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**informes y estudios especiales**

**M**acroeconomic coordination  
in Latin America: does it have a  
future?

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UNITED NATIONS



Santiago, Chile, December 2005

This document was prepared by José Luis Machinea, Executive Secretary of the Economic Commission for Latin America and the Caribbean (ECLAC) and by Guillermo Rozenwurcel, Consultant, Office of the Executive Secretary.

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United Nations Publication  
ISSN printed version 1682-0010  
ISSN online version 1682-0029

ISBN: 92-1-121571-4  
LC/L.2431-P  
Sales No.: E.05.II.G.177  
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Printed in United Nations, Santiago, Chile

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## Abstract

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For most developing countries, open regionalism has emerged as quite a sensible response to the undergoing turbulent and asymmetric process of economic globalization. Moreover, the successful experience of the countries which are now part of the European Union, has made regional integration an increasingly attractive option for the developing world. Whenever regional integration is intended to go beyond merely a free trade agreement, macroeconomic coordination becomes a key issue. Theoretically, the underlying idea of the macroeconomic coordination is the interdependency between economies: when economies are interdependent, the events that take place and the policies implemented in each of them will affect the performance of all the rest, through different real and monetary transmission channels. Therefore, if there is interdependence between the economies, then the macroeconomic coordination appears to be a means of internalizing the effects of reciprocal inter-relationships on decision-making in each economy, and improving the results for all concerned.

After the introduction, this paper examines the macroeconomic coordination and its perspectives in Latin America through four sections). The first one shows the reasons for macroeconomic coordination from a theoretical viewpoint, trying to determinate the degree of economic interdependence in Latin America. The second section analyses the experience of MERCOSUR in terms of macroeconomic coordination, while the third one focuses on the obstacles and opportunities of macroeconomic coordination in the region. Finally, the fourth section concludes.

This research shows that in Latin America the progress achieved on macroeconomic coordination has been poor. Demand for coordination is weakened by the lack of synchronization between economic cycles in the different countries. The heterogeneous productive structures in the region explain in part this situation; but one of the main reasons, is the low level of trade interdependence. Moreover, since financial integration virtually does not exist in the region, the reciprocal externalities present on this front are exclusively due to the contagion effects generated by the frequent shocks that are brought about by the highly volatile nature of globalized financial markets. This last fact tends to lead countries to try to differentiate themselves from their neighbors in times of crisis rather than to seek macroeconomic coordination.

Therefore, it is clear that macroeconomic coordination and convergence in Latin America entails greater difficulties than those confronted by Europe in its early stages of the integration process. These difficulties reinforce the importance of gradualism in the approach to macroeconomic coordination in the region. The complexity of the factors involved and the need to generate confidence and mutual understanding between the parties involved make this inevitable.

## Introduction

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For most developing countries open regionalism has emerged as a quite sensible response to the undergoing turbulent and asymmetric process of economic globalization: it avoids the huge costs usually associated to both isolationism and outright liberalization. Moreover, the successful experience of the countries that now form the European Union has made regional integration an increasingly attractive option for the developing world.

Whenever regional integration is intended to go beyond just a free trade agreement, macroeconomic coordination becomes a key issue. From a theoretical standpoint, the underlying idea is simple: when economies are interdependent, the events that take place and the policies implemented in each of them will, through various (real and monetary) transmission channels, impact the performance of all the rest. Under these conditions, macroeconomic policy coordination appears to be a means of internalizing the effects of reciprocal interrelationships on decision-making in each economy and improving the results for all concerned.

This idea has spread beyond the borders of the Old World, but for a variety of reasons, repeated attempts to implement macroeconomic coordination mechanisms outside Europe, and in Latin America in particular, have run into numerous difficulties.<sup>1</sup>

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<sup>1</sup> Non-surprisingly, economic success is negatively correlated to the willingness of a country to co-ordinate with its neighbours, especially if they are characterized by macroeconomic instability.

Be that as it may, regional integration agreements are now a well-established reality on the world scene, and Latin America is no exception to this rule. In many cases, moreover, the participants in these agreements are seeking to go beyond improving trade relations and to set themselves decidedly more ambitious integration goals. The reasons for this tendency are not solely economic, but instead involve wider political and cultural motivations as well.

If the tendency to move in this direction grows stronger, then it is natural to expect that co-ordination efforts will not be abandoned. Exploring the obstacles that will have to be overcome and the circumstances under which these initiatives can be profitable therefore becomes a necessary task. It is clear that this task can only be completed satisfactorily if the specific nature of the economic interdependence and political conditions and factors existing in each case are taken into account. Contributing to the efforts to achieve this objective in Latin America is the primary motivation of this analysis.

To this end, the discussion that follows this introduction is divided into four sections. The first looks at the particular characteristics of the economic interdependence entailed in the integration agreements existing in Latin America, with emphasis on how they differ from the European case. The second assesses the experience with macroeconomic coordination in MERCOSUR, the region's largest trading bloc. An effort is made here to draw some lessons valid also for the other integration schemes in the region. The third section raises the question as to how the demand for co-ordination can be increased in Latin America and seeks to identify the main obstacles, opportunities and incentives in this regard. The fourth section concludes.

# **I. Reasons for macroeconomic co-ordination: how much economic interdependence is there in Latin America?**

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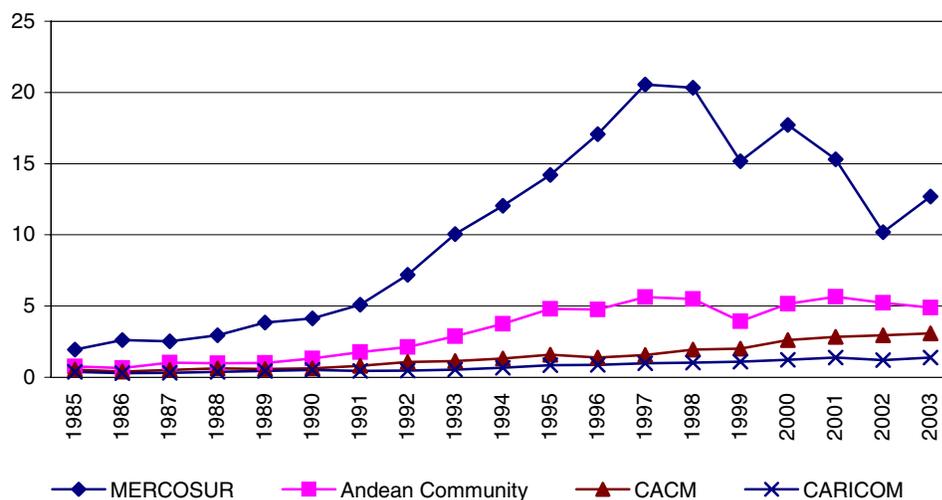
A high level of interdependence among countries is one of the main reasons for increasing the co-ordination of macroeconomic policies, since interdependence implies that each member of the group is affected by what happens in the other countries. The degree of interdependence among a group of countries is usually measured on the basis of the trade and financial links existing among them. Both aspects are discussed below.

## **1. Trade interdependence**

Intra-regional trade has followed quite different trends in the various sub-regional integration schemes existing in Latin America throughout the 1990s and thus far during the present decade. As can be seen in Figures 1 and 2, MERCOSUR and the Andean Community grew steadily up to 1997-1998, both in terms of the dollar values and in terms of the share of total trade activity accounted for by intra-regional trade. This trend changed abruptly when the international crisis erupted, however, and intra-regional trade's share of the total dropped significantly, although the Andean Community managed to maintain the dollar value of such trade near the highs recorded in 1997-1998 while in MERCOSUR it fell steeply. In CACM, on the

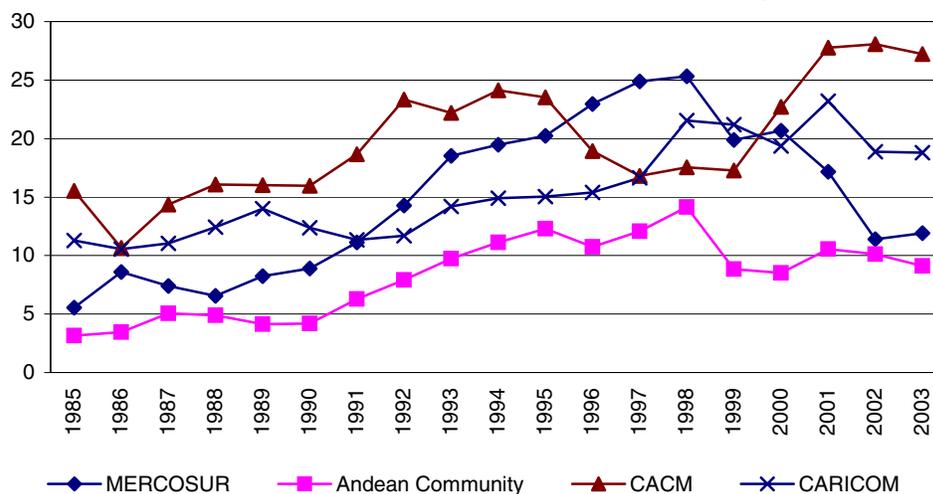
other hand, the dollar value of intra-regional trade (without including *maquila* activities) has risen steadily throughout this period, and intra-regional trade's share of the total, although it has fluctuated sharply, has also exhibited an overall increase. Within CARICOM, intra-regional trade expanded considerably, both in terms of dollar values and when measured as a percentage of total trade until 1998, and has maintained its share at a fairly steady level since then.

**Figure 1**  
**TOTAL INTRA-REGIONAL EXPORTS BY INTEGRATION SCHEMES: 1985-2003**  
*(Billions of dollars)*



Source: ECLAC, Division of International Trade and Integration, on the basis of official data.

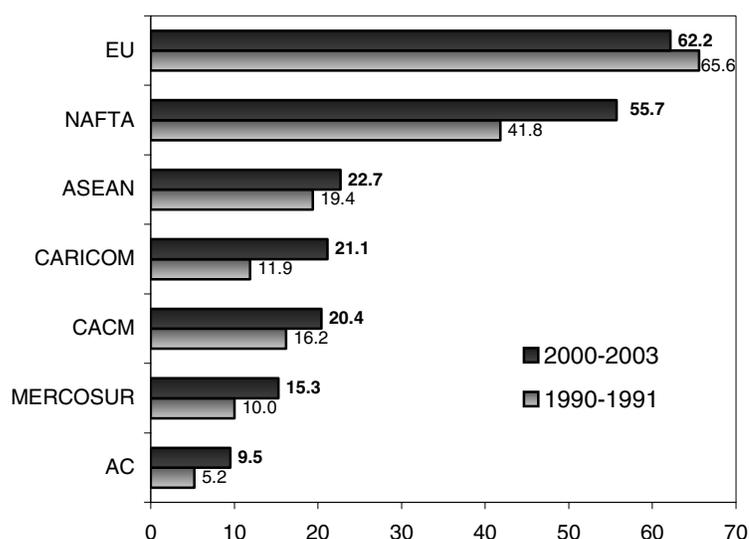
**Figure 2**  
**SHARE OF INTRA-REGIONAL EXPORTS IN TOTAL REGIONAL EXPORTS: 1985-2003**  
*(Percentages of total exports)*



Source: ECLAC, Division of International Trade and Integration, on the basis of official data.

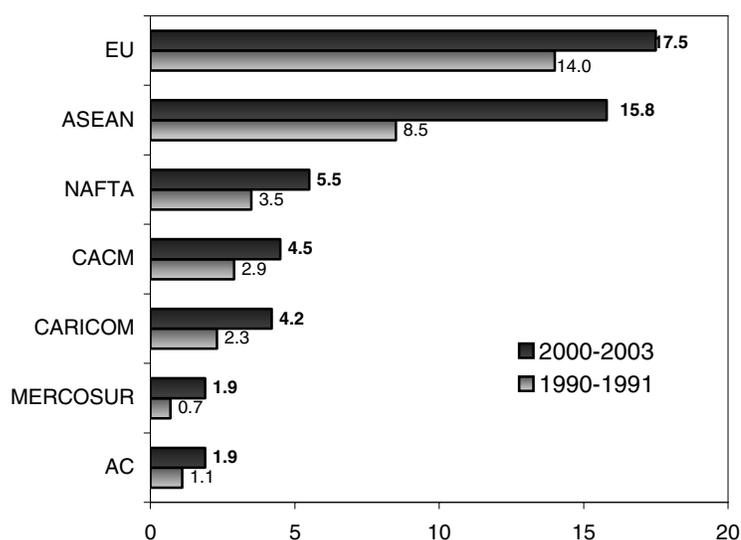
Figures 3 and 4, in turn, assess the trade interdependence existing in the different Latin-American economic blocs and other regional agreements. This comparison is based on two indicators: a) intra-regional trade with respect to total trade, and b) intra-regional trade in terms of GDP. For Latin America and the Caribbean, the indicators show that interdependence in subregional integration agreements, although increasing during the past decade, is still substantially less tight than in other regions. These findings become particularly evident when we analyse intra-regional trade in terms of GDP. The differences between the two indicators are primarily attributable to the openness of the different countries.

**Figure 3**  
**SHARE OF INTRA-REGIONAL EXPORTS IN TOTAL REGIONAL EXPORTS:**  
**1990-1991<sup>a</sup> & 2000-2003<sup>a</sup>**  
*(Percentages of total exports)*



**Source:** ECLAC, Division of International Trade and Integration, on the basis of official data.  
<sup>a</sup> Annual average.

**Figure 4**  
**INTRA-REGIONAL EXPORTS AS A PERCENTAGE OF REGIONAL GDP**  
**1990-1991<sup>a</sup> & 2000-2003<sup>a</sup>**



**Source:** ECLAC, Division of International Trade and Integration, on the basis of official data.  
<sup>a</sup> Annual average.

The most illustrative case of the differences between the two measures of interdependence is MERCOSUR: despite considerable trade interdependence in terms of intra-regional exports, these exports account for a relatively small proportion of GDP.

