

MERCOSUR and Trade Diversion: What Do The Import Figures Tell Us?

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Abstract

Has MERCOSUR's trade performance to date provided strong evidence that it has encouraged inefficient trade flows between its members? This paper evaluates the methodology suggested by Yeats (1997, 1998) to study trade flows within MERCOSUR. Yeats was motivated by the traditional concern of economists that regional trading arrangements can be welfare-reducing by fostering trade diversion (the replacement of efficiently produced goods from outside the arrangement by inefficiently produced goods from inside). His methodology was based on comparing shifts in intra-regional exports with a measure of relative efficiency in production. This paper argues that Yeats should have instead focused on imports. There has been a strong growth in intra-regional imports, but imports from third countries have also grown impressively. This reflects the increased multilateral openness of the MERCOSUR economies. If Yeats' methodology is adapted to examine trends in imports, the evidence for significant trade diversion is less clear-cut than he suggested. It is difficult to have a clear idea about whether MERCOSUR producers are efficient suppliers of different goods. However, even for the cases where one may have some doubts, the growth in intra-MERCOSUR imports has been accompanied by growing trade with the rest of the world. In addition, the formation of MERCOSUR does not appear to have seriously compromised these countries' imports of high technology products from the industrialized countries.

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1. Introduction

The last decade has witnessed a renewed interest in regional economic integration in many parts of the world. The European Union's single market programme and the NAFTA (the North American Free-Trade Agreement) are the primary examples, but many developing countries have also been part of this trend. Perhaps the most well known case of regional economic integration among developing countries in recent years is the customs union arrangement known as the *Mercado Común del Cono Sur* (MERCOSUR), involving Argentina, Brazil, Paraguay and Uruguay.

For economists, customs unions and other regional integration schemes, such as free-trade areas, have ambiguous welfare effects. This is because regional schemes remove distortions between the relative price of domestic goods and partner-country goods, but *introduce* another distortion between the relative price of goods which originate within the arrangement and those from outside. In the classic terminology of Jacob Viner, regional schemes can lead to both *trade creation* and *trade diversion*. It is difficult to say *a priori* which of these two effects will dominate. In addition, the empirical analysis of regional arrangements has been hampered by a lack of reliable procedures for studying changes in trade flows. In a recent paper, Yeats (1997, 1998) proposed a new methodology for evaluating regional schemes. He used an index of regional orientation to examine whether individual products are more or less likely to be traded with partner countries compared to the rest of the world. He combined this index with a measure of apparent comparative advantage, to see whether partner countries could be considered relatively efficient producers of these goods. Yeats used this methodology to study the trade of the MERCOSUR countries.

The analysis he conducted led him to the conclusion that much of the increase in trade between the MERCOSUR countries was in the "wrong" products. Many of the products were capital-intensive in production, i.e. they required relatively more capital than labour to produce them. Traditional (Heckscher-Ohlin) trade theory tells us that countries which are capital-abundant should be relatively efficient at producing capital-intensive goods, whilst countries with relatively higher endowments of labour should be more efficient at producing labour-intensive goods. The assumed comparative advantage of the MERCOSUR countries, Yeats argued, is in labour-intensive goods, so the fact that capital-intensive goods feature prominently in their trade with each other is a cause for concern.

Yeats' study attracted a great deal of attention. In part, this was because of the general interest in regional economic integration and its implications for world trade.¹ For example, many believe that an excessive reliance on regionalism will divert attention from the multilateral system and so reduce the prospects for securing global free trade. However, much of the interest in Yeats' study stems from the growing importance of the MERCOSUR arrangement itself. Table 1 shows that the combined GNP of the MERCOSUR countries exceeded \$880 billion in 1995, and that their combined population was over 200 million. With the prospect of a Free-Trade Area of the Americas (FTAA) some time early in the next century, the MERCOSUR bloc may be an important counterbalance to the United States in future negotiations.² The possibility also exists of a free-trade area between MERCOSUR and the EU. The EU is the principal trading partner of the MERCOSUR countries and regards MERCOSUR as "a new growth centre of worldwide importance and one of strategic importance to Europe".³ At the EU-Latin American summit held in Panama in February 1998, EU and MERCOSUR leaders again raised the possibility of concluding a free-trade area agreement. Argentina and Brazil, are clearly beginning to emerge as important actors in global trade negotiations. For these countries, this fact probably serves as a visible sign to the rest of the world that they have finally put the debt crisis of the 1980s behind them.

MERCOSUR is also the principal example of regional integration between developing countries in the world today. Its success or failure will therefore be seen as a test case for the renewed efforts which other developing countries are now making to foster integration between themselves. One problem in the past is that many so-called "South-South" integration schemes involved countries with small markets, low incomes and comparable production structures. As a consequence, there was little opportunity for trade creation. Indeed, many previous attempts at regional integration by developing countries seemed designed to encourage trade diversion. As noted by de Melo and Dhar (1992), there were a number of reasons for this. Tariff concessions were usually negotiated item by item and countries were therefore encouraged to be highly selective in the offers they made. As a

¹ See, for example, Jagdish Bhagwati's article in *The Economist*, ('Bhagwati on Trade: Fast track to nowhere', *The Economist*, 18 October, 1997, pp23-26).

² Bhagwati (1994) and Bhagwati and Panagariya (1996) suggest that a hegemonic country, such as the United States, would want to bargain sequentially with smaller countries in establishing a free-trade area, since the bargaining position of the latter is weaker when they are more isolated. Political lobbies (such as the environmental lobby and the labour standards lobby) in the hegemonic country will also be more likely to bind small countries into obligations in areas which concern them in regional agreements which are negotiated one at a time. The formation of MERCOSUR may therefore be a rational response by South American countries to the possibility of an otherwise hegemon-dominated hemispheric agreement, since as a customs union MERCOSUR countries would bargain collectively.

³ European Commission (1994), p12.

consequence, trade liberalization was less than complete. In addition, high levels of protection were maintained against third countries. The Latin American experience of regional integration in the 1960s was a classic example of import-substitution policies, pursued at a regional level. Rajapatirana (1994) points out that these policies resulted in reduced trade within the region as well as with the rest of the world.

At first sight, MERCOSUR seems to be quite different from previous Latin American regionalism. According to Foders, “a country that decides to join neighbour countries in setting up a trade regime like MERCOSUR demonstrates that its policymakers hold a view of trade liberalization and foreign competition that radically departs from the protectionist views held in the past to justify inward-looking policies.”⁴ In the case of MERCOSUR, each country has undertaken fundamental macroeconomic and structural reforms, including a strong unilateral liberalization of its trade and investment regime. This is part of the general trend towards economic reform and more open trade regimes in Latin America as a whole – a phenomenon which is well documented (see, for example, Edwards, 1994).

A comparison with the EU experience of regional integration is perhaps helpful. The “deep” integration which the EU has achieved may be contrasted with the “shallow” integration which the MERCOSUR countries have managed up to now.⁵ The accepted view is that regional integration within the EU has had a positive impact on the welfare of its member countries. Writing in 1975, Balassa concluded that “trade creation has been substantial in absolute terms and has exceeded trade diversion several times.”⁶ He found strong evidence of intra-industry specialization in manufacturing, which enabled the exploitation of economies of scale. There were also gains from the rationalization of production in response to intensified competition in a wider market. These so-called “dynamic effects” of economic integration had already been highlighted (Balassa, 1961). As Sapir (1992) notes, dynamic effects were at the heart of the EU’s single market programme, which aimed at abolishing all remaining barriers to the free circulation of goods, services, people and capital by the end of 1992. The most recent evaluation conducted by the European Commission suggests that EU GDP is now 1% higher than it would have been without the single market (European

⁴ Foders (1996), p3.

⁵ The terms “deep” and “shallow” integration were coined by Robert Lawrence. He noted that once tariffs are removed on intra-regional trade, there remains the complex question of how to reconcile different national regulatory policies. So-called “shallow” integration is based on the view that these should be determined and administered at the national level, with partner-country goods and firms given non-discriminatory, national treatment. This can be contrasted with “deep” integration, which is based on the adoption of common rules and policies and supra-national implementation mechanisms. See, for example, Lawrence (1997).

⁶ Balassa (1975), p16. This conclusion applied only to trade in manufactures, since there were welfare losses associated with the EU’s agricultural policies.

Commission, 1996). Of course, as EU member countries become richer there can also be positive spill-overs for non-member countries, the most obvious being through increased demand for third-country imports.

Of the various lessons which may be drawn from the EU experience, there are two which seem to be among the most pertinent for Latin America. The first is that, by their very nature, dynamic gains take time to be fully realised. Since MERCOSUR is still in its infancy, one cannot expect to evaluate fully its welfare implications by examining data for a limited time-period.⁷ The second is that external trade liberalization is a key complement to the removal of barriers on intra-regional trade. In an important study, Jacquemin and Sapir (1991), found that it is *extra*-EU imports which exert a pro-competitive effect on price-cost margins in the EU. This strengthens the case for following a combination of internal and external trade liberalization rather than pursuing internal liberalization on its own.

2. The trade regime of the MERCOSUR countries

MERCOSUR was created by the Treaty of Asunción of March 1991.⁸ It seems to have been partly inspired by the Treaty of Rome, one of the founding documents of the EU. The Asunción Treaty called for the gradual establishment of a common market and specified a transition period from June 1991 to December 1994, during which time tariffs on intra-MERCOSUR trade were to be gradually eliminated and a common external tariff (CET) adopted. There was some slippage in achieving this objective, but when the MERCOSUR “customs union” officially began operating on 1 January 1995, approximately 80 per cent of all products traded between its members were no longer subject to tariffs, the main exceptions being sensitive products such as textiles, steel and automobiles.⁹

In recent years, the MERCOSUR countries have substantially reduced their external tariffs. This is largely due to domestic trade policy reforms in the last decade or so, but, to some extent, it also reflects the adoption of the CET. It should be noted that Brazil’s average tariff

⁷ In any event, Baldwin (1997) has pointed out (in relation to Yeats’ study) that although trade volume changes are suggestive of welfare changes, the former are not a sufficient condition for the latter, except under restrictive assumptions. On this, see Baldwin and Venables (1995).

⁸ Argentina and Brazil started the process of regional integration somewhat earlier than the other two countries. Some tariff preferences were included in the twenty-four bilateral trade protocols signed by Argentina and Brazil between 1984 and 1989. At the end of 1990, the two countries signed an agreement to systemize and deepen these bilateral protocols. At around the same time, Paraguay and Uruguay expressed an interest in participating in the bilateral process already underway and the four countries then decided to sign an agreement to create a common market. A full description of the trade regime of the MERCOSUR countries is beyond the scope of this paper. For recent analyses, see WTO Secretariat (1996, 1997) and Laird (1997).

⁹ Apparently, some 95 per cent of intra-MERCOSUR trade was duty free by this time (WTO Secretariat, 1996).

stood at 51 per cent in 1988, but in recent years this has fallen from 21.2 per cent (January 1992) to 14 per cent (July 1993) and 11.9 per cent in 1995. Similarly, Argentina's tariff averaged some 30 per cent in 1989, but in recent years has fallen from 12.2 per cent in 1991 to 10.5 in 1995.¹⁰ Olarreaga and Soloaga (1997) note that "the larger members of MERCOSUR are adjusting downwards to the CET . . . which signals not only a liberalizing effort, but also that the region will tend, on average, to be more open".¹¹

This general trend towards increased *multilateral* openness can be seen from Table 2. The figures show that both average tariff protection and the coverage of non-tariff barriers in the MERCOSUR countries fell substantially over the period 1985 to 1995. The greater part of this increase in multilateral openness occurred between 1985 and 1991-92. However, it can also be seen that the beginning of intra-MERCOSUR liberalization, which occurred around 1991-92, was accompanied by a further reduction of trade barriers applied on a multilateral basis.

The MERCOSUR CET has 11 tariff levels, ranging (until recently) from 0 to 20 per cent, and applies to approximately 85 per cent of items.¹² The remaining items, including capital goods, telecommunications equipment and computer products, are subject to national tariffs until the end of a transition period lasting up to 2006, with a timetable of convergence to the CET applying. Furthermore, each country is allowed a list of up to 300 exemptions from the CET (399 in the case of Paraguay), which are again subject to a process of convergence.

Laird (1997) reports that external tariffs averaged some 10.7 per cent at the time of implementation of the CET, but that tariff escalation affords a significant degree of *effective protection* to processing industries. Effective protection measures the effects of a tariff system on value-added in different industries, given that tariffs on inputs are often lower than those on final goods. In this case, the nominal tariff can be a misleading indicator of protection. In Brazil, the production-weighted average rate of effective protection was apparently 12.9 per cent in December 1995. The highest rate of effective protection was afforded to cars, trucks and buses (in excess of 270 per cent), reflecting the high nominal tariffs on motor vehicles

¹⁰ The effect is even greater for Uruguay, which had average tariffs in excess of 100 per cent at the end of the 1970s. Note that Paraguay is the exception, in that its average tariff was lower than under MERCOSUR, and, in any event, it may not have been very efficient at collecting tax revenue pre-MERCOSUR. However, its share in total trade is quite small. Information on MERCOSUR countries' tariffs is taken from WTO Secretariat (1996) and Laird (1997).

