	27.6
Farm goods	15.4	19.9	20.4	59.1	48.5	48.2	57.1	21.3	21.0
Minerals	2.8	4.9	4.0	0.3	0.4	0.2	6.9	8.9	6.6
Fuels	41.4	29.6	23.2	0.1	-	0.8	0.1	0.1	-
Manufactures	40.2	45.3	51.9	40.4	51.0	50.7	35.6	69.5	72.2
a) Resource-based	36.4	30.7	31.7	26.5	30.5	33.0	25.0	36.0	33.2
Farm goods	6.7	13.1	11.4	22.4	22.8	23.1	20.5	30.6	21.3
Mining	3.7	6.9	9.5	1.3	4.2	4.4	1.0	2.3	5.4
Petroleum derivatives	26.1	10.7	10.8	2.8	3.5	5.6	3.4	3.0	6.5
b) Non-resource-based	3.9	14.6	20.2	13.9	20.5	17.7	10.6	33.5	39.0

Source: Joint ECLAC/UNIDO Industry and Technology Division, empirical base for comparative studies, Argentina, Brazil and Mexico, 1988.

it possible to complement the advantages already acquired by Brazilian industry in large-scale production making intensive use of common inputs.

These elements of structural complementarity are favourable factors in the rethinking of the trade and industrial policies of the two countries in order gradually and flexibly to dismantle the existing excessive protectionism. In the Brazilian case a gradual modification of the general levels and methods of protection in the production apparatus could be initiated by means of preferential imports from Argentina, which would be not only strictly complementary, as is generally the case today, but also competitive with domestic production (Tavares de Araujo Jr., 1988). For Argentina, whose manufacturing also enjoys high levels of protection, although lower than Brazil's, integration with Brazil is an alternative to the unilateral deregulation already attempted between 1978 and 1981 with clearly negative results. Preferential access to the Brazilian market would stimulate the recovery of production investment and the pursuit of greater genuine competitiveness.

Recognition of the existence of potential complementarities and common needs cannot, however, disguise the fact that both the repetition in both countries of the same model of industrialization and the differences in sectoral strength in the most recent period impose harsh structural restrictions on bilateral trade. In fact, it must be stressed that the Brazilian economy is facing the current situation with a broad-based, more modern and relatively integrated industrial capacity and has secured substantial export diversification. On the other hand, in Argentina only the agricultural sector has shown some vigour in output and the incorporation of technological change during the last 15 years. The manufacturing sector has undergone a process of introversion, with the result that the levels of production and employment have dropped and the branches making most intensive use of skilled labour and with a greater capacity for introducing technical advances have lost weight in the overall structure and in exports.

In addition, the fact that the import-substitution strategy is based almost exclusively on supply of the domestic market has led to the

formation of similar industrial structures in both countries. The widespread implementation of this strategy was intended to "solve" the problems of production scale by means of a system of high, generalized and permanent protection, which neutralized the potential gains from competitiveness that would be expected from the maturing of manufacturing and technological development. This favourable treatment of the relative inefficiency of production standards and plant organization hindered active integration in international markets. This therefore stimulated the gradual integration of the various stages of production at the national level and excessive vertical integration at the plant level. As a result, Argentina and Brazil possess industrial supplies with very similar profiles but with different absolute sizes.

Only in some exceptional cases involving subsidiaries of transnational corporations (TC) do manufacturers in Argentina and Brazil show some degree of specialization and complementarity and develop intra-company trade on the basis of compensation-trade programmes, in particular in the automobile and truck sector. Duplication generally prevails in the manufacturing sector, and this naturally does not favour trade. Nevertheless, given that Brazil's industrialization and export strength are greater, its prospects with regard to manufacturing exports are obviously much greater too, as is apparent in bilateral trade.