Both indicators are relevant. The proportion of GDP represented by such exports gives an idea of how intra-regional trade is perceived by the private sector in the different countries and therefore of the demand for coordination that such a perception generates. The other measure of the economic importance of trade interdependence is provided by the share of total exports accounted by intra-regional exports. Although sales within the bloc may represent a relatively small proportion of GDP in a closed economy, their share in total exports provide a better picture of the required adjustment in the current account, and therefore of the required reduction in aggregate demand, that a shrinking in intra-regional trade could provoke.<sup>2</sup> Take as an example the case of a country in which regional exports account for 20% of total exports and it is equivalent to 2% of GDP. What would happen in this country if the regional agreement break up? The worst case scenario would result in a contraction of 20% in the country's exports and a significant fall in GDP depending on the income-elasticity of imports. With a short-term income-elasticity of 2, a 20% fall in imports requires a GDP fall of around 10%.<sup>3</sup> This means that the actual impact of the regional agreement on economic activity is greater than its perceived importance as measured by the percentage of GDP represented by intra-regional trade.

In any event, the expansion of intra-regional trade is clearly limited by the size of the bloc. There are enormous differences in this respect: whereas the European Union accounts for 37.2% of world trade, no subregional agreement in Latin America accounts for more than 1%, with the sole exception of MERCOSUR, which being the largest bloc in the region only accounts for 1.4% of world trade (see Figure 5).

This situation means it would be difficult for intra-regional trade to increase much more in relative terms. Figure 6 gives an idea of this by showing the scale of intra-regional trade after discounting each bloc's share of world trade.<sup>4</sup> The adjusted figures make it clear that intra-regional trade is fairly significant in all sub-regional blocs, with the adjusted levels in the Caribbean Community (CARICOM) and the Central American Common Market (CACM) being close to those of the European Union. In other words, the size of the bloc is a major determinant of the relative volume of trade within the bloc; thus, it is unthinkable that trade interdependence in the region could reach the same quantitative levels as those seen in the European Union.

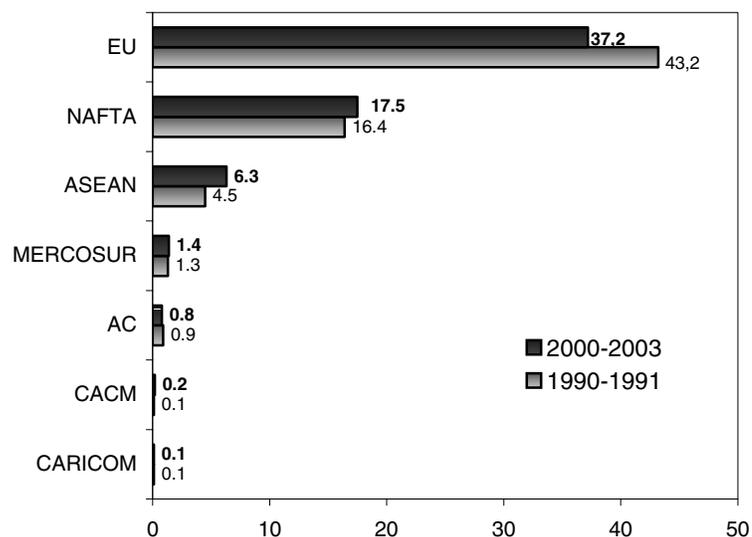
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<sup>2</sup> Current account adjustment is usually the combined result of a fall in output and the depreciation of the exchange rate, with the former being the more influential factor in the short term.

<sup>3</sup> Obviously the bloc would not simply "disappear", and exports can be redirected to other destinations. It should be borne in mind, however, that because of its nature, a share of intra-regional exports would be difficult to redirect to other markets.

<sup>4</sup> The idea is to observe the extent to which sales within the bloc are greater than the bloc's importance in world trade. Apart from the existence of differentiated tariffs, there are various reasons for this difference (geographical proximity, common historical and cultural roots, etc.) and these variables are generally used in gravitational models.

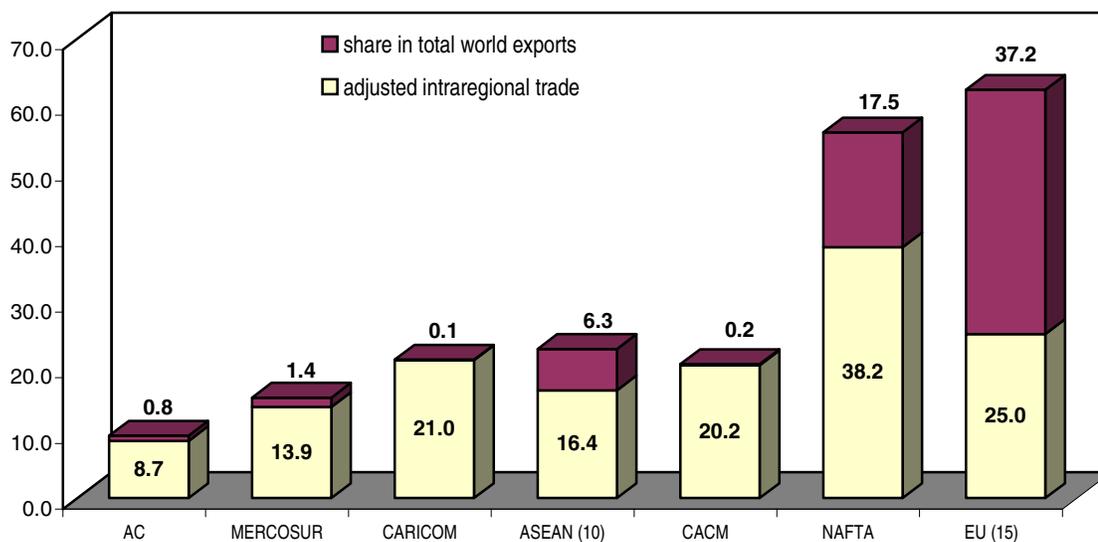
**Figure 5**  
**SHARE OF REGIONAL EXPORTS IN WORLD TRADE,**  
**1990-1991<sup>a</sup> & 2000-2003<sup>a</sup>**



**Source:** ECLAC, Division of International Trade and Integration, on the basis of official data.

<sup>a</sup> Annual average.

**Figure 6**  
**INTRA-REGIONAL TRADE ADJUSTED BY PARTICIPATION IN WORLD TRADE, 2000-2003<sup>a</sup>**

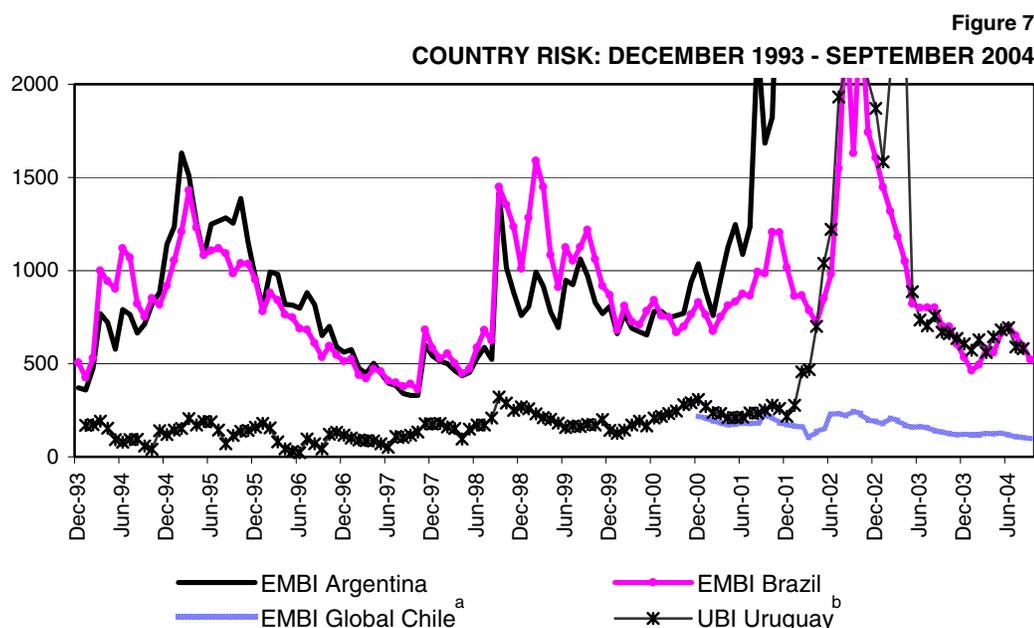


**Source:** ECLAC, Division of International Trade and Integration, on the basis of official data.

<sup>a</sup> Annual average.

## 2. Financial integration

The reciprocal externalities operating among the countries of Latin American subregional blocs have not been transmitted solely via trade channels, however. Macroeconomic spillovers from financial markets have also been extremely significant, even though the integration of domestic financial markets in terms of either financial transactions or related activities is virtually nil (Machinea and Rappoport, 2003). Financial conditions in the countries of subregional blocs are connected in two ways. On the one hand, since external vulnerability is a trait shared by all the member countries, changes in international financing conditions tend to have a more or less similar impact on all their economies. On the other, the contagion effects deriving from the imperfect information prevailing in international financial markets tend to magnify their interdependence in this respect. The strong correlation between the country risk ratings in MERCOSUR, in particular those of the largest economies of the bloc, until shortly before Argentina's default, is a good illustration of this point (see Figure 7).<sup>5</sup>



**Source:** ECLAC, on the basis of JP Morgan Securities Inc., and Uruguay Republic Pension Fund (AFAP).

<sup>a</sup> Global Bond 2009 Sovereign Spread over UST.

<sup>b</sup> Uruguay Bond Index (UBI). Since May 2003, Uruguay changes the reference bond basket.

In fact, empirical studies have shown the existence of strong interconnections between financial markets in emerging countries that are clearly influenced by geographic proximity, trade links and economic policy similarities (IADB, 2002, chap. 7). Moreover, there is evidence that a country's currency crises are more closely associated with exchange-rate misalignments with respect to a partner in a trade agreement than with the rest of the world.<sup>6</sup> However, when contagion is measured through the impact of a change in a country's capital flows on the other partners' flows, the evidence is more ambiguous.<sup>7</sup>

<sup>5</sup> One exception is the absence of contagion in the final phases of the Argentine crisis. This could be attributed to the "absence of surprise" as events unfolded, which enabled investors to prepare themselves by reallocating their assets gradually. During the preceding months, however, there was an impact on other countries in the region, and during 2002 the crisis severely affected Uruguay. Although there are different definitions of contagion, references here are to a situation in which a crisis in another country increases the probability of crisis in the home country, after controlling for the economic fundamentals (Eichengreen, Rose and Wyplosz, 1996).

<sup>6</sup> Fernández-Arias, Panizza and Stein (2002).

<sup>7</sup> This issue is described in IADB (2002, chapter 7) in more detail.

These trade-related and financial externalities notwithstanding, their presence has not generated a reciprocal demand for macroeconomic cooperation on a permanent basis. The reason is simple: although the expansion of intra-regional trade was regarded as a long-lasting phenomenon, every time one of the two largest partners was overtaken by a crisis, the most prevalent reaction was a fear of financial spillovers. In such situations, the usual response of policy makers in the other countries has been to send out signals that differentiate them from their distressed neighbour in an effort to influence the mainstream perception on financial markets.<sup>8</sup> Their reason for doing so is that the adverse effects to be expected in the short run have been of such a magnitude, and the decision-making horizon for governmental and private-sector actors has shortened to such a point that the ratio between the perceived costs and benefits of integration has grown drastically worse.

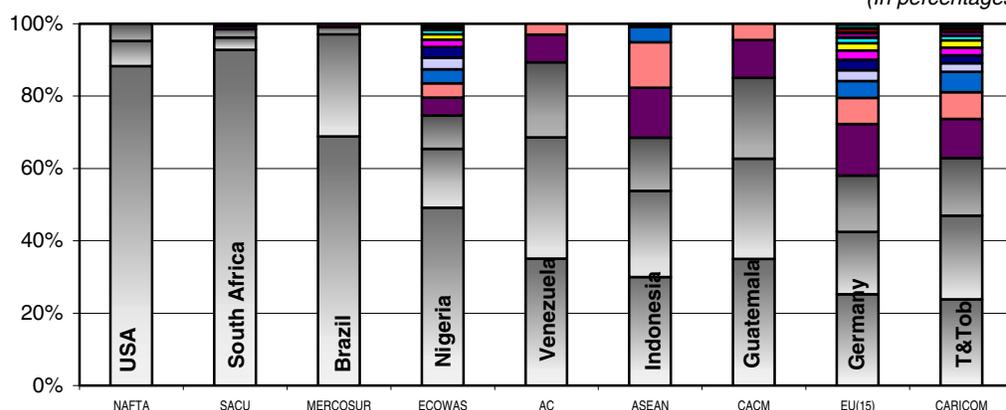
### 3. Dependence or interdependence?

Statistics on interdependence for the bloc as a whole often conceal considerable differences between countries, which are often due to differences in their sizes. The figures shown below indicate the level of dependence or interdependence in different regional agreements based on two indicators: intensity of reciprocal trade between the largest partner in each agreement and the rest of the bloc; and distribution of regional GDP.

Figures 8 and 9 show that there are considerable differences in country size within NAFTA and MERCOSUR. In such cases, there are fewer coordination incentives for the largest country. In NAFTA, in particular, it is unthinkable that the United States would be prepared to coordinate its fiscal and monetary policies with Canada and Mexico. Although concern for its neighbours may lead the United States to help them in critical situations such as Mexico's "tequilazo" in 1994, it is extremely unlikely that it would ever agree to have Mexican or Canadian representatives sitting on the Federal Reserve Board.

Of course, incentives for cooperation are not only related to size and economic interdependence. Beyond trade and financial interdependence may be other economic or political reasons for coordination among members of an agreement. The European integration is a clear example of that. But without doubt, large sizes differences among the partners reduce the incentives for co-operation.

