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## Macroeconomic coordination and economic integration: Lessons for a Western Hemisphere free trade area

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**DEPARTAMENTO DE ECONOMIA**

**PUC-RIO**

**TEXTO PARA DISCUSSÃO**

**N.º 340**

**Macroeconomic Coordination and Economic Integration:  
lessons for a Western Hemisphere free trade area**

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## 1. Introduction

This paper examines the relationship between macroeconomic coordination and trade integration in selected integration initiatives, and searches for lessons to be drawn for a future preferential trade area in the western hemisphere. Many reasons stimulate the interest on lessons from previous experiences: recurrent difficulties faced in the European Union, the recent Mexican crisis, including the role of the United States in defining the rescue package, and the instability of subregional integration initiatives such as the Mercosur.

The paper is divided into seven sections, in addition to this introduction. Section 2 underlines the heterogeneity of different integration initiatives in terms of relative economic size of partners and importance of intraregional trade, and discusses the importance of these issues for the convergence of macroeconomic policies. The third section describes trade-related issues and convergence of policies in other fields within different subregional integration initiatives in the Mercosur: the Andean Group, the Caribbean Common Market (Caricom), the Central American Common Market (CACM), the North American Free Trade Area (NAFTA), and the Mercado Común del Sur (Mercosur). The analysis stresses that the coverage of trade related issues and the degree of convergence of policies is highly uneven across integration initiatives.

The next three sections examine experiences of macroeconomic coordination in different integration contexts. Section 4 discusses the difficulties with the Exchange Rate Mechanism and the long-term objective of a single currency in the European Union. The Mexican exchange crisis in late 1994 is examined in section 5. A discussion of macroeconomic imbalances in the Mercosur is the subject of section 6. Section 7 examines the link between macroeconomic coordination, short and long-term exchange rate fluctuations, and trade flows and presents an empirical analysis of the impact of exchange rate variability on trade flows in the Mercosur. The last section concludes by summarizing the main lessons to be drawn from previous experiences for a future Western Hemisphere free trade area (WHFTA).

## 2. Taxonomy of integration initiatives: diversity of formats

Convergence of macroeconomic policies in a specific trade initiative depends crucially on the relative size of the economies encompassed by the integration initiative. The larger a given economy is, the more important its role in a process of macroeconomic convergence will be, especially if its relative size is significant on a world basis. Small economies, however virtuous, will be followers. Size in this context may relate to gross product or to shares in total subregional trade. The analysis which follows is mainly based on comparative GNP sizes but would not have been generally affected if trade shares had been chosen instead (see table 2.1, columns A and G).<sup>1</sup>

The European Union, whose problems of macroeconomic convergence have been very much in the center of the academic debate in recent years, has some characteristics of composition of membership which can be contrasted with those of other integration initiatives. (In this paper reference will be made to Europe of the twelve (EC-12) as of January 1, 1995). Similarly to the Andean Group and the Caribbean Common Market (Caricom) and the Central American Common Market (CACM), and in contrast with North American Free Trade (NAFTA), Mercado Comun del Sur (Mercosur) -- and still more with a future Western Hemisphere Free Trade Area (WHFTA) -- EC-12 contains a reasonable number of large economies of about the same size: to the three in table 2.1, Germany, France and Italy, can be added the United Kingdom, whose size is only slightly smaller than Italy's. It is only natural to expect that national economic and financial authorities in such economies, including the respective central banks, should tend to consider that they must play a key role in the process of convergence towards a single currency and a single central bank as a quid pro quo for relinquishing its (waning) power to influence the main macroeconomic variables. The preeminence of the Bundesbank and the recognition that Germany is bound to play a central role was and still is reluctantly accepted in some of these larger economies. In some cases, as in the United Kingdom, this emerges explicitly under the umbrella of a general attitude of

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<sup>1</sup> A powerful argument in favor of stressing GNP size rather than trade flows is that integration initiatives are increasingly covering issues such as investment, services, or intellectual property, whose trade liberalization gains are related to the size of domestic markets rather than to trade flows.

criticism of encroachment into national individuality or sovereignty. In others, as in Italy, such difficulties are made explicit by structural foot dragging in accepting more restrained standards concerning fiscal policies.

In the Western Hemisphere, besides the obvious size disparity between NAFTA and all other initiatives, due to the size of the US, NAFTA and Mercosur are very much marked by the size dominance of its bigger members, the US and Brazil. In the proposed WHFTA, standard measures of concentration show that the US would be much bigger in relation to the other member economies than it is in NAFTA (see column F of table 2.1). The US economy would correspond to about two thirds of the whole WHFTA aggregate GNP, followed by some much smaller economies of medium size (Brazil, Mexico, Canada, Argentina), then a very large number of still smaller economies whose aggregate GNP is smaller than that of Brazil.

These contrasts must be kept in mind in discussions to follow on policy convergence, including in the macroeconomic field, as most of the European difficulties on which country or institution may play the central role in policy coordination are unlikely to arise. Harmonization of policies in the western hemisphere will be dominated by the role of the United States and would continue to be so even if the record of many Latin American economies in macroeconomic management had been considerably better in the past.

Another important structural difference between the EC-12 and hemispheric present and prospective integration initiatives concerns lower intra-FTA trade shares.<sup>2</sup> Indeed much lower if the case of NAFTA is excepted (see table 2.2 and, for Caricom, 2.3). While in EC-12 intraregional trade was 38.2% of total trade in 1993 (ratio between intra-FTA as measured by exports and the sum of total exports and imports to all destinations net of intra-FTA imports), the ratios for other existing initiatives are: 25.5% for NAFTA, 10.1% for Mercosur, 6.0% for the Central American Common Market and 5.0% for the Andean Group. Such ratio for WHFTA in 1993 would be

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<sup>2</sup> Intra FTA trade shares provide a rather imperfect indication of preferential policy-induced regional trade bias as the trade patterns of specific economies depend on their GDP size, the share of GDP they trade, the commodity composition of trade and trade transaction costs. Such shares also reflect the number of economies in a given integration initiative. See Anderson and Norheim (1993).

30%. Intra-FTA trade has increased most noticeably overtime in the EC-12, especially in the 1960's, and in the Mercosur from 1990.

The relative importance of FTA trade in each member country also varies very considerably in the integration initiatives in the western hemisphere as compared to EC-12. While in EC-12 the range of such ratios is 46.6-70.4% in the hemispheric initiatives it is: 6.5-14.3% in the Andean Group, 0.1-63.9 % in Caricom, 4.0-27.8% in CACM, 13.5-50.0% in the Mercosur and 27.7-75.7% in NAFTA (table 2.3). This the result of a complex set of factors. To list just a few: different stages reached by each integration initiative; diverse resource-endowment and consequences on commodity trade pattern; geography or trade transaction costs; size of GDP and level of development with their consequences on supply capabilities. What is important to stress is the different importance specific economies may ascribe to their participation in integration initiatives or, more relevantly in the context of this paper, the different importance they may ascribe to new initiatives, in particular the WHFTA. Adjustment costs and net economic advantages of integration are very unevenly distributed.

Not surprisingly, when the importance of intra WHFTA trade is gauged at the disaggregated country level, ratios tend to come much closer, and indeed to exceed, those typical of the EC-12 (see table 2.4). This, of course, is a reflection of the importance of the United States as a trade partner for most of the economies in the region. But for a small group of economies, hemispheric trade is not of such a paramount importance. This is true first of all for the United States itself and also for Brazil, Argentina and Chile, besides a number of very small economies, especially in the Caribbean. These differences in trade structure are one of the sources of explanation of the very heterogeneous coverage of issues by different trade integration initiatives in the Americas as will be shown in the next section.

