What Macroeconomic Measures are Needed for Free Trade to Flourish in the Western Hemisphere?[1]

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1. Introduction

Is the close coordination of macroeconomic policies needed for free trade to flourish in the Western Hemisphere? Should that coordination include efforts to stabilize exchange rates between the participants in the region's free trade agreements, leading ultimately to the establishment of a single currency for North America, South America, and perhaps the entire hemisphere? Or should governments concentrate on putting their own houses in order – on the pursuit of sound and stable macroeconomic policies at home – while leaving policy coordination and monetary integration for another day?

Motivating these questions are three prominent – and very different – experiences with regional integration. The first of these is Mercosur, the free trade area of Argentina, Brazil, Paraguay and Uruguay (with Chile and Bolivia as associate members). This effort to construct a free trade area in the Southern Cone has been weighed down by macroeconomic disruptions and exchange rate disputes between its two largest members, in particular. This problem goes back to the beginning of Mercosur, which roughly coincided with Argentina's convertibility plan. With convertibility, the peso became increasingly overvalued against the Brazilian real, and Argentina responded with anti-dumping duties and safeguarding measures against Brazilian

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exports of farm machinery, spark plugs, steel refrigerators, paper, textiles and chemicals. In 1994 it was Brazil's turn: with the launching of the Real Plan, the Brazilian currency became overvalued, and in 1995 the Brazilian government raised tariffs and imposed quotas on imports of motor vehicles and other products from Argentina. In 1997, as its crisis worsened, Brazil then imposed a system of discretionary import licenses on selected products. The devaluation of the real then led Argentina to slap import quotas on textiles and to impose bureaucratic restrictions on imports of Brazilian machinery, and Brazil to retaliate by reintroducing subsidies for rice production and to demand limits of imports of footwear.

Most recently, in 2001, Argentina's devaluation once more dimmed Brazil's enthusiasm for Mercosur. These last events have been particularly disastrous for the FTA. Intra-Mercosur trade, after expanding by 16 per cent a year on average in the 1990s, declined by almost 10 per cent in 2001, and 2002 looks even worse. Currently, intra-Mercosur exports make up only 19 per cent of the group's total exports, down from 25 per cent in 1998. The irony is that an FTA designed to foster better commercial relations between Argentina and Brazil has in fact seen a heightening of trade tensions between them, due largely to instability in currency markets. This observation has led some commentators to suggest that Mercosur needs closer macroeconomic and financial cooperation and that its members should contemplate the creation of a single currency (Giambiagi 1997, 1998).

Proponents of this view must, however, confront the fact that there exists another, rather more successful free trade initiative in the Western Hemisphere, the North American Free Trade Area, whose members do not coordinate their macroeconomic and exchange rate policies in any systematic way and do not envisage a single currency. To be sure, from the start there has been the fear that macroeconomic and currency volatility would undermine the political basis for NAFTA. Even before the agreement was ratified, U.S. Treasury and Fed officials had begun to discuss the need for a standing consultative mechanism to anticipate and head off exchange rate problems in the region, leading to the establishment of the North American Framework Agreement and the North American Financial Group with Canada in April 1994. The U.S. and Canada provided Mexico a multilateral contingency facility to deal with trouble in the event that the NAFTA vote went wrong. The U.S. then provided a special $6 billion foreign currency swap arrangement to stabilize the peso in the run-up to the 1994 Mexican election, and it orchestrated the $40 billion IMF-Exchange Rate Stabilization Fund-led bailout in 1995. The devaluation of the peso in 1995 fueled anti-NAFTA sentiment north of the U.S.-Mexican border, as now cheaper Mexican exports flooded into the United States, and raised questions about the merits of the free trade agreement south of it, as Mexican GNP plummeted.

Since 1995, however, the three North American currencies have floated against one another rather freely. There has been little systematic discussion of the coordination of macroeconomic and monetary policies in the context of the Framework Agreement and the Financial Group. Given sound and stable policies at home, fluctuating exchange rates between the currencies of the participating countries seem quite compatible with free trade in North America – they are part of the solution rather than part of the problem insofar as they respond to asymmetric business cycle conditions. In this sense the notion that regionalism in the Western Hemisphere requires close macroeconomic coordination and monetary integration is not obviously supported by the experience of NAFTA.