**Figure 8**  
**REGIONAL GDP DISTRIBUTION: 1990-2003<sup>a</sup>**  
(In percentages)

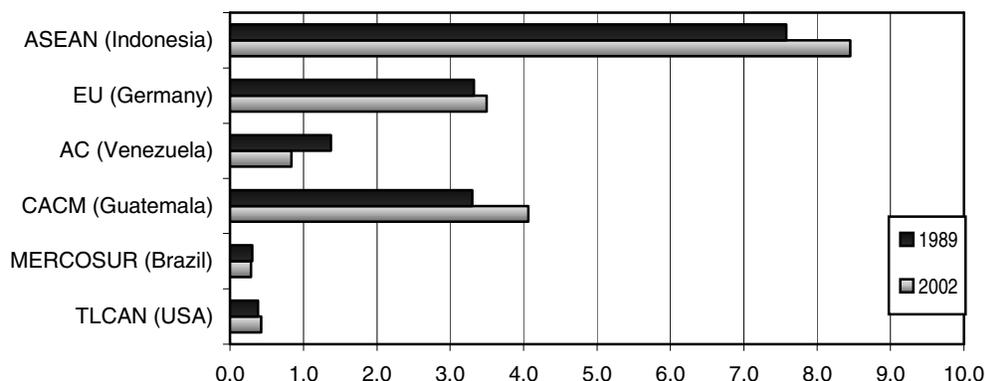


**Source:** ECLAC, Division of International Trade and Integration, on the basis of official data for MERCOSUR, AC, CACM and CARICOM; and *World Development Indicators 2004* for the cases of NAFTA (North American Free Trade Agreement); SACU (South African Custom Union), EU (European Union), and ECOWAS (Economic Community of West African States).

<sup>a</sup> Annual average.

<sup>8</sup> The extreme case being Argentine government behaviour in 1999 after the Brazil's devaluation.

**Figure 9**  
**DEGREE OF INTERDEPENDENCE OF CORE COUNTRIES IN SOME**  
**INTEGRATION SCHEMES: 1989 & 2002**  
*(In percentages)*



**Source:** ECLAC, Division of International Trade and Integration, based on IBD (2002) *Integration 2002 Report*, Chapter 7 (Box 7.1), pp. 48.

**Note:** The indicator was estimated with the following formula:

$$\varphi_{int} = \left\{ \left( \frac{X_{jB}}{X_{jTOT}} \right) / \left( \frac{\sum_{i \neq j} X_{ij}}{\sum_{i \neq j} X_{iTOT}} \right) \right\}$$

Which shows the ratio between the exports of the larger country  $j$  to the regional integration agreement  $B$ , and the sum of the exports of the rest of the country members  $i$  to the larger country  $j$ . In both cases, exports are normalized by the respective total exports. In parenthesis, the left axis shows the larger country in terms of its share to regional GDP, considering the figure 7.

## 4. Other reasons for coordination

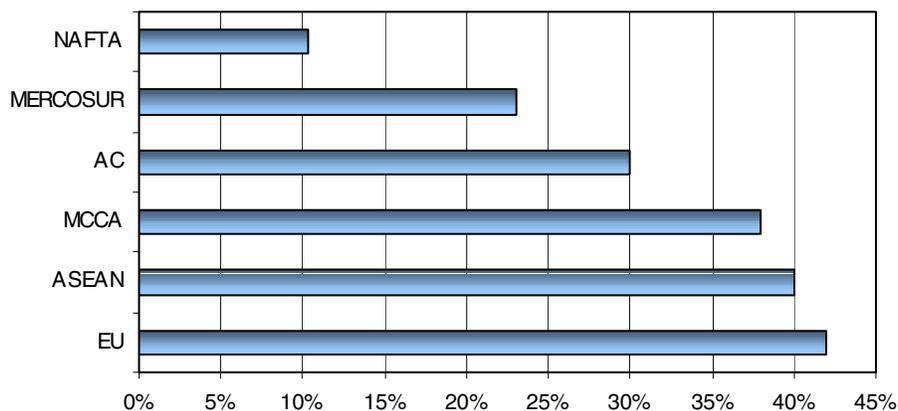
Motives for coordination that go beyond financial or trade interdependence may include cyclical synchronism, political support for a long-term agenda, its importance in introducing discipline in the face of domestic pressures, and its use as a mechanism to reduce macroeconomic volatility and to build up government's credibility within a country.

**Cyclical synchronism.** Benefits from macroeconomic coordination increase (or the cost decrease) to the extent that the countries belonging to the regional agreement face similar situations. If cycles are synchronous, economic policy decisions will be similar, and therefore the cost of forgoing autonomous policies will be lower.

Countries in subregional blocs in Latin America have historically registered low synchronism in economic cycles, at least when they are compared against countries of the UE and ASEAN (see figure 10). Within this context, CACM countries are found to have a relatively high level of correlation, while MERCOSUR and AC (De la Cuba and Winkelried, 2004) evidence the lowest level of synchronism in the region. Nevertheless, some studies suggest that, at least in the case of MERCOSUR, during the 1990s the cycles of the member countries, and particularly those of the two largest partners, have been somewhat more closely synchronized than in the past (Lacunza, *et al.*, 2003; Fanelli and González Rozada, 2003; Machinea, 2003a). This has mainly occurred as the result of external financial disturbances that have affected all the countries of the bloc.

Figure 10

**CYCLICAL SYNCHRONISM-WEIGHTED AVERAGE OF CORRELATION COEFFICIENT (1962-2002)**



Source: Machinea, José Luis (2003a), "La inestabilidad cambiaria en el MERCOSUR: Causas, problemas y posibles soluciones", BID/INTAL.

**Future interdependence.** Political support for deepening the integration process is linked to future interdependence. For example, when the objective of the integration process is to achieve a monetary union, incentives to cooperate at the macroeconomic level increase considerably, as it is difficult to move forward in creating a single currency if inflation rates differ significantly between countries, or if the fiscal deficits generate substantial growth in public debt. Integration processes in Latin America and the Caribbean, particularly in recent years, have been characterized by the goal of going beyond free trade areas. This political willingness, however, is not always reflected in specific decisions in support of this objective. Macroeconomic cooperation has its costs, as will be discussed below, and in order to move forward governments must therefore prove, by means of tangible evidence, that their national agendas are giving way to a regional one

**Domestic resistance.** Similarly, a macroeconomic coordination agreement can serve to implement measures that have met with domestic resistance. However, the importance of the role of regional agreements in imposing some degree of internal discipline depends on whether the agreement is perceived by the actors involved as being advantageous for the country. While this has been the case for Europe, it has not necessarily been so for Latin America and the Caribbean.

**"Borrowing" credibility.** As discussed below, it is not clear whether macroeconomic policy coordination is an effective means of building domestic credibility in the region. Unlike the situation in Europe, it is difficult to find in the region countries that have strong enough reputations to generate credibility for other nations by partnering with them in the area of macroeconomic policy. Even more importantly, countries in Latin America do not have strong enough reputations to emerge unharmed from an association with a country that has a history of severe instability.

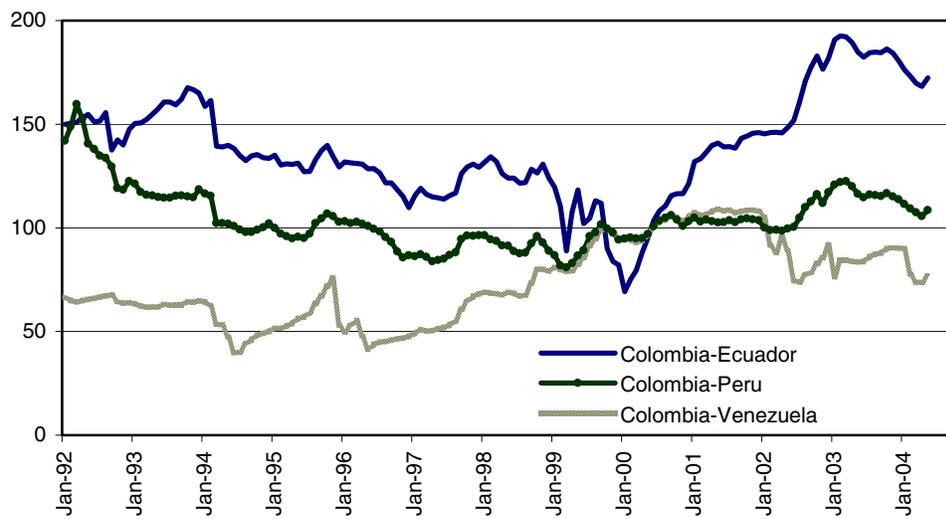
Finally, while a country's volatility affects its partners in different ways, exchange rate volatility typically attracts the most attention due to its effects on trade and on the political economy of the integration process. As can be seen in figures 11 to 14, although exchange-rate volatility is not so intense in Central America, it is particularly severe in MERCOSUR and is also quite significant in the Andean Community, the two largest economic blocs in Latin America.

**Figure 11**  
**MERCOSUR - BILATERAL REAL EXCHANGE RATES**  
*(January 2002 to May 2004-2000=100)*



Source: ECLAC, on the basis of official data.

**Figure 12**  
**ANDEAN COMMUNITY - BILATERAL REAL EXCHANGE RATES**  
*(January 2002 to May 2004 - 2000=100)*



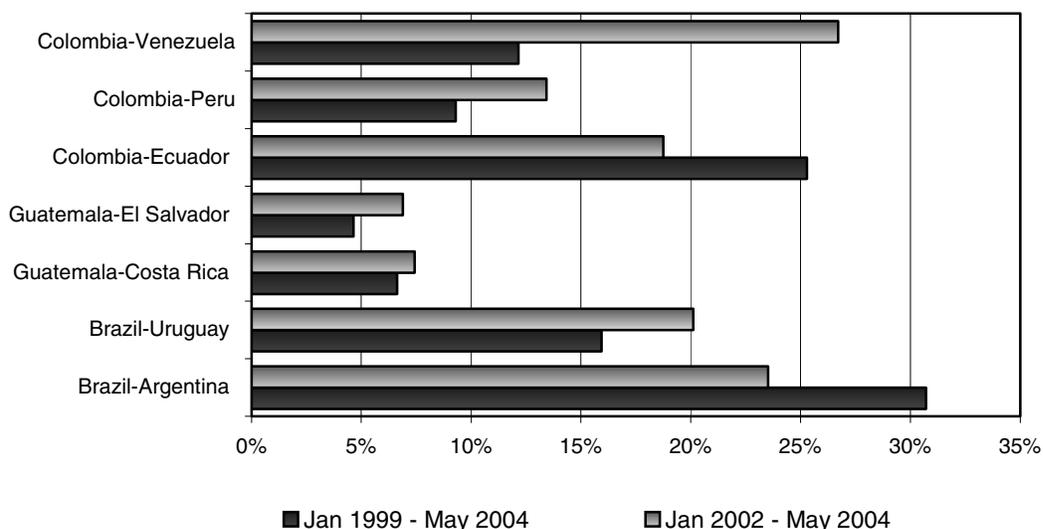
Source: ECLAC, on the basis of official data.

**Figure 13**  
**CENTRAL AMERICA - BILATERAL REAL EXCHANGE RATES**  
*(January 2002 to May 2004=100)*



Source: ECLAC, on the basis of official data.

**Figure 14**  
**VOLATILITY OF BILATERAL REAL EXCHANGE RATES**



Source: ECLAC, on the basis of official data.

There are several reasons for these large exchange rate volatilities. We want to point out, among them, the different domestic macroeconomic policies and the co-existence of different exchange rate policies. In particular, the co-existence of dollarization in Ecuador and convertibility in Argentina with more flexible exchange regimes in the rest of Latin America, explains part of the volatility from 1998 on, the period where the region experienced similar large financial shocks.<sup>9</sup>

The potential advantages of macroeconomic coordination as a means of reducing economic volatility, in particular exchange-rate volatility, and improving economic performance in the members of a regional agreement are discussed in the following sections.

<sup>9</sup> See Machinea (2003) and Fanelli and González-Rosada (2003) for a detailed discussion in the MERCOSUR case.



## **II. Macroeconomic coordination: the experience of MERCOSUR from a Latin American perspective**

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MERCOSUR can be considered to be Latin America's largest and probably most ambitious integration initiative to date. When it was created, the member countries committed themselves to structuring a customs union, which, over time, was to develop into a common market. MERCOSUR was, in fact, considered one of the most successful regional integration agreements among the many that arose in the 1990s (World Bank, 1999).

The difficulties that MERCOSUR is currently experiencing, however, raise serious doubts as to the possibility of achieving significant progress on integration in the near future. Questions about its functioning, and even its usefulness for the economic development of its members, have been raised with particular force in recent years. With differing gradations and intensities, many of the obstacles that MERCOSUR is now facing are similar to those being encountered in other integration agreements in the region.

From that vantage point, this section will first analyse the way in which the MERCOSUR integration process has evolved. It will then look at recent changes in the nature and intensity of the interdependence existing among the countries of this bloc. Finally, the main lessons to be learned from the failed attempt at macroeconomic coordination made in 2000 will be discussed.

## 1. Evolution of the integration process: from hope to disenchantment

MERCOSUR was established in 1991, and by the middle of that decade the integration process was already running into difficulties in complying with the commitments made regarding the elimination of non-tariff barriers, adoption of a common external tariff, special import regimes, a common customs code and harmonization of procedures to deal with unfair trade practices. The virtual absence of any supranational institutional structure has been particularly significant.

These difficulties went largely unnoticed so long as the two largest countries of the bloc were experiencing rapid growth. In 1997, however, there was a significant break in the trend towards the elimination of trade restrictions occurred when, in order to curb the growth of its current account deficit caused by a sharp appreciation of the exchange rate, Brazil decided to impose general import restrictions which also applied to its partners under the agreement.<sup>10</sup>

Until 1998, the significant expansion of intra-regional trade had contributed to the MERCOSUR countries' wider strategy of trade liberalization. A close look at bilateral trade between the two major partners of the bloc indicates that, despite some deepening of intra-regional trade,<sup>11</sup> the prevailing trend in both countries was an expansion of external trade as a whole based on a significant increase in total imports.