In this respect, and in contrast with what happened in the integration experiments in Europe or between Canada and the United States, where in the preceding stages there had already been a considerable volume of trade among member countries, Argentine-Brazilian trade exhibits no similar relative dimension, although it does show profound asymmetries (Hirst, 1987). Firstly, Argentina's average ranking as a supplier of Brazil fell from sixth in the 1970s to ninth in the 1980s. Brazil has been a more significant supplier of Argentina, above all in the 1980s when, except in 1981, it has been the main supplier after the United States. A similar asymmetry is found in exports: while for Argentina the Brazilian market was between second and fourth in order of importance, for Brazil the Argentine market fluctuated between sixth and tenth.

3. Specialization in bilateral trade

The trade flows between Argentina and Brazil conform primarily with a pattern of *intersectoral* specialization, in which Argentina exports agro-food goods and imports industrial manufactures, almost always with a negative balance. Within this dominant scenario there were some changes in the 1980s which, without becoming a trend, are significant factors in an evaluation of the integration prospects.

Throughout the 1980s the total value of bilateral trade between Argentina and Brazil fluctuated between US\$1 billion and US\$1.5 billion a year, with a slight upturn in recent years after the fall in 1983. During this period the trade balance was consistently negative for Argentina, with the exception of 1986, when the achievement of a favourable level of exports helped to generate a slight surplus. In the last two years the imbalance was particularly pronounced, amounting to 25% of total trade and 70% of Argentina's exports in 1988. Until then, the behaviour of trade flows had been erratic and the relative movements of the deficit could not be explained by a definite trend in exports or imports. From 1987, in contrast, Brazil's exports attained especially high levels (table 3).

When bilateral trade is compared with total foreign trade, for both countries there is a pronounced difference in the importance of the

partner country. Argentina has a smaller share both as a seller and as a buyer in Brazilian trade, with values of 3% in both cases, while for Argentina's trade Brazil is a market and supplier of greater importance. In particular, the value of Argentine imports from Brazil has stabilized at around 15%. The growth of the share of the Brazilian market in exports in the last two years is also significant, for Argentina's weight among Brazil's suppliers has risen from 2% to 4-5%.

In recent years, therefore, the levels of bilateral trade have increased and the importance of each country as a trade partner of the other is growing, but these trends are not modifying substantially the traditional asymmetries reflected in Argentina's deficits and greater relative dependence. This situation is corroborated by the pattern of relative specialization that has developed in bilateral trade, with Brazil a major supplier of industrial manufactures and Argentina a supplier of agricultural products with varying degrees of processing.

In fact, when the different sources of the goods traded are examined, Argentina emerges with a constant surplus in commodities and agricultural manufactures (AM). Nevertheless, there have been sharp variations in the respective annual exports in recent years, with a peak in 1986 associated with the surge in domestic demand following the introduction of the *Plan Cruzado* in Brazil, and with a strong slump in 1987 due to a combination of a cutback in Brazilian demand and a fall in international prices. In contrast, Brazilian exports are mostly industrial (IM) and have been on the rise, which also explains Argentina's rising deficit under this heading (table 4).

A comparison of trade levels by product in recent years shows that the trends in trade in industrial manufactures have been more stable. This item shows sustained growth, in contrast with the sharp fluctuations in trade in agricultural products, which have especially affected Argentina's exports. The uneven behaviour of the bilateral trade balances between 1985 and 1987 reflects the divergent trends by group of products. The pattern of specialization in Argentine-Brazilian trade seems to be associated with increased stability of the foreign-exchange balance in the segments in which Brazil is a net exporter.

Table 3

ARGENTINA-BRAZIL: BILATERAL TRADE 1975-1988

(Millions of US dollars)

	Exports	Imports	Balance
1975	213.5	383.1	-169.6
1978	576.8	348.9	227.9
1980	765.0	1 091.5	-326.5
1981	595.1	880.2	-285.1
1982	567.7	666.4	-98.7
1983	338.3	654.6	-316.3
1984	478.2	853.1	-374.9
1985	496.0	611.6	-115.6
1986	698.0	690.2	7.8
1987	539.0	819.3	-280.3
1988	572.9	971.3	-398.4

Source: Argentina, Secretariat of Industry and Foreign Trade National Office for Sectoral Research.