Finally, there is the case of Western Europe, where regional integration has gone further than anywhere else.   Since the establishment of Europe's customs union, there have been persistent efforts to stabilize exchange rates, coordinate macroeconomic policies, and pursue monetary integration, culminating in 1999 with the creation of the euro. Europe has moved from a customs union to a single market free of barriers to the movement of factors of production as well as goods and services, supported by the unification or the close coordination of competition and regulatory policies. It has replaced 11 national currencies with the euro, eliminating the problem of exchange rate instability within the region by eliminating exchange rates, and it conducts close mutual surveillance of national fiscal policies.[2]

The fact that Europe has both a single currency and a single market suggests that monetary integration may be an essential concomitant of a single regional market. But, in fact, Europe's experience raises as many questions about the architecture of regional integration as it answers. Did Europe's success at creating a single market make possible the establishment of a single currency? Or was the single currency an essential prerequisite for the success of the single market? Or was there actually no causal connection between real and monetary integration – did a third factor, unique to Europe, lay behind the success of both the single currency and the single market?

In what follows I use the experiences of these three regions to formulate answers to the questions posed in the opening paragraph of this paper. My answers run as follows. Monetary unification, whether for Mercosur, NAFTA or a Free Trade Areas of the Americas, remains an unrealistic goal over the time horizon relevant for practical policy discussion. In contrast to

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[2]While the euro area has 12 members, those 12 members previously had only 11 national currencies, there already having existed a monetary union between Belgium and Luxembourg.

Europe, where special circumstances rendered it a credible policy goal, pursuit of a single currency would not be an effective mechanism for encouraging the closer coordination of macroeconomic and financial policies. To the contrary, discussions of monetary integration would only distract policy makers from the issues at hand, if anything diminishing their credibility with the markets.

Moreover, a looser approach to coordinating macroeconomic policies, not grounded in the goal of creating a single regional currency, is unlikely to bear fruit. Organizing such coordination around an agreement to limit the movement of regional currencies, perhaps to explicit fluctuation bands, would inevitably come to grief, given the overwhelming liquidity of global financial markets; this is a clear lesson of recent financial history. And, attempting to organize such coordination on a self-standing basis – as something the participating governments will want to do as in their own interest – is unlikely to be credible or effective. The first time there is a significant conflict between domestic policy objectives and political pressures, on the one hand, and governments' vague and ill-defined agreement to cooperate, on the other, there is little doubt which of these commitments will fall by the wayside.

Is there then no way of reconciling the desire for regional integration with the autonomy of national macroeconomic and monetary policies? In fact, the experience of NAFTA suggests a reconciliation. Canada, Mexico and the United States all engage in inflation targeting, either de facto or de jure. This monetary policy rule provides an anchor for inflationary expectations and thus for exchange rate expectations as well. The exchange rates between the currencies of inflation targeting countries, as I show below, are significantly less volatile than the exchange rates of countries with other monetary regimes; this is true not just within NAFTA but around the world. Within NAFTA, floating rates backed by inflation targeting have allowed currency fluctuations to vent macroeconomic pressures without allowing currency volatility to undermine the operation of or support for the free trade area.

Thus, NAFTA's experience suggests a direction for Mercosur and an FTAA. The participating countries should agree on harmonized inflation targets. By doing so, they will limit exchange rate volatility to levels compatible with the operation of their free trade agreements, while at the same time not undermining their credibility by committing to more ambitious initiatives to coordinate policies that, at the end of the day, they will not be able to carry off.

The remainder of this paper makes these points as follows. Section 2 explains why monetary union, while feasible in Europe, is not a practical basis on which to predicate policy coordination in the Western Hemisphere. Section 3 argues that looser forms of policy coordination are unlikely to be more successful. Section 4 then makes the case for harmonized inflation targeting, while Section 5 entertains objections to this thesis. Section 6 concludes.