### **3. Coverage of trade-related issues and policy harmonization in integration initiatives in the Americas**

The coverage of issues in regional integration initiatives varies considerably with specific circumstances, and not only because of the target may be either a preferential

trade area, or a customs union, or a common market. Free trade between the economies encompassed by all such types of integration initiatives is, of course, a standard objective after a transition period whose duration may vary considerably. A continuum of issues includes WTO covered trade-related issues (and sectoral exceptions), non-WTO issues whose relation trade is perhaps less obvious, and issues concerning macroeconomic convergence.

Differences in coverage of trade issues may reflect the fact that different integration initiatives may be at different stages in the direction of establishing a preferential trade area. These differences may also be explained by the uneven distribution of "sensitive" issues as between economies and initiatives. The types of products covered by special treatment or exclusion clauses are likely to differ depending, for instance, whether a given integration initiative includes mainly developed economies or mainly developing economies. Lists of agreed exceptions to general rules governing tariff reduction and different phase-in time spans reflect such specificities.

The treatment of tariff and nontariff barriers under different integration initiatives is thus not included in the tables in this section which compare the comprehensiveness of coverage of different integration. Similarly, all integration initiatives include provisions concerning safeguards under article XIX of GATT 1994, unfair trade practices other than antidumping and subsidy countervailing duties, technical standards, sanitary and phytosanitary standards, rules of origin and dispute settlement mechanisms. The coverage and characteristics of such provisions, however, vary enormously depending on the integration initiative and are thus excluded from the comparative tables.<sup>3</sup>

Some clarifications are required on the information provided in the tables that follow.<sup>4</sup> The existence of disciplines does not mean that their level is GATT-plus, that is, that their level of commitment, or implementation delays, or scope, are more stringently defined than in the agreements reached in the Uruguay Round. Mere declarations of intention about the adoption of future policies have been counted as noes. The same

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<sup>3</sup> Detailed work on such heterogeneity is scarce. The kind of effort required is shown by the study on rules of origin by Garay and Estevadeordal (1995).

<sup>4</sup> The tables are based mainly on OAS (1995).



has been somewhat subjectively decided when the level of commitment was deemed to be too general.

Information on some of the more important issues covered by WTO multilateral agreements is summarized in table 3.1. The right to apply countervailing duties generally has not been eliminated at the regional level except in EC-12. The multilateral disciplines agreed in the Uruguay Round regulate such practices in most regional agreements.

Trade in services is included in most regional initiatives. In some cases as financial services in NAFTA, liberalization has been proceeding rather rapidly, while multilateral (minus one) negotiations in the WTO proceed very slowly. In some of the smaller integration initiatives inclusion of the issue may result from recognition of the lack of supply response. In integration initiatives including larger economies, such as Mercosur, the issue has been only covered very selectively.

A similar pattern emerges in relation to trade-related intellectual property (TRIPs) and trade-related investment measures (TRIMs). Most integration initiatives include both issues, but Mercosur does not cover TRIPs. Disciplines and rules in such issues are generally GATT-plus both in EC-12 and NAFTA. It should be reminded that in the case of TRIPs multilateral obligations, such as the Berne and Paris Conventions, by defining national treatment very broadly makes it difficult for integration initiatives to provide preferential treatment for members.<sup>5</sup>

Specific sectoral exceptions are treated in table 3.2. They follow the pattern of interests already made explicit in multilateral trade negotiations in Geneva or the specificities of certain economies, as the role of oil in the Mexican economy and the political difficulties surrounding any change of control of most segments of the oil sector.

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<sup>5</sup> See World Trade Organization (1995), p.61.

Agriculture, the automotive industry and textiles are especially sensitive sectors mainly, but not exclusively, in developed economies. Agriculture is heavily regulated in EC-12 with internal prices much above world prices, high (or infinite) protection and heavily subsidized exports. In the NAFTA negotiations free trade in many agricultural products will require a phase-in period of 15 years.<sup>6</sup> Protection of inefficient domestic producers prompted even Argentina and Brazil, prominent members of the Cairns group in the Uruguay Round negotiations, to protect their sugar and wheat sectors, respectively, in Mercosur. NAFTA rules on automotive products shall remove in ten years most of the distortions of the Mexican automotive regime such as domestic content requirements, export performance criteria related to the distribution of import quotas and trade balancing requirements. Rules of origin are stiff at 62.5% of North American content. In Mercosur many limitations apply to trade in motor vehicles and automotive parts and components. Moreover, as will be further analyzed in section 7, as the real peso-real parity has fluctuated widely over time there has been a permanent pressure to adjust the regional list of exceptions to cope with its impact on specific sectors. For instance, access to the Brazilian motor car market which was free for its Mercosur partners may be restricted in 1996 as part of a partial reversal of trade liberalization.

Textiles and clothing products face regulations in EC-12 on indirect imports applicable to products which face national import restraints under the Multifibre Arrangement.<sup>7</sup> In NAFTA, textiles and clothing quotas shall be phased out in ten years. Rules of origin are extremely strict, requiring the use of NAFTA spun yarn and NAFTA made fabric. In Mercosur there are a few remaining quota restrictions on textiles and clothing but given the recent volatility of lists of exceptions it is difficult to identify stable rules.

The government procurement agreement is one of the multilateral, as opposed to multilateral, agreements under the aegis of the WTO. Developing countries are not signatories of the agreement. It is not thus surprising that most of the integration

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<sup>6</sup> See Hufbauer and Schott (1993), for a sectoral description of NAFTA's impact.

<sup>7</sup> Article 115 of the Treaty of Rome. See Faini and Heimler (1991), pp. 72-4.

initiatives which do not include developed economies do not cover the issue. In EC-12 public procurement has been detected as one the main issues explaining income effects generated by completing the internal market. This is a reflection of the lack of advance in opening procurement to competition within the integrated economies.<sup>8</sup> NAFTA opened procurement at the Federal level but with many sectoral exclusions.

The pattern that emerges from this comparative exercise is that Latin American economies tend to exclude from regional agreements in which they participate the same issues which they have been reluctant (to a declining degree) to negotiate in multilateral rounds. There may be exceptions here and there concerning the coverage of the Andean Group, Caricom or CACM. But Mercosur is certainly the integration initiative which excludes the largest number of “sensitive” issues. This is a reflection of the lack of enthusiasm for entering into liberalization commitments related to such issues by the relatively bigger economies such as Argentina, and, especially, Brazil.

Coverage of non-WTO issues follows a similar pattern. As shown by table 3.3, “brand new” issues such as labor standards, environment and competition policies are only covered by EC-12 and NAFTA. In the EC the consequences of liberalization of services (especially of a financial nature) and of increased competition are a crucial part of the effort to complete integration of the internal market.<sup>9</sup> The two complementary agreements which were essential to win domestic political support for NAFTA in the US were on labor standards and environmental matters. The latter covered environmental standards and border environment issues. It is expected that some of Latin American economies will find it difficulty, especially in relation to labor standards and environmental matters, to converge with the US stance. The negotiations are likely to become even more complex with the inclusion of topics such as the generation of global externalities and the optimal level of environmental quality control from the national and intercountry perspectives. The EC being a common market allows free labor mobility. This is excluded in all other integration initiatives, including Mercosur.