¹¹ Olarreaga and Soloaga (1997), p21. One should note that non-tariff barriers have also been reduced significantly in recent years. See, for example, Edwards (1994), Rajapatirana (1994) and Laird (1995).

¹² There are also various national import charges applied by individual countries. For example, Argentina applied until recently a 3 per cent "statistical tax" on non-MERCOSUR imports.

and the relatively low-value added in the industry. Other areas benefiting from high effective protection include electrical materials, electronic equipment, the dairy industry, beverages and food products, textiles and plastics. On the other hand, effective rates of protection are considerably below average in non-fuel mining, agriculture and chemicals.

The automobile industry deserves special mention, as this is clearly a “sensitive” sector, at least as far as Brazil is concerned. The sector is, in fact, the most highly assisted manufacturing industry in Brazil (WTO Secretariat, 1996). Special arrangements, which are not technically part of MERCOSUR, serve to allow managed trade in this sector between Argentina and Brazil. These arrangements provide for local content plans, concessional entry for vehicles and parts and export-balancing requirements. Laird notes that in order to comply with the WTO Agreement on Trade-Related Investment Measures (TRIMs), it will be necessary to eliminate the local content and export-balancing requirements by the year 2000. Brazil has Latin America’s largest vehicle parts industry, and there is clearly scope for intra-industry trade accompanied by greater outsourcing of supplies. However, there is also a concern that high tariff protection in this sector can lead to over-investment and excess capacity. In 1997, MFN tariffs on imports of motor cars were as high as 30 per cent in Argentina and 63 per cent in Brazil.¹³

Even if the MERCOSUR countries can assuage concerns about trade diversion, there are clearly areas where continued reform is required. Three such areas are worth noting here. Firstly, the flexibility granted to individual countries in deviating from the CET does not encourage certainty or transparency in policy formulation, and may tend to support the view that the distributive interests of sectoral lobbies are more important than general welfare and efficiency considerations.¹⁴ The automobile sector is an obvious example, and a move away from managed trade in motor vehicles should be a policy priority.¹⁵ Individual exemptions from the CET also fuel concerns that MERCOSUR is not yet a fully fledged customs union. Secondly, whilst the Uruguay Round resulted in a considerable increase in tariff bindings, these are generally considerably above applied levels.¹⁶ The room for manoeuvre to raise

¹³ Source: EU Market Access Database. NB these figures do not reflect the increase in tariffs announced in November 1997.

¹⁴ Olarreaga and Soloaga (1997) use an endogenous tariff model to explain MERCOSUR countries’ deviations from the CET in terms of the influence of sectoral lobbies.

¹⁵ In March 1998, Brazil reached an agreement with the US to accelerate the dismantling of trade-distorting investment requirements in the automobiles sector. Some IMF Directors had already called for a reduction in the protection provided to the motor industry in the IMF Article IV consultation with Brazil (‘IMF calls on MERCOSUR to cut tariff’, *Financial Times*, 16 March 1998). It remains to be seen what will happen to tariffs once these measures have been dismantled.

¹⁶ In the case of Brazil, tariff bindings are generally at a rate of 35 per cent for manufactured products and 55 per cent for agricultural goods (WTO Secretariat, 1996).

applied tariffs within tariff ceilings also reduces the degree of certainty which one can attach to MERCOSUR trade policy. Finally, economic difficulties affecting the MERCOSUR countries have also given rise to periodic tariff adjustments.¹⁷ Trade taxes are obviously an important source of revenue for these countries, but a reform of domestic taxes could allow a further reduction in tariffs.

3. Trade diversion: the need to look at imports

Empirical researchers wishing to evaluate regional integration schemes must obviously confront the difficult question of how to disentangle the effect of any scheme from the myriad of other factors which may alter trade flows. The two main methodologies which researchers have used are econometric techniques and computable general equilibrium (CGE) models. As Baldwin and Venables (1995) note, there are problems with both approaches. Econometric evaluations, for example, have an advantage in that they can be appraised with standard statistical techniques. On the other hand, they cannot capture the complicated interplay of effects which may be important for large policy changes associated with the formation or deepening of important regional arrangements. CGE models allow for more interplay between endogenous variables, but neither the models nor the results can be judged statistically and the models face a trade-off between transparency and complexity.

In his paper, Yeats proposed a new methodology for evaluating regional schemes. He used an index of regional orientation to examine whether individual products are more or less likely to be traded with partner countries compared to the rest of the world. He combined this index with different measures of apparent comparative advantage, to see whether partner countries could be considered relatively efficient suppliers of these products. Comparing these two measures led Yeats to the conclusion that MERCOSUR had resulted in a significant amount of trade diversion. MERCOSUR producers had not established themselves as efficient suppliers of many of the goods which were increasingly traded between the four countries.

In his study, Yeats noted that “it is likely . . . that trade arrangements both created and diverted trade”.¹⁸ However, he focused on trade diversion alone. He looked at the most

¹⁷ During the 1990s, Brazil has been plagued by current account deficits and both Argentina and Brazil have suffered from periodic fiscal difficulties. Thus, in March 1995, in the wake of the Mexican economic crisis, Argentina launched a fiscal adjustment programme. As well as the restoration of the 3 per cent statistical tax on non-MERCOSUR imports, Argentina also raised tariffs on capital goods and telecommunications equipment. In April of the same year, Brazil also undertook a number of emergency measures, such as raising tariffs on automobiles and durable consumer goods, and temporarily broadening the list of exceptions to the CET to 450 products. In November 1997, Brazil and Argentina decided to raise the CET by 3 per cent. Argentina simultaneously abolished the statistical tax.

¹⁸ Yeats (1997), p29.

dynamic products in intra-MERCOSUR *exports* and asked whether the four countries were also able to export these products to third countries. A problem with this approach is that the pattern of demand in different markets can differ, as can the structure of protection. More substantially, we should note that, by focusing on trends in exports one can fail to capture the important growth in trade with third countries which MERCOSUR countries have experienced. The growth in MERCOSUR's total imports has greatly exceeded the growth in its total exports in recent years. Imports increased by 268 per cent compared to 129 per cent for exports over the period 1986 to 1995. By concentrating on the share of intra-MERCOSUR exports in total exports (rather than the share of intra-MERCOSUR imports in total imports), one may therefore tend to overstate the relative importance of growing trade between the MERCOSUR countries and underestimate their growing trade with the rest of the world. In relation to Yeats' study, this point has previously been made by Devlin (1996).

Furthermore, by focusing on exports, one may also risk overstating the importance of capital-intensive goods in intra-MERCOSUR trade. Yeats found that capital-intensive goods featured heavily in intra-MERCOSUR *exports*. He regarded this as a cause for concern, "since economic theory holds that countries like those in MERCOSUR should not have a comparative advantage in the production of relatively capital-intensive goods".¹⁹ However, empirical researchers who have studied how the direction of trade can affect the pattern of trade have found that, in general, "developing countries' exports to other developing countries are more capital-intensive than their exports to industrial countries"²⁰, whilst their imports from other developing countries tend to be *less* capital-intensive than their imports from developed countries. This feature of developing countries' trade could be partly the result of policy distortions, but it may also be somewhat intuitive, and as such there have also been attempts to explain it within the general framework of traditional Heckscher-Ohlin trade theory.²¹

Finally, if we are studying developing countries, it is likely that raw materials and agricultural products (for which price fluctuations may be relatively important) will tend to feature more heavily in their exports than in their imports and that the reverse will tend to be true for manufactured goods (for which price fluctuations will be relatively less important). Therefore,

¹⁹ Yeats (1997), p15.

²⁰ Havrylyshyn (1987), p27.

²¹ Key references are Krueger (1970), Baldwin (1979) and Deardorff (1987).

an analysis which focuses on exports may be more sensitive to price fluctuations than one which concentrates on imports.²²

4. Regional evolution of imports

Tables 3.A and 3.B show that there has been an increase in the relative importance of MERCOSUR in the total imports of the two larger economies over the period 1988 to 1996. Argentina and Brazil are the two largest markets within MERCOSUR and they also represent the two main sources of intra-MERCOSUR imports. It is therefore not unreasonable to presume that if significant amounts of trade diversion have arisen under MERCOSUR, it is mainly in these two countries' trade with each other. The share of the other MERCOSUR countries in the imports of Argentina increased modestly over this period from 22 per cent to 25 per cent. Thus, although Argentina's imports from Brazil grew by an annual average rate of 24 per cent between 1988 and 1996, there was also strong growth in imports from other main trading partners (e.g. NAFTA: 23%; EU: 19%; Chile: 18%). The share of other MERCOSUR countries in Brazil's imports more than doubled between 1988 and 1996. Whilst Brazil's imports from Argentina grew by an annual average rate of 33 per cent, imports from other main trading partners also performed well (NAFTA: 19%; EU: 19%; Rest of Western Hemisphere: 17%).

Since there has been an appreciable growth in both countries' total imports over this period, the aggregate figures in Tables 3.A and 3.B tend not to support the view that regional integration between Argentina and Brazil over this period has been at the expense of trade with other main trading partners. It is, of course, difficult to say what would have happened to the regional evolution of these countries' imports over this period had the regional trade preferences not been granted. Nevertheless, it should be noted that the imports of all developing countries from the world grew by an annual average rate of 12 per cent between 1988 and 1996, which is less than the growth in world imports by Argentina and Brazil over this period. Of course, Brazil's import surge may also be partly explained by the over-valuation of the exchange rate, a consequence of the *Plano Real* stabilization package.

Tables 3.C and 3.D show that, for the two smaller MERCOSUR economies, Paraguay and Uruguay, the share of intra-regional trade in total trade is much greater (around 45 per cent). In other words, "the importance of MERCOSUR as a source of imports decreases as country

²² For developed countries, on the other hand, raw materials and primary goods will feature relatively more in imports than in exports. Sapir (1992) makes this point in his analysis of intra-EU trade.

size increases”.²³ Again, however, regional integration under MERCOSUR was accompanied by increased trade with third countries.

Table 4 reports the ratio of imports from MERCOSUR and non-MERCOSUR countries in each member country’s GDP for 1988 and 1995. These figures confirm Yeats’ finding of a strong growth in MERCOSUR intra-trade. Note, however, that the figures also record an increased *multilateral* openness of the MERCOSUR economies over this period. The MERCOSUR countries recorded an important increase in the share of *extra*-regional imports in GDP. The only exception is Uruguay, where the share of imports from the rest of the world was unchanged at 11 per cent.

This analysis of the regional evolution of MERCOSUR imports suggests that even if trade diversion has been important for certain products, there has nevertheless been a strong growth in total imports from the rest of the world. Laird characterizes the growth of MERCOSUR imports from third countries as “impressive” and suggests that “the growth of intra-trade cannot be attributed uniquely to trade diversion resulting from the creation of MERCOSUR as, apart from certain years and partners, trade has also been growing strongly with other countries”.²⁴

5. The shifting regional orientation of intra-MERCOSUR imports

This section seeks to identify a list of products in each country’s imports which may have been the subject of trade diversion. For present purposes, trade diversion may be considered to have arisen when two conditions have been met: (1) imports from MERCOSUR sources of a given product have displaced imports from the rest of the world to a significant degree; and (2) there are good reasons to believe that MERCOSUR producers are not relatively efficient suppliers of that product. In this section, the focus is on identifying products which meet the first of these conditions.

A useful way of identifying imports where MERCOSUR producers have displaced producers from the rest of the world is to adapt the index of regional orientation (RO) suggested by Yeats to look at imports. This index should provide a useful tool for the empirical researcher who is interested in analyzing the shifting geographical composition of trade in particular products. One can agree with Yeats that changes in this index in the short to medium term are more likely to be influenced by differential changes in trade barriers than factors such as

²³ Foders (1996), p7.

²⁴ Laird (1997), p2.

shifting comparative advantage or tastes. The index of regional orientation of a given country's *imports* of product *i*, RO_i , is defined as follows:

$$RO_i = \frac{(m_i^P / M^P)}{(m_i^T / M^T)} \quad (1)$$

where m_i^P and m_i^T represent the value of imports of product *i* from MERCOSUR partners and from third countries, respectively, and M^P and M^T represent total imports from MERCOSUR partners and from third countries, respectively. The index value ranges between zero and infinity, with a value of unity indicating the same tendency to import the product from MERCOSUR partners as from third countries and values above unity indicating a greater tendency to do so.²⁵

The problem with using the regional orientation index to identify products where trade diversion may have arisen is that there may be other reasons why imports from MERCOSUR producers have displaced imports from the rest of the world. For example, increased competition within MERCOSUR and ongoing structural reforms in these countries may have stimulated greater intra-regional trade flows. Additionally, product differentiation may be important and the increased regional orientation of imports of a given good may partly reflect the demand for increased variety, some of which is now being met from regional sources. Furthermore, the case for trade diversion can only really be convincing when imports from MERCOSUR sources have replaced imports from the rest of the world to a significant degree. Relatively minor changes in import shares in the short- to medium-term might be quite normal, e.g. because of fluctuations in real exchange rates. This suggests that the RO index needs to be interpreted with some caution.