2. Monetary Integration

If a case can be made that monetary integration is essential to the success of regional integration, nowhere is that case stronger than in Europe. Monetary integration was integral to the larger European project from the start. In 1950, the recipients of Marshall Plan aid established the European Payments Union, under which they extended short-term financial assistance to countries with temporary balance of payments problems, engaged in the mutual surveillance of one another's macroeconomic and commercial policies, and coordinated the removal of exchange and trade restrictions. Through its operation they were able to complete the transition to Article VIII convertibility by 1959 and agree to the formation of a customs union. In 1970 they adopted the Werner Plan for creating a European economic and monetary union within ten years, although these efforts were derailed by the collapse of the Bretton Woods System and the oil shocks of the 1970s. In 1979 they established the European Monetary System (EMS) of exchange rate bands, with Short- and Very-Short-Term Credit Facilities and a mutual surveillance process. In 1985 France and Germany presented a joint proposal for closer economic and political cooperation, setting the stage for an intergovernmental conference at which it was agreed to create a single European market. This led to the decision at the Hannover Summit in 1988 to push ahead to monetary union, to the Delors Report in 1989 and to the Maastricht Treaty in 1992. The capstone of this process was the irrevocable locking of exchange rates and creation of the European Central Bank (ECB) in 1999, followed by issuance of the physical euro in 2002.

In Europe, then, monetary integration and commercial integration have always gone hand in hand, complementing and reinforcing one another. It is hard to imagine that Europe could have moved so rapidly to create the euro in the absence of a broader commitment to integration. Of the major continents, Europe was first to create a customs union, and it is still alone in having created a true single market. Monetary integration was integral to the broader project. Exchange rate instability was long seen as interfering with and eroding political support for an integrated European market.[3] It is no coincidence, then, that the Maastricht Treaty followed

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[3]The irony, of course, is that the most direct threat was not to the customs union itself but to the Common Agricultural Policy (CAP), which set domestic-currency support prices for agricultural goods that were therefore effectively exempted from the customs union. (A constellation of domestic-currency support prices that was economically viable initially could quickly become unviable if exchange rates moved significantly, since there would then be an

almost immediately on the adoption of the Single European Act, which obliged member states to remove capital controls in order to create a single market in factors of production as well as merchandise. Eliminating capital controls made it more difficult to stabilize the exchange rates between national currencies, as the 1992 crisis in the European Monetary System was quick to demonstrate.[4] The choice became whether to move backward toward more freely fluctuating exchange rates, which might jeopardize the single market, or to move forward to monetary union, which would eliminate the problem of exchange rate instability by eliminating the exchange rate. Retreating to more flexible exchange rates threatened to fuel a backlash against the single market, since currency depreciation could then confer an arbitrary competitive advantage on some national producers. Moving backwards was not an option, given the value that European politicians and officials attached to economic integration. The only feasible alternative was to move forward to a single currency. In a sense, then, it was the 1992 EMS crisis that provided the immediate impetus for monetary unification.

Some would argue that other parts of the world – North America, South America, East Asia, even Africa – similarly need monetary unification to prevent exchange rate instability from precipitating a protectionist backlash and otherwise disrupting the development of their RTAs.

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irresistible incentive to ship agricultural products from where their prices were low to where they were now high, undermining the initial support prices. Governments responded with a special set of "green exchange rates" expressly for agricultural trade, but market participants had an obvious incentive to circumvent them.) In fact, the best way of understanding the CAP is as a side payment from Germany to France, designed to compensate France for its perceived difficulty in competing with German industry once intra-European trade was freed. Thus, there is no inconsistency in arguing that exchange rate instability which threatened the CAP might also jeopardize support for the customs union.

[4] I return to the lessons of the 1992 crisis below.