The complex progression of macroeconomic changes that have occurred in the region since 1998 has significantly altered the relative positions of the countries by affecting their intra-regional trade flows and their links with international financial markets. These changes have generated new asymmetries and have affected the nature and intensity of the interdependence existing among the countries of the bloc.

As a result of the large-scale macroeconomic disturbances seen in the past few years, the region's low growth rates, the sharp cyclical downswings in Argentina and Uruguay and the steep real devaluations of their currencies, in 2003 the per capita GDP of these two countries was more or less similar to 1980s levels. Although its economy has been somewhat less volatile, Brazil's per capita product is not very different from what it was then either. Moreover, in the three countries aggregate product, measured in dollars, was quite close to its lowest level of the last three decades. This implies that the sizes of these economies, as viewed by their neighbours, have been contracting significantly (Heymann, 2004).

The negative macroeconomic performance of the past few years has been transmitted to the countries' intra-regional trade. As a result, not only has its share of total trade fallen from 25.3% in 1998 (i.e., before the international financial crisis began to impact the region) to 11.4% in 2002, but its dollar value has also plummeted from somewhat over US\$ 20 billion in 1998 to slightly more than half that figure in 2002. These results even compare unfavourably with the performance of the other trade blocs in Latin America and the Caribbean during this time period.

Since 1998 the sharp contraction in trade flows triggered by the crisis has been asymmetrical, as the share of Brazil's total imports accounted for by imports from Argentina shrank from 14% in 1998 to 10% in 2002 and remained at around that level in 2003, whereas Argentine imports from Brazil increased from 22% to 27% of the total over the same period. In

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<sup>10</sup> As a matter of fact, in 1992, again in a context of significant exchange rate appreciation, Argentina had already had recourse to the temporary establishment of a 10% statistical duty on imports of any origin.

<sup>11</sup> Between 1990 and 1998 Argentine imports from Brazil went from 18% to 23% of the total (most of this growth took place between 1990 and 1992), while Brazilian imports from Argentina rose from 7% to 14% of the total.

other words, the share of Brazilian goods in the regional market climbed steeply, and this increase was so strong that even the abrupt real devaluation of the peso in 2002 did not reverse it.<sup>12</sup>

As a result of the deterioration in the macroeconomic situation triggered by the events occurring in the international arena from 1998 on, the weaknesses of the integration process became more apparent as the recession increased the countries' sensitivity to trade problems and caused relations between the member countries to worsen even further, undermining the countries' already debatable willingness to create even a minimal institutional framework and significantly weakening not only the integration process but also trade relations within the bloc.

As we have already discussed in the previous section, the conditions for extending integration and establishing macroeconomic cooperation mechanisms within MERCOSUR, and in Latin America in general, are comparatively less favourable than those that prevailed in the process that led to the establishment of the European Union.

Firstly, the degree of trade integration that can be attained by MERCOSUR, and for that matter the other integration schemes in Latin America is unlikely to approach the levels seen in the European Union or NAFTA for a number of reasons, including one quite simple factor: the enormous difference between the sizes of their respective markets. Second, cyclical synchronism is still quite low and even though the cycles have become more synchronized in the 1990s, this has mainly been the result of spillovers arising from financial external disturbances. Thirdly, the extreme volatility of exchange rates, added to the deep economic crises of recent years and the fact that the region has grown more slowly than the rest of the world have led to a proliferation of intra-regional trade restrictions, significantly weakening not only the integration process but also trade and political relations within the bloc.

Fourthly, in times of crisis, the political horizon is shortened to its minimum expression and the authorities' discount rate soars. It is therefore not surprising that the benefits of integration, which tend to make themselves felt over the long term, appear to be outweighed by its costs, which are evident in the short term. There are two clear manifestations of this effect. On the one hand, whenever sharp macroeconomic fluctuations in either of the two larger member of the bloc have significantly altered intra-regional trade flows in ways that have adversely affected their neighbours, sectoral pressures and the public's reaction have inevitably given rise to policy responses oriented towards counteracting those effects. These policy measures have generally been aimed at restraining imports from the country which, either because of the presence of recessionary conditions or because of a devaluation of its currency, was in a better competitive position in the regional market. Neither Argentina nor Brazil departed from this pattern. On the other hand, every time a country is in deep trouble, the partners' foreseeable reaction is to try to distance themselves from the neighbour that is experiencing difficulties. As a result, instead of creating a demand for coordination, financial interdependence has generated political conflicts within the bloc on a recurring basis.

It may be argued that if progress were made in macroeconomic coordination, intra-regional trade would be strengthened, the correlation of the countries' cycles would be increased and favourable conditions would be created for deepening their integration (Frankel and Rose, 1996). It is clear, however, that such cooperation requires a minimum set of political and economic conditions that have thus far not been seen in MERCOSUR. Moreover, in view of the scale of economic problems, the political will of the relevant parties becomes a critical factor. However, in addition to facing unfavourable economic conditions, it is clear that MERCOSUR has also exhibited weaknesses on the political front. Thus, along with these growing economic problems,

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<sup>12</sup> This phenomenon is valid not only at the aggregate level, but is also seen at the sectoral level in a wide range of activities (Heymann, 2004).

the countries' strong initial commitments have given rise to political tensions that have gradually slowed down the integration process.<sup>13</sup>

Today MERCOSUR is in trouble. The remaining exceptions to the common external tariff have prevented consolidation of the customs union and, what is more, new non-tariff barriers have appeared. Although a technical secretariat was created in 2002 and, more recently, a Commission of Permanent Representatives has been established, given the minimal nature of these bodies' budgets and the diffuse nature of their functions, the agreement's institutional structure has remained virtually non-existent. As a reflection of this setback, the share of intra-MERCOSUR exports in the total exports of the countries in this bloc declined from a peak of 25% in 1997-1998 to less than 12% in 2002-2003.

Naturally, economic issues have had a decisive impact on this process. There are three main factors involved: (1) the member countries' heavy dependence on extraregional international financing and consequently, their marked vulnerability to external shocks,<sup>14</sup> (2) the high level of macroeconomic volatility, including that of exchange-rate parities, which is caused by external volatility but also by the recurrent inconsistency of domestic macroeconomic policies; and (3) as a result of the previous factor, the poor reputation and lack of credibility of the members' economic policies. In addition to their direct effects, economic factors have also aggravated political difficulties.

The political dimension of the crisis is also evident. On this level, at least three other closely interrelated factors have been present, to a greater or lesser extent, since the beginning: (1) difficulties of accepting any degree of limitation on the countries' sovereignty in decision-making, especially on the part of the larger partners, which is the main reason for the bloc's lack of progress in institution-building; (2) ambivalence concerning the appropriateness of deepening this association in preference to other options; and (3) the lack of a firm leadership, that would be capable of leading to consensus and even compensating for asymmetries when necessary.

The situation has deteriorated to such a point that it will be impossible to reactivate MERCOSUR unless the various parties formulate a new agenda to renew the political commitment which led to its creation. This new agenda should not be an endless list of good intentions, but should rather focus on priority issues for gradual implementation through concrete actions: (1) establishing reasonable time limits for eliminating exceptions to the common external tariff and para-tariff barriers to intra-regional trade and ensuring compliance; (2) adopting common quality standards and competition rules; (3) harmonizing prudential regulation of the financial system and domestic capital markets and making progress on their integration; (4) internalizing decisions taken at the MERCOSUR level more rapidly in national legislations; (5) eliminating or harmonizing tax treatment to investment; and (6) gradually creating supranational institutions endowed with decision-making power regarding certain aspects of the integration process, such as dispute settlement or a similar.<sup>15</sup> Progress in macroeconomic coordination will only be feasible in the context of this new agenda.

As for financial spillovers, it is true that recently the MERCOSUR economies' relations with international financial markets have recently followed divergent paths. Almost three years after the default, Argentina now appears to be entering the final phase of a complex restructuring of its

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<sup>13</sup> The difficulties to deepen integration at the economic sphere have been an obstacle for strengthening the political relationship within the bloc.

<sup>14</sup> The fact that this financing is mostly denominated in dollars, even though a large part of export income and competitiveness levels are linked to changes in the euro and other strong currencies, adds an additional factor of vulnerability: exchange-rate fluctuations between major currencies. This factor played a significant role in the Brazilian devaluation of 1999 and also in the abandonment of convertibility in Argentina.

<sup>15</sup> It was agreed at the beginning of 2002 that a dispute settlement tribunal would be established for the bloc, but the nomination of its members took place only in 2004 and the tribunal has not yet begun to deal with any concrete case.

sovereign debt. Uruguay, on the other hand, achieved a reprogramming without any explicit debt reduction, and Paraguay is normalizing the arrears on its debt. Finally, Brazil has not modified the terms applying to its public debt. It is clear, however, that the financial transmission channel has not disappeared. The macroeconomic performance of Brazil, and also of Uruguay and Paraguay, will not be indifferent to the way in which the renegotiation of the Argentine debt is finally resolved. The good news coming from Brazil in terms of macroeconomic performance and growth are, without doubt, of great significance for the future macroeconomic development of MERCOSUR's countries.

## **2. The attempt at macroeconomic coordination in 2000: lessons from a failed experiment**

Although the need to coordinate the macroeconomic policies is explicitly stated in the first article of the Treaty of Asunción, which sanctioned the creation of MERCOSUR, given the relative weakness of the macroeconomic spillovers among the countries of the bloc, in the beginning the demand for coordination was not significant.

As stated earlier, the available evidence suggests that the interdependence of the MERCOSUR countries has increased over the past decade. This has not, however, resulted in any significant progress with regard to macroeconomic cooperation.

However, in 2000 an attempt to advance in this direction was made which, although overtaken by later events, set a precedent that may be useful to analyse. The ministers of finance and the presidents of the countries' central banks agreed in their first meeting of that year: (1) to establish common targets in regard to macroeconomic matters and financial services; (2) to develop performance indicators based on a common methodology; (3) to begin to publish a series of harmonized fiscal indicators on a regular basis starting in September 2000; (4) to set jointly agreed goals in relation to the fiscal deficit, the public debt and inflation in March 2001; (5) to complete and update a survey and comparative analysis of current regulations relating to financial and capital markets, including payment systems, with a view to moving towards the integration of these markets; (6) to establish a macroeconomic monitoring group made up of high-level officials whose first task would be to evaluate the consistency of the joint methodology to be used to prepare the indicators.

It proved possible to harmonize the statistics on the fiscal deficit, public debt and prices in a relatively short span of time. Then, in December 2000, the ministers of finance and the presidents of the countries' central banks met in Florianópolis, Brazil, to set targets for the fiscal deficit, public debt and inflation that would enter into force as of 2002. The target set for prices was a ceiling rate for the annual increase in the CPI of 5% until 2005 and of 4% as of 2006 (in this case on the basis of the core inflation rate of the CPI, to be estimated using a harmonized methodology). As for fiscal matters, a maximum value of 3% was set for the consolidated deficit, and a downward trend was projected for the debt/GDP ratio starting in 2005, with a maximum limit of 40% to be reached by 2010 at the latest. The discussion of goals related to the external sector, including targets for the current account and the short-term external debt, was left for the future.

At the meeting in Florianópolis it was not possible, however, to make significant progress in developing incentives for compliance with these goals. What the authorities did succeed in agreeing upon was that any country that deviated from these goals should inform the macroeconomic monitoring group of the corrective measures it would take to return to the established limits, and would have to apply those measures within one year from the date of presentation to the group. It was also agreed that the ministers of finance and the presidents of the

countries' central banks could make whatever public comments on such measures as they deemed appropriate.

Some important lessons can be learned from this experience. Firstly, it was demonstrated that it is possible to achieve results fairly quickly if the highest political decision-making levels are involved and capable technical bodies exist.

The second lesson concerns the trade-off involved in the establishment of quantitative goals. The first impression is that the levels set for inflation and the fiscal deficit were too high for the countries' economic situation at that time. However, if more ambitious goals were stipulated, they might have looked as difficult to attain. The levels that were selected called for an additional effort on the part of almost all of the countries involved, yet sought to strike a balance between the two extremes. At the same time, the fact that this experience with the establishment of macroeconomic guidelines was the first ever in the region left room to set more demanding criteria in the future. In any case, the very fact that the ministers of finance and the presidents of the countries' central banks engaged in an extensive discussion about the need to adopt these or even lower limits was an indication that the principles of macroeconomic responsibility have begun to take root in the region. Unfortunately, latter events turned the nominal goals unattainable.

A third lesson that may be learned from this first experience is of a more negative nature and concerns the rewards and penalties required to ensure compliance with the goals. In this connection the results were not very significant. This may not be a serious drawback in the initial phases of an experiment of this nature, but this issue brought to light the absence of effective mechanisms for secure compliance with the commitments assumed in this respect.

The deterioration of the Argentine economy that culminated in its collapse in late 2001 and 2002 and the worsening situation in the other countries of the bloc led to the introduction of new trade restrictions, exceptions to the common external tariff and heated disputes among member countries. As a result, this first attempt at coordination came to an abrupt end. The conclusion is clear: when there is excessive instability and high exchange-rate volatility in one of the countries concerned, especially one of the larger ones, macroeconomic cooperation becomes unworkable.

### **III. The future of macroeconomic coordination in Latin America and the Caribbean: obstacles and opportunities**

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Is it possible to increase the demand for coordination? Above all else, individual countries need to have responsible macroeconomic policies that guarantee a minimum level of stability. It is impossible to coordinate policies without reasonably stable economies. Viewed from this standpoint, the demand for stability can be considered, to a certain extent, an initial basic condition for the emergence of a demand for policy coordination between neighbour countries.

In principle, the strengthening of trade integration tends to generate greater incentives for coordination. However, regional experience shows that reinforcing such integration alone is not sufficient to increase the demand for coordination. It is therefore essential to find other incentives for this demand and, especially, for ensuring compliance with the agreements reached by the parties.