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<sup>8</sup> See Commission of European Communities (1988), part E.

<sup>9</sup> See Commission of European Communities (1988), part E.

The only large integration initiative which considers the question of macroeconomic policy coordination is the EC (see table 3.4). The difficulties of such coordination as portrayed by the crises in the European Monetary System are examined in section 4 below. Macroeconomic policy coordination in the Mercosur, although frequently mentioned as a desirable objective, has never been systematically discussed. One important explanation for this is the sustained pegging of the Argentinian peso since mid-1991. Difficulties raised by actual and potential inconsistency of macroeconomic policies in Mercosur are discussed in section 6 below.

Especially relevant from a macroeconomic viewpoint are safeguards on balance of payments matters. In the EC, recent history has shown the role of flexibilization of exchange rate parities in correcting exchange rate misalignments. Specific exchange rate safeguards exist both in the Andean Group<sup>10</sup> and, less clearly, in the CACM agreements. The specific problems of coordinated macroeconomic cooperation within NAFTA, in particular the Mexican crisis of late 1994, are considered in section 6.

Tax harmonization is an explicit objective in EC-12 since a single market requires the elimination of tax frontiers and the convergence or harmonization of indirect taxes (excise and value added) and their structure to avoid distortions related to competition and potential fraud. In all other integration initiatives the only scope for treatment of taxation policies is through double taxation agreements negotiated bilaterally.<sup>11</sup>

It is in the European Union that the attempts to coordinate macroeconomic policy have more significantly advanced. It is only natural that much of the attention concerning lessons to be drawn from previous integration initiatives from the point of view of macroeconomic harmonization or coordination of policies has been centering on its experience.

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<sup>10</sup> Chapter IX of the Cartagena Agreement.

<sup>11</sup> See Bovenberg and Horne (1988) and Commission of European Communities (1988), pp. 61-5.

#### 4. Obstacles to macroeconomic convergence in the European Union

In the economic field it is monetary integration which has been the crucial focus of attention in deepening the European integration process. Monetary integration aiming at a single currency in a not too remote future required decisions on convergence criteria for macroeconomic policies. The Maastricht Treaty of December 1991 endorsed the Delors Plan on monetary union. Three stages were defined.<sup>12</sup> Stage 1, beginning in 1990, involved the removal of all exchange controls, the creation of a single financial area, the commitment that the currencies of all members would enter the Exchange Rate Mechanism (ERM) with bands narrowed to 2.25% and that 10% of reserves will be pooled in the European Reserve Fund. Stage 2, planned to be introduced in the beginning of 1994 would involve: the consolidation of a European system of central banks; ERM bands would possibly be narrowed; the ERM will be hardened and realignments introduced only under exceptional circumstances. Stage 3 would entail a full European Monetary Union and establish the independent European central bank. A single currency would be introduced to replace domestic currencies. It should begin no later than January 1, 1999. Negotiations have been marked by persistent British resistance and the United Kingdom retained the right not to join monetary union. The recently redefined timetable establishes 2002 as the deadline for the introduction of a single currency.

Maastricht specified four preconditions to be met by countries participating in the monetary union: inflation in the last 12 months not more than 1.5% above average of that in the three lowest inflation members; interest rate not more than 2% higher than the average in same three states; deficits no greater than 3% of GDP; ratio of public debt to GDP 60% or reduction at a satisfactory pace.

These plans were to be disturbed by two waves of instability affecting European foreign exchange markets. In January 1992 five years of monetary management without realignment was commemorated. But this was to end abruptly as markets

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<sup>12</sup> See Masson and Taylor (1992), p.60 on the Delors Plan and Eichengreen (1993), p.1325 and ff. on Maastricht.

reflected the uncertainties concerning the ratification of Maastricht starting with the result against ratification in the Danish referendum in June 1992. Foreign exchange markets became very nervous, the Swedish crown came under attack, then currencies in the ERM, especially sterling and the lira. By mid-September they were falling below ERM floors and required massive support which was insufficient to prevent their withdrawal from the ERM. A new crisis occurred in mid-1993 as by the end of July the French franc, the Belgian franc and the Danish krone exchange rates fell below the ERM floors. Germany was unwilling to cut interest rates by fears of inflation following the unification and other members were unwilling to face further rises in unemployment. Allowed ERM bands were widened to 15% in a move warmly welcomed by academic opinion.<sup>13</sup>

Criticisms have been mounting on many aspects of the monetary union plans, including on whether it should require a single currency and on the feasibility of the Maastricht timetable.<sup>14</sup> Small gains in transaction costs of single currency must be compared to costs of losing policy autonomy. Joining monetary union increases the credibility of anti-inflationary stance of decision-makers as monetary policies are supposed to converge to those of Germany. But experience has shown that it is low inflation which has led to foreign exchange stability rather than exchange rate stability inducing policies that led to low inflation.<sup>15</sup> Reduction in foreign exchange variability does not require a single currency.

Disturbances may be asymmetric as between members of an integration initiative. If exchange rates adjustments are blocked, adjustment to such disturbances would have to depend on migration and wage flexibility, as in the United States. But Europe faces difficulties of adjustment through labor mobility as labor is much less responsive to wage differentials. Wage flexibility is also limited. There are indications that countries with best price performance partly achieved this through allowing unemployment to rise above structural levels.

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<sup>13</sup> See No reason to mourn, *Financial Times*, August 6, 1993, signed by a group of professors from MIT: Blanchard, Dornbusch, Fischer, Krugman, Modigliani, Samuelson and Solow.

<sup>14</sup> See, for instance, Eichengreen (1992) and (1993).

<sup>15</sup> Collins and Giavazzi (1993) quoted by Eichengreen (1992).

Governments may try to accommodate asymmetric disturbances through fiscal policies. But there are strong constraints on this adjustment strategy. Statutory restraints on fiscal autonomy are strong. The importance of fiscal transfers under a system of federal taxes and transfers is disputed and even if the case for such transfers is granted, there are doubts whether the EC does have the capacity to undertake it. The case for fiscal policy coordination is weak because of offsetting cross-border effects.

The transition criteria are arbitrary and do not discriminate adequately those governments with financial discipline from those without it. To give an example of the difficulties entailed by the convergence criteria, Belgium will have to generate a budget surplus of 6% of GDP for 15 years to reach the target of a 60% debt/GDP ratio.<sup>16</sup> Also convergence to low levels of inflation may cause fiscal problems to high-inflation Southern Europe economies which rely relatively more on inflation tax.

There being no clearly evident grounds for monetary union with a single currency and the implied convergence criteria, pressure for its adoption originates mainly in political economy arguments on the distributive impact of foreign exchange fluctuations as, for instance, on payments under the Common Agriculture Policy.

The history of the European Union with monetary integration is much richer in experiences to be avoided than in lessons for other integration initiatives in the field of macroeconomic policy coordination. In any case, European monetary union is part of an extremely ambitious integration program which includes or may include convergence of both national objectives and decision-making processes in fields such as foreign relations and a common defense policy. These objectives are outside the planned scope of integration even of those groups of countries in principle engaged in the formation of a common market such as Mercosur.

The European experiments with macroeconomic coordination and monetary integration have attracted much attention mostly because of the possible lessons to be

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<sup>16</sup> **Financial Times**, May 12, 1994.

drawn in terms of constraints and sequencing. On the other hand, the Mexican crises which developed since the end of 1994, have drawn attention to the behavior of the United States in assuring the availability of a rescue package and to the assessment of the possible singularity of the episode in spite of its obvious financial preeminence in the hemisphere.