Tables 5.A., B., C. and D. report values of RO_i for the top thirty products in each MERCOSUR country's imports which meet these two selection criteria: (a) they show an increase in regional orientation over recent periods; and, (b) imports from MERCOSUR sources exceeded \$1 million at the end of the period considered. Selection criterion (b) was introduced, as in Yeats' study, in order to exclude marginal products. Note that time periods

²⁵ According to his equation (2), Yeats scaled his RO variable by 100. This cannot be correct since he says that a value of *unity* (not 100) indicates the same tendency to export a product to MERCOSUR markets as to the rest of the world, and values above *unity* (again, not 100) indicate a greater tendency to do so.

vary according to importing country because of differences in the availability of data.²⁶ As in Yeats' study, products were classified according to the Standard Industrial Trade Classification (SITC) system, and disaggregated at the 3-digit level. The products listed account for between 76 per cent (Uruguay) and 97 per cent (Brazil) of the increase in regional orientation of MERCOSUR imports over the periods considered.

For Argentina, most of the increase in the regional orientation of imports from MERCOSUR sources was concentrated in the chemical products, manufactured goods and machinery and transport equipment categories. For Brazil, food and live animals featured most prominently, followed by manufactured goods and machinery and transport equipment. For Paraguay, the products showing an increase in regional orientation of imports from MERCOSUR were concentrated in the manufactured goods, food and live animals and chemical products categories. For Uruguay, the most important categories were food and live animals, machinery and transport equipment, chemical products and manufactured goods.

At a more detailed level, the products with an increased tendency of being imported from MERCOSUR partners compared to third countries were somewhat of a mixed picture. Both higher value-added products (e.g. telecommunications equipment, motor vehicles) and more traditional developing-country exports (e.g. agricultural products, textiles, clothing, footwear) appear to have shifted towards MERCOSUR sources in recent years. In general, however, the results are not out of line with what is known about the intra-trade of the MERCOSUR countries before they began to undertake both significant preferential trade liberalization and unilateral, non-discriminatory reductions in trade barriers. As Baumann (1993) noted,

“If we look at the most important trade flows, we find that in 1989 Argentina's main exports within MERCOSUR consisted of wheat, dairy products, fruits and nuts, petroleum products, and motor vehicle parts. Brazil exported coffee, iron ore and concentrates, petroleum products, steel products and automobiles. Uruguay mainly exported meat, rice, processed cereals and some chemical products such as pigments and paints, while the principal Paraguayan exports were cotton, meat, coffee and essential oils.”²⁷

²⁶ The analysis is based on data available for the most recent period possible as reported by each country according to the SITC Rev. 3 classification. The exact period therefore differs by country.

²⁷ Baumann(1993), p136.

Many of these products occur in the list of goods showing an increase in regional orientation favouring MERCOSUR. Of course, this tells us which products were being exported by each MERCOSUR country to its partners. What about *imports*? In 1989, Argentina's main imports from other MERCOSUR countries consisted of iron ore and concentrates, ingots and other primary forms of iron and steel, motor vehicle parts and accessories, other hydrocarbons and coffee and coffee substitutes. Brazil imported cotton, wheat, leather, meat and edible meat offal and fruit and nuts. Uruguay mainly imported passenger motor cars, polymerization products, refined petroleum products, iron and steel plates and sheets and telecommunications equipment. The main Paraguayan imports were refined petroleum products, tractors, rubber tyres, polymerization products and paper and paperboard. Again, many of these products feature in the list of goods which have been identified as showing an increase in regional orientation favouring MERCOSUR.

Thus, both for traditional developing-country exports and for higher value-added products, an important part of the recent increase in the regional orientation of MERCOSUR imports is explained by goods which were already being traded relatively intensively between the four countries before major intra-bloc trade barriers were lifted.

In order to provide a convincing argument that the products in Tables 5.A. to D. have shifted towards MERCOSUR sources as a result of trade diversion, it needs to be established that MERCOSUR producers cannot be considered to be relatively efficient suppliers. This issue will be examined in the next section.

6. Identifying the comparative advantage of the MERCOSUR countries

Yeats' analysis was based on the traditional factor-proportions (Heckscher-Ohlin) theory of comparative advantage, which explains relative efficiency in the production of different goods on the basis of differences in countries' relative endowments of different factors of production. The theory states that countries will have a comparative advantage in producing those goods which use intensively the factors of production with which they are relatively more endowed. Countries which are labour-abundant (i.e. developing countries), will tend to be relatively efficient at producing goods which are labour-intensive in production, and similarly for capital-abundant (i.e. developed) countries.

The factor-proportions theory is intuitively appealing and has stood up remarkably well to empirical scrutiny. Deardorff (1984) provides a survey of empirical tests of the theory. He concludes that "it does reasonably well at explaining the commodity composition of trade, but beyond that it is fairly helpless. We need something more, or different, even to address issues

of the bilateral pattern and volume of trade. If we wish our model to be consistent with . . . empirical observations [e.g. on the importance of trade between countries with similar factor endowments], a more radical departure from the . . . model may be called for.”²⁸

A problem with the traditional theory, then, is that it says very little about the direction of trade. Why should Argentina’s exports to Brazil necessarily be the same as its exports to rest of the world? Yeats found that “dynamic products [in intra-MERCOSUR trade] generally consist of goods that are relatively capital-intensive in fabrication”²⁹. As has already been noted, however, developing countries’ exports to other developing countries tend to be more capital-intensive than their exports to developed countries, and their imports from other developing countries are less so (although it may be that trade policy distortions reinforce this effect).

Yeats did not provide any information on relative endowments of factors of production in the MERCOSUR countries, but one way to proxy this is to look at their relative income levels. It seems reasonable to assume that richer countries have higher relative endowments of physical and human capital and that poorer countries have higher relative endowments of labour. On the basis of per capita income levels, the World Bank classifies the MERCOSUR countries (with the exception of Paraguay) as “upper-middle-income”. This tends to suggest that the MERCOSUR countries lie somewhere in between the developed countries and the rest of the developing world in terms of their relative factor endowments. In other words, they might be higher up the ladder of comparative advantage than the average developing country (relative endowments of physical and human capital might be greater than for the average developing country) but still below developed countries (relative endowments of labour are still greater than in the developed world).

This makes the identification of the comparative advantage of the MERCOSUR countries somewhat difficult. As developing countries, they should tend to have a comparative advantage in the production of relatively labour-intensive products. However, since per capita incomes are higher in the MERCOSUR countries than in the developing world on average, these countries may also have an emerging specialization in some relatively higher value-added products.

²⁸ Deardorff (1984), p512.

²⁹ Yeats (1997), p15.

Empirical researchers have long struggled with the problem of identifying different countries' comparative advantages. Perhaps one of the most well known contributions to this area is the index of *revealed comparative advantage* (RCA), developed by Balassa (1965). The calculation of this index does not depend on relative factor endowments, but rather on the ratio of the share of a good in a country's exports to the share of that good in total world exports. Values above (below) unity indicate that a country has (does not have) an apparent comparative advantage (or export specialization) in a given product. The traditional (Balassa) RCA index for product i , country j is calculated as the ratio of the share of i in j 's total exports to the share of that product in world trade (world exports of i as a proportion of total world exports), i.e.

$$RCA_j^i = \frac{(x_j^i / X_j)}{(x_w^i / X_w)} \quad (2)$$

Yeats calculated a slightly different version of this index, by excluding intra-bloc trade from both the numerator and the denominator.³⁰ He did this in order to prevent preferential trading arrangements within MERCOSUR from biasing the results. He wanted to measure countries' *true* abilities to export products in markets where they do not benefit from an "unnatural" edge (which MERCOSUR's CET would give them). Whilst this is a valid concern, which must give rise to difficulties with the interpretation of the Balassa version of the RCA index, there are also problems with the approach favoured by Yeats. Firstly, MERCOSUR exporters may also benefit from preferential treatment in important third country markets (although, in general, third-countries' MFN tariffs will not give MERCOSUR exporters the same degree of "unnatural" edge which they might enjoy under MERCOSUR's CET). Secondly, and more importantly, if intra-bloc trade in certain goods is the main motivation for the development of new export industries (as may be the case in motor vehicle parts), or if an important number of MERCOSUR firms already specialize in supplying the needs of regional markets (for example, Uruguayan exports of cereal preparations are almost exclusively destined for Brazil), then removing these markets from the calculation of the index can tend to understate a country's revealed comparative advantage. Tastes can also differ in different markets, and it might be that intra-regional differences in tastes are less important than differences between MERCOSUR and the rest of the world. Alternatively, for some products, intra-regional

³⁰ Given the small share of the MERCOSUR countries in world trade, excluding intra-bloc trade from the denominator does not greatly affect the value of this index.

transport costs may be low enough for MERCOSUR producers to be considered efficient suppliers of local markets relative to extra-regional suppliers.³¹

More generally, if direction matters for trade, it is not clear that “regionalizing” revealed comparative advantage in this manner is appropriate. Since one expects MERCOSUR exports to developed countries (who make up the greater part of world trade) to be less capital-intensive than their exports to each other, the products with increased regional orientation might ordinarily have higher values for the Balassa version of the index than for the Yeats version. Furthermore, if MERCOSUR exporters face important trade barriers in third-country markets which are less important for intra-MERCOSUR trade, the Yeats version can also understate these countries’ revealed comparative advantage.³² Yeats did not provide any empirical support for his contention that his version of the RCA index is superior to that suggested by Balassa (e.g. application to the study of other regional trading arrangements), and one may therefore express legitimate doubts as to its general validity.

On the other hand, the problem with the Balassa version, as Yeats pointed out, is that it may be artificially biased by the trade regime created under MERCOSUR. This problem might be eliminated by calculating RCAs for the period before MERCOSUR was formed. Even then, however, the index may be biased because of pre-MERCOSUR trade policy distortions. Perhaps the best that can be done is to compare the different versions of the RCA index over different periods of time. This is done in Tables 6.A. to D.

7. Identifying possible trade diversion

Tables 6.A. to D. indicate whether the RCA indices (both the Balassa and Yeats versions) for each MERCOSUR country’s main regional suppliers are above unity for each of the products previously identified as showing an increase in regional orientation.

Thus, if, for example, one is interested in Argentina’s imports, the table shows whether the RCA index for Brazil, Paraguay or Uruguay (depending on which of these countries is an important supplier to the Argentine market) is above unity and therefore whether one can consider MERCOSUR producers to be relatively efficient suppliers of a given product. Both

³¹ One should note, however, that Amjadi and Winters (1997) found that, in general, intra-MERCOSUR transport margins are probably not large enough for MERCOSUR to be able to reap large gains as a “natural” trading bloc.

³² Historically, this may have been the case for many products in which the MERCOSUR countries might have a comparative advantage (e.g. agricultural products, or textiles and clothing). Industrial countries have traditionally imposed significant restrictions on Latin American exports, often in the form of non-tariff barriers. Edwards (1994) reports that import-weighted non-

versions of the index were calculated over different periods: the average for the period 1988-90 (before MERCOSUR) and 1995 (most recent available data). Finally, the Tables give figures, where available, for an index of capital-intensity. This provides an *ex ante* measure of comparative advantage (in contrast to the RCA index, which is an *ex post* measure). It is based on the assumption that one can proxy the capital-intensity of production of different goods in a given country by using figures for value-added per worker (generally considered to be a good measure of human and physical capital-intensity) in US manufacturing. A value of 100 indicates that the good is as capital-intensive as the average for US manufacturing, while values above (below) 100 indicate goods which are more (less) capital-intensive relative to this average.

Are there strong reasons for believing that the shift in regional orientation of MERCOSUR countries' imports is associated with products for which significant trade diversion has arisen? In fact, this is far from straightforward. Different measures of comparative advantage often yield quite different results. For example, looking at Brazil's imports, it can be seen that Argentina has a revealed comparative advantage in the production of live animals when measured by the Balassa RCA index. However, if the MERCOSUR market is excluded, the Yeats version of the RCA index shows Argentina *not* to have a revealed comparative advantage. The explanation for the discrepancy in the two indices may lie in the fact that trade in live animals, such as bovine cattle, may be restricted to the region because of high transport costs.³³ As noted earlier, a major weakness of the Yeats version of the RCA index is that there are factors other than preferential trade barriers which may explain why a product is mainly shipped to regional markets.