Table 4

ARGENTINA-BRAZIL: BILATERAL TRADE 1985-1987
EXPORTS AND IMPORTS BY TYPE OF PRODUCT

(Millions of US dollars)

	Exports			Imports			Balance		
	1985	1986	1987	1985	1986	1987	1985	1986	1987
Commodities	176.7	315.4	218.2	144.1	166.4	158.6	32.6	149.0	59.6
AM	146.9	206.7	113.1	14.5	26.3	26.3	132.4	180.4	86.8
Fuels	63.5	23.4	0.1	17.7	0.3	30.6	45.8	23.1	30.5
IM	109.0	150.4	207.8	435.3	497.2	603.8	-326.3	-346.8	-396.0
Total	496.0	698.0	539.0	611.6	690.2	819.3	-115.6	7.8	-280.3

Source: Argentina, Secretariat of Industry and Foreign Trade, National Office for Sectoral Research.

AM: Agricultural manufactures.

IM: Industrial manufactures.

4. Macroeconomic instability

The first agreements of the programme of bilateral integration were negotiated and signed during 1986. That year the main macroeconomic variables behaved favourably in both countries: growth of the economy in general and the industrial sector in particular, relative price stability and an upturn, although a weak one, in the investment rate. In that context the two exchange rates also remained relatively stable. However, in macroeconomic performance 1986 was an exception as compared with the decade as a whole. Particularly since 1986, i.e., when the agreements came into effect, the economic situation took a dramatic turn for the worse.

The contrast between that time and the present could not be more striking. Both economies are entering a phase of open recession with sharp falls in the levels of industrial production. The restrictive monetary policies have proved incapable of halting the runaway inflation. Shaken by a succession of increasingly less effective stabilizing adjustments, Argentina and Brazil were slipping towards hyperinflation in the first months of 1989, amidst evident symptoms of a breakdown in the production apparatus. The difficulties on the external front caused Brazil to declare in early 1987 a moratorium on the payment of its external-debt service, a moratorium which remained in force for a year and threatens to be reimposed. Argentina has in fact observed an undeclared moratorium since

April 1988. In this context, the fluctuations in the two exchange rates and in their relative parities have been spectacular.

The macroeconomic imbalances clearly reveal the difficult situation in which both economies have been functioning since the foreign-debt crisis at the beginning of the decade. Many of the imbalances are due basically to the burden of foreign-debt service and to speculative transfers associated with exchange-rate instability, which mainly affect the international balance of payments and the fiscal accounts. Since 1982 both countries, as well as the Latin American region in general, have carried out a severe adjustment process that has provided financing for those transfers through an unprecedented growth in the trade balance. Although a substantial growth in exports has been achieved, the generation of an external trade surplus has been largely due to the cutback in imports. At the same time the fiscal adjustment curbed mainly public investment. Both factors greatly contributed to establishing conditions of almost permanent recession, which still exist, impeding both industrial restructuring in economies stripped of financial resources in this way and trade integration between relatively insolvent economies.

In this context the industrial system is encountering many difficulties in reestablishing itself in international markets. In view of the inflexible downward trend in financial costs, the

growing cost of foreign exchange for imports, fiscal restrictions and the lack of a consistent technological-industrial policy, the gains from competitiveness in the manufacturing sector tend to rest on continual over-devaluation of the local currency and reduction of real wages. However, there is thus no virtuous circle of the kind found in more successful situations of industrial growth, in which a rising share in the international market is generated by the self-sustaining growth of industrialization, productivity levels, real wages and domestic demand. On the contrary, a structural duality tends to be recreated with the removal from the manufacturing sector of a specifically export segment, for its energy cannot then reach the domestic market. Strictly speaking, its performance hinges fundamentally on a series of factors that tend to depress domestic demand, because the basis of its international competitiveness is rooted much more in a sys-

tem of direct or implicit subsidies than in genuinely higher productivity. Thus, the domestic market subsidizes the export sector through low wages, fiscal incentives, depressed prices in related sectors, tariff exemptions for imports and over-devaluation of the exchange rate.