### **5. The Mexican crisis and the US response**

Towards the end of 1994 an extremely severe foreign exchange crisis affected Mexico only a few months after the NAFTA agreements came into effect. Increasing doubts about the sustainability of the peso parity led to a sudden drop in reserves and a sharp devaluation in December 1994. The spillover on other Latin American economies, especially Argentina, and to a lesser extent Brazil, was important.<sup>17</sup> As the role of support by the United States was crucial to limit the damage caused by the Mexican crisis, a set of questions are raised in the context of the links between economic integration and macroeconomic policy management.

The macroeconomic environment in Mexico during 1994 was marked by a fall in private savings in the wake of a demand boom. Public sector borrowing requirements increased. Given the objectives, the management of monetary policy is still more difficult to explain. In March 1994, when presidential candidate Colosio was murdered, foreign reserves fell abruptly from US\$ 26 billion to US\$ 18 billion. Interest rates, which had been increased initially, were reduced afterwards as the domestic impact of the loss of reserves was sterilized by increased domestic credit. Foreign reserves were held constant after the fall in March but there was a sharp deterioration in the composition of short-term public debt as the outstanding amount of dollar-indexed Tesobonos rose from US\$ 3 billion to US\$ 29 billion in the end of the year. Maturities were also considerably shortened. The reasons for such errors have been ascribed to misjudgment concerning the persistence of difficulties affecting the supply of foreign finance and fears concerning the impact of a rise in interest rates on the level of activity and the stability of the financial system.

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<sup>17</sup> On the Mexican crisis see Folkerts-Landau and Ito (1995), and Lustig (1995).



The attack on the peso continued after its parity had been abandoned. As Guillermo Calvo<sup>18</sup> put it before the turmoil: such a devaluation in a climate of imperfect credibility instead of resolving the overappreciation problem was perceived as a revelation of the taste of authorities for discretionary policy and an indication that this attitude was likely to recur.

A succession of rescue initiatives was launched to face the crisis as either markets failed to be appeased by financial packages deemed insufficient or political difficulties were faced by rescuers, especially in the United States.<sup>19</sup> An initial swap facility of US\$ 7 billion (US\$ 6 billion from the US and US\$ 1 billion from Canada) was increased to US\$ 18 billion as the US contribution was raised to US\$ 9 billion, US\$ 5 billion were promised by the Bank of International Settlements and US\$ 3 billion by the commercial banks. A record IMF stand-by arrangement of US\$ 7.8 billion was added to the rescue package. Financial markets remained unimpressed by the rescue package size as Mexico's payments in foreign exchange in 1995 were deemed to exceed US\$ 50 billion. To avoid financial collapse its size was increased by raising the US stake to US\$ 40 billion through a loan guarantee scheme. But this required approval by Congress and there were doubts whether it could be obtained in time. The US government decided to revert to a rescue package consisting of swaps and loan guarantees from the Exchange Stabilisation Fund which did not need congressional approval. To the US contribution of US\$ 20 billion were added US\$ 17.8 billion from the IMF (the initial US\$ 7.8 billion plus US\$ 10 billion which were initially to be contributed by developing economies) and US\$ 1 billion from Canada. The contributions from the Bank of International Settlements (doubled to US\$ 10 billion) and the commercial banks (US\$ 3 billion) did not materialize.

The whole process was marked by much tension between the United States and other developed economies as the US authorities tended to commit funds in principle multilaterally controlled without prior consultation with other interested parties. The

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<sup>18</sup> See Calvo (1994).

<sup>19</sup> On the history the succession of packages designed to rescue the peso see Bitter Legacy of battle to bail out Mexico, *Financial Times*, February 16, 1995.

rescue package as it took shape was seen by some countries as part of a policy designed to bail out US pension and mutual funds from the losses they had incurred following the Mexican devaluation.

Two questions are especially relevant when one attempts to draw lessons from the Mexican episode in the context of the possible links between economic integration and macroeconomic policy coordination. The first is whether the United States would be willing to play the same role in mustering support for a rescue package to bail out other economies from Latin America which may face similar difficulties. The second concerns doubts on the ability of the United States to provide a solution even if the US government were convinced that it should do so.

It seems reasonable to consider that the US have treated Mexico as a special case and to anticipate that in general the same treatment will not be extended to other Latin American economies facing foreign exchange crises. Mexico was a special case for a complex set of reasons which certainly include its importance as a showpiece case for liberalization policies, credibility of NAFTA, and its contiguity to the US. Unless systemic risks are perceived, the US probably would be unwilling to play the same crucial role in mounting and providing financial support for economies facing similar situations. This means that attempts to provide support, if entertained, will only occur in the case of a very small group of economies such as Brazil and Argentina.

Whether these attempts to support would succeed is another matter. Reticence by the European and Japanese is likely to recur in the IMF. The financial capacity of rescue providers may prove to be overextended. Domestic political resistance to provision of support by the US is most likely to gain strength and there will be no possibility of sidestepping Congress as was done in the case of Mexico. In any case, it is unlikely that progress in economic integration processes will have much influence on the stance of the provider of rescue.

In the absence of the alternative of a repetition of the Mexican rescue operation there is mainly one way of avoiding a similar crisis. It is important to assure that flexible exchange rate policies are adopted and that footloose capital is dealt with due respect

but the crucial aspect is that the fiscal and monetary stances should remain very defensive. There are of course limits to the sustainability of very stringent interest rate policies but the relaxation of such policies necessarily depends on a deep change in the fiscal stance which includes expenditure cuts, privatization of government assets and tax reform.

## **6. Mercosur macroeconomic coordination difficulties**

Mercosur came into force in January 1, 1995. A common external tariff ranging from zero to 20% applies to about 85% of total trade. A list of temporary exemptions affect 400 items in each country. Tariffs will converge to a common Mercosur level by 2001. Capital goods and computer industry goods are exempted from the common external tariff but tariffs will converge by 2006. Trade within Mercosur is free of tariffs but there is a small list of exemptions which shall be phased out until the year 2000.

Commercial integration in the Mercosur area has increased tremendously in the last few years and it is expected that it will continue to increase rapidly. Total intra-Mercosur exports increased from US\$ 4.3 billion in 1990 to US\$ 11.6 billion in 1994. However, based on the very bad historical record of macroeconomic policy management in the region, especially of Argentina and Brazil, by very far the major subregional partners, there are some reasons to ponder whether macroeconomic policies will continuously provide the required conditions of sustainability for such a rapid trade expansion (see table 6.1 for effective exchange rates in both economies since 1980).

Since the introduction of the Cavallo stabilization plan in April 1991 the Argentinian peso has been pegged to the US dollar. From the point of view of both stabilization and growth the plan was an outstanding success bringing down inflation as measured by consumer prices from more than 2,300% a year in 1990 to 4.3 % in 1994 (see table 6.2 for macroeconomic data on Mercosur economies). GDP growth has resumed at rates which exceeded 6% every year since 1991. Many public assets have been privatized. Commitment to a fixed parity has played a major role in the stabilization effort and the inability to make it flexible without compromising the program's success

has been a major source of anxiety. Exchange rate appreciation and growth have made imports soar, especially from the Mercosur as subregional tariffs were dismantled. Through a combination of export subsidies and thinly disguised increase in import duties it was possible to cope with some of the peso overvaluation but the much increased current account deficit has made Argentina vulnerable to disturbances in the international financial markets. This has justified the adoption of stringent macroeconomic policies with a slowing down of economic activity. From mid-1994 the reversal of the trade deficit with Mercosur has been a major factor in providing some relief to the Argentinian authorities.