Consider now the products with an increased regional orientation in the imports of Argentina. For fifteen of the thirty most important products shown in Table 6.A., none of the main regional suppliers of the Argentine market (usually Brazil), had a Balassa RCA above unity in 1988-90. However, if one were to eliminate those products for which either: (a) any one of the main regional suppliers had a Balassa RCA above unity in 1995 (it may have developed a specialization in the product over this period); or, (b) any one of the main regional suppliers had a Yeats RCA above unity in either 1988-90 or 1995, one is left with only nine products. Three of these products can be eliminated, since they seem to be relatively labour-intensive. This leaves only six products. However, from Table 5.A., it can be seen that the average

tariff barrier coverage ratios in OECD markets in the mid-1980s were 63 per cent for Argentina and 38 per cent for Brazil. The Uruguay Round should significantly improve the prospects for Latin America's exports to the industrial countries.

³³ Gupta and Schiff (1997), p6.

annual growth rate of Argentine imports from third countries for these six products has been between 12.9 per cent (automatic data processing machines) and 31.7 per cent (polyacetals) in recent years.

Performing a similar exercise for Brazil in Table 6.B., one again starts with fifteen products for which none of its main regional suppliers had a Balassa RCA above unity in 1988-90. Again, eliminating those products for which one of the other measures of RCA is above unity or which could be considered labour-intensive, one is left with around ten products.³⁴ It will be seen that only two of these products (transmission shafts and non-ferrous base metal waste) are associated with declining imports from third countries. For the other eight products, Brazil's imports from third countries have again been growing very strongly over recent years. Annual average growth rates for imports from third countries range from 7.1 per cent (taps, cocks and valves) to 22.2 per cent (polymers of styrene).

For Paraguay, there are only six products which cannot be eliminated on the basis of either version of the RCA index for either period or the capital-intensity index. For only one of these products (fertilizers) have Paraguayan imports from third countries fallen in recent periods. Annual average growth rates of imports from third countries for the other five products have ranged from 12.5 per cent (alcoholic beverages) to 24.3 per cent (motor cars). For Uruguay, there are only two products which cannot be eliminated on the basis of RCA indices or capital-intensity. Uruguayan imports of these two products (medicaments and soap) from third countries have been growing by, on average, at least fifteen per cent over recent periods.

Two conclusions may be drawn from the above analysis. First, it is important to focus on imports rather than exports. For most of the products which have shown an increase in regional orientation towards MERCOSUR suppliers, imports from third countries have also been growing strongly. This observation is difficult to square with the view that MERCOSUR has been associated with a significant amount of welfare-reducing trade diversion. Second, the identification of trade diversion is not straightforward. There are difficulties with the interpretation of the different measures of comparative advantage. However, if one were to look for strong evidence of trade diversion by using all the various indicators together, one would find only a handful of products in the imports of each country. Even for these products, there has been an impressive increase in imports from third countries. In most cases, the annual average growth rate of third country imports exceeds 10 per cent over the periods

³⁴ It seems reasonable to exclude cut articles of paper, since this could be either a labour-intensive or a capital-intensive product on the basis of figures reported in Yeats (1989).

examined. Of course, one cannot say what would have happened to the growth of imports from outside MERCOSUR had the four countries not eliminated barriers to trade with each other whilst maintaining some protection against third countries. Trade diversion has undoubtedly occurred for some products, but the increasing multilateral openness of the MERCOSUR countries coupled with the dynamic effects of the growth in their economies' may have outweighed any static welfare losses. Furthermore, there may well be reasons other than trade diversion which explain why imports of these products have shown an increase in regional orientation favouring MERCOSUR.

8. Trade barriers in MERCOSUR countries

Table 7 reports post-Uruguay Round applied tariffs for Argentina, Brazil and Uruguay, as well as for the US, the EU and a selection of countries in East Asia and the Pacific. The figures were taken from Finger, Ingco and Reincke (1996). Also shown is the proportion of trade covered by non-tariff barriers for the period 1990-93 (i.e. pre-Uruguay Round figures). These were taken from World Bank (1997).

In his paper, Yeats argued that the combination of high tariff preferences favouring MERCOSUR partners and non-tariff barriers applied to third country imports played an important part in explaining the recent dynamism of intra-MERCOSUR exports. He noted that tariff margins for these products are "far higher than the average within the European Union" and that "non-tariff barriers were also structured along lines that would reinforce the trade distorting effects of the agreements (sic) preferential tariffs".³⁵ Of course, developing countries tend to have higher levels of external protection than those of industrial countries. The comparison with the EU is useful, since it represents a good example of how regional integration can be successfully combined with increasing multilateral openness. Nevertheless, one should not lose sight of the fact that MERCOSUR is an arrangement among developing countries. A more useful comparison is therefore one involving other developing countries.

What is important to remember is that the MERCOSUR countries started with high levels of external protection and have since undertaken dramatic, unilateral liberalizations of their trade regimes. It is true that Latin American countries do not have trade regimes which are as open as those in the industrialized countries, but it should nevertheless be noted that, on average, "Latin America now has lower tariff protection than other developing regions . . . [and that] non-tariff barriers for all products other than fuel are quite moderate and on the whole lower

³⁵ Yeats (1997), pp26-28.

than in the industrialized countries”.³⁶ Table 7 shows that the level of non-tariff protection in the three largest MERCOSUR countries compares favourably with that in the US or the EU. In addition, both tariff and non-tariff protection is, in general, lower than in developing countries in East Asia and the Pacific.

9. The technology content of MERCOSUR imports

Theories of trade based on differences in technology provide an alternative framework to the Heckscher-Ohlin approach.³⁷ It is interesting to ask whether there has been a shift in the technology content of imports from intra- and extra-MERCOSUR sources in recent years. This may provide further insights as to whether MERCOSUR has generated significant trade diversion.

Foders (1996) suggests that the MERCOSUR countries are specialized in the production of standard technology products, with perhaps an emerging specialization in a number of intermediate technology products (e.g. rubber manufactures). On the other hand, MERCOSUR countries are unlikely to be the most efficient suppliers of each other's imports of high technology products. As Foders notes, intra-MERCOSUR trade “can only be a part of [the] total foreign trade of MERCOSUR member states; imports of embodied and disembodied technology and know-how, which will be necessary to achieve high and sustainable rates of economic growth, will continue to originate in the OECD countries”.³⁸ Therefore, if there has been any shift in these countries' imports of high technology goods towards intra-MERCOSUR sources in recent periods, this may lend support to the view that trade policy changes introduced by the MERCOSUR countries may have encourage inefficient intra-regional trade flows.

Tables 8.A. and B. show that, Argentina and Brazil depend on non-MERCOSUR sources for almost all their imports of high technology products. For Argentina, there does not seem to have been much of a shift in the share of imports from MERCOSUR and third countries when classified by technology content.³⁹ For Brazil, the most noticeable development is an increase in MERCOSUR's share of imports of intermediate technology goods, from 6 per cent in 1989 to 12 per cent in 1995. However, the rest of the world still accounts for by far the greater part of Brazil's imports of such goods.

³⁶ UNCTAD (1993), p114-115.

³⁷ Again, see Deardorff (1984) for a survey of empirical tests of technology-oriented theories of trade.

³⁸ Foders (1996), p16.

³⁹ The classification is based on that used by Foders (1996) in a previous study of MERCOSUR trade. See Annexe 1.

Any shift in technology content is more noticeable for the smaller countries than for the larger countries. The rest of the world's share in Argentina's and Brazil's imports of high technology goods has not changed much over the periods examined. On the other hand, Tables 8.C and D. show that the rest of the world's share in Paraguay's and Uruguay's imports of high technology goods increased, while the other MERCOSUR countries increased their share in these two countries' imports of standard technology goods.

One can also apply this classification of goods by technology content to the products identified by Yeats as featuring prominently in intra-MERCOSUR exports. In his Table 4, Yeats lists the thirty products which have grown fastest in intra-regional exports. His Table 5 shows the thirty products where there has been the greatest increase in regional orientation towards MERCOSUR (again, looking at exports). Of the first group of products, only two are high technology and only five are intermediate technology. Of the second group, again only two are high technology, whilst seven are intermediate technology. Thus, if one looks at exports rather than imports, the recent increase in MERCOSUR trade is mainly confined to standard technology products and a handful of intermediate products. This is not out of line with the prior assumption that these countries should tend to be specialized in the production of such goods.

Thus, the evidence presented here suggests that the intra-trade of the MERCOSUR countries is not as perverse, from a technology-content point of view, as one might think. In particular, regional integration within MERCOSUR does not seem to have seriously compromised these countries' imports of high technology products from outside the region. The analysis of the regional composition of MERCOSUR imports when classified by technology does not provide strong support for the hypothesis that intra-MERCOSUR trade flows are inefficient. Of course, one does not know what would have happened had regional integration not taken place. MERCOSUR may not be as good as multilateral free trade (or an equivalent degree of liberalization on a multilateral basis – Yeats' counterfactual), but it may not be all bad either.

10. Conclusions

Developing countries, particularly in Latin America, have a rather poor history of forming regional integration schemes among themselves. Yeats' paper serves to remind us of one of the principle concerns which have been expressed about such schemes, i.e. that they can tend to be welfare-reducing by fostering trade diversion. However, Yeats' analysis focused on intra-MERCOSUR exports. As such, it failed to capture the importance of growing imports from third countries. The growth in imports from non-MERCOSUR countries reflects the fact that the formation of MERCOSUR has taken place at the same time as these countries were

implementing structural reforms including a continued, multilateral opening of their economies. In the 1960s, the regional integration efforts of Latin American countries led to reduced trade within the region and with the rest of the world. In the 1990s, the MERCOSUR countries have recorded both a strong surge in intra-regional trade and an impressive growth in trade with third countries. This is hardly characteristic of a “fortress”.

The key question in examining trade diversion is whether more efficiently produced imports from outside the region have been replaced by less efficiently produced imports from within. The methodology followed in this paper has been to identify those products which show an increased tendency to be imported from MERCOSUR sources compared to the rest of the world, and then to seek to determine whether such products correspond to the presumed comparative advantage of the MERCOSUR countries. Identifying the products which show an increased tendency to be imported from MERCOSUR partners compared to third countries is relatively straightforward. The Regional Orientation index suggested by Yeats is a useful tool for the empirical researcher, and can be easily adapted to look at imports. The products which show an increase in regional orientation towards MERCOSUR in these countries’ imports are somewhat of a mixed picture: higher value-added products are included along with more traditional developing country exports. For both categories, many of the products were already being traded relatively intensively between the four countries before they undertook significant discriminatory trade liberalization.

Identifying the comparative advantage of the MERCOSUR countries is less straightforward than Yeats suggested. These are “upper-middle-income” countries whose relative endowments of physical and human capital are presumably well above those for the average developing country. Thus, the view that these countries should only be exporting labour-intensive manufactures may be somewhat simplistic. Looking at indices of revealed comparative advantage provides an alternative approach, which is not reliant on determining the factor endowments of MERCOSUR. On this basis, one can identify a list of products where MERCOSUR suppliers do not have a revealed comparative advantage. For these products, the shift towards MERCOSUR suppliers at the expense of third countries may be suggestive of trade diversion, although this is far from obvious. For most of these products there has also been a strong growth in imports from third countries, which suggests that concerns about trade diversion may be exaggerated.

Since MERCOSUR is still in its infancy, it is not possible to arrive at a definitive conclusion about its welfare implications for member countries and the rest of the world. Concerns about the effects of regional trade arrangements on member and non-member welfare, and on the

multilateral system more generally, are much older than MERCOSUR. The European Union provides an example of how a regional integration scheme can be combined with increasing multilateral openness. If the MERCOSUR countries are to emulate the EU in this respect, they must continue to press ahead with structural reforms and continued efforts to open their economies on a non-discriminatory basis. Argentina and Brazil are already amongst the most important developing country markets for EU exports. Over the period 1988 to 1996, EU exports to Argentina and Brazil grew by annual average rates of 19 per cent and 17 per cent, respectively. In other words, discriminatory trade barriers introduced by the formation of MERCOSUR do not seem to have seriously constrained EU exports to the region. This seems to provide further evidence that trade creation and positive dynamic effects of multilateral liberalization have also been present along with trade diversion.

One final point which should be made is that, although it is as yet difficult to identify significant trade diversion as a result of the liberalization which the MERCOSUR countries have conducted towards each other, this does not rule out the possibility that trade diversion could arise from a free-trade agreement with the EU. MERCOSUR's CET (and the various national tariffs which are still in operation for certain products) are still high. There may be important non-economic reasons for deepening the EU-MERCOSUR relationship (e.g. the close cultural and political ties between the two regions). But if MERCOSUR countries were to eliminate tariffs on imports from the EU whilst maintaining a high level of external protection against third countries, the scope for trade diversion would, in principle, be quite large. On the other hand, such adverse effects could be avoided by a non-discriminatory reduction in trade barriers.