The macroeconomic setting and the coherence of the industrial strategy are, in the end, determining factors in the development of an integration scheme such as the one that Argentina and Brazil are introducing. In particular, the macroeconomic situation of both countries was clearly adverse in 1987 and 1988, and much less favourable for the introduction of the Agreement than could have been predicted when it was signed in 1986. The industrial slump and the extreme volatility of exchange-rate parities were the harshest constraints both for the negotiations and for reciprocal trade and the mobilization of new investments.

III

Summary and conclusions

Argentina and Brazil are entering the 1990s in a critical economic situation. Hyperinflation is the most evident manifestation of the crisis, but the signs of disinvestment, technological slippage and deterioration in living standards are equally disturbing.

Although the crisis is due to a series of structural and cyclical causes, it is evident that the weak position of the manufacturing sector in international trade in both economies is one of its chief traits. One of the arguments that has gained ground in the debate and in economic policy blames the high level of protection of the domestic market for industry's lack of competitiveness and proposes integration in the world market by means of unilateral economic deregulation. The experiments in such deregulation attempted in the region, especially in Argentina in 1979-1981, did little to promote genuine manufacturing competitiveness, since the generation of export flows was based on static comparative advantages. Nevertheless, it must also be recognized that the situation of generalized

permanent protectionism in which industry has operated has not generated the productivity gains which would have been expected from the maturing of the process of manufacturing and technological development. It is in these circumstances, when it is essential to restructure the industrial apparatus shaped by the import-substitution strategy, in order to secure competitiveness based on the incorporation of technological advances and the generation of dynamic comparative advantages, that the prospect of regional economic integration acquires fundamental importance.

An expanded market would help to reduce the levels of protection of many activities that no longer need it, with the elimination of frivolous protection under more gradual and controlled conditions than in the schemes of unilateral deregulation. At the same time, concerted efforts in the technological sphere, in the context of economic integration, would make it less troublesome and more feasible to ensure the genuine protection of activities at the technological

frontier—a common policy in industrialized countries and in some recently industrialized ones which helps to create dynamic competitive advantages.

Advances in the theoretical literature on the subject have been few, but they do provide some valuable justification of the advantages of preferential trade agreements. In the orthodox theoretical literature *customs unions* have been regarded as a second-best alternative, given the difficulty of promoting a generalized free-trade scheme. To the extent that they create trade they will facilitate a better international allocation of resources and consequent gains in prosperity for member countries than protection could offer in either of the markets. In other words, free trade would be the ideal but, given the impossibility of achieving it, a customs union will have advantages over the alternative of closed national economies.

These arguments are reinforced by the inclusion in the *new* theory of international trade of increasing yields to scale and oligopolistic competition among the assumptions that explain trade flows. The expanded market of a customs union will facilitate economies of specialization and economies of scale, resulting in greater efficiency and product mix, as well as increased competition. Free trade will remain the theoretical *desideratum*, but a customs union will certainly be preferable to closed markets.

In contrast, other writers, particularly on development theory and evolutionary theories of technological change, also base the existence of advantages for the countries members of a customs union on a scheme of unilateral openness to free trade. The advantages derive from the concept of "preference for industrialization", which justifies protection in terms of its beneficial effects on employment, acquisition of know-how and introduction of technical progress associated with the process of industrialization. Similarly, the generation of significant external economies in technological research and development justifies some degree of protection in these areas, although it will necessarily be less in the case of an expanded market than in individual countries. This argument is relevant for Argentina and Brazil, confronted as they are by the need to intensify their industrialization by

restructuring existing activities and making progress in the production of goods with greater technological content.