Bearing this need in mind, the following section presents an analysis of the main obstacles and opportunities for macroeconomic cooperation and coordination in Latin America. The discussion will first briefly look at the question of where to start and how to gradually shift from “softer” to “harder” forms of coordination. It will then move on to the issue of rules and incentives for coordination. The difficulties raised by exchange-rate volatility as well as the type of macroeconomic policy mix called for under exchange-rate floats, the currently prevailing regime in the region, are then examined. Finally,

the feasibility and implications of the integration of domestic financial markets, as well as the role that sub-regional stabilization funds or other financial instruments might play, are explored.

## 1. Where to begin

Given the complexity of the factors involved, macroeconomic coordination processes can only progress gradually. There is consensus about this issue in the literature, which is also supported by the European experience. Periodic meetings, exchange of information, standardization of statistics and the creation of supranational forums for policy debates are necessary procedures for gradually building the mutual trust and knowledge that are critical to avoiding the “prisoner’s dilemma” and incentives for opportunistic behaviour (Ghymers, 2001).<sup>16</sup>

Seen from this vantage point, the exchange of information can be considered as an initial way of implementing cooperation policies. Although information exchange is a “soft” form of coordination that has no direct effect on macroeconomic performance, it does enable countries to become better acquainted, improve their understanding of each other’s specificities and circumstances and achieve a common vision, which is far from being the case in Latin American integration processes. Standardizing statistics makes the exchange of information more productive. Similarly, periodic meetings of policy makers enable the relevant actors to learn more about each other and to understand each other’s problems. Such interaction also makes it possible to identify opportunities for coordination.

The integration process will be strengthened if countries set up and maintain a supranational technical forum in which they can meet regularly and systematically take on certain tasks (such as the standardization of statistics and harmonization of indicators), assess other experiences, analyse various aspects of the integration process and, when the time comes, formulate criteria and options for convergence. This forum could function informally, but its institutionalization would send out a strong signal of the importance attached to the goal of coordination. Establishing such procedures is essential for laying the foundations for coordination, but they cannot be carried out instantaneously and the results will not be immediate.

Nevertheless, if there is political will to make progress towards integration, a long-term approach should be adopted and the establishment of mutual confidence must not be taken for granted but should be seen as the first objective to be achieved through an “institutional investment” that requires the allocation of resources, concrete actions and continuity over time.

During this initial phase of “soft” coordination, it is crucial to achieve a minimum level of national macroeconomic stability (and exchange-rate stability in particular), especially for the larger members of the bloc, which thus bear the responsibility of its leadership. Only if this “de minimus” objective is achieved will more concrete coordination mechanisms appear to be an attractive way of reinforcing the credibility of the larger countries and of enabling the smaller countries to “buy credibility” for their own macroeconomic policies.

## 2. Towards a “harder” form of coordination

The main objective of the second stage of macroeconomic coordination is to sustain stability in the long term. This requires the adoption of more explicit coordination mechanisms. As suggested by the European experience, this implies establishing goals for the convergence of a set of macroeconomic variables.

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<sup>16</sup> The Macroeconomic Dialogue Network (REDIMA), an ECLAC initiative launched in 2000, has played an important role in promoting this approach, albeit with mixed results, in MERCOSUR, the Andean Community and CACM, the three Latin American sub-regional integration agreements.

The convergence of certain variables at predetermined values established by common agreement does not guarantee that these values will be maintained in the future. Furthermore, a commitment to hold the fiscal deficit below a certain level may limit a country's capacity to implement countercyclical policies. Sustaining macroeconomic stability over the long run requires institutions that encourage fiscal and monetary responsibility, nominal price flexibility and factor mobility. Some authors (Eichengreen, 1998) therefore believe that carrying out the institutional reforms needed to ensure lasting stability in each country is more important than setting convergence objectives.

However, as the experiences of some countries of the region show, institutional reforms are not irreversible either. Thus, although such reforms are surely vital, mutual commitment to the convergence of certain key variables at credible levels may enhance the policy consistency and stability of the economies involved. In addition to exchange-rate issues, which will be discussed later, the question of macroeconomic convergence raises other matters, such as the fiscal situation, inflation and, given the region's external vulnerability, its exposure to changes in international market conditions.

Fiscal convergence is necessary to prevent any one country's lack of discipline from damaging its own financial market, increasing its country risk and, via contagion effects, impairing the flow of capital to the region as a whole. Given its intertemporal dimension, the effort to achieve convergence should include the fiscal deficit and the public debt, measured as proportions of GDP. To avoid curtailing the possibility of implementing countercyclical policies, the deficit that should be taken into account for these purposes is the structural deficit (adjusted for cyclical variations). In the light of the region's track record in such matters and its Governments lesser borrowing capacity, the limit for the structural deficit should be lower than the level set in Europe. For countries that are initially above the maximum limit, the adjustment period allowed to align themselves with the target figure should be reasonably brief. A low deficit does not, however, guarantee a government's solvency if its debt is too high, hence the need to place a ceiling on the public debt. Since satisfying this condition may not be feasible immediately, the adjustment period allowed for in this case will have to be longer than the period set for convergence on the deficit target.

Given that high inflation also tends to be more volatile, the first objective of setting an inflation target is to reduce uncertainty. In floating exchange-rate regimes, inflation targets also help to curb volatility in the nominal exchange rate.

The external vulnerability of the region is precisely what makes it necessary for macroeconomic coordination to include targets for the external sector, as suggested by Lavagna and Giambiagi (2000), Zahler (2001) and others. These targets would be the current account deficit and short-term external debt. Fiscal policy may not be sufficient to achieve these objectives in the face of large capital flows. In care of massive capital inflows, for instance, it might be necessary to impose some kind of restrictions on short-term capital movements.

### **3. Rules and incentives for coordination**

Establishing explicit macroeconomic coordination mechanisms —through, for example, the adoption of convergence targets— will only be useful if those targets are feasible and if compliance with the relevant agreements can be somewhat enforced. The need to ensure that targets are feasible raises the question of just how strict the rules should be, while the need to enforce compliance is linked to the issue of incentives.

Adopting rules that are too strict could make compliance excessively costly or simply impossible under certain circumstances; knowledge is never complete, and there is no way of predicting all eventualities. Thus, a certain degree of policy flexibility has to be maintained in order to deal with unexpected critical situations. Excessive flexibility, however, could undermine the credibility of the commitments undertaken.

Striking the right balance is not simple in any case, but especially not for the countries of the region. On the one hand, adopting policies based on strict rules seems to be the only option for Governments whose good reputations are often in doubt. On the other hand, many such policies in the region have failed to take account of the intrinsic vulnerability of these economies and have therefore been unsuccessful because policy makers lack enough maneuvering room to respond to unexpected shocks. The collapse of the convertibility regime in Argentina is the most recent example of this type of situation.

In any event, integration agreements aimed at furthering macroeconomic coordination in the region can clearly afford to grant little leeway in terms of establishing common targets. This being the case, it becomes vital to determine which alternatives could be used to stimulate cooperation.

The high costs of irresponsible policies in the current context of economic globalization already constitute an incentive for macroeconomic discipline, which is also encouraged by the conditionality of agreements with IMF and other multilateral credit agencies.<sup>6</sup> To a certain extent, these factors act implicitly as exogenous coordination variables.

More explicit use could be made of incentives at the international level in promoting macroeconomic coordination. For instance, multilateral financial institutions could play an important role if regional agreements were taken into account in programme design.<sup>7</sup> What is more, convergence targets would be much more influential if the criteria used for that purpose were agreed upon with those same institutions. Similarly, the rules established by the Bank of International Settlements for the prudential regulation of national financial systems could be adapted and used as a basis for regional financial integration agreements. It would be a mistake to ignore external incentives because of potential political susceptibilities, especially when internal incentives are weak.

Indeed, the European experience shows that the most powerful coordination incentive, especially for smaller countries, is the enhanced reputation associated with achieving convergence targets. Unfortunately, this incentive may not apply in the region for some time. For economic agents, the main sign that a government is implementing its macroeconomic policy responsibly is compliance with agreements concluded with IMF and other multilateral financial institutions, and this does not seem about to change any time soon.

The gains afforded by a reduction in exchange-rate volatility vis-à-vis major trading partners are another incentive for coordination. Of course, the importance of this factor will increase in proportion to the volume of intra-regional trade. Although this factor is present in the integration agreements existing in Latin America and the Caribbean, as it has been discussed in section I, it clearly cannot come to be as important as it has been in the European experience (Ghymers, 2000).<sup>17</sup>

Another incentive that has also been considered in Europe is the threat of direct sanctions (either financial or of other sorts). For this kind of incentive to be effective, non-compliance must

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<sup>6</sup> In MERCOSUR, for instance, all countries have concluded agreements with the IMF in recent years.

<sup>7</sup> The Brazilian devaluation of 1999, which was supported by IMF, and its impact on neighbouring countries provide a good example of the negative externalities that IMF could help to mitigate if its recommendations were to take account of regional interdependency.

<sup>17</sup> In retrospect, however, it can be seen that direct sanctions have not played such an important role in the European Union. In fact, in recent years instances of non-compliance by some countries of the bloc have gone unpunished. It is quite clear that the reason for this is that the countries concerned, such as Germany and France, are among the most important ones in the Union.

imply possible exclusion from the agreement. When the number of countries involved is too small or their economic size is too different, it is extremely unlikely that direct sanctions can be enforced. In Latin America this is clearly the case of MERCOSUR: the exclusion of Uruguay or Paraguay would have enormous costs for the integration project, while the departure of Brazil or Argentina would signify the end of the agreement altogether. In any case, direct sanctions do not seem easy to impose in the other Latin American sub-regional agreements as well.

Although moral sanctions are “softer” than financial penalties, they are also an incentive worth considering. In principle, the fact that their cost is tolerable but not negligible makes moral sanctions viable and capable of making some contribution to the objective of coordination. One possibility is to set up an independent assessment committee, made up of regional and international experts, tasked with periodically checking compliance with agreements and making recommendations where appropriate. Logic would dictate that the assessments should be public in order to have some effect. However, the fact that many of the region’s countries have agreements with IMF suggests that, under current conditions, their effect would not be very significant.

Following this brief analysis, it does not seem too bold to conclude that the above-mentioned incentives are not enough to make macroeconomic cooperation an attractive option for existing sub-regional integration agreements in Latin America and the Caribbean. This issue will be reconsidered later, following a discussion of the available alternatives for limiting exchange-rate volatility and an analysis of the viability of sub-regional funds in that context.

#### **4. Options for limiting exchange-rate volatility**

As discussed in detail in Machinea (2003b), it is impossible to deepen an integration process without curtailing variations in the exchange rates of the countries involved, given their direct influence on trade and the political economy of integration.

In a significant sample of developed and developing countries, Fernández-Arias, Panizza and Stein (2002) observed that the negative effects of exchange-rate mismatches tend to be greater in relation to other countries within the region than with the rest of the world; this is probably attributable to the part played by “regional goods”, i.e., goods that, for different reasons, are mainly traded within the region where they are produced.

In principle, it is to be expected that, as a result of increased uncertainty, both the level of the exchange rate and exchange-rate fluctuations would have adverse effects on foreign trade. This is especially true if there is high volatility and no adequate hedging instruments to cover risk, as is common in less developed countries. This hypothesis is supported by several empirical studies (Devlin *et al.*, 2001; Estevadeordal *et al.*, 2001; and Giordano and Monteagudo, 2002).

In the specific case of MERCOSUR, many applied studies have found that variations in the exchange rate do have some effect on intra-regional trade (Heymann and Navajas, 1991 and 1998).

Significant variations in exchange rates also affect the political economy of the process. When the exchange rate is devalued in a given country (especially a large country within the region), the appreciation of the other countries’ exchange rates shifts the internal balance of forces in favour of anti-integration sectors, generates more protectionist pressures and reduces Governments’ capacity for cooperation. The negative reactions are much more dramatic during a regional recession than during a period of growth.

There are various causes of fluctuations in the exchange rate. At the national level, monetary and fiscal excesses are obviously a major determining factor. In a context of high capital mobility, the effects mainly manifest themselves in terms of public and external debt (especially short-term

debt). Structural external disturbances affect the real equilibrium exchange rate as well. When such disturbances are asymmetrical, i.e., when they affect the various countries involved in the integration process in differing ways, then there is a change in the real equilibrium exchange rates among those countries.

Domestic fundamentals and external disturbances are not the only causes of exchange-rate variability in the short and long terms, however. Under conditions of high capital mobility, the exchange market basically behaves like any other financial assets market. As pointed out by Frankel and Rose (1995), asymmetrical access to relevant information, imperfect transmission of information between market participants and their heterogeneous nature may give rise to herd behaviour or bandwagon effects that could trigger sharp appreciations or devaluations in nominal and real exchange rates.

Lastly, the implications of having coexisting different exchange-rate regimes must also be considered. It is not particularly controversial to state that nominal wages and prices are not completely flexible, that purchasing power parities cannot be accurately determined and that nominal devaluations account, in large part, for the performance of the real exchange rate (Froot and Rogoff, 1995; Obstfeld, 2000). The exchange-rate regime is therefore a relevant factor in accounting for the real exchange rate, and the coexistence of different systems affects real exchange-rate variations across countries. This manifests itself when countries from a given region experience a symmetrical external disturbance that changes the equilibrium exchange rate of all the countries in relation to the rest of the world without altering the equilibrium parity among them.

For instance, let us consider what happens when two countries with different exchange-rate systems are affected in a similar way by an external negative shock, such as an abrupt reversal in capital flows or a deterioration in the terms of trade. In a country with a floating exchange-rate regime, the required increase in the exchange rate will occur fairly quickly through the rise in the nominal exchange rate.<sup>18</sup> In a country with a fixed exchange rate, on the other hand, the adjustment will require a deflation of prices and wages, and it may take a long time if bringing down nominal prices proves difficult. As a result, the currency of the country with the fixed exchange rate will tend to appreciate in relation to the country with the floating regime during the transition period. The same rationale applies (but in the opposite direction) when an external shock requires a reduction in the equilibrium exchange rate of both countries. In the latter case, however, the bilateral exchange rate would be less affected, given that nominal prices are presumably more flexible on the rise than when falling.