But in none of these other regions is the commitment to regional integration as deep and abiding. The progress of regional trade liberalization remains halting in East Asia, South America and Africa. The three partners in the North American Free Trade Agreement have created a free trade area, to be sure, but not yet a single market.[5] Trade among Canadian provinces and among U.S. states remains very much larger than trade between the two countries, even after adjusting for per capita incomes and transportation costs, indicating that the NAFTA countries have some ways to go in terms of integration.[6] While there may be pressure for exchange rate stabilization to preserve what has been achieved, in none of these other regions does the achievement and therefore the pressure approach European levels.

If monetary union was attractive in Europe because it was integral to the larger project of economic integration, then it was feasible because it was part of the larger process of political integration. In Europe there is a readiness to contemplate true institutions of transnational governance like the European Central Bank, in whose decisions the participating countries all have a say. Institutions like the ECB have legitimacy because they are part of a larger construct, the European Union. They are legitimate because they can be held accountable to their constituents by other EU institutions, specifically by the European Parliament to which the ECB is obliged to report and before which its high officials are called to testify.[7]

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[5]Among other things, they continue to control their own trade, government procurement, and competition policies, and labor mobility between Mexico, Canada and the U.S. of course continues to be restricted.

[6]Helliwell (1999) estimates that the density of trade among provinces and states exceeds the density of trade between them by a factor of 20.

[7]To be sure, there are complaints that democratic accountability remains insufficient, but this is more likely to lead to a further strengthening of the powers of the European Parliament

Could not other regions similarly create institutional frameworks within which their own regional central banks would be situated? Some might say yes, especially if we don't require them to specify the date by which they think that this will happen. But when we make the question concrete – how many years will it be before the NAFTA partners or the members of ASEAN+3 create institutions with the powers of the European Commission, the European Parliament, and the European Court of Justice – one must acknowledge that we are unlikely to see this anytime soon.

Europe is unique because its intellectual and political history is unique. There is a long-lived strand of integrationist thought that has led European politicians and their constituents to contemplate compromises of national sovereignty more readily than their counterparts in other parts of the world.[8] The Pan-European Union, founded in 1923, lobbied for a European federation, attracting the support of, among others, Konrad Adenauer and Georges Pompidou. In the mid-19th century, European intellectuals like Victor Hugo were already advancing the case for a United States of Europe. William Penn proposed a European parliament, Jeremy Bentham a European assembly, Jean-Jacques Rosseau a European federation, Henri Saint-Simon a European monarchy. Many generations before the Maastricht Treaty, in other words, there already existed a powerful strand of European integrationist thought.

This history makes clear that the euro is part of a larger political project – part of the process of building a Europe that is integrated politically as well as economically. The euro as a

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than to the abolition of the ECB. The constitutional convention currently underway provides a unique opportunity to address this problem.

[8]This argument is drawn from Bayoumi and Eichengreen (1999).

symbol has done much to bring home to the man and woman in the street the idea that, while still citizens of a nation state, they are also citizens of Europe. Each time they reach into their wallets they are reminded of this larger political entity. In addition, by reducing transactions costs and increasing the transparency of prices, the euro has furthered the process of market integration and thereby heightened the perceived urgency of creating EU-level institutions for regulating Europe's markets.[9] Here, then, we observe the operation of "neofunctionalist spillovers" – that is, the tendency for monetary integration to quicken the pace of economic integration, and for economic integration to create pressure for political integration. As the single market is perfected, there is more pressure for EU-level regulation, and as more regulatory power is centralized at the EU level, questions about the accountability of EU officials become all the more pressing. This ratchets up the pressure for political reform to enhance the accountability and therefore the legitimacy of the institutions and individuals now responsible for regulating Europe's integrating markets. From this point of view, it is no coincidence that the EU has convened an unprecedented constitutional convention, charged with drawing up a new blueprint for Europe's political architecture, directly following (indeed, within months of the physical manifestation of) the euro.[10]

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[9]This is most obviously the case of financial markets, where the effects of the euro on market structure and conduct have been particularly profound. In response, we have seen the Lamfallusy Report, which recommends the creation of a powerful new committee of EU securities regulators, and the initiative of Gordon Brown, Britain's chancellor of the exchequer, and Hans Eichel, Germany's finance minister, for similar committees to oversee the regulation of the banking and insurance industries.