Brazil's recent history of macroeconomic management has some similarities with Argentina's. The Real stabilization plan preparatory stages were introduced in late 1993 but only from July 1994 the new currency was introduced. Price stability even if less dramatic than in Argentina has been spectacular in comparison not only with the past of rampant inflation but, more aptly, with the results obtained by the implementation of the many stabilization plans which preceded the Real. The flickering hope that this plan was different from its predecessors has been gaining strength. Inflation has been brought down from more than 40% to under 2% monthly on a sustained basis. Economic growth has been sustained: GDP has increased 5.7% in 1994 and is expected to grow more than 6% in 1995.

Foreign exchange overvaluation in relation to the foreign exchange rate ruling at the beginning of the plan reached a maximum of almost 20% measured in relation to a basket of currencies in February 1995. About half of this overvaluation was reversed by the depreciation of the US dollar -- to which the Real is pegged --- in relation to currencies of other Brazilian trade partners. Very recently this dollar-yen parity trend has itself been reversed. There is of course scope for much discussion on what in fact is the new equilibrium real-US dollar exchange rate since so many fundamentals have been dramatically affected by the success of the plan. Not surprisingly export interests underline the consequences of appreciation on their competitiveness and the government, or part of it, insists on the importance of changed circumstances.

An import boom, already under the way following a return to growth and a sharp reduction in the level of protection since 1990, was boosted by such foreign exchange developments. For the first time in years Brazil's balance of trade became negative from November 1994. By February the trade deficit was around 27% of the value of imports. From the point of view of macroeconomic management, the whole picture had been dramatically reversed by then by aftereffects of the Mexican crisis in December. Before the crisis, which led to what would prove, against general predictions, a very temporary withdrawal of funds from Latin American markets, the reversal of the trade balance was seen as an important element in disciplining domestic oligopolies whose pricing policies were undermining the stabilization efforts.

Reluctant at first to squeeze demand by a further tightening of monetary policy, and unable to do much in the fiscal field due to the slow progress of the reforms which would make possible a lasting fiscal adjustment, the Brazilian government decided to introduce tariff increases, import quotas and restrictions on import credit affecting selected products, especially consumer durables, in a partial reversal of the monotonic liberalization policy which had been maintained since 1990. It also made the foreign exchange regime more flexible allowing for non-discrete exchange rate realignment. The level of reserves never fell below US\$ 30 billion but as macroeconomic policy relied heavily on a stringent monetary policy in the absence of fiscal alternatives extremely high domestic interest rates attracted speculative capital and made the government wary about its ability to face a domino effect following the Mexican crisis.

As initial statements by the Brazilian government underlined that restrictions would also apply to imports from Mercosur this provoked a strong reaction by the Argentinian authorities. Argentinian exports to Brazil have become crucial in a very tight balance of payments position. The expansion of Argentinian exports to Brazil corresponded to no less than 30.9% of the total expansion of Argentinian exports in 1994. This has increased in the first five months of 1995 to 45.9%. The traditionally unfavorable bilateral trade which had been reinforced by the Cavallo plan was in fact reversed from September 1994. Brazil has backed down from applying increased tariffs and quotas to imports from Mercosur. In fact early resurgence of interest in the financial markets sharply reversed the deterioration in the position of Brazilian balance

of payments, leading to a rapid accumulation of reserves to a record level of about nine months of imports. There is no indication that protectionist measures taken in the wake of the Mexican crisis will be reversed. These difficulties illustrate forcefully the arguments on the vulnerability of integration initiatives to the political economy of (perceived) exchange rate misalignments.

An undesirable consequence of deeper commercial integration in a context of a fixed exchange rate, as is the case in Argentina, whose survival is a clear prerequisite for continued success of the stabilization program, is that Argentinian interests see Brazil's more flexible exchange regime as a menace to Argentina. It is as if the commitment to maintain parity had been regionalized.

It is to be expected that lack of coordination of macroeconomic policies will continue to play an important role in putting Mercosur under strain. It is unlikely that any institutional arrangement envisaging such coordination will be successful.<sup>20</sup> The best form of coordination is that which would emerge from the adoption of sustainable fiscal and monetary policies in all Mercosur economies which at place high priority on price stability. Sources of future instability in Argentina will inexorably center on the pegged exchange rate and the requirements of international finance to sustain it. In Brazil the main danger appears to be linked to the persistence of political constraints to the effective implementation or continued implementation of structural reforms such as privatization, social security, reform of the public service and redefinition of the roles of the three levels of government. Failure to proceed rapidly in these directions will keep political pressure on the ability to sustain a very stringent monetary policy.

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<sup>20</sup> As suggested by Genberg and De Simone (1993), p.192.

## 7. Exchange rate misalignment and trade flows in the Mercosur

The previous sections show that in recent years considerable progress has been achieved in integration initiatives in different regions of the world. They also reveal that successful initiatives have taken place both in regions with relative macroeconomic stability among countries, and regions where countries have marked differences in their macroeconomic stands. Thus, while commodity and factor market integration has advanced in the European Union in the context of explicit convergence indicators for macro economic policies, within Mercosur, for example, integration has proceeded amid periods of pronounced macroeconomic instability in some of its member countries. This section examines the role of macroeconomic coordination in integration initiatives, having these diverse experiences as a background, and then analyses empirically the links between foreign exchange volatility and trade flows in Mercosur.

A fundamental association between macroeconomic coordination and trade integration takes place via the exchange rate. With differences in the implementation of monetary policy across countries, changes in relative national prices will be observed, and variability in the real exchange rate will occur.<sup>21</sup> Depending on the degree of interdependence of countries participating in a particular integration initiative, the effects of such variability can be very important. In a context of high economic integration, asymmetries in macroeconomic management will have more impact on participating economies than without integration. Integration imposes the need for higher macroeconomic coordination among partners. Without macroeconomic coordination, there is excessive variability in the real exchange rate and this will have a negative impact on trade flows.

Exchange rate variability can affect integration through its potentially negative impact on trade and cross-border investment. For the purpose of this discussion, it is convenient to separate exchange rate variability into two different types. First, exchange rate volatility, or short-term fluctuations of the exchange rate. Second,

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<sup>21</sup> In pegged exchange rate regimes this will be the major concern. With floating exchange rates, variability on nominal exchange rates will also be an issue.

exchange rate 'misalignment', or persistent departure from parities assumed to reflect some kind of medium term equilibrium.

Assuming risk-averse economic agents, the risk associated with exchange rate volatility will lead agents to relocate to domestic activities and, as a result, will produce lower trade volumes.<sup>22</sup> There have been many studies of the effect of exchange rate volatility both on aggregate and on bilateral trade flows.<sup>23</sup> However, no clear evidence of a significant and systematic effect of exchange rate volatility on trade flows has emerged from this literature.