Table 1. MERCOSUR and other South American countries: basic data

	GNP 1995 US \$ millions	Population 1995 thousands	GNP per capita 1995 US \$	GNP per capita (PPP) 1995 \$
MERCOSUR	882,834	201,899	4,370	5,880
Argentina	278,431	34,665	8,030	8,310
Brazil	579,787	159,222	3,640	5,400
Paraguay	8,158	4,828	1,690	3,650
Uruguay	16,458	3,184	5,170	6,630
Chile	59,151	14,225	4,160	9,520
Andean Pact	212,566	101,164	2,100	5,470
Bolivia	5,905	7,414	800	2,540
Colombia	70,263	36,813	1,910	6,130
Ecuador	15,997	11,447	1,390	4,220
Peru	55,019	23,819	2,310	3,770
Venezuela	65,382	21,671	3,020	7,900
All above	1,154,551	317,288	3,640	5,912

Source: World Bank (1997). Note some figures are for years other than those specified.

Table 2. The increasing *multilateral* openness of the MERCOSUR economies

	Average tariff protection			Coverage of non-tariff barriers		
	Average (unweighted) total charges (tariffs + para-tariffs, %)			Average (unweighted) %		
	1985	1991-92	1994-5	1985	1991-2	1994-5
Argentina	26.0	15.0	11.9	31.9	8.0	2.4
Brazil	80.0	21.1	12.3	35.3	10.0	2.0
Paraguay	71.7	16.0	10.2	9.9	0.0	0.0
Uruguay	32.0	12.0	10.5	14.1	0.0	0.4

Source: Edwards (1994) for 1985 and 1991-92 and UNCTAD Database on Trade Control Measures (TRAINS version 5.0) for 1994-5. See UNCTAD (1996).

Table 3.A. Argentina: regional evolution of imports, 1988-1996

Source	Share in total imports	Share in total imports	Annual average growth rate of imports 1988-1996
	1988	1996	
Brazil	18%	23%	24%
Paraguay/Uruguay	4%	2%	12%
MERCOSUR	22%	25%	22%
NAFTA	20%	23%	23%
Rest of W. Hemisphere	10%	4%	9%
of which, Chile	3%	2%	18%
EU-15	31%	29%	19%
Rest of World	16%	18%	22%
World	100%	100%	21%

Source: IMF Direction of Trade Statistics Yearbook, various years. Note Western Hemisphere is DoTS definition and excludes Cuba.

Table 3.B. Brazil: regional evolution of imports, 1988-1996

Source	Share in total imports	Share in total imports	Annual average growth rate of imports 1988-1996
	1988	1996	
Argentina	5%	13%	33%
Paraguay/Uruguay	3%	3%	18%
MERCOSUR	7%	15%	29%
NAFTA	25%	26%	19%
Rest of W. Hemisphere	5%	5%	17%
of which, Chile	2%	2%	13%
EU-15	23%	26%	19%
Rest of World	40%	27%	12%
World	100%	100%	18%

Source: IMF Direction of Trade Statistics Yearbook, various years. Note Western Hemisphere is DoTS definition and excludes Cuba.

Table 3.C. Paraguay: regional evolution of imports, 1988-1996

Source	Share in total imports	Share in total imports	Annual average growth rate of imports 1988-1996
	1988	1996	
Argentina	12%	14%	30%
Brazil	30%	30%	27%
MERCOSUR	43%	45%	28%
NAFTA	11%	18%	35%
Rest of W. Hemisphere	4%	2%	21%
of which, Chile	2%	2%	28%
EU-15	20%	9%	16%
Rest of World	23%	25%	29%
World	100%	100%	27%

Source: IMF Direction of Trade Statistics Yearbook, various years. Note Western Hemisphere is DoTS definition and excludes Cuba. Note also that DoTS reports Paraguay's imports on an fob basis.

Table 3.D. Uruguay: regional evolution of imports, 1988-1996

Source	Share in total imports	Share in total imports	Annual average growth rate of imports 1988-1996
	1988	1996	
Argentina	15%	21%	18%
Brazil	26%	22%	12%
MERCOSUR	42%	43%	14%
NAFTA	14%	14%	15%
Rest of W. Hemisphere	4%	6%	21%
of which, Chile	2%	2%	12%
EU-15	25%	19%	10%
Rest of World	15%	17%	15%
World	100%	100%	14%

Source: IMF Direction of Trade Statistics Yearbook, various years. Note Western Hemisphere is DoTS definition and excludes Cuba.

Table 4. MERCOSUR countries' import shares, 1988 and 1995

	1988	1995
Argentina		
Imports/GDP	6.6%	8.6%
MERCOSUR imports/GDP	1.2%	1.9%
Rest of the World imports/GDP	5.4%	6.7%
Brazil		
Imports/GDP	5.7%	8.4%
MERCOSUR imports/GDP	0.4%	0.7%
Rest of the World imports/GDP	5.3%	7.6%
Paraguay		
Imports/GDP	36.9%	51.2%
MERCOSUR imports/GDP	15.5%	20.2%
Rest of the World imports/GDP	21.4%	31.0%
Uruguay		
Imports/GDP	19.1%	20.4%
MERCOSUR imports/GDP	8.1%	9.4%
Rest of the World imports/GDP	11.0%	11.0%

Source: computed from IMF *International Financial Statistics* and UN COMTRADE data.

Table 5.A. Argentina: top thirty imports with increased regional orientation from MERCOSUR sources, 1992-1996

SITC Rev. 3 code	Product description	% of total imports with increased regional orientation	Regional orientation		MERCOSUR imports					RoW imports				
			1992	1996	1992	1996	1992	1996	92-96	1992	1996	1992	1996	92-96
					US \$'000s	US \$'000s	% share	% share	ann. avg. growth rate	US \$'000s	US \$'000s	% share	% share	ann. avg. growth rate
784	parts and accessories of motor vehicles	13.13%	3.69	4.11	399751	605987	56%	57%	11.0%	320309	455341	44%	43%	9.2%
713	internal combustion piston engines	8.26%	2.73	3.08	123055	252858	48%	50%	19.7%	133433	253951	52%	50%	17.5%
672	ingots and other primary forms, of iron or steel	3.49%	5.37	260.01	20750	75552	64%	99%	38.1%	11436	898	36%	1%	-47.1%
071	coffee and coffee substitutes	3.39%	10.39	15.26	35118	88307	78%	83%	25.9%	10000	17888	22%	17%	15.6%
778	electrical machinery and apparatus, n.e.s.	3.00%	0.64	0.72	43336	90468	18%	19%	20.2%	201489	387783	82%	81%	17.8%
652	cotton fabrics, woven	2.78%	1.39	9.20	20566	64261	32%	75%	33.0%	43761	21598	68%	25%	-16.2%
642	paper and paperboard, cut to size or shape	2.64%	2.13	2.42	34284	75762	42%	44%	21.9%	47558	96778	58%	56%	19.4%
722	tractors	2.54%	2.21	3.57	14915	54873	43%	54%	38.5%	19979	47534	57%	46%	24.2%
281	iron ore and concentrates	2.53%	71.49	313.10	133192	172940	96%	99%	6.7%	5512	1707	4%	1%	-25.4%
574	polyacetals, other polyethers and epoxide resins	2.29%	0.57	1.08	8038	44011	16%	26%	53.0%	41667	125429	84%	74%	31.7%
285	aluminium ores and concentrates	2.17%	1.54	4.65	17397	51504	34%	60%	31.2%	33363	34210	66%	40%	0.6%
752	automatic data processing machines	2.14%	0.15	0.31	15828	49378	5%	9%	32.9%	303724	493673	95%	91%	12.9%
772	electrical apparatus	2.04%	0.38	0.64	17440	49422	11%	17%	29.7%	136978	239610	89%	83%	15.0%
591	insecticides, rodenticides, fungicides, herbicides	2.01%	0.58	0.77	16172	47821	16%	20%	31.1%	82243	192488	84%	80%	23.7%
542	medicaments (including veterinary medicaments)	2.00%	0.24	0.50	6795	38275	7%	14%	54.1%	85377	235219	93%	86%	28.8%
334	petroleum oils and oils (bituminous)	1.97%	0.46	0.48	26625	57602	13%	13%	21.3%	173056	369144	87%	87%	20.9%
511	hydrocarbons, n.e.s.	1.97%	2.21	2.54	17502	48386	43%	45%	28.9%	23407	58974	57%	55%	26.0%
651	textile yarn	1.91%	2.26	2.82	38589	68570	43%	48%	15.5%	50483	75033	57%	52%	10.4%
733	machine-tools for working metal	1.90%	0.36	2.47	1850	31709	11%	44%	103.5%	15346	39628	89%	56%	26.8%
658	made-up articles (textiles)	1.89%	2.62	6.36	19982	49702	47%	67%	25.6%	22544	24165	53%	33%	1.8%
851	footwear	1.80%	0.62	1.73	20231	48576	17%	36%	24.5%	96868	86566	83%	64%	-2.8%
821	furniture and parts thereof	1.64%	1.84	1.85	18035	43870	38%	37%	24.9%	29017	73448	62%	63%	26.1%
554	soap, cleansing and polishing preparations	1.64%	0.54	1.43	7022	32710	15%	32%	46.9%	38626	70649	85%	68%	16.3%
675	flat-rolled products of alloy steel	1.45%	0.45	1.96	8327	31073	13%	39%	39.0%	54948	48889	87%	61%	-2.9%
874	measuring instruments	1.28%	0.19	0.30	8564	28632	6%	9%	35.2%	132449	293420	94%	91%	22.0%
522	inorganic chemical elements	1.24%	2.18	3.13	21656	41105	42%	50%	17.4%	29371	40586	58%	50%	8.4%
696	cutlery	1.24%	2.45	4.62	15394	34816	45%	60%	22.6%	18569	23283	55%	40%	5.8%
742	pumps for liquids	1.18%	0.58	0.75	15289	33760	16%	20%	21.9%	77846	138893	84%	80%	15.6%
771	electric power machinery	1.16%	0.05	0.52	1040	19190	2%	14%	107.3%	56435	113432	98%	86%	19.1%
533	pigments, paints, varnishes and related materials	1.14%	0.75	0.76	16073	33972	20%	20%	20.6%	63755	138716	80%	80%	21.5%
	Total of above products	77.80%			1142816	2365092	33%	36%	19.9%	2359549	4198933	67%	64%	15.5%

Source: computed from UN COMTRADE statistics. NB Regional orientation: for definition, see text.

Table 5.B. Brazil: top thirty imports with increased regional orientation from MERCOSUR sources, 1989-1995