[10]To be sure, there are other sources of political pressure for the convention, such as Ireland's failure to ratify the Nice Treaty in its first referendum and the prospect of EU enlargement to the east. My point, though, is that there would be pressure to render EU institutions more accountable and efficient even in the absence of these events.

Other regions, it is clear, do not have comparable traditions. In North America, the problem is the dominance of the United States. Canadians do not want to be seen as residents of what is essentially the 51st U.S. state. Mexicans remember how the northern part of their country was taken from them by force, and they are reluctant to privatize Pemex for fear that it will be taken over by Yankees. The members of Mercosur have little tradition of political cooperation and no desire for federation. In Asia, the problem is diverse political systems. It is hard to imagine more strongly contrasting systems than those of China, Korea and Japan.

All this leads me to conclude that other parts of the world are unlikely to follow Europe down the path to monetary unification anytime soon. The real lesson of the euro, then, is that they will have to find other solutions to the problem of exchange rate instability and other ways of reconciling monetary autonomy with economic integration.

To be sure, there would seem to be a strong case for monetary integration in North America on purely economic grounds.[11] More than 80 per cent of Canadian exports go to the United States, and more than 75 per cent of the country's imports come from the U.S. The figures for Mexico are virtually identical. Labor mobility has already created immigrant networks on which future mobility can build. Cultural and linguistic obstacles are fewer than in Europe. Foreign investment is extensive. U.S. banks have substantial presence in both Canada and Mexico. The single largest component of U.S.-Canada trade involves the assembly plants and subsidiaries of U.S. automobile companies north of the border, while the single most important component of Mexico-U.S. trade is in maquiladoras owned and operated by U.S.

[11]The case has been made by, inter alia, Courchene and Harris (1999), Buiter (1999), and Grubel (2002).

companies south of the border.

In principle, this renders the U.S. dollar an attractive basis for monetary unification.[12] If Canada and Mexico adopted the dollar, their new currency would immediately be the leading vehicle and invoicing currency used in international transactions. Both countries would gain greater ease of transactions not just with the United States but also with the rest of the world. It would not be necessary to convince other central banks to add the North American currency to their reserve portfolios, since the dollar is already the dominant reserve currency; thus, Canada and Mexico would gain all the benefits of reserve-currency status (including seigniorage and the ability to issue foreign debt in their own currency). Assuming that an expanded Federal Reserve System remained responsible for North America's monetary policy, there would already exist an experienced central bank and be no need to create a new institution or undergo a painful teething process.

But herein lies the rub. The dominance of the United States over the North American economy means that Canada and Mexico could not go it alone. The U.S., in turn, would have effective veto power over institutional arrangements. There would be overwhelming resistance in the U.S. to creating a new currency (like the "amero"envisaged by Grubel 2002), along with a North American Central Bank to assume the responsibilities of the Federal Reserve System. The best that Canada and Mexico can hope for, looking 10 or 20 years down the road, is a seat on an

[12]The argument in this paragraph is *not* that Canada and Mexico are already de facto (U.S.) dollarized. Such an argument would be especially strained for Canada. Although the share of foreign currency deposits as a share of total deposits at Canadian banks nearly doubled in the second half of the 1990s, de facto use of the greenback in Canada remains limited (see Murray and Powell 2002). These authors suggest that de facto dollarization in Canada today is if anything even less than 20 years ago.

expanded Federal Reserve Board and perhaps permanent representation on an expanded Federal Open Market Committee, like that enjoyed by the Federal Reserve District of New York.[13]

Not even this is certain, since U.S. interests might well be reluctant to dilute their representation. As a price for giving them membership in the Federal Reserve System, the U.S. Congress might insist that Mexico be represented by the Dallas Fed and that the various Canadian provinces be assigned to the San Francisco, Minneapolis and Boston reserve banks. If the Canadian and Mexican governments resisted this, their only other option might be to dollarize unilaterally, like El Salvador and Panama have done. Anyone familiar with North American politics will dismiss this as implausible.