By virtue of the absolute size of each economy Argentina will benefit more from an expanded market. The greater vigour of the Brazilian economy could also have a *locomotive* effect on Argentine production. Thus, on the assumption of static comparative advantages and in accordance with a model of trade deregulation between Argentina and Brazil, it has been estimated that the benefits would be greater for Argentina. In addition, the results of the application of the model indicate that the potential increase in trade would conform with an *intersectoral* pattern: agro-foods from Argentina, metal manufactures from Brazil. In fact, this has been the content of their bilateral trade in the last 10 years. Under this scheme the direct benefits of integration will be a large preferential market for Argentina and a supplier of relatively cheap food for Brazil.

However, the expanded market may also have dynamic restructuring effects stemming from economies of scale and specialization and from technological and organizational externalities—a hypothesis that leads to the exploration of potential *intrasectoral* advantages. The fact that both countries have a relatively mature and diversified industrial sector and similar per capita income levels suggests the existence of complementarities capable of serving as a base for expansion of trade and output.

In comparison with Brazilian industry, for example, Argentine industry is competitive not only in agroindustries but also in a number of sectors making intensive use of skilled labour and with short production runs. At various times these sectors have performed satisfactorily in international markets. Similar advantages might be found in specialized components. Given the excessively closed nature of Brazil's economy, selective openness to competition from Argentine producers would help to promote a process of reorganization that would benefit the overall competitiveness of its industrial system.

In addition to the potential benefits, the severe difficulties and constraints involved in the introduction of a formula of integration between the two countries are also evident. Macroeconomic instability continually alters the

conditions of competition and influences investment decisions. The parallelism of industrial structures would continue to inhibit intrasectoral trade unless eventual restructuring programmes are not harmonized in some way. The current high levels of protection generate opposition to the possibility of intensified competition in the two domestic markets. Finally, the asymmetry in the size and strength of the production apparatus accentuates the reluctance of the smaller partner.

The answer to this complex set of needs, potentials and limitations was based on a highly flexible and very gradual approach. PICE, approved in July 1986, established a process of advances by sectoral protocols, without goals, specific contents or specific sequences of incorporation. The instruments range from simple letters of intent to harmonize policies in some sectors to the creation of free-trade areas in others. The logic of this approach would seem to lie in the quest for "success" in a few projects and a sort of *demonstration effect* which will help to create a critical mass of trade and consensus to serve as a basis for a later stage of more rapid and generalized dismantling of reciprocal trade barriers.

Within this framework of flexibility and fairly vague definition of instruments, a guiding principle was nevertheless adopted: the establishment of conditions for intrasectoral specialization. Thus, the most significant agreement in the first stage of PICE was in the capital-goods sector (Protocol 1), defining a free-trade area between the two countries, with no tariffs or semi-tariff barriers and with the gradual incorporation of the various production lines into the scheme. This instrument injected remarkable strength into bilateral trade in capital goods in 1987 and 1988; it has become the main stimulus of the increased output in Argentina; it has promoted the only, albeit weak, restructuring efforts in the sector; and it has therefore tended to internalize the potential advantages of the expanded market (Porta, 1989).

At the same time, this development has been jeopardized by a number of management deficiencies in Protocol 1, owing to the meagre or non-existent progress with the integration programme in other sectors, the inconsistencies in industrial policy and, above all, the negative

impact of recessionary trends and macroeconomic instability. Trade remains depressed, the negotiations on incorporation of products in the sectoral free-trade area are tending to stagnate, the mechanisms for the promotion of new investments and joint undertakings are not materializing and there are no serious indications of reorganization or reactivation of the industrial capacity in general.

The approach based on gradual progress by sectors causes some problems. What is the advisable sequence? The sectoral approach demands an effective answer to this question, for there are two supplementary issues: first, the need to prevent imbalances in the production chain; and second, the need to consider the dynamics of the "integration effect" on intersectoral trade. The agreement between Argentina and Brazil began with final goods: first, capital goods and then, in turn, automobiles and agro-foods.