Regardless of its causes, exchange rate volatility is a formidable barrier to moving forward with integration. The question is how to control it. Monetary union is obviously the most expedient means since, by definition, it eliminates exchange rate variations between the countries involved. For economic and political reasons, however, this option is far from feasible within the sub-regional integration agreements in Latin America and the Caribbean.

With monetary union ruled out, at least for the foreseeable future, it is vital to consider alternative options. As previously stated, the coexistence of different exchange-rate systems is a contributing factor to large exchange-rate variations resulting from common external disturbances. In fact, floating regimes are prevalent in most Latin American countries at present.

In this sense, MERCOSUR has recently taken an important step in the right direction: following the collapse of the convertibility regime in Argentina, that country and Uruguay both managed to stabilize by adopting a flexible exchange-rate regime similar to the one that has been in force in Brazil since 1999.

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<sup>18</sup> The adjustment trajectory may even involve an initial increase higher than that needed to reach equilibrium (Dornbusch, 1976).

Given the fact that international financial and commodities markets continue to be highly unstable, the currency float prevailing in the region seems to be the most advisable option. In this respect, Eichengreen and Taylor (2002) showed that the variability of exchange rates is lessened when countries adopt floating exchange-rate systems and steer monetary policy towards a particular inflation rate (i.e., inflation targeting). The explanation behind it is that, in most cases, countries with fixed exchange rates face rather abrupt exchange-rate adjustments when they abandon exchange-rate parity.

However, as noted by Calvo and Reinhart (2002), the difficulties associated with flexible exchange rates should not be underestimated. On the one hand, it is true that a float facilitates adjustments in the equilibrium rate when circumstances call for it. On the other hand, as previously mentioned, it is equally true that the fluctuations permitted by this regime, particularly in the context of heightened capital mobility, are not always due to “fundamental” reasons, at least in the short and medium terms. In principle, then, the advantage of adjusting the equilibrium real exchange rate more quickly comes at the cost of greater uncertainty.

Besides, in countries where dollar-denominated debt is rather widespread, whether in the public or private sector, the problems that arise with abrupt fluctuations in the exchange rate are particularly significant due to their effects on financial assets. If dollarization is so widespread that it encompasses bank claims and, above all, if deposits are dollarized as well, then the situation becomes even more complicated: the likelihood that an unforeseen devaluation would trigger a currency and financial crisis and prompt a drastic slowdown in production levels dramatically increases (Rozenwurcel, 2003).

It is true that having a highly dollarized economy is, in large measure, the result of a very thin market for local-currency debt issues (Eichengreen, Hausmann and Panizza, 2002), and this situation does not seem easily reversible in the short term. It is, however, possible, at least, to adopt financial policies that do not promote dollarization and, although rather gradually, tend to discourage it. In the first place, to minimize the risks of currency mismatches it seems advisable to set higher bank liquidity requirements for dollar-denominated deposits and to increase provisions for dollar-denominated loans granted for non-tradable activities. In the second place, it seems appropriate to permit the use of medium- and long-term inflation-indexed financial contracts in order to discourage the practice of denominating contracts in dollars. The recent, albeit incipient, trend in monetary aggregates in Argentina suggests that, even in fairly dollarized economies, a gradual reversal of the process may still be possible.

No matter what, in order for a floating regime to work reasonably well, monetary policy and, above all, the reputation of the authorities responsible for its implementation are crucial. This gives rise to a delicate trade-off, particularly in highly dollarized economies. Restoring credibility and achieving a fair degree of monetary autonomy is inevitably a gradual process whose benefits will only become apparent in the medium and long terms. In the short run, on the other hand, the process may entail high interest rates, slower monetization and sluggish economic growth.

In addition to the challenges posed by a floating regime in reducing the variability of the exchange rate in each country, its implications for the rest of the region must also be considered. As previously stated, a floating exchange-rate system tends to facilitate exchange-rate stability among the countries of a given region when all of the countries are affected similarly by external shocks. However, exchange-rate flexibility increases variability when disturbances, whether external or internal, are asymmetrical.

A paper by Fanelli and González Rozada (2003), in which the cyclical co-movements of Argentina, Brazil and Uruguay are analysed, offers two important findings in this connection. Although the paper focuses on MERCOSUR, its application in the rest of the region is more than

plausible. The first finding is that common external shocks arising from volatility in international financial markets are an important factor in explaining the common component shared by the economic cycles of the three countries and that the spillovers among them are considerable. The second finding, however, is that the idiosyncratic component accounts for most of the cycle of each country (approximately 85%), leaving only 15% to be explained by the common component.<sup>19</sup>

The large size of the idiosyncratic component present in the cycles of the members of the bloc reveal significant differences in their respective production structures, in addition to the existence of marked asymmetries in the shocks they are exposed to, as well as a lack of policy coordination. An immediate consequence of this is that, despite the fact they have similar exchange-rate regimes, significant sources of exchange-rate volatility persist among MERCOSUR partners.

A second conclusion to be drawn, which holds true for MERCOSUR and other regional agreements alike, is that if countries belonging to a trading bloc decide to coordinate their macroeconomic policies and adopt common macroeconomic targets, this could certainly help reduce exchange-rate fluctuations, even though the exchange rate itself may not be a target. In fact, policy differences among the various countries are responsible for much of the lack of synchronization in their economic cycles. Therefore, coordinating macroeconomic policy would not only deactivate an important source of instability in each country, but would also eliminate one of the mechanisms that amplifies external shocks.

## **5. Exchange rate volatility and inflation: How should monetary policy be managed under a floating regime?**

Given the fact that floating regimes are inherently unstable, it is evident that if exchange-rate volatility is to be reduced, a managed float is preferable to a free float. Nevertheless, in order to manage the float, the authorities must intervene in the foreign exchange market, and in order for them to do this, sufficient reserves must be available and monetary effects must not put pressure on prices.

In truth, central bank interventions can have different objectives. At present, China and other Asian countries, for example, have aimed their exchange rate policies at maintaining a devalued real exchange rate as part of their development strategy (Dooley, Fokerts-Landau and Garber, 2003 and 2004). The pros and cons of this approach fall outside the scope of this paper. Nonetheless, according to Rodrik (2003), one of the few stylized facts that can be deduced from a careful analysis of concrete experiences of economic development is that policy prescriptions “travel” poorly from one country to the next. In particular, considering the economic conditions needed to make a policy of this nature viable, in terms of both reserve accumulation and inflation, it seems rather straightforward to perceive that the feasibility of such an alternative in most Latin American countries is very far from materializing.

Therefore, the main aim of exchange-rate policies in the region should be to smooth out short-term swings, which generate “noise” that engenders uncertainty and has a negative effect on expectations and economic performance. Any intervention on the part of monetary authorities, on the other hand, must not hinder adjustments in the real exchange rate to accommodate disturbances that undermine its long-term equilibrium.

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<sup>19</sup> A common external shock could have different impact on the partners as a result of idiosyncratic reasons related to the economic and financial structure.

The announcement of the introduction of a currency band is the most common type of intervention. The narrower the band is, the closer it is to a fixed exchange-rate regime and the greater the volume of reserves needed. Hence, taking into consideration the significance of capital flows, their high volatility and the constraints faced by the countries in the region in terms of reserves, if this type of exchange-rate rule is adopted, the band must not be too narrow. Furthermore, to ensure that the real exchange rate can adjust itself, albeit more gradually, currency bands can be set based on a moving average of the market rate over a certain period.<sup>20</sup>

A second problem with this mechanism is that, as seen in fairly recent times, in many countries of the region any exchange-rate rule will face serious problems of credibility. In such cases, a managed float cannot take the form of a commitment. Although this does not necessarily mean that the aim of reducing volatility should be ruled out, the task becomes more complex: the actual implementation of exchange-rate policy must implicitly be the source of the signals sent to shape the expectations of market participants.

At any rate, a managed float entails a trade-off in terms of the objectives of monetary policy, as monetary effects from exchange-rate interventions can have undesired consequences with respect to inflation. This issue cannot be taken lightly in Latin America, where many countries have a long history of inflation. Hence, as noted earlier, under a floating exchange rate regime ensuring that monetary authorities have a solid reputation is of critical importance.

This could lead to the assumption that monetary policy should be focused exclusively on achieving the inflation target and that the exchange rate should float freely. This would be an extreme case of inflation targeting, where the reaction function of the policy maker (the so-called Taylor rule) entirely excludes the aim of stabilizing the exchange market.

The issue warrants discussion, particularly because inflation targeting seems to be becoming commonplace in the region. In the first place, under certain circumstances an overly rigid implementation of this approach can be counterproductive. As shown by Blanchard (2004), the more heavily indebted a government is, the larger the share of that debt that is denominated in foreign currencies and the higher its risk premium, the greater the likelihood that an interest-rate hike will generate inflationary pressures rather than helping to stabilize prices. This can occur when the interest-rate hike increases the risk of default; if this happens, then the consequent deterioration of the capital account will trigger a devaluation of the exchange rate and will drive prices up.<sup>21</sup> The second point to be made here refers to the desirability of maintaining some degree of flexibility in applying the rule of inflation targeting. One way or another, monetary policy cannot completely disregard what is happening with the level of economic activity and the exchange rate. This is possible if a reasonably sized inflation band is adopted.<sup>22</sup> Certainly, the extent of flexibility will depend on the specific situation of each country: the lower reserves are, the less credible the monetary authority is and the less sustainable is the fiscal stance, then the less leeway there will be.

Thirdly, there is no need to discuss at length the inflationary impact of nominal devaluations. Although a tendency towards nominal appreciation, on the other hand, can help to temporarily slow down the rise in prices, allowing the nominal exchange rate to appreciate when there are no “fundamental” reasons to do so is counterproductive not only in terms of the economy’s competitiveness, but also as regards the future trend of inflation if it sets the stage for a subsequent

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<sup>20</sup> In December 1999, Colombia adopted this rule and uses it still today. The currency band width is calculated on a daily basis: the upper limit of the band is 4% above and the lower, 4% below the crawling average in the past 20 days according to the market rate. Colombia’s central bank, Banco de la República, has undertaken to purchase or sell up to US\$ 180 million in order to keep the nominal exchange rate within the band. The quantity of reserves used so far amounts to 3.6% of the country’s international reserves to date (Clavijo, 2003 and 2004). Mexico used a similar rule between 1995 and 2001.

<sup>21</sup> In the same paper, Blanchard asserts that this is precisely what happened in Brazil during the 2002 crisis.

<sup>22</sup> In practice, none of the countries that use inflation targeting entirely disregard what occurs in the exchange market, and a growing number of them use a band as their inflation target rather than a specific rate.

corrective devaluation. In this case, reducing the volatility of the foreign exchange market will help the authorities meet the inflation target.

Fourthly, maintaining certain “rumble” value of the exchange rate may require “some talking” from the central bankers.

Lastly, it should be emphasized that the monetary effects of intervention in the foreign exchange market can be at least partially offset as long as they remain within a certain range. The monetary authority can use two tools to ensure this. Sterilization via open-market operations using government securities or paper issued by the central bank is the most traditional method. Raising bank reserve requirements when growth in money supply spurred by currency operations compromises the implementation of monetary policy, or lowering them when exchange-rate interventions move in the opposite direction, is a second possibility.<sup>23</sup>

Sterilization via open-market operations tends to reduce the borrowing capacity of the private sector. Fiscal discipline is therefore key for its execution. In fact, the possibility for such operations increases if the government generates a fiscal surplus and reduces its debt during economic booms, as Chile did during much of the 1990s.

Naturally, the effectiveness of such tools has its limits. On the one hand, reserve requirements should not be constantly changing. On the other, sterilization via the issuance of government bonds has a cost as the interest rate paid out is higher than the rate obtained on reserves. Furthermore, its efficiency depends on the depth of the government bond market and on the scale of the imbalances that the authorities are trying to offset. The shallower the domestic debt market, the higher the quasi-fiscal cost of open-market operations and the more quickly the usefulness of such operations will disappear.

Therefore, as long as financial deepening continues to be very limited and dollarization rather widespread, as is the case in many Latin American countries, managed floats may cease to be feasible when strong external shocks occur. What should be done in such extreme cases? One possibility is to let the exchange rate float freely. If the real parity is at a reasonable level and if fiscal and monetary policies are managed responsibly, regulating short-term capital movements seems to be a better option.

Despite the fact that restrictions on capital flows continue to be a subject of heated debate, considering the high volatility exhibited by globalized financial markets, there are good theoretical reasons for using them (Rodrik, 2003; Rogoff, 2002; Ffrench-Davis and Larraín, 2003; Ocampo and Chiappe, 2003; DeLong, 2004). Moreover, empirical evidence suggests that, although they have costs and do not work perfectly, when implemented sensibly, such restrictions can be efficient in moderating flows, modifying their composition and smoothing out swings in the exchange rate (Ffrench-Davis and Villar, 2005).

Until now, the motivation behind regional integration has not explicitly figured in this discussion on monetary and exchange-rate policy under a floating regime. However, it is evident that even if all members of a regional agreement adopt a floating exchange rate, the differences in their monetary and exchange-rate policies may be a serious hindrance to any reduction in the volatility of exchange rates in the region.

Therefore, if the objective of furthering integration is to be maintained, it is very important—in addition to setting common macroeconomic and particularly inflation targets—for the countries to gradually make progress on the coordination of their exchange-rate policies, starting with the definition of common criteria for intervention, then moving on to the harmonization of

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<sup>23</sup> Likewise, higher backing requirements for dollar-denominated bank credits, while discouraging the external funds of banks, could help decrease the number of interventions needed to stabilize the foreign exchange market.

regulations pertaining to capital movements and, possibly, the adoption of a system of currency bands. Of course, in an area as sensitive as this, major advances cannot be expected to occur quickly. However, in principle the countries could agree on a mechanism for consulting with one another concerning possible courses of action to follow in extreme situations. This exercise would not imply any concrete commitments for action, but it would be the starting point for the joint learning process that is needed in order to propose more ambitious objectives later on.