Even if Canada and Mexico were given seats on an expanded Federal Reserve Board, there would be the question of how and to whom that institution would be accountable, and, if not from accountability, then from what else its legitimacy will derive. The Fed is held accountable by requiring its chairman to testify regularly before the U.S. Congress. If it pursues policies inconsistent with the national interest, members of Congress can make life very uncomfortable for the governors; in addition to public criticism, they can hold up confirmation of new appointees to the Board.

Clearly, there will be no North American Congress in our lifetimes with the power to hold the Federal Reserve Board accountable. Will the chairman then be required to make periodic appearances before the Canadian Parliament and Mexican Congress in order to be held accountable for his actions? It seems unlikely that such appearances would be more than pro

[13]Even this assumption is heroic. Alternatively, the Bank of Mexico and Bank of Canada might have to rotate on and off the FOMC like the run-of-the-mill reserve bank.

forma; any objections by these bodies would be drowned out by the opinions of the U.S. Congress. Would nominees to the Board have to be confirmed by the Mexican Congress and Canadian Parliament as well as the U.S. Congress, and, if so, does one really think that these bodies will have the power to hold up appointments for significant periods of time if U.S. politicians decide otherwise?

There would be other economic problems as well. The United States might demand that Canada reduce its public debt in return for representation on the Federal Reserve Board or that Mexico accept oversight of its fiscal policy. Canada and Mexico would require reassurance that the Fed would act as lender of last resort to their banking systems. In return, the U.S. might demand new powers over Canada and Mexico's banking systems; it might require those countries to import U.S. rules on anything from ownership to lending practices. At a minimum this would require institutional arrangements for closer coordination among national regulators.

Still, the principal obstacles to a North American monetary union are not economic but political. The *National Post,* Canada's leading newspaper, put it well in an editorial a couple of years ago (National Post 1999). "[T]he move to a common currency is ultimately a political issue. The euro rests on an extensive supra-national system of government that has the explicit goal of creating a united Europe. We do not seek political integration with the U.S. So there is no positive political case for a common currency."

Many of the same arguments can be made regarding Mercosur. The countries of the Southern Cone share no desire for political integration; Brazil and Argentina, in particular, with their very different colonial, cultural and linguistic traditions, display no willingness to contemplate federation. There will be no Mercosur Congress, equivalent to the European

Parliament, with powers sufficient to hold a Mercosur Central Bank ("MCB") accountable for its actions in the foreseeable future. And, in the absence of accountability, the MCB would not be seen as politically legitimate. There is no need to repeat an argument already made in the context of NAFTA that applies to Mercosur with even greater force.

Some will say that the Mercosur countries can achieve monetary unification indirectly, by all adopting the U.S. dollar. If Mercosur is subsumed into a Free Trade Area of the Americas that extends throughout the Western Hemisphere, they argue, the case for adopting the dollar will be stronger still. But however compelling the economic logic for unilateral dollarization, the political obstacles are formidable. Although creative thinkers can imagine how Canada and Mexico might someday acquire seats on the Federal Reserve Board, it is impossible to imagine that the U.S. Congress would be prepared to further dilute the membership by giving seats to Argentina, Brazil, Paraguay, Uruguay, Bolivia, Chile and others. Dollarization would therefore mean giving up all voice in formulation of the common monetary policy. Economists can come up with arguments for why this is desirable (see e.g. Garcia Herrero and Glockler 2000), but political scientists will recognize the political implications as unsupportable, leaving aside very small countries in special circumstances. Even the most extreme social, political and economic crisis did not lead Argentina to dollarize this year. Is it really realistic to think that a country in more normal political circumstances would do otherwise?

3. Coordination Short of Monetary Unification

Some will suggest that the Mercosur countries or the members of the prospective FTAA, while not pursuing the unrealistic goal of monetary unification, should nonetheless attempt to more closely coordinate their macroeconomic policies in order to prevent sharp exchange rate changes and export surges that create distress for concentrated interests, potentially undermining support for regional integration. There are two incarnations of this proposal, one in which coordination would be organized around collective exchange rate pegs or bands, and another which it would occur in their absence.