Empirical evidence on the impact of exchange rate variability on trade flows has been obtained by Eichengreen and Irwin (1993), and Frankel, Stein and Wei (1995), among others, using the gravity model of Linneman (1966). Frankel, Stein and Wei (1995) examined the impact of both nominal and real exchange rate volatility on bilateral trade flows, using a sample of 63 countries with separate cross-section equations for 1965, 1970, 1975, 1980, 1985, and 1990. Their empirical analysis was framed in a gravity model which relates bilateral trade flows to national income, population, geographical distance between countries, and contiguity. The standard gravity model was augmented by dummy variables to capture the effect of trade initiatives and a measure of exchange rate volatility. In general, the results fail to display a systematic effect of volatility on bilateral trade and when the coefficients in the estimated equations have the expected negative impact, their magnitude is small. A potential explanation for such results is that low cost hedging instruments against exchange rate risk became increasingly available in recent years, and their use reduces the impact of volatility on trade flows.

A second type of exchange rate variability arises when the real exchange rate persistently deviates from parities which are considered to reflect medium or long term equilibrium parities (usually, purchasing power parities). This type of exchange

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<sup>22</sup> This result depends on a utility function with absolute risk aversion. For more general specifications of the utility function there could be ambiguity on the effect of risk on trade. See De Grauwe (1988) for a model in which higher exchange rate risk may result in greater export activity.

<sup>23</sup> The early literature is surveyed in IMF (1984). Recent studies are reviewed in Sapir, Sekkat and Weber (1994).



rate variability, sometimes called exchange rate misalignment, generates uncertainty against which insurance is virtually nonexistent.

There is a powerful political economy reason explaining the unfavorable impact of misalignment on trade. Sectors that lose with exchange rate fluctuations lobby for increased protection. Once protection is increased it is not easy to reduce it even if the misalignment is reverted because of the well known contrasts between the lobbying power of producers and consumers. Given this asymmetry, the likely impact of misalignment on trade is negative.

Empirical evidence fails to reject the hypothesis that misalignment affects trade adversely. De Grauwe (1988) has used cross section export equations to show that variability of the real exchange rate has a negative effect on the growth rate of trade. Variability of the exchange rate is less important than reduced output growth or the decreased pace of both integration in the EC and Japanese penetration of industrial markets to explain the fall in trade growth from 1960-1969 to 1973-1984. But it still accounts for no less than 20% of the total effect.

Could the expected lack of macroeconomic coordination discussed in section 6 be a deterrent for further commercial integration in the Mercosur? As discussed above, macroeconomic coordination and commercial integration are linked through the impact of exchange rate variability on trade flows; this effect will now be assessed in the context of the Mercosur, using the gravity framework.

In the standard gravity model, trade between two countries is assumed to be a function of their sizes as measured by GNP, per capita incomes, distance between their major economic centers, and contiguity of their territories. A standard version of the gravity model is

$$\text{TRADE}_{ij} = b_0 + b_1 (\text{GNP}_{ij}) + b_2 (\text{GNP/POP})_{ij} + b_3 (\text{DISTANCE})_{ij} + b_4 (\text{CONTIGUITY})_{ij} + u_{ij}.$$

where  $TRADE_{ij}$  is the value of trade between countries  $i$  and  $j$ ,  $GNP_{ij}$  is the product of countries  $i$  and  $j$  national incomes,  $(GNP/POP)_{ij}$  is the product of countries  $i$  and  $j$  per capita national incomes,  $(DISTANCE)_{ij}$  is the distance between countries  $i$  and  $j$  major economic centers, and  $(CONTIGUITY)_{ij}$  is a dummy variable which takes the value of 1 if countries  $i$  and  $j$  share a common land border and 0 otherwise.

The impact of exchange rate variability on trade flows in the Mercosur is now assessed using the standard gravity framework.  $TRADE_{ij}$  is assumed to be the nominal value of exports from country  $i$  to country  $j$ , deflated by a US price index. The national income variables are measured in constant US dollar terms, and the distance between countries is measured in number of miles covered in airline routes between the major economic centers in the region (the national capitals for Argentina, Paraguay, and Uruguay, and São Paulo for Brazil). Except for the contiguity dummy, all variables are measured in logs. The sources of all variables are described in notes to tables 7.1 and 7.2.

Given the small number of members in the Mercosur integration initiative, the gravity model was estimated with a pooling of cross-section and time series data. A fixed effects model was employed which allows for different intercepts for all countries in the sample and accounts for country specific effects on export performance, such as trade regime, tax policy and credit policy. Data was gathered for 4 countries in the period 1958-1994, yielding a total of 444 bilateral trade flows.

Table 7.1 presents the main estimation results. Equation 1 displays the basic specification of the gravity model. All variables have estimated coefficients which are statistically different from zero at standard confidence levels. As expected, trade increases with economic size, per capita incomes, and when countries share a common border.

A surprising result is obtained in table 7.1 for the coefficient on the distance variable, which displays a positive sign, i.e. indicating that, controlling for other fundamental economic determinants, trade in the Mercosur increases with the distance between major economic centers. The estimated coefficient of 0.64 indicates that when the distance between two non-adjacent countries is higher by 1 percent, trade increases by 0.64 percent.

The use of this variable in the gravity model is meant to capture the impact of transportation costs on trade. In most of the available studies which use cross-sections with a large number of countries, transportation costs are largely dominated by maritime transport costs. This does not happen in the case of Mercosur, where the role of road transportation is important. Therefore, this variable could be measuring transportation costs imperfectly in the Mercosur region because of differences in availability and quality of roads between the major economic centers in the region, especially in the early years of the period in study. Indeed, when the sample is shortened and the starting year moves away from 1958, and gets closer to 1994, the estimated coefficient on the distance variable first becomes statistically insignificant and then (after the early 1980s) turns negative and statistically different from zero.

The second equation in table 7.3 incorporates a dummy variable to capture the impact of the Mercosur initiative on trade. The variable takes a value of 0 from 1958 to 1990, and 1 after 1991, when the Asuncion Treaty was signed. The estimated coefficient indicates that after 1991 the countries in the region traded more with one another as a result of the Mercosur.<sup>24</sup> The coefficients on the other explanatory variables are similar to those reported in the earlier result. The only difference is the contiguity dummy variable which appears with a higher coefficient, suggesting that the effect of a common border on trade flows became more important as the prospects for integration increased after 1991.

Equations 3 and 4 add a proxy of real exchange rate variability to the first two specifications of the gravity model to try to gauge its impact on bilateral trade flows in the Mercosur region. Variability is measured as the percent deviation between the actual bilateral real exchange rate and the real exchange rate estimated from a log-linear trend equation. The estimated coefficients have the expected negative sign, but are not statistically different from zero at standard confidence levels.

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<sup>24</sup> This result is consistent with those obtained by Frankel, Stein and Wei (1995) which indicate that Mercosur trade is far greater than what would be explained by gravity alone. They find a strong intraregional trade bias which increased in recent years: in 1985 trade was twice what would be explained by gravity; in 1990 the ratio had risen to eight.

It is possible that most exchange rate variability takes place within a year and, for that reason, the data used in the gravity model failed to discern any significant impact on trade flows. Alternatively, the impact of exchange variability on trade flows can be assessed with higher frequency information using standard export supply equations with quarterly data, as in Kenen and Rodrik (1986) and De Grauwe (1988). To address this question in the context of Mercosur trade, a basic export equation was specified in which the log of bilateral export flows is assumed to be a function of the log of the bilateral real exchange rate, the log of a measure of activity in the partner country, and a proxy for real exchange rate variability. Again, a fixed effects model was used, now with quarterly data for 1991-1995. A standard measure of exchange rate variability was used: the standard deviation of the first difference of the logarithmic bilateral real exchange rate, with the quarterly standard deviation being taken over the two years preceding the export flows.