SITC Rev. 3 code	Product description	% of total imports with increased regional orientation	Regional orientation		MERCOSUR imports					RoW imports				
			1989	1995	1989	1995	89-95	1989	1995	1989	1995	89-95		
					US \$'000s	US \$'000s	% share	% share	ann. avg. growth rate	US \$'000s	US \$'000s	% share	% share	ann. avg. growth rate
048	cereal preparations and preparations of flour	31.78%	1.95	11.61	25774	852314	20%	65%	79.2%	103314	450200	80%	35%	27.8%
784	parts and accessories of motor vehicles	15.76%	1.29	2.86	50331	460200	14%	44%	44.6%	304691	578509	86%	56%	11.3%
222	oil seeds and oleaginous fruits	5.88%	1.07	19.49	2902	155723	12%	86%	94.2%	21148	25641	88%	14%	3.3%
054	vegetables, fresh, chilled, frozen	5.74%	9.31	9.72	72046	221380	54%	82%	20.6%	60477	49941	46%	18%	-3.1%
022	milk and cream	5.66%	3.28	6.05	64887	212164	30%	73%	21.8%	154803	77077	70%	27%	-11.0%
421	fixed vegetable fats and oils	5.60%	10.98	17.82	39998	185519	58%	85%	29.1%	28484	33707	42%	15%	2.8%
044	maize (not including sweet corn) unmilled	5.30%	19.41	41.33	18682	156635	71%	93%	42.5%	7524	12689	29%	7%	9.1%
713	internal combustion piston engines	5.17%	0.71	1.73	14515	148999	8%	35%	47.4%	159859	277051	92%	65%	9.6%
001	live animals other than animals of division 03	3.21%	6.26	19.31	32970	116458	44%	83%	23.4%	41173	23792	56%	17%	-8.7%
893	articles, n.e.s. of plastics	1.95%	0.61	1.08	2169	52888	7%	36%	70.3%	27865	92418	93%	64%	22.1%
642	paper and paperboard, cut to size or shape	1.54%	0.98	2.90	1466	41443	11%	55%	74.5%	11742	33775	89%	45%	19.3%
582	plates, sheets, film, foil and strip, of plastics	1.08%	1.04	1.25	8195	36313	12%	27%	28.2%	61890	99727	88%	73%	8.3%
572	polymers of styrene, in primary forms	0.79%	0.43	1.14	485	21038	5%	42%	87.4%	8865	29559	95%	58%	22.2%
012	other meat and edible meat offal	0.76%	0.67	8.61	7865	27604	8%	88%	23.3%	92272	3818	92%	12%	-41.2%
657	special yarns, special textile fabrics	0.58%	0.63	0.87	2598	17792	7%	21%	37.8%	32184	65938	93%	79%	12.7%
746	ball or roller bearings	0.57%	0.03	0.38	625	15460	0%	9%	70.7%	151719	151738	100%	91%	0.0%
081	feeding stuff for animals	0.53%	1.45	3.81	738	14502	16%	45%	64.3%	3993	17885	84%	55%	28.4%
748	transmission shafts	0.53%	0.08	0.35	1639	15301	1%	9%	45.1%	163868	147281	99%	91%	-1.8%
344	petroleum gases	0.48%	1.31	4.10	13871	26358	14%	49%	11.3%	82827	27075	86%	51%	-17.0%
747	taps, cocks, valves and similar appliances	0.47%	0.24	0.44	2333	14552	3%	11%	35.7%	76017	114632	97%	89%	7.1%
751	office machines	0.47%	0.09	0.40	384	12503	1%	17%	78.7%	34238	60319	99%	83%	9.9%
597	prepared additives for mineral oils and the like	0.45%	0.14	0.92	632	12317	2%	15%	64.0%	36252	67928	98%	85%	11.0%
074	tea and mate	0.44%	0.16	28.79	3	11328	2%	94%	294.6%	144	727	98%	6%	31.0%
682	copper	0.42%	0.01	0.16	397	11431	0%	5%	75.1%	217506	210758	100%	95%	-0.5%
654	other textile fabrics, woven	0.38%	1.84	2.11	2780	12786	19%	29%	29.0%	11809	31884	81%	71%	18.0%
248	wood, simply worked	0.37%	102.87	223.25	15394	25016	93%	97%	8.4%	1170	717	7%	3%	-7.8%
699	manufactures of base metal, n.e.s.	0.36%	0.08	0.28	643	10067	1%	7%	58.2%	64491	137881	99%	93%	13.5%
288	non-ferrous base metal waste and scrap, n.e.s.	0.35%	0.01	1.28	37	9218	0%	41%	150.8%	29482	13317	100%	59%	-12.4%
531	synthetic organic colouring matter	0.35%	0.70	0.70	6242	15369	8%	12%	16.2%	69928	112284	92%	88%	8.2%
679	tubes, pipes and hollow profiles	0.34%	0.53	0.85	4344	13198	6%	20%	20.3%	63810	51238	94%	80%	-3.6%
	Total of above products	97.33%			394945	2925876	16%	49%	39.6%	2123545	2999506	84%	51%	5.9%

Source: computed from UN COMTRADE statistics. NB Regional orientation: for definition, see text.

Table 5.C. Paraguay: top thirty imports with increased regional orientation from MERCOSUR sources, 1989-1995

SITC Rev. 3 code	Product description	% of total imports with increased regional orientation	Regional orientation		MERCOSUR imports					RoW imports				
			1989	1995	1989	1995	89-95	1989	1995	1989	1995	92-96		
					US \$'000s	US \$'000s	% share	% share	ann. avg. growth rate	US \$'000s	US \$'000s	% share	% share	ann. avg. growth rate
122	tobacco, manufactured	19.76%	0.05	3.82	577	135916	3%	75%	148.5%	19449	46337	97%	25%	15.6%
334	petroleum oils (bituminous)	10.70%	12.26	22.74	73137	146441	88%	81%	12.3%	10154	33794	12%	19%	22.2%
001	live animals other than animals of division 03	8.23%	4.97	336	368	56691	74%	100%	131.5%	126	189	26%	0%	7.0%
591	insecticides, rodenticides, fungicides, herbicides	4.01%	0.34	2.50	1601	29076	17%	69%	62.1%	7989	13062	83%	31%	8.5%
783	road motor vehicles, n.e.s.	3.35%	2.77	2.83	3898	26819	62%	86%	37.9%	2397	4437	38%	14%	10.8%
542	medicaments (including veterinary medicaments)	2.88%	1.13	2.20	2253	22002	40%	66%	46.2%	3401	11173	60%	34%	21.9%
022	milk and cream	2.82%	0.10	391	75	19382	5%	98%	152.4%	1291	411	95%	2%	-17.4%
781	motor cars and other motor vehicles	2.46%	0.25	0.27	3294	20126	13%	20%	35.2%	22007	81286	87%	80%	24.3%
333	petroleum oils (bituminous)	2.28%	0.00	1.52	13	15655	0%	30%	226.2%	67149	36633	100%	70%	-9.6%
562	fertilizers (other than those of group 272)	2.27%	8.78	311	6985	22534	84%	95%	21.6%	1354	1130	16%	5%	-3.0%
641	paper and paperboard	2.25%	1.92	1.98	8847	24268	53%	75%	18.3%	7826	8097	47%	25%	0.6%
098	edible products and preparations, n.e.s.	2.11%	0.48	1.80	988	15425	22%	60%	58.1%	3540	10073	78%	40%	19.0%
642	paper and paperboard, cut to size or shape	2.01%	0.66	1.62	616	14390	28%	64%	69.1%	1594	8111	72%	36%	31.1%
554	soap, cleansing and polishing preparations	1.83%	1.01	11.74	217	12720	37%	92%	97.1%	366	1110	63%	8%	20.3%
893	articles, n.e.s. of plastics	1.80%	1.52	1.68	1597	13904	47%	67%	43.4%	1786	6868	53%	33%	25.2%
784	parts and accessories of motor vehicles	1.76%	0.71	1.80	1737	13767	29%	61%	41.2%	4189	8737	71%	39%	13.0%
062	sugar confectionery	1.63%	3.79	6.58	652	11804	69%	91%	62.0%	293	1151	31%	9%	25.6%
851	footwear	1.48%	0.23	0.52	584	10751	12%	53%	62.5%	4274	9540	88%	47%	14.3%
674	flat-rolled products of iron or non-alloy steel	1.47%	1.65	12.89	920	10972	49%	90%	51.2%	949	1152	51%	10%	3.3%
673	flat-rolled products, of iron or non-alloy steel	1.39%	3.99	16912	1508	11014	70%	88%	39.3%	644	1439	30%	12%	14.3%
553	perfumery, cosmetics or toilet preparations	1.31%	0.18	0.50	540	9530	10%	36%	61.4%	5113	16731	90%	64%	21.8%
652	cotton fabrics, woven	1.21%	1.55	7.30	248	8504	48%	84%	80.2%	273	1599	52%	16%	34.3%
693	wire products	1.11%	3.97	17.42	648	8269	70%	79%	52.9%	278	2243	30%	21%	41.6%
684	aluminium	1.09%	4.82	9.07	1345	8827	74%	91%	36.8%	475	924	26%	9%	11.7%
121	tobacco, unmanufactured	1.03%	157.23	2247	277	7319	99%	91%	72.6%	3	764	1%	9%	151.8%
112	alcoholic beverages	1.01%	0.02	0.08	310	7234	1%	11%	69.0%	28808	58445	99%	89%	12.5%
699	manufactures of base metal, n.e.s.	0.96%	1.61	2.45	1479	8043	49%	64%	32.6%	1565	4427	51%	36%	18.9%
073	chocolate and other food preparations	0.94%	3.09	6.42	359	6789	64%	88%	63.2%	198	962	36%	12%	30.1%
662	clay construction materials	0.88%	10.93	19.77	2034	8086	87%	98%	25.9%	317	167	13%	2%	-10.1%
891	arms and ammunition	0.87%	0.10	1.21	42	5977	6%	71%	128.5%	721	2399	94%	29%	22.2%
	Total of above products	86.90%			117149	712235	37%	66%	35.1%	198529	373391	63%	34%	11.1%

Source: computed from UN COMTRADE statistics. NB Regional orientation: for definition, see text.

Table 5.D. Uruguay: top thirty imports with increased regional orientation from MERCOSUR sources, 1993-1996

SITC Rev. 3 code	Product description	% of total imports with increased regional orientation	Regional orientation		MERCOSUR imports					RoW imports				
			1993	1996	1993	1996	1993	1996	93-96	1993	1996	1993	1996	93-96
					US \$'000s	US \$'000s	% share	% share	ann. avg. growth rate	US \$'000s	US \$'000s	% share	% share	ann. avg. growth rate
098	edible products and preparations, n.e.s.	7.11%	1.61	4.50	6734	39050	57%	78%	79.7%	5138	11046	43%	22%	29.1%
782	motor vehicles for the transport of goods	6.91%	1.31	1.53	20646	52070	52%	55%	36.1%	19426	43414	48%	45%	30.7%
611	leather	5.18%	4.17	24.83	19548	43081	77%	95%	30.1%	5767	2209	23%	5%	-27.4%
642	paper and paperboard, cut to size or shape	4.49%	1.63	3.33	10448	30876	57%	72%	43.5%	7868	11795	43%	28%	14.4%
061	sugars, molasses and honey	4.43%	2.29	20.57	11416	31574	65%	94%	40.4%	6115	1955	35%	6%	-31.6%
641	paper and paperboard	3.25%	1.27	1.40	14911	29676	51%	52%	25.8%	14379	26928	49%	48%	23.3%
721	agricultural machinery (excluding tractors)	3.20%	1.32	1.55	8355	22896	52%	55%	39.9%	7761	18808	48%	45%	34.3%
764	telecommunications equipment, n.e.s.	3.09%	0.08	0.22	1454	15500	6%	14%	120.1%	21244	91562	94%	86%	62.7%
542	medicaments (including veterinary medicaments)	3.04%	0.85	1.04	14803	28633	41%	45%	24.6%	21481	35221	59%	55%	17.9%
722	tractors	2.66%	1.26	1.57	6590	18685	51%	55%	41.5%	6429	15201	49%	45%	33.2%
553	perfumery, cosmetics or toilet preparations	2.53%	0.75	1.75	4551	16051	38%	58%	52.2%	7437	11659	62%	42%	16.2%
893	articles, n.e.s. of plastics	2.44%	1.18	1.52	12857	23958	49%	54%	23.1%	13353	20136	51%	46%	14.7%
554	soap, cleansing and polishing preparations	2.36%	0.94	2.45	3724	14460	43%	66%	57.2%	4864	7529	57%	34%	15.7%
048	cereal preparations and preparations of flour	2.12%	1.03	4.04	2192	11854	46%	76%	75.5%	2615	3732	54%	24%	12.6%
591	insecticides, rodenticides, fungicides, herbicides	2.10%	0.59	0.89	5352	14910	32%	41%	40.7%	11192	21329	68%	59%	24.0%
074	tea and mate	2.10%	40.27	44.45	25429	34980	97%	97%	11.2%	776	1002	3%	3%	8.9%
728	other machinery and equipment specialized	1.97%	0.56	0.91	5737	14694	31%	42%	36.8%	12634	20558	69%	58%	17.6%
081	feeding stuff for animals	1.88%	4.80	7.96	4375	12926	80%	86%	43.5%	1119	2069	20%	14%	22.7%
121	tobacco, unmanufactured; tobacco refuse.	1.54%	1.33	3.78	4792	11806	52%	75%	35.1%	4442	3975	48%	25%	-3.6%
725	paper mill and pulp mill machinery	1.50%	1.11	3.57	800	7630	48%	74%	112.1%	882	2722	52%	26%	45.6%
821	furniture and parts thereof; bedding, mattresses	1.41%	0.91	1.93	8471	14878	42%	60%	20.7%	11471	9811	58%	40%	-5.1%
575	other plastics, in primary forms	1.35%	0.86	1.26	6703	12862	41%	50%	24.3%	9605	13049	59%	50%	10.8%
784	parts and accessories of motor vehicles	1.33%	2.47	3.40	20832	26859	67%	73%	8.8%	10352	10066	33%	27%	-0.9%
073	chocolate and other food preparations	1.24%	2.16	3.19	2242	7902	64%	71%	52.2%	1273	3153	36%	29%	35.3%
845	articles of apparel, of textile fabrics	1.19%	0.15	1.59	2388	7783	11%	56%	48.3%	19566	6217	89%	44%	-31.8%
222	oil seeds and oleaginous fruits	1.13%	4.18	16.32	2082	7229	77%	93%	51.4%	612	564	23%	7%	-2.7%
573	polymers of vinyl chloride	1.11%	2.11	2.79	4033	9078	63%	69%	31.1%	2350	4142	37%	31%	20.8%
044	maize (not including sweet corn) unmilled	0.99%	79.89	93.08	7541	12061	98%	99%	16.9%	116	165	2%	1%	12.5%
652	cotton fabrics, woven	0.98%	1.53	2.28	5837	10277	55%	64%	20.8%	4703	5740	45%	36%	6.9%
684	aluminium	0.95%	10.44	20.82	7080	11413	89%	94%	17.3%	833	698	11%	6%	-5.7%
	Total of above products	75.60%			251923	595652	52%	59%	15.4%	235803	406455	48%	41%	9.5%

Source: computed from UN COMTRADE statistics. NB Regional orientation: for definition, see text.