The idea that an agreement on exchange rate bands or pegs could form the basis for efforts to coordinate policies is drawn from Europe's experience with the EMS, generally by Europeans.[14] As in the EMS, the members of an RTA would specify a multilateral grid of exchange rate parities for their currencies, surrounded by bands of, say, plus-and-minus 10 or 15 per cent. This would retain some scope for exchange rates to adjust to commodity-price shocks and asymmetric business cycle conditions but prevent them from moving by large amounts that could undermine support for the FTA. When exchange rates approached the edge of their fluctuation bands, intervention by the strong currency countries on behalf of their weak currency counterparts would be triggered.[15]

Two features of this system are cited as rendering these commitments incentive compatible. First, the participating countries would engage in mutual surveillance of one another's monetary and fiscal policies and coordinate those policies so as to limit imbalances and pressures. Thus, the role for coordination – and the incentive to engage in it in this system – would be to limit the financial commitments required of strong currency countries and to

[14]See for example Alberola, Buisan and Fernandez de Lis (2002)

[15]Alternatively, the central banks of the countries concerned could engage in bilateral swaps of their respective currencies.

maximize the likelihood that, if such commitments were required, the countries extending them would be repaid. Second, if currencies became seriously misaligned, central parities and bands would be adjusted before market pressures became overwhelming.

While the EMS provides the inspiration for such schemes, it also illustrates their limitations. Defending exchange rate bands or pegs in the face of highly liquid international markets is a formidable task, as the experience of Argentina, Venezuela, Brazil before 1999, and any number of other Latin American countries, not to mention Europe in 1992, amply demonstrates. Political support for subordinating all other goals of policy to maintenance of the peg must be complete and unquestioned in order for the peg to command market confidence. In practice, such unqualified support is unlikely to obtain in democratic societies, some of whose citizens attach priority to other goals and who can express their preferences in the voting booth and the streets. In Argentina, convertibility was regarded as a sacred contract between the government and the public and the linchpin of national economic policy; but when it came to be seen as incompatible with the pursuit of full employment and growth, it lost public support and then investor confidence. The same was true in Europe in 1992, where rising unemployment weakened the resolve of governments to implement harsh policies of austerity in order to defend their currency pegs. Thus, it is far from clear that the governments involved will take whatever policy measures are needed to defend their currencies, either of their own volition or through negotiation.[16]

It is sometimes argued that governments are more likely to undertake these difficult adjustments when they are obliged to do so by an agreement with other countries. If they fail to

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[16]See Eichengreen (2002).

respond in the requisite fashion, their economic and political relations with those other countries will be jeopardized; cooperation thus encourages adjustment by raising the stakes. In addition, if there are credit lines on offer, adjustment is encouraged by the carrot of financial support and the stick of its denial.

But both European experience in the early 1990s and Latin American experience with IMF conditionality suggest that these mechanisms are not sufficient to guarantee quick adjustment and successful maintenance of currency pegs. In 1992, at the time of the EMS crisis, the UK hesitated to raise interest rates to defend sterling, its multilateral commitments notwithstanding, for fear of what this would do to the economy. The IMF offers the carrot of financial support and the stick of its denial. Falling out with the IMF threatens not only a country's relations with the multilaterals but also its reputation with the markets. But even IMF programs are not a sufficiently strong bonding device to guarantee the policy adjustments needed to sustain pegged rates.

It could be argued that the EMS was different because it provided a mechanism for policy coordination – for complementary adjustments in the stance of policy by strong and weak currency countries. The obvious response to the 1992 crisis would then have been interest rate hikes by Britain, complemented by interest rate cuts by Germany, the strong currency country. But Germany refused to cut interest rates for fear of the inflationary consequences; it refused to import British inflation, in other words. Efforts to coordinate a broader adjustment – to induce Germany to cut interest rates by getting a substantial number of other EMS members, and not just the UK, to either raise interest rates or devalue against the deutsche mark, foundered on free-rider and large-numbers problems. That is, the UK was willing to participate, but France and the

Netherlands refused to go along. That Europe, where monetary cooperation is more highly developed than anywhere in the world, was unable to respond to this crisis cooperatively is revealing of the obstacles to the collective management of exchange rates even under favorable circumstances.