At first glance, the decision to start with final goods in the programme of bilateral integration would appear to encounter obstacles fairly soon unless there is relative convergence of the two domestic cost structures, particularly with respect to physical inputs. This hypothesis posits the need to harmonize national policies for the basic industrial sectors, intermediate-goods producers and forward-price setters, and to include integration formulas in these policies as quickly as possible. The experience of the capital-goods sector shows how difficult it is to make progress when there are wide differences in domestic iron and steel prices in the two countries. In this respect, the sectoral approach would benefit from progress in the programming to scale of related production activities, so as to cover the entire technical-economic structure of the industrial branch.

Another factor, linked directly to the one just discussed, is the limitations of the gradual sectoral approach in regard to consolidating the advances made in a given sector. As each sector is increasingly subject to the new conditions of competition in the expanded market, there will be a need for an equal degree of harmonization of policies between the partners, as well as extension of the Agreement to cover more sectors. Otherwise there is a risk that the sectoral scheme may begin to deliver decreasing returns, and the potential advantages of integration may

tend to be nullified. In other words, the gradual approach seems to be an adequate response to the difficulties and reluctance encountered at the point of departure, but this initial virtue will be eroded unless more extensive integration criteria are applied at a later stage.

The Treaty signed in November 1988 by Argentina and Brazil, which provides for the total elimination of tariffs and other trade barriers over a period of 10 years, apparently introduces this second stage. Once the two Congresses enact it into law, the establishment of a customs union between the two countries will be a reality. This situation will enable more active use to be made of tariff policy as an instrument for restructuring existing industries and will motivate the parties to undertake joint activities with a strong technological content. At the same time, by adopting selective criteria of protection against third-party suppliers they could bring about definite structural changes in both countries which will generate genuine increases in their international competitiveness. Progress in this direction will of course demand extensive harmonization of sectoral and macroeconomic policies between the two partners.

Indeed, the greatest difficulties remain the macroeconomic conditions in which the process of accumulation functions in Argentina and Brazil. The macroeconomic imbalances are of such magnitude that they can neutralize integration schemes of any kind. However, it should not be inferred that, unless these imbalances disappear completely, no long-term strategies—such as the free-trade area—will be viable. The achievement of a degree of control over the macroeconomic variables and, essentially, the relative harmonization of macroeconomic poli-

cies and coherence in sectoral policies would open up opportunities for some sectors to consolidate a process of restructuring and reactivation with a view to gradual integration. Obviously, the road would have fewer pitfalls if each country's strategy of reindustrialization and restructuring of the production apparatus, and the eventual role of the integration process were set forth with greater clarity.

In order to contribute to a more precise formulation of the advantages and disadvantages of a free-trade area over other long-term alternatives that are being outlined at present, it is vital to have a series of studies that describe in detail the competitive situation of each production branch in Argentina and Brazil and examine the way in which an expanded market could modify the current conditions of competitiveness and level of protection by using economies of scale and specialization. In turn, it is vital to determine the strategy for industries with high research and development intensity, taking into account the dissimilar situations in each country and the changing international frontier. These studies on structural situations must necessarily be supplemented by an evaluation of the macroeconomic, trade and industrial conditions and policies, especially exchange-rate parities and the system of payments and international financing.

The production of such studies will not only strengthen the economic bases of integration but will also facilitate the negotiation of the general free-trade area. As demonstrated by the experience of other attempts, an integration exercise undoubtedly requires good negotiators and political consensus, but it requires solid technical support as well.

Bibliography

- Botzman, M. and F. Porta (1989), "El superávit externo de Brasil en la década de 1980. ¿Ajuste estructural o ajuste recesivo?" (DT 09/89), Buenos Aires, International Economics Centre.
- Chudnovsky, D. (1987), "Latin American economic integration and transnational enterprises. Some issues emerging from the process of integration of Argentina with Brazil", Porto Alegre Conference, *mimeo*.