Table 6.A. Argentina: MERCOSUR partners' RCAs, main regional suppliers and capital-intensity for products with an increased tendency of being imported from MERCOSUR sources

Code	Product description	Main regional suppliers	Does (do) the main regional supplier(s) have a revealed comparative advantage?				Capital-intensity
			Balassa (1988-90)	Balassa (1995)	Yeats (1988-90)	Yeats (1995)	
784	parts and accessories of motor vehicles	Brazil	no	yes	no	no	120
713	internal combustion piston engines	Brazil	yes	yes	no	yes	102
672	ingots and other primary forms, iron or steel	Brazil	yes	yes	no	yes	82
071	coffee and coffee substitutes	Brazil	yes	yes	yes	yes	*
778	electrical machinery and apparatus, n.e.s.	Brazil	no	no	no	no	91
652	cotton fabrics, woven	Brazil	no	yes	no	no	49-51
642	paper and paperboard, cut to size or shape	Brazil	no	yes	yes	yes	80-125
722	tractors	Brazil	yes	no	no	no	122-124
281	iron ore and concentrates	Brazil	yes	yes	no	yes	*
574	polyacetals, other polyethers, epoxide resins	Brazil	no	no	no	no	*
285	aluminium ores and concentrates	Brazil	yes	yes	yes	yes	*
752	automatic data processing machines	Brazil	no	no	no	no	122-134
772	electronic circuit equipment	Brazil	no	no	no	no	85
591	insecticides, rodenticides, fungicides	Brazil	no	yes	no	no	*
542	medicaments (incl. veterinary medicaments)	Brazil	no	no	no	no	*
334	petroleum oils	Brazil	yes	yes	no	no	*
511	hydrocarbons, n.e.s.	Brazil	yes	yes	no	yes	*
651	textile yarn	Brazil	yes	no	no	no	49
733	machine-tools for working metal	Brazil	no	no	no	yes	92
658	made-up articles (textiles)	Brazil	yes	yes	yes	yes	51-68
851	footwear	Brazil/ Uruguay	yes/no	yes/yes	no/no	yes/yes	46-54
821	furniture and parts thereof	Brazil	no	no	no	no	60
554	soap, cleansing and polishing preparations	Brazil	no	no	no	no	160
675	flat-rolled products of alloy steel	Brazil	yes	no	no	no	145
874	measuring instruments	Brazil	no	no	no	no	*
522	inorganic chemical elements	Brazil	yes	yes	yes	yes	*
696	cutlery	Brazil	yes	yes	yes	yes	121
742	pumps for liquids	Brazil	no	yes	yes	yes	113
771	electric power machinery	Brazil	no	no	no	no	*
533	pigments, paints, varnishes, related materials	Brazil/ Uruguay	no/yes	no/yes	yes/no	no/no	*

Sources: RCAs and main regional suppliers computed or derived from UN COMTRADE statistics (using 1995 data). Capital intensity derived from Yeats (1989).

Notes: * = unavailable or not applicable; a country is listed as a main regional supplier if it accounts for more than twenty per cent of MERCOSUR imports in this market. capital-intensity = a figure above one hundred indicates that the product is more capital-intensive than the average for US manufacturing.

Table 6.B. Brazil: MERCOSUR partners' RCAs, main regional suppliers and capital-intensity for products with an increased tendency of being imported from MERCOSUR sources

Code	Product description	Main regional suppliers	Does (do) the main regional supplier(s) have a revealed comparative advantage?				Capital-intensity
			Balassa (1988-90)	Balassa (1995)	Yeats (1988-90)	Yeats (1995)	
048	cereal preparations and preparations of flour	Argentina/Uruguay	no/yes	yes/yes	no/no	no/no	*
784	parts and accessories of motor vehicles	Argentina	no	no	no	no	120
222	oil seeds and oleaginous fruits	Paraguay	yes	yes	no	yes	*
054	vegetables, fresh, chilled or frozen	Argentina	yes	yes	yes	yes	*
022	milk and cream	Argentina/Uruguay	yes/yes	yes/yes	yes/yes	no/yes	*
421	fixed vegetable fats and oils	Argentina/Paraguay	yes/yes	yes/yes	yes/no	yes/no	*
044	maize (not including sweet corn) unmilled	Argentina/Paraguay	yes/no	yes/yes	yes/no	yes/no	*
713	internal combustion piston engines	Argentina	no	no	no	no	102
001	live animals	Uruguay/Argentina	yes/no	yes/yes	yes/no	yes/no	*
893	articles, n.e.s. of plastics	Uruguay/Argentina	no/no	no/no	no/no	no/no	81-87
642	paper and paperboard, cut to size or shape	Argentina	no	no	no	no	80-125
582	plates, sheets, film, foil and strip, of plastics	Argentina	yes	no	no	no	81-87
572	polymers of styrene, in primary forms	Argentina	no	no	no	no	*
012	other meat and edible meat offal	Argentina/Uruguay	yes/yes	yes/no	yes/yes	yes/no	*
657	special yarns, special textile fabrics	Argentina	no	no	no	no	51-68
746	ball or roller bearings	Argentina	no	no	no	no	*
081	feeding stuff for animals	Arg./Par./Uru.	yes/yes/yes	yes/yes/no	no/no/no	yes/yes/no	*
748	transmission shafts	Argentina	no	no	no	no	*
344	petroleum gases	Argentina	yes	yes	no	no	*
747	taps, cocks, valves and similar appliances	Argentina	no	no	no	no	*
751	office machines	Argentina/Uruguay	no/no	no/no	no/no	no/no	*
597	prepared additives for mineral oils and the like	Argentina	no	no	no	no	*
074	tea and mate	Argentina	yes	yes	no	yes	*
682	copper	Argentina	no	no	yes	no	*
654	other textile fabrics, woven	Uruguay	yes	yes	no	yes	57-67
248	wood, simply worked	Paraguay	yes	yes	no	yes	*
699	manufactures of base metal, n.e.s.	Argentina	no	no	no	no	84
288	non-ferrous base metal waste and scrap, n.e.s.	Argentina /Uruguay	no/no	no/no	no/no	no/no	*
531	synthetic organic colouring matter	Argentina	no	no	no	no	*
679	tubes, pipes and hollow profiles	Uruguay/Argentina	no/yes	no/yes	no/no	no/yes	101

Sources: RCAs and main regional suppliers computed or derived from UN COMTRADE statistics (using 1995 data). Capital intensity derived from Yeats (1989).

Notes: * = unavailable or not applicable; a country is listed as a main regional supplier if it accounts for more than twenty per cent of MERCOSUR imports in this market. capital-intensity = a figure above one hundred indicates that the product is more capital-intensive than the average for US manufacturing.

Table 6.C. Paraguay: MERCOSUR partners' RCAs, main regional suppliers and capital-intensity for products with an increased tendency of being imported from MERCOSUR sources

Code	Product description	Main regional suppliers	Does (do) the main regional supplier(s) have a revealed comparative advantage?				Capital-intensity
			Balassa (1988-90)	Balassa (1995)	Yeats (1988-90)	Yeats (1995)	
122	tobacco, manufactured	Brazil	no	yes	yes	yes	210
334	petroleum oils	Argentina/Brazil	yes/yes	yes/no	no/no	yes/no	*
001	live animals	Argentina	no	yes	no	no	*
591	insecticides, rodenticides, fungicides, herbicides	Brazil/Argentina	no/yes	yes/yes	no/no	no/no	*
783	road motor vehicles, n.e.s.	Brazil	yes	no	no	no	122
542	medicaments (including veterinary medicaments)	Argentina/Uruguay	no/no	no/no	no/no	no/no	*
022	milk and cream and milk products other than butter	Argentina	yes	yes	yes	no	*
781	motor cars and other motor vehicles	Brazil	no	no	no	no	122
333	petroleum oils	Argentina	no	yes	no	yes	*
562	fertilizers (other than those of group 272)	Brazil	no	no	no	no	*
641	paper and paperboard	Brazil	yes	yes	no	yes	*
098	edible products and preparations, n.e.s.	Argentina	no	yes	no	no	*
642	paper and paperboard, cut to size or shape	Argentina/Brazil	no/no	no/yes	no/yes	no/yes	80-120
554	soap, cleansing and polishing preparations	Brazil/Argentina	no/no	no/no	no/no	no/no	160
893	articles, n.e.s. of plastics	Argentina/Brazil	no/no	no/no	no/no	no/no	81-87
784	parts and accessories of motor vehicles	Brazil	no	yes	no	no	120
062	sugar confectionery	Argentina/Brazil	yes/yes	yes/yes	yes/yes	yes/yes	*
851	footwear	Argentina/Brazil	no/yes	no/yes	no/no	no/yes	46-54
674	flat-rolled products of iron or non-alloy steel	Argentina	yes	no	no	yes	*
673	flat-rolled products, of iron or non-alloy steel	Argentina/Brazil	yes/yes	yes/yes	no/no	yes/yes	*
553	perfumery, cosmetics or toilet preparations	Argentina/Brazil	no/no	yes/no	yes/yes	no/no	160
652	cotton fabrics, woven	Brazil	no	yes	no	no	49-51
693	wire products	Brazil	yes	yes	yes	yes	73
684	aluminium	Argentina	yes	yes	no	yes	*
121	tobacco, unmanufactured	Brazil/Argentina	yes/yes	yes/yes	no/no	yes/yes	*
112	alcoholic beverages	Argentina	no	no	no	no	*
699	manufactures of base metal, n.e.s.	Brazil/Argentina	no/no	no/no	no/no	no/no	84
073	chocolate and other food preparations	Brazil/Argentina	no/no	no/yes	yes/no	no/no	*
662	clay construction materials	Brazil	yes	yes	no	yes	76
891	arms and ammunition	Brazil	no	no	no	no	*

Sources: RCAs and main regional suppliers computed or derived from UN COMTRADE statistics (using 1995 data). Capital intensity derived from Yeats (1989).

Notes: * = unavailable or not applicable; a country is listed as a main regional supplier if it accounts for more than twenty per cent of MERCOSUR imports in this market. capital-intensity = a figure above one hundred indicates that the product is more capital-intensive than the average for US manufacturing.

Table 6.D. Uruguay: MERCOSUR partners' RCAs, main regional suppliers and capital-intensity for products with an increased tendency of being imported from MERCOSUR sources

Code	Product description	Main regional suppliers	Does (do) the main regional supplier(s) have a revealed comparative advantage?				Capital-intensity
			Balassa (1988-90)	Balassa (1995)	Yeats (1988-90)	Yeats (1995)	
098	edible products and preparations, n.e.s.	Argentina /Brazil	no/no	yes/no	no/no	no/no	*
782	motor vehicles for the transport of goods	Brazil	yes	yes	yes	no	122
611	leather	Argentina/Paraguay	yes/yes	yes/yes	no/no	yes/yes	69
642	paper and paperboard, cut to size or shape	Argentina/Brazil	no/no	no/yes	no/yes	no/yes	80-125
061	sugars, molasses and honey	Brazil	yes	yes	yes	yes	*
641	paper and paperboard	Brazil/Argentina	yes/no	yes/no	no/no	yes/no	*
721	agricultural machinery (excluding tractors)	Brazil	no	yes	yes	no	122-124
764	telecommunications equipment, n.e.s.;	Argentina/Brazil	no/no	no/no	no/yes	no/no	105-120
542	medicaments (including veterinary medicaments)	Argentina	no	no	no	no	*
722	tractors	Brazil	yes	no	no	no	122-124
553	perfumery, cosmetics or toilet preparations	Argentina	no	yes	yes	no	160
893	articles, n.e.s. of plastics	Argentina/Brazil	no/no	no/no	no/no	no/no	81-87
554	soap, cleansing and polishing preparations	Argentina	no	no	no	no	160
048	cereal preparations and preparations of flour	Argentina/Brazil	no/no	yes/no	no/no	yes/no	*
591	insecticides, rodenticides, fungicides	Argentina/Brazil	yes/no	yes/yes	no/no	no/no	*
074	tea and mate	Brazil	yes	yes	no	yes	*
728	other machinery and equipment specialized	Brazil/Argentina	no/no	no/no	no/no	no/no	77-88
081	feeding stuff for animals	Argentina	yes	yes	yes	yes	*
121	tobacco, unmanufactured tobacco refuse	Brazil	yes	yes	no	yes	*
725	paper mill and pulp mill machinery	Brazil	yes	yes	no	yes	99
821	furniture and parts thereof; bedding, mattresses	Brazil/Argentina	no/no	no/no	no/no	no/no	60
575	other plastics, in primary forms	Brazil/Argentina	no/yes	no/no	no/no	no/no	*
784	parts and accessories of motor vehicles	Brazil/Argentina	no/no	yes/no	no/no	no/no	120
073	chocolate and other food preparations	Brazil/Argentina	no/no	no/yes	yes/no	no/no	*
845	articles of apparel, of textile fabrics	Brazil/Argentina	no/no	no/no	no/no	no/no	36-64
222	oil seeds and oleaginous fruits	Argentina	yes	yes	yes	yes	*
573	polymers of vinyl chloride	Brazil/Argentina	no/no	yes/no	no/no	yes/no	*
044	maize (not including sweet corn) unmilled	Argentina	yes	yes	yes	yes	*
652	cotton fabrics, woven	Brazil/Argentina	no/no	yes/no	no/no	no/no	49-51
684	aluminium	Brazil/Argentina	yes/yes	yes/yes	yes/no	yes/yes	*

Sources: RCAs and main regional suppliers computed or derived from UN COMTRADE statistics (using 1995 data). Capital intensity derived from Yeats (1989).