The estimation results are reported in table 7.2. Equation 1 displays the basic export equation. The real exchange rate and activity variables have their expected signs: a real exchange rate depreciation or an increase in the level of activity in the partner country increase exports. Equation 2 augments the basic equation by the real exchange rate variability measure. The estimated coefficient has the expected sign, is statistically different from zero at standard confidence levels, and its magnitude implies that cutting real exchange rate variability by 1 percent would increase bilateral exports by about 0.26 percent. The analysis of quarterly data indicates that real exchange rate variability has a negative impact on trade flows in the Mercosur and empirically supports the view that a lack of macroeconomic coordination could be an impediment for further commercial integration in the region.

## **8. Lessons for the WHFTA**

What lessons can be drawn from the experiences examined in the previous sections? Perhaps the most general lesson is that exchange rate stabilization through macroeconomic coordination is not an easy task. The experience of the Exchange Rate Mechanism in the European Union shows that, even when countries are strongly committed to a monetary union, and try to set domestic policies accordingly, capital markets will test the

determination of fixed parities and will produce periodic crises. As Obstfeld and Rogoff (1995) have put it, in a world of highly integrated capital markets, fixed exchange rates might be just a mirage.

Is there a role to be played by macroeconomic coordination in the future Western Hemisphere Free Trade Area? The empirical analysis for the Mercosur has shown that one cannot reject the hypothesis of an inverse relationship between real exchange rate variability and trade flows in the region. Therefore, exchange rate stabilization through macroeconomic coordination could have a positive impact on trade flows in the region. The Mercosur experience, however, underlines the difficulties of pursuing macroeconomic coordination when one of the trade partners is irrevocably committed to a given exchange rate policy. In this case, if real exchange rates are to be stabilized, the degrees of freedom of macroeconomic policy in the other members of the integration initiative are considerably reduced. If, as it is the case in the Mercosur, a large proportion of trade is outside the region and countries follow a member which has an exchange rate misaligned with respect to the rest of the world, macroeconomic coordination within the region may lead to a vicious rather than a virtuous cycle.

In a future WHFTA there would be no doubt about which country could play a central role in macroeconomic coordination similar to those in the European Union. If there were plans to coordinate macroeconomic policies the US would have to play the central role. But it is likely that the US would be unwilling to do so. Their role seems very much centered on making efforts to deter threats to systemic stability. Attention is consequently focused on relatively big players such as Brazil or Argentina even if the domestic political barriers to involvement seem much more formidable.

A WHFTA would raise specific problems which would tend to aggravate difficulties already mentioned concerning macroeconomic coordination. Important heterogeneity in trade structures, trade geographic distribution, and economic structures make it likely that disturbances will affect integration partners unevenly. Given the lack of adjustment mechanisms such as free labor movement it is important that exchange rate regimes remain flexible.

There seems to be no substitute to macroeconomic convergence as assured by a collective commitment to virtuous macroeconomic policies which stress the paramount importance in the economic agenda of price stability and a sustainable balance of payments position in a context of continued market reform.

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Table 2.1  
Selected Integration Initiatives: Share of largest members in total GNP and trade, 1993, percent\*

Initiative	Date of origin	Present or proposed number of members	Relative size of each initiative (EC-12 GDP=100)	GNP share of largest economy in total subregional GNP (A)	GNP share of second largest economy in total subregional GNP (B)	GNP share of third largest economy in total subregional GNP (C)	Average GNP size of all other members (D)	Average GNP size of all members (E)	(F)=(A)/(E)	Share of largest trading economy in total subregional trade (G)
EC-12	1983	12	100	23.4 (Germany)	18.8 (France)	17.5 (Italy)	4.5	8.3	2.8	26.7 (Germany)
Andean Group	1969	5	8.7	38.7 (Colombia)	34.2 (Venezuela)	14.5 (Peru)	6.3	20.0	1.9	45.9 (Venezuela)
Caricom	1973	13	0.3	31.8 (Trinidad and Tobago)	22.1 (Jamaica)	19.6 (Bahamas)	2.6	7.3	4.4	29.4 (Bahamas)***
CACM	1960	5	1.4	40.6 (Guatemala)	22.1 (Costa Rica)	15.6 (El Salvador)	10.8	20.0	2.0	30.8 (Costa Rica)
Mercosur	1991	4	19.9	72.8 (Brazil)	24.1 (Argentina)	1.7 (Uruguay)	1.4	25.0	2.9	65.4 (Brazil)
NAFTA	1993	3	130.4	84.2 (US)	8.1 (Mexico)	7.7 (Canada)	0	33.3	2.5	73.5 (US)
WHFTA	?	34	163.0	67.4 (US)	8.9 (Brazil)	6.5 (Mexico)	0.6	3.0	22.5	64.1 (US)***

\*All GNP estimates are PPP, except for Caricom. To compute WHFTA GNP shares, Caricom GNP per capita estimates corrected for PPP were assumed to be, in line with Jamaica, twice their uncorrected 1993 level. Data on Montserrat not included.

\*\* Total trade of identified country divided by sum of total trade for all countries in the FTA.

\*\*\* Does not include data for Antigua, Montserrat, St Kitts and St Lucia.

Sources: GDP: World Bank, **World Development Report 1995**; Trade: IMF, **Direction of Trade Statistics Yearbook 1994**.

Table 2.2

Selected Integration Initiatives: Share of intra FTA trade in total trade, 1960-1993, percent\*

Initiative	1960	1970	1980	1990	1993
EC-12	24.5	34.8	35.6	42.2	38.2
Andean Group	0.4	1.2	2.3	2.7	5.0
Central American Common Market	3.2	12.8	12.3	6.8	6.0
Mercosur	3.6	4.7	5.4	5.8	10.1
NAFTA	20.2	24.0	19.2	22.8	25.5
WHFTA**	29.8	29.8	25.1	27.0	30.0

\* Intra-FTA exports divided by total trade of all partners with all economies net of intra-FTA imports.

\*\*Caricom excluded.

Source: raw data from IMF, **Direction of Trade and Direction of Trade Statistics Yearbook**, several years.

Table 2.3  
 Selected Regional Initiatives: Share of intra FTA trade in  
 total trade, by country, 1993\*

Initiatives	Share of intra FTA trade in total trade by country and initiative
EC-12	
Belgium and Luxembourg	70.4
Denmark	50.1
France	56.1
Germany	46.6
Greece	58.1
Ireland	64.1
Italy	54.3
Netherlands	65.7
Portugal	70.3
Spain	64.1
United Kingdom	46.6
Andean Group	
Bolivia	10.2
Colombia	14.3
Ecuador	9.7
Peru	11.0
Venezuela	6.6
Caricom	
Bahamas	0.1
Barbados	63.9
Belize	3.5
Dominica	16.5
Grenada	35.6
Guyana	10.1
Jamaica	1.7
St Vincent and the Grenadines	13.4
Trinidad and Tobago	9.2
CACM	
Costa Rica	5.7
El Salvador	19.7
Guatemala	17.2
Honduras	4.0
Nicaragua	27.8
Mercosur	
Argentina	24.0
Brazil	13.5
Paraguay	22.5
Uruguay	46.0
NAFTA	
Canada	74.6
Mexico	75.7
United States	27.7

Source: raw data from *Direction of Trade Statistics Yearbook*, 1993. Data on Antigua and Barbuda, Montserrat, St Kitts-Nevis-Anguilla and St Lucia not available.