## **6. Integration of regional financial systems and macroeconomic stability**<sup>24</sup>

The existing sub-regional agreements in Latin America do not, so far, provide any major incentives for financial integration. On the contrary, thus far the only source of externalities operating between financial systems in the region has been contagion effects. Under certain conditions, however, the regional integration of domestic financial systems can generate positive synergies among member countries and can help to reduce macroeconomic volatility.

In fact, the vulnerability of the countries' financial systems is one of the main sources of macroeconomic instability in the region. Raising and harmonizing the regulatory standards of the members' financial markets in accordance with international best practices can therefore be seen as a means of complementing macroeconomic coordination in relation to exchange-rate, monetary and fiscal matters as part of a concerted effort to reduce volatility and deepen regional integration.<sup>25</sup>

The harmonization of financial regulations is a good starting point for the financial integration process because it does not involve any weakening of the national policy makers' and institutions' independence. Thus, it will not be perceived as a vehicle for contagion among the financial systems of each country.

The contribution that financial harmonization can make to macroeconomic stability is not, however, the only reason for promoting the integration of financial systems at the regional level. In time, this form of integration can also help to reduce transaction costs and further the development of a regional capital market. In order to this to occur, the harmonization of prudential regulations would have to be extended, during a second stage, to include convergence among other financial institutions. In particular, consideration should be given to the adoption of similar mechanisms for deposit insurance and the creation of a region-wide payments system.

This step, unlike the harmonization of regulations, can indeed have implications in terms of the exposure to the risk of contagion, since it would increase the interdependence of the countries' financial systems. The timing of the announcement of such measures is therefore just as important as their proper implementation.

## **7. Stabilization funds and other sub-regional financial agreements**

There are very good reasons why the majority of the countries in the region have recently adopted floating exchange-rate regimes. However, as it has been mentioned in section III.4, the inherent volatility of the exchange rate does not disappear even when the fundamentals are kept in order and monetary policy is managed responsibly. The difficulties that this poses on the domestic level and for regional integration processes are all the greater because the countries have a very

<sup>24</sup> This subject is discussed in depth in Machinea and Rappoport (2003).

<sup>25</sup> The fragility of these domestic financial systems and the magnitude of the shocks to which they are exposed would seem to indicate that the regulations to be adopted should be stricter than those required to meet the Basel standards. Factors that are not addressed by those standards, such as currency mismatches or public debt risk, should also be taken into account, however. The regulations to be established should therefore be based on modified "Basel plus" standards.

limited capacity to intervene in order to curb the instability of foreign exchange markets. Macro-level coordination may contribute to achieving this objective, but is not sufficient in itself.

The European experience of the last few decades shows that various mechanisms for regional cooperation in the exchange-rate and financial sphere have played a very important role in stabilizing parities within the region (Giovanni and Mayer, 1992 and Eichengreen and Ghironi, 1996). Of course, in the European case there was another fundamental element which is lacking in the region, since in Europe some of the countries had convertible currencies and could thus intervene on exchange markets with their own currencies.<sup>26</sup>

The idea of creating supranational funds to contribute to regional stability has begun to gather momentum in Latin America as a result of the severe crises that erupted on international financial markets in the 1990s (Ocampo, 1999; Mistry, 1999; Agosin, 2001; and Machinea, 2003a).

These crises revealed shortcomings and delays in the provision of assistance by the International Monetary Fund (IMF) to emerging economies, which are attributable only in part to the fact that resources and capacities were overwhelmed by the scale of the events in question. The other reasons have been the large discussions related to conditionality clauses and, in some cases, to the attitude of “wait and see” the results of policies. If this diagnosis is correct, regional and sub-regional funds that would act as lenders “of first resort” could be an effective complement to the role of the Fund as a lender of last resort (Mistry, 1999).

In fact, a sub-regional stabilization fund has already been operating in Latin America. For quite some time. The Latin American Reserve Fund (*Fondo Latinoamericano de Reservas*, FLAR) was created in 1978 by the countries of the Andean Community. More recently, in 1991, Costa Rica also joined the Fund. The main purpose of FLAR is to provide short term financing aimed at crisis prevention and management. The country members eligible for loans are its only shareholders and the Fund’s assistance is basically channeled through four credit lines: (1) loans to help cover balance of payment imbalances are granted for a maximum period of 4 years and are conditioned to macroeconomic performance, (2) funds for public debt restructuring are also available for a maximum period of 4 years, but in this case co-financing from other multilateral institutions is required, (3) credit to Central Banks for liquidity purposes up to twelve months and, (4) contingency financing to face transitory BOP problems due to external shocks, on a non renewable basis and up to six months. FLAR’S financing played an important countercyclical role in the recent period of high volatility in the international environment: its loans peaked in 1996 and 1999, helping the Andean countries’ GDP growth to recover from two severe external shocks quite rapidly.

From the point of view of the sub-regional integration processes, the possibility that the countries have a mechanism capable of cushioning the effects of external shocks and change investors perceptions before contagion spreads to their neighbours would be very helpful. In addition to facilitating the adjustment of the country or countries concerned, it would minimize the defensive reactions of partner countries in their attempts to distance themselves from their neighbour in problems.

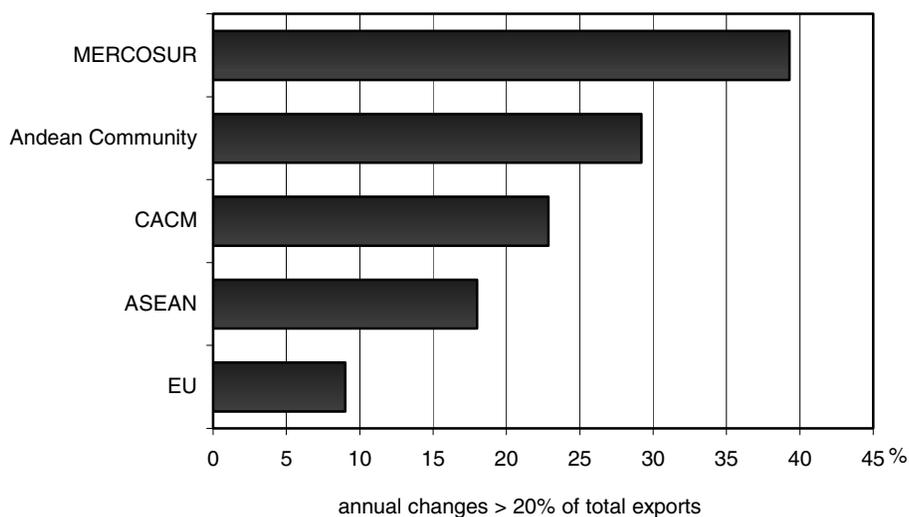
Moreover, sub-regional funds could serve as an incentive for macroeconomic coordination. This would be the case if compliance with the agreed goals for convergence be required in order for requesting countries to receive assistance from the fund.

The relevance of these sub-regional funds will of course depend on the volume of resources available. Thus, unless support is forthcoming from developed countries, it seems improbable that funds of this type could serve to soften the impact of simultaneous abrupt reversals in capital flows, when their scale is significant and trigger contagion effects in neighbour countries of the region (see figures 15 and 16).

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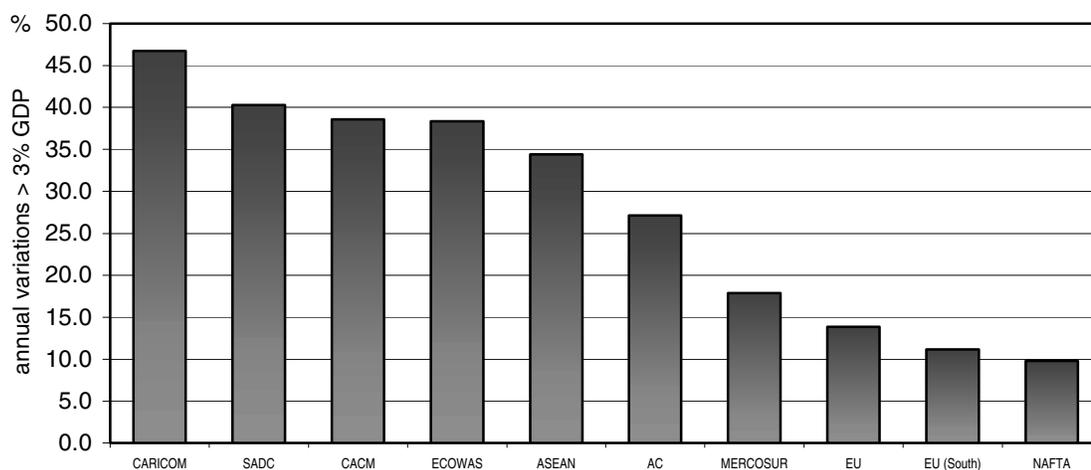
<sup>26</sup> The best-known case is Germany’s intervention to defend the value of the franc in 1992.

**Figure 15**  
**PRIVATE CAPITAL FLOWS VOLATILITY (1971-2000)**  
 (% of Annual changes greater than 20% of exports)



**Source:** Machinea, José Luis (2003a), "La inestabilidad cambiaria en el MERCOSUR: Causas, problemas y posibles soluciones", BID/INTAL.

**Figure 16**  
**FINANCIAL VOLATILITY. MAGNITUDE OF CAPITAL FLOWS AS % OF GDP (1972-1999)**  
 (Percentage of changes in capital flows greater than 3% of GDP)

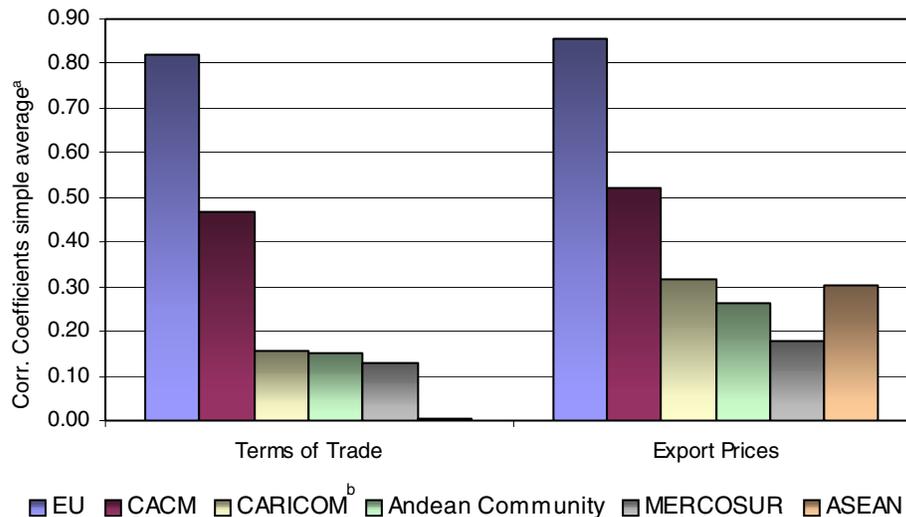


**Source:** Own estimations based on *World Development Indicators 2001* (World Bank, 2001) and *World Economic Outlook* (IMF, 2001).

On the other hand, as variations in the terms of trade do not show any significant correlation and the magnitude of their impact is much less than that of financial disturbances, these funds could be quite useful in the case of this type of shock even if resources come only from contributions of the countries of the region (see figures 17, 18 and 19).

Figure 17

**REAL SHOCKS: TERMS OF TRADE AND EXPORT PRICES CORRELATION**



**Source:** Machinea, José Luis (2003a), “La inestabilidad cambiaria en el MERCOSUR: Causas, problemas y posibles soluciones”, BID/INTAL.

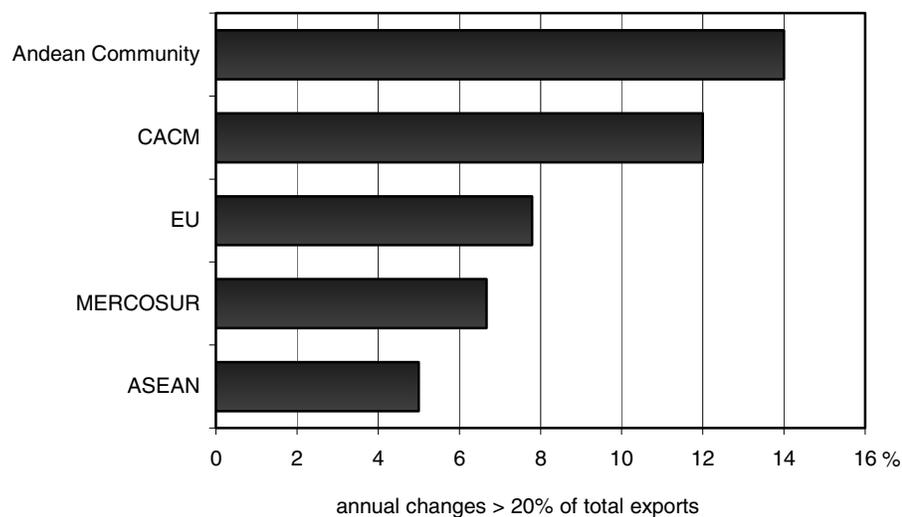
<sup>a</sup> Correlation coefficients are expressed as the simple average of the correlation coefficients among the rates of growth of each country member.

<sup>b</sup> Due to data unavailability only four countries were included for CARICOM: Guyana, Haiti, Jamaica and Trinidad and Tobago, that represent 63% of regional GDP.