- (1989), "Cambios estructurales y desempeño reciente en la industria argentina", Chudnovsky and Del Bello (eds.), *Argentina e Italia: trayectorias recientes y posibles convergencias económicas*, Mexico City, Fondo de Cultura Económica.
- Cline, W. (1981), "El interés de América Latina en la integración económica", *Integración latinoamericana*, No. 62, Buenos

- Aires, Instituto para la Integración de América Latina (INTAL), October.
- Cooper C. and B. Massell (1965), "Toward a general theory of customs unions for developing countries", *The Journal of Political Economy*, vol. LXXIII, No. 5, Chicago, The University of Chicago Press, October, p. 461.
- Dornbusch, R. (1986), "Los costos y beneficios de la integración económica regional", *Integración latinoamericana*, No. 113, Buenos Aires, INTAL, June, p. 13.
- Dosi, G., L. Tyson and J. Zysman (1989), "Trade, technologies and development. A framework for discussing Japan", C. Johnson and others (eds.), *Politics and Productivity. The Real Story of Why Japan Works*, New York, Ballinger Div. Harper & Row.
- Fuentes, A. and J. Villanueva (1989), *Economía mundial e integración de América Latina*, BID/INTAL, Buenos Aires, Editorial Tesis.
- Helpman E. and P. Krugman (1989), *Market Structure and Foreign Trade. Increasing Returns. Imperfect Competition and the International Economy*, Massachusetts, The MIT Press.
- Hirst, M. (1987), "Las relaciones Argentina-Brasil: de la asimetría al equilibrio", *Integración latinoamericana*, No. 122, Buenos Aires, INTAL, April, p. 35.
- Katz, J. (consultant) and others (1986), *Desarrollo y crisis de la capacidad tecnológica latinoamericana. El caso de la industria metalmeccánica*, Estudios sobre desarrollo tecnológico, IDB/ECLAC/IDRC/UNDP, Buenos Aires.
- Krugman, P. (1987), "Is free trade passé?", *Economic Perspectives*, No. 2.
- (1988), "La nueva teoría del comercio internacional y los países menos desarrollados", *El trimestre económico*, January-March, vol. LV (1), No. 217, Mexico City, Fondo de Cultura Económica, p. 41.
- Pomfret, R. (1986), "The theory of preferential trading arrangements", *Wirtschaftliches Archiv. Review of World Economics*, vol. 122, Tübingen, Journal of the Kiel Institute of World Economics, p. 439.
- Purta, F. (1989), "El acuerdo de integración argentino brasileño en el sector de bienes de capital: características y evolución reciente", DT 08/89, Buenos Aires, International Economics Centre, January.
- Robson, P. (1980), *The Economics of International Integration*, Studies in Economics, No. 17, Policy Studies Institute, London, G. Allen and Unwin Ltd.
- Stewart, F. (1989), "Recent theories of international trade: some implications for the South", H. Kierzkowski (ed.), *Monopolistic Competition and International Trade*, Oxford, United Kingdom.
- Tauile, J. (1987), "Automação e competitividade, uma avaliação das tendências no Brasil", Instituto de Economía Industrial, Federal University of Rio de Janeiro, mimeo.
- Tavares de Araujo Jr., J. (1988), "Os fundamentos econômicos do programa de integração Argentina-Brasil", *Revista de economia política*, vol. 8, No. 3, Rio de Janeiro, Editora Brasileira, July-September, p. 41.
- (1988), "O programa de integração Argentina-Brasil e as tendências atuais da economia mundial", Institute of Industrial Economics, Federal University of Rio de Janeiro, Discussion Paper, No. 181, mimeo.
- Villalobos, R. (1981), "El papel del sector agropecuario en el proceso de integración Argentina-Brasil-Uruguay", Buenos Aires, International Economics Centre, September, mimeo.
- Wonnacott, P. and R. Wonnacott (1981), "Is unilateral tariff reduction preferable to a customs union? The curious case of the missing foreign tariff", *The American Economic Review*, vol. 71, No. 4, Nashville, Tennessee, American Economic Association, September, p. 704.