\*Preliminary data.

Table 2.4  
Selected Western Hemisphere Economies: Share  
of intra FTA trade in total trade by country, 1993\*

Initiatives	Share of trade with WHFTA in total trade by country 1993
<b>Andean Group</b>	
Bolivia	64.7
Colombia	65.7
Ecuador	70.6
Peru	57.3
Venezuela	73.4
<b>Caricom</b>	
Bahamas	33.6
Barbados	65.3
Belize	64.7
Dominica	37.9
Grenada	60.1
Guyana	56.7
Jamaica	80.4
St Vincent and the Grenadines	36.4
Trinidad and Tobago	77.3
<b>CACM</b>	
Costa Rica	78.6
El Salvador	74.8
Guatemala	86.2
Honduras	72.7
Nicaragua	74.1
<b>Mercosur</b>	
Argentina	51.5
Brazil	46.4
Paraguay	45.1
Uruguay	64.0
<b>Nafta</b>	
Canada	76.1
Mexico	80.0
United States	34.6
<b>Other</b>	
Chile	42.6
Haiti	74.0
Panama	56.4
Surinam	48.0

Source: raw data from **Direction of Trade Statistics  
Yearbook, 1993.**

\* Preliminary data. Computed as WHFTA included all Western Hemisphere economies. Data on Antigua and Barbuda, Montserrat, St Kitts-Nevis-Anguilla and St Lucia are not available.

Table 3.1

Selected issues on which WTO multilateral agreements exist which are covered by selected regional integration initiatives, 1995

Initiative	Issue	Antidumping and subsidy countervailing duty rules for regional trade	Services: liberalization, MFN and national treatment	TRIMs: National treatment	TRIPs
EC-12	No	Yes	Yes	Yes	Yes
Andean Pact	Yes	Yes	Yes	Yes	Yes
Caricom	No specific rules	No	Yes	Yes	Not covered
CACM	Yes	Yes	Not covered	Yes	Yes
Mercosur	No specific rules	Not covered, transportation excepted	Yes, many exceptions	Yes	Not covered
NAFTA	Yes	Yes	Yes	Yes, UR plus	Yes

Source: OAS/Trade Unit and World Trade Organization (1995).

Table 3.2

Sectors offered special treatment and issues covered by regional initiatives on which WTO plurilateral agreements exist, 1995

Initiative	Issue	Energy	Automotive industry	Agriculture	Textiles and clothing	Government procurement
EC-12	Yes	Yes	Yes	Yes	Yes	Yes
Andean Pact	n.a.	n.a.	n.a.	n.a.	n.a.	Not covered
Caricom	n.a.	n.a.	n.a.	n.a.	n.a.	Not covered
CACM	n.a.	n.a.	n.a.	n.a.	n.a.	Yes
Mercosur	No	Yes	No, except sugar and wheat	No	Yes	Not covered
NAFTA	Yes	Yes	Yes	Yes	Yes	Yes

Source: OAS/Trade Unit and World Trade Organization (1995).

Table 3.3

Scope of selected integration initiatives: Labor mobility and other non-WTO issues, 1995

Initiative	Issue	Labor mobility	Labor standards	Environment agreement	Competition policies	Regional dispute settlement
EC-12		Yes	Yes	Yes	Yes	Yes
NAFTA		No	Yes	Yes	Yes	Yes
Central American Common Market		No	No	No	No	Yes
Andean Pact		No	No	No	No	Yes
Caricom		No	No	No	No	Yes
Mercosur		No	No	No	No	Yes

Source: OAS/Trade Unit

Table 3.4

Scope of selected integration initiatives: Macroeconomic issues, 1995

Initiative	Issue	Macroeconomic coordination	Balance of payments safeguards	Tax harmonization
EC-12		Yes	Yes	Yes
NAFTA		No	No	Double taxation bilateral agreements
Central American Common Market		No	Yes	No
Andean Pact		No	Yes	No
Caricom		Yes	No	Double taxation
Mercosur		No	No	No

Source: OAS/Trade Unit.

Table 6.1  
Argentina and Brazil: effective exchange rates,  
1980-1994\*

	Argentina	Brazil
1979	74.7	59.9
1980	49.0	75.1
1981	65.9	66.1
1982	149.9	64.1
1983	106.4	86.6
1984	88.0	96.4
1985	100.0	100.0
1986	90.9	94.4
1987	113.9	86.3
1988	109.1	77.8
1989	208.8	60.9
1990	133.2	54.2
1991	97.7	68.6
1992	85.8	68.4
1993	84.8	62.1
1994	81.8	57.0

\*The lower the index, the more appreciated is the currency.

Sources: Authors' calculations, CEDES and CNI.

Table 6.2  
Mercosur: Macroeconomic data, 1990-1994

	1990	1991	1992	1993	1994*
Real GDP growth rate					
Argentina	1.5	8.9	8.7	6.0	4.3
Brazil	-4.1	1.2	-0.9	4.2	5.7
Paraguay	3.1	2.5	1.8	4.2	4.0
Uruguay	0.9	3.2	7.7	1,5	5.1
Inflation yearly rate (CPI)					
Argentina	2,313.7	172.0	24.6	10.6	4.3
Brazil	2,928.4	440.9	1,008.7	2,146.7	2,669.4
Paraguay	38.1	24.3	15.1	18.2	20.7
Uruguay	112.3	102.0	68.4	54.1	44.8

Sources: International Monetary Fund and Banco Central do Brasil.

\* Preliminary.



Table 7.1  
Mercosur: Determinants of Trade, 1958-1994\*

Variable	Equation 1	Equation 2	Equation 3	Equation 4
GNP	0.32 (7.02)	0.28 (6.38)	0.32 (7.01)	0.28 (6.38)
GNP per capita	0.98 (10.24)	0.98 (10.65)	0.98 (10.21)	0.98 (10.62)
Distance	0.64 (7.05)	0.67 (7.63)	0.65 (7.06)	0.67 (7.66)
Contiguity	0.55 (3.08)	0.69 (3.95)	0.55 (3.08)	0.69 (3.96)
Mercosur	-	0.72 (6.05)	-	0.72 (6.07)
Real exchange rate variability	-	-	-0.28*10 <sup>-3</sup> (-0.49)	-0.41*10 <sup>-3</sup> (-0.75)
Adjusted R <sup>2</sup>	0.83	0.84	0.83	0.84
Number of observations	444	444	444	444
Standard error	0.78	0.75	0.78	0.75

\* t statistics in parenthesis.

Sources: Trade: IMF, **Direction of Trade Statistics**; GNP and GNP per capita: World Bank, **World Tables**; distance: Amadeus airline booking system; real exchange rate: calculated from nominal exchange rate and price information from IMF, **International Financial Statistics**.

Table 7.2  
Mercosur: Effect of Exchange Rate Variability on Exports, 1991.I-1995.I\*

Variable	Equation 1	Equation 2
Lagged real exchange rate	0.22 (17.41)	0.23 (17.97)
Activity	2.66 (3.57)	2.97 (4.05)
Real exchange rate variability	-	-0.26 (-3.28)
Adjusted R <sup>2</sup>	0.82	0.82
Number of observations	192	192
Standard error	0.75	0.73

\* t statistics in parenthesis.

Sources: Real exchange rates: calculated from nominal exchange rate and price information from IMF, **International Financial Statistics**; activity: yearly GDP growth rates from IMF, **International Financial Statistics**.