Figure 18

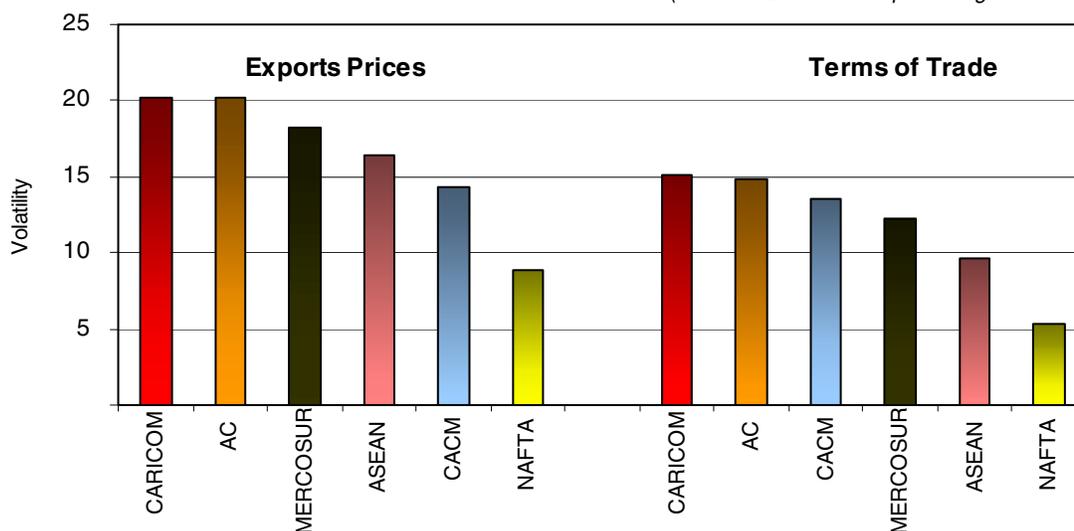
**TERMS OF TRADE VOLATILITY (1971-2000)**

(As percentage of total exports)



**Source:** Machinea, José Luis (2003a), “La inestabilidad cambiaria en el MERCOSUR: Causas, problemas y posibles soluciones”, BID/INTAL.

**Figure 19**  
**REAL VOLATILITY OF TERMS OF TRADE AND EXPORT PRICES (1971-2000)**  
*(Standard Deviation as percentage of Mean)*



**Source:** Machinea, José Luis (2003a), "La inestabilidad cambiaria en el MERCOSUR: Causas, problemas y posibles soluciones", BID/INTAL.

As analysed in Machinea (2003a) with regard to MERCOSUR, during the 1990s the maximum impact of fluctuations in the terms of trade was on the order of US\$ 6.3 billion in 1999 and for the rest of the decade never reached even one third of that figure. In contrast, capital outflows amounted to almost US\$ 16 billion in 1999 and exceeded US\$ 10 billion two years previously. Accordingly, a regional fund on the order of US\$ 5 billion (which is just over 10% of the total reserves of the countries in the region as of 2000) would be able to offset almost 80% of annual losses owing to variations in the terms of trade on the scale of the worst fluctuations experienced in the 1990s, but its coverage would be scarcely more than 30% of annual capital outflows similar to the highest levels recorded in that decade.<sup>27</sup>

In addition to the level of resources, the creation of sub-regional funds poses a second problem: the differences in size of the countries that might be involved. In fact, the creation of a fund exclusively for MERCOSUR, for example, would seem very difficult to implement. Taking into account the fact that Brazil generates approximately 65% of the region's GDP and 60% of its foreign trade, it would be almost impossible for a fund established solely by the current members to help that country to cushion adverse shocks.

The problem of size asymmetries becomes less severe as the number of countries participating in such a fund rises.<sup>28</sup> The drawback is that a fund formed by member countries of different sub-regional blocs would make its potential role as an incentive for macroeconomic coordination within each bloc much more difficult to implement.

Of course, sub-regional cooperation in the financial sphere need not be restricted to stabilization mechanisms. Development banking is another relevant area where sub-regional

<sup>27</sup> It is therefore clear that regional funds could contribute to stabilization but would not eliminate the need to review the role of multilateral financial agencies. In particular, the possibility of offsetting at least part of the effects of capital-flow volatility would require, as a minimum, the reformulation by the Fund of the Compensatory Financing Facility to transform it into an automatic disbursement line.

<sup>28</sup> In Agosin (2001). For example, it is proposed that all the countries of South America establish a joint fund.

initiatives can effectively complement the role played by the World Bank and the IADB. This can be the case, in particular, if they specialize in medium and long term funding for infrastructure and productive sector projects, especially considering that the current priorities of the multilateral lending institutions are mainly in the field of structural reforms and the social sectors.

In fact, three sub-regional development banks created in the sixties are still active in Latin America: the Central American Bank for Economic Integration (CABEI), created in 1961, the Andean Development Bank (CAF or *Corporación Andina de Fomento*), created in 1968, and the Caribbean Development Bank (CDB), created in 1969. To have a rough idea of the relevance of the lending activity of sub-regional development banks it is enough to consider the following figures for the period 2000-2002. In the Andean Community the loans approved by CAF represented on average 1.0% of GDP, while those approved by the WB and IADB together represented 0.7%. In the Central American Common Market, the averages were 0.7% for CABEI and 1.1% for the multilateral institutions. Finally, in CARICOM, they were 0.7% and 1.4% for CDB and the multilaterals respectively (see Titelman and Uthoff, 2004).

The rationale for sub-regional development banks can be justified on several grounds. Firstly, they can be better prepared than the multilateral institutions to take into account certain specific traits of the borrowing countries and to offer an array of financial instruments more appropriate to their needs. Secondly, the fact that country members eligible for loans be the main shareholders imply that they have larger voting rights than in the multilateral institutions. Thirdly, sub-regional institutions can improve access to international financial markets because they can get better risk ratings than individual countries.<sup>29</sup> They can be a powerful instrument in promoting intra-regional trade and furthering financial integration, therefore helping to deepen and consolidate the integration process as a whole.

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<sup>29</sup> In fact, the three sub-regional development banks have capital adequacy ratios that largely exceed the Basel requirements, are ranked as “investment grade”, and have better risk ratings than the individual countries in each sub-region.

## IV. Final considerations

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The progress made in the area of macroeconomic cooperation and coordination in Latin America has so far been rather poor. From an economic viewpoint, the lack of synchronization among cycles weakens demand for coordination. One of the main causes of this, together with the differences between the production structures of the various economies, is the low level of trade interdependence. In fact, the relative scale of intra-regional trade in the existing integration schemes is substantially lower than in other economic blocs, and there is little room to expect that it will increase very much in the future, given the limited size of the markets involved.

Moreover, as financial integration is virtually nil, the reciprocal externalities existing on this front are exclusively due to contagion effects generated by the frequent shocks that are brought about by the highly volatile nature of globalized financial markets. Adverse macroeconomic spillovers caused by contagion tend to lead countries to try to differentiate themselves from their neighbours in times of crisis. This, in turn, exacerbates political tensions and weakens integration processes.

The perception that coordination with regional partners can engender more negative than positive externalities tends to create a vicious circle. As in the prisoner's dilemma, each country hopes that the other will behave in a non-cooperative way and acts accordingly, thereby further undermining incentives for coordination (Ghymers, 2002).

Under these conditions, it is justifiable to wonder whether it is reasonable for sub-regional blocs to continue to try to coordinate their macroeconomic policies. The response depends on the objective being pursued. In other words, on whether or not the aim is to deepen cooperation and the integration process.

If the decision is not to advance beyond trade linkages, then a free trade area will be sufficient, and macroeconomic coordination will be mostly unnecessary. This choice implies accepting the idea that the importance of sub-regional blocs will fade as the conclusion of free trade bilateral agreements with other countries and regions becomes more frequent.

The other option is to deepen the integration process. This implies that countries are willing to move forward towards the creation of a common market, which in turn would involve agreeing upon common protection levels and, hence, a similar development agenda. For example, relatively high levels of protection for certain production sectors only make sense if the aim is to develop those sectors within the agreement. However, if the various countries' production strategies differ, it will be difficult for them to form a customs union. This appears to have been the case so far with MERCOSUR.

It is clear, therefore, that this option entails accepting some loss of sovereignty and calls for a strong political will to back it up. This is true for any country, but in particular for the larger partners in the agreement, for which the loss of autonomy is more costly, especially when they are partnering with countries whose economies are much smaller. In other words, when economic interdependence among the members of an integration agreement is highly asymmetrical, the larger partners have the responsibility to provide leadership for the deepening of the integration process to proceed.

Only under these conditions does it make sense to pursue macroeconomic coordination. However, in this case, the following dilemma arises: in order to deepen integration, macroeconomic policies must be coordinated, but in order for the demand for coordination to emerge, a significant degree of economic interdependence is required.

While the example of Europe is usually cited to demonstrate that the demand for coordination increases with the level of interdependence, it is also true that, from an evolutionary perspective, the same example reveals that coordination and interdependence can become complementary factors and can be developed together as part of a recursive process.

It is clear, nevertheless, that macroeconomic coordination in Latin America entails greater difficulties than those that confronted Europe in its early stages of the integration process. In fact, in Latin America there is no exogenous exchange-rate coordination mechanism such as prevailed under the Bretton Woods agreements in the initial phase of the European integration process; what is more, the situation is compounded by the governments' lack of sufficiently strong reputations, the fragility of the countries' domestic financial systems and the scale of the external shocks now affecting the region.

In any case, and bearing in mind that the concrete forms of coordination will vary according to the specific characteristics of the different integration agreements, there are certain lessons to be drawn from international experience and certain common features of Latin American economic conditions that should be taken into account in all cases.

It is a fact that macroeconomic coordination can only move forward gradually. The complexity of the factors involved and the need to generate the necessary confidence and mutual understanding make this inevitable. In addition, a basic minimum degree of domestic macroeconomic stability, and above all, exchange-rate stability, must be achieved initially, especially among the principal partners in the bloc. Only if this "de minimus" objective is achieved will the perceived benefits of coordination outweigh its costs and the use of more concrete mechanisms have greater appeal.

These more concrete mechanisms, therefore, correspond to a more advanced stage, when it will be possible to set convergence goals in order to consolidate macroeconomic stability and its long-term sustainability. Given the region's external vulnerability, in addition to the usual targets (fiscal deficit, public debt and inflation), coordination in Latin America must include goals for the

external sector relating to such variables as the current account deficit or the short-term external debt. Additionally, measures designed to harmonize prudential regulations in financial markets can also contribute to macroeconomic stability.

Obviously, the adoption of convergence goals will contribute to regional stability only if countries strive to fulfil them. Incentives, therefore, are a crucial issue. Apart from the “exogenous” incentives for macroeconomic discipline deriving from agreements with multilateral financial institutions, endogenous incentives must also be present. In the European experience, the chance to build stronger reputations proved to be a powerful incentive for the fulfillment of such goals but, for the time being, this is clearly not the case in Latin America. Supervision of compliance with convergence goals by a committee of experts and the dissemination of the corrective measures that it recommends in the event of non-compliance may gradually lend greater importance to this incentive, but only in the long run. The adoption of effective sanctions does not appear to be very credible either, especially when the countries do not perceive the costs of being excluded from an integration agreement as being very high. Since trade interdependence is not as pronounced as in Europe, the gains afforded by a reduction in the volatility of bilateral exchange rates are also a less important incentive.

In sum, for one reason or another, the incentives that were present in the European experience are not strong enough to bring about macroeconomic coordination in the case Latin America. This being the case, the creation of stabilization funds and other sub-regional financial mechanisms can become significant additional incentives for macroeconomic coordination. On the one hand, stabilization funds capable of providing fast-disbursing resources to facilitate the adjustment of member countries to external shocks could prove to be an efficient complement to the role of IMF as a lender of last resort; what is more, if the fulfillment of agreed commitments in the convergence targets were one of the requirements for receiving disbursements, these funds could also encourage macroeconomic coordination. Sub-regional development banks, on the other hand, besides being an effective complement of multilateral lending institutions in certain areas, can play an important role in easing the countries’ access to the international financial markets. Moreover, they can be an effective tool for promoting intra-regional trade and furthering financial integration.

Nevertheless, the establishment of such institutions entails several difficulties. In the case of stabilization funds, in particular, sharp asymmetries can render the fund useless for the larger countries, as would be the case of Brazil in MERCOSUR. The participation of a larger number of countries in the fund would make this problem less severe, but to maintain its role as an incentive for coordination, it would be necessary to increase the number of partners in the bloc. On the other hand, and irrespective of the asymmetries that exist, given the positive correlation of capital flows to countries of the region, the amount of resources necessary to cushion the impact of common financial shocks could be very high. However, these funds could be useful for terms of trade shocks and in the case of financial shocks for small and even medium-size countries. Large scale funds would require the support from developed countries, as is the case with the Chiang Mai Initiative in Asia.

Lastly, reference should be made to the problem of exchange-rate volatility. As already pointed out, addressing this phenomenon is crucial in order to achieve deeper integration: the volatility of bilateral exchange rates not only undermines intra-regional trade, but also exacerbates political tensions within the integration scheme. The adoption of similar exchange-rate regimes helps to alleviate the problem by eliminating one of the reasons for the variability of bilateral exchange rates: differences in adjusting to common external shocks. But the exchange-rate floats that have tended to prevail in the region, and which have been adopted in order to cope with the persistent instability of international financial markets, present difficulties that should not be underestimated. From the standpoint of regional integration, in particular, the existence of major

asymmetries in the shocks to which countries of the region are exposed means that important sources of exchange-rate volatility continue to exist. The coordination of macroeconomic policies can help to reduce this volatility but will not eliminate the problem.

For this reason, in addition to ensuring that monetary policy is consistent with the objective of smoothing out exchange-rate fluctuations and refraining from ruling out the introduction of restrictions on capital flows, it is very important for the countries to move towards some degree of coordination of their exchange-rate regimes. Clearly, in an area as sensitive as this, major advances cannot be expected overnight. Nevertheless, countries could, as a first step, agree upon a mechanism for consulting with one another concerning possible courses of action without committing themselves to specific measures with a view to setting themselves more ambitious objectives later on.

In any event, the volatility inherent in flotation regimes will not disappear even if the fundamentals are kept in line and appropriate mechanisms for macroeconomic policy coordination are in place. These difficulties are compounded by the magnitude of the external shocks to which the countries of the region are exposed. Thus, the creation and strengthening of the above mentioned sub-regional stabilization funds might serve as a tool for cushioning these shocks, facilitating macroeconomic cooperation and advancing towards deeper integration.

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