Notes: * = unavailable or not applicable; a country is listed as a main regional supplier if it accounts for more than twenty per cent of MERCOSUR imports in this market. capital-intensity = a figure above one hundred indicates that the product is more capital-intensive than the average for US manufacturing.

Table 7. Tariff and non-tariff barriers in Argentina, Brazil, Uruguay, the US, the EU and East Asia and the Pacific

	Argentina	Brazil	Uruguay	US	EU	East Asia and Pacific ¹
<i>post-Uruguay Round applied tariffs</i>						
Agriculture excluding fish ²	4.9	11.0	9.5	2.2	3.7	11.2
Fish and fish products	5.1	5.8	11.9	0.9	11.0	9.1
Petroleum oils	29.1	0.0	33.7	0.7	0.4	8.3
Wood, pulp, paper and furniture	9.9	2.0	7.2	0.2	0.3	7.4
Textiles and clothing	12.1	15.5	6.4	14.8	8.7	17.5
Leather, rubber, footwear	8.4	10.6	10.9	6.9	4.9	13.8
Metals	9.3	5.6	8.2	1.1	1.0	8.2
Chemical and photographic suppl.	6.1	11.5	9.9	2.5	3.8	11.0
Transport equipment	14.7	11.7	10.7	3.4	5.5	22.8
Non-electric machinery	13.7	18.9	8.3	0.9	1.4	13.3
Electric machinery	15.2	16.6	8.9	1.7	5.4	12.9
Mineral prod., prec. stones & metal	9.6	1.2	9.5	1.7	0.5	7.9
Manufactured articles n.e.s.	14.2	15.2	8.8	0.4	2.5	10.2
<i>Share of imports covered by non-tariff barriers, 1990-93</i>						
All products	0.2	1.5	*	4.3	13.4	2.1 - 5.5
Primary products	0.1	4.1	*	4.0	22.0	1.2 - 8.8
Manufactured products	0.3	0.4	*	4.3	11.5	2.0 - 4.2

Source: Finger, Ingco and Reincke (1996) for tariffs and World Bank (1997) for non-tariff barriers.

Notes: 1. East Asia and the Pacific = Indonesia, Korea, Macau, Malaysia, Philippines and Thailand.

Non-tariff barriers range shown for Indonesia, Malaysia and Thailand

2. Estimate 2 from Finger, Ingco and Reincke (1996).

* = unavailable

Table 8.A. Argentina: Technology content of imports, 1992-1996

Technology content of imports	MERCOSUR 1992 %	Rest of World 1992 %	MERCOSUR 1996 %	Rest of World 1996 %
Standard	34	66	34	66
Intermediate	31	69	28	72
High	10	90	11	89
Total	25	75	24	76

Table 8.B. Brazil: Technology content of imports, 1989-1995

Technology content of imports	MERCOSUR 1989 %	Rest of World 1989 %	MERCOSUR 1995 %	Rest of World 1995 %
Standard	30	70	28	72
Intermediate	6	94	12	88
High	2	98	2	98
Total	11	89	14	86

Table 8.C. Paraguay: Technology content of imports, 1989-1995

Technology content of imports	MERCOSUR 1989 %	Rest of World 1989 %	MERCOSUR 1995 %	Rest of World 1995 %
Standard	30	70	47	53
Intermediate	40	60	40	60
High	37	63	25	75
Total	37	63	39	61

Table 8.D. Uruguay: Technology content of imports, 1993-1996

Technology content of imports	MERCOSUR 1993 %	Rest of World 1993 %	MERCOSUR 1996 %	Rest of World 1996 %
Standard	48	52	58	42
Intermediate	49	51	47	53
High	30	70	26	74
Total	45	55	46	54

Source: Computed from UN COMTRADE statistics. For definitions of technology, see Annexe 1.

Annexe 1. Classification of technology content of trade by SITC Rev. 3

SITC Rev 3. code	Product description
High Technology	
54	Pharmaceutical products
72	Machinery specialized for particular industries
74	General industrial machinery and equipment
75	Computer and other office machines
764	Telecommunications equipment
772	Electronic components (excluding semiconductors)
774	Medical apparatus
776	Semiconductors, etc.
778	Electrical machinery and apparatus
792	Aircraft and associated equipment, spacecraft, etc.
793	Ships, boats and floating structures
87	Professional, scientific and controlling instruments
88	Photographic and optical apparatus and equipment
Intermediate Technology	
3	Mineral fuels, lubricants and related materials
5 (less 54)	Chemicals and related products
61	Leather, leather manufactures
62	Rubber manufactures
64	Paper, paperboard and articles of paper pulp
71	Power generating machinery and equipment
73	Metal working machinery
76 (less 764)	Sound recording equipment
77 (less 772, 774, 776, 778)	Household appliances, transformers, etc.
78	Road vehicles
Standard Technology	
0	Food and live animals
1	Beverages and tobacco
2	Crude materials, inedible, except fuels
4	Animal and vegetable oils, fats and waxes
63	Cork and wood manufactures
65	Textile yarn, fabrics
66	Non-metallic mineral manufactures
67	Iron and steel
68	Non-ferrous metals
69	Manufactures of metals
79 (less 792, 793)	Other transport equipment
81	Prefabricated buildings, etc.
82	Furniture, etc.
83	Travel goods, handbags, etc.
84	Articles of apparel and clothing, etc.
85	Footwear
89	Miscellaneous manufactured articles
9	Commodities and transactions not classified elsewhere

Source: Foders (1996), Table 7.

References

- Amjadi, Azita and L. Alan Winters (1997). 'Transport Costs and "Natural" Integration in MERCOSUR', Policy Research Working Paper n° 1742, World Bank.
- Balassa, Bela (1961). *The Theory of Economic Integration*, (Homewood, Illinois: Irwin).
- Balassa, Bela (1965). 'Trade Liberalization and "Revealed" Comparative Advantage', *The Manchester School of Economic and Social Studies*, 23, pp.99-124.
- Balassa, Bela (1975). 'Trade Creation and Diversion in the European Common Market: An Appraisal of the Evidence' in Bela Balassa (ed.), *European Economic Integration*, (Amsterdam: North-Holland).
- Baldwin, Richard E. (1997). 'The Causes of Regionalism', Discussion Paper N° 1599, London: Centre for Economic Policy Research.
- Baldwin, Richard E. and Anthony J. Venables (1995). 'Regional Economic Integration', chapter 31 in Gene M. Grossman and Kenneth Rogoff (eds.), *Handbook of International Economics*, volume 3, (Amsterdam: Elsevier Science).
- Baldwin, Robert E. (1979). 'Determinants of Trade and Foreign Investment: Further Evidence', *Review of Economics and Statistics*, 61, pp.40-48.
- Baumann, Renato (1993). 'Integration and Trade Diversion', *CEPAL Review*, 51, p.133-147.
- Bhagwati, Jagdish N. (1994). 'Threats to the World Trading System: Income Distribution and the Selfish Hegemon', *Journal of International Affairs*, 48, pp279-285. Spring.
- Bhagwati, Jagdish N. and Arvind Panagariya (1996). 'Preferential Trading Areas and Multilateralism – Strangers, Friends, or Foes?' in J. N. Bhagwati and A. Panagariya (eds.), *The Economics of Preferential Trade Agreements*, (Washington, D.C.: The American Enterprise Institute Press).
- Deardorff, Alan (1984). 'Testing Trade Theories and Predicting Trade Flows' in Ronald W. Jones and Peter B. Kenen (eds.), *Handbook of International Economics*, vol. 1, (Amsterdam: North-Holland), p467-517.
- Deardorff, Alan (1987). 'The Directions of Developing-Country Trade: Examples of Pure Theory', in Oli Havrylyshyn (ed.), *Exports of Developing Countries. How Direction Affects Performance*, (Washington, D.C.: World Bank).
- Devlin, Robert (1996). 'In Defense of Mercosur', *The Inter-American Development Bank*, p3. December.
- Edwards, Sebastian (1994). 'Trade and Industrial Policy Reform in Latin America', NBER Working Paper n° 4772, National Bureau of Economic Research.
- European Commission (1994). 'The European Community and MERCOSUR: An Enhanced Policy', Communication from the Commission to the Council and the European Parliament, COM(94) 428 final.

- European Commission (1996). 'Economic Evaluation of the Internal Market', *European Economy, reports and studies*, 4.
- Finger, J. Michael, Merlinda D. Ingco and Ulrich Reincke (1996). 'The Uruguay Round: Statistics on Tariff Concessions Given and Received', (Washington, D.C.: World Bank).
- Foders, Federico (1996). 'MERCOSUR: A New Approach to Regional Integration?', Kiel Working Paper n° 746, Kiel Institute of World Economics.
- Gupta, Anju and Maurice Schiff (1997). 'Outsiders and Regional Trade Agreements among Small Countries', Policy Research Working Paper n° 1847, World Bank.
- Havrylyshyn, Oli (1987). 'Evidence of Differences between South-South and South-North Trade' in Oli Havrylyshyn (ed.), *Exports of Developing Countries. How Direction Affects Performance*, (Washington, D.C.: World Bank).
- Jacquemin, Alexis and André Sapir (1991). 'Competition and Imports in the European Market' in L. Alan Winters and Anthony J. Venables (eds.), *European Integration: Trade and Industry*, (Cambridge: Cambridge University Press).
- Krueger, Anne (1977). 'Growth, Distortions and Patterns of Trade Among Many Countries', *Princeton Studies in International Finance*, 40, (Princeton, N.J.: Princeton University Press).
- Laird, Sam (1995). 'Trade Liberalization in Latin America', *Minnesota Journal of Global Trade*, 4, pp.101-127.
- Laird, Sam (1997). 'MERCOSUR: Objectives and Achievements', WTO Staff Working Paper, TPRD-97-002, WTO, Geneva.
- Lawrence, Robert Z. (1997). 'Preferential Trading Areas: The Traditional and the New' in Ahmed Galal and Bernard Hoekman (eds.), *Regional Partners in Global Markets: Limits and Possibilities of the Euro-Med Agreements*, (London: Centre for Economic Policy Research and Egyptian Center for Economic Studies).
- de Melo, Jaime and Sumana Dhar (1992). 'Lessons of Trade Liberalization in Latin America for Economies in Transition', Policy Research and External Affairs Working Paper n° WPS 1040, World Bank.
- Olarreaga, Marcelo and Isidro Soloaga (1997). 'Endogenous Tariff Formation: the Case of MERCOSUR', WTO Staff Working Paper, ERAD-97-003, WTO, Geneva.
- Rajapatirana, Sarath (1994). 'The Evolution of Trade Treaties and Trade Creation: Lessons for Latin America', Policy Research and External Affairs Working Paper n° WPS 1371, World Bank.
- Sapir, André (1992). 'Regional Integration in Europe', *Economic Journal*, 102, pp.1491-1506.

- UNCTAD (1993). *Trade and Development Report, 1993* (New York: United Nations Conference on Trade and Development).
- UNCTAD (1996). *A User's Manual for TRAINS*, (New York and Geneva: United Nations Conference on Trade and Development).
- World Bank (1997). *World Development Indicators*, (Washington, D.C.: World Bank).
- WTO Secretariat (1996). *Trade Policy Review Mechanism: Brazil*, (Geneva: World Trade Organisation).
- WTO Secretariat (1997). *Trade Policy Review Mechanism: Paraguay*, (Geneva: World Trade Organisation).
- Yeats, Alexander (1989). 'Shifting Patterns of Comparative Advantage: Manufactured Exports of Developing Countries', Policy, Planning and Research Working Paper n° WPS 165, World Bank.
- Yeats, Alexander (1997). 'Does Mercosur's Trade Performance Raise Concerns about the Effects of Regional Trade Arrangements?', Policy Research Working Paper n° 1729, World Bank.
- Yeats, Alexander (1998). 'Does Mercosur's Trade Performance Raise Concerns about the Effects of Regional Trade Arrangements?', *World Bank Economic Review*, 12, pp1-28.