Germany also made clear its reluctance to provide unlimited support to the weak currency countries, absent agreement on their part to first devalue their currencies to lower, more sustainable levels. (Although the EMS Articles of Agreement technically obliged countries to provide unlimited support for currencies under pressure, in 1978 the Emminger Letter summarized an understanding between the Bundesbank and the German Government that the former would not in fact be required to engage in unlimited intervention if doing so was incompatible with its commitment to price stability.) Devaluation by these other countries would have reduced German import prices and thus reconciled support for foreign central banks with price stability at home. Cooperation might then have saved the day.

Why then did other EMS participants refuse to devalue? We see here an illustration of the growing rigidity of adjustable pegs in an environment of high capital mobility. EMS parities had been devalued repeatedly before 1988, when capital controls were widespread in Europe. But with the adoption of the Single European Act, controls were removed in the interest of the single market. In an environment of high capital mobility, even contemplating the possibility of a devaluation is certain to excite the markets. To defend their parities, governments must deny the intention. But their credibility then becomes wrapped up in their stated commitment to the peg, which renders them reluctant to reverse course and devalue.[17] If there is one clear lesson of

[17]Again, Latin readers will be reminded of the case of Argentina.

international financial history, it is that so-called "adjustable pegs" grow rigid in an environment of high capital mobility. In turn, that rigidity limits the scope for foreign support. And absent foreign support, the defensibility of such pegs is dubious.

I conclude that a regional system of currency bands or pegs would not provide a durable basis for policy coordination. Attempting to establish one would only set the countries of the region up for a painful fall and discredit the wider project of regional integration.

The alternative is to encourage policy coordination in the absence of a regional stabilization agreement. It has been suggested that emulating the kind of peer pressure used to encourage real and nominal convergence in Europe could be part of the solution.[18] In fact, the members of Mercosur have adopted macroeconomic convergence targets that bear no little resemblance to the convergence criteria of the Maastricht Treaty and established a Macroeconomic Monitoring Group (GMM) to monitor compliance.[19] Thus, on December 15th, 2000 the presidents of the member countries declared their commitment to specific convergence targets. They committed to targets for inflation (a core rate not to exceed 5 per cent per annum in 2002-2005, to fall to 4 per cent in 2006), fiscal deficits (not to exceed 3.5 per cent of GDP in 2002 and 2003 and then 3 per cent starting in 2004), and public debts (not to exceed 40 per cent of GDP by 2010). If discrepancies were detected, then the government of the offending country would be required to present macroeconomic and structural measures designed to guarantee a

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[18]See for example Alberola, Buisan and Fernandez de Lis (2002).

[19]For details, see http://gmm.mecon.gov.ar. The Treaty of Asuncion creating the FTA had provided for the coordination of macroeconomic policies and envisaged periodic meetings of Ministers of Economy and central bank governors, but no such meetings took place for several years prior to the devaluation of the real at the beginning of 1999, which can therefore be seen as having provided new impetus for efforts to encourage policy coordination.

return to target at the next meeting of the GMM. The influence of European experience on Mercosur practice is clear.

But it is revealing that, at the time of writing, the most recent posting on the Banco Central do Brasil's website regarding the GMM is dated January 3rd, 2001 – that is, almost two years ago. Clearly, first Argentina's crisis and now Brazil's unavoidably delayed the process. But the more fundamental problem is that if the governments involved fail to achieve their convergence targets, they have no one to answer to but themselves. There is no supranational institution in the Southern Cone analogous to the European Commission to hold them accountable. There is no interlocking web of economic, financial and political bargains among the Mercosur countries, all of which would be jeopardized by their failure to adhere to their convergence targets. In contrast to the Short-Term and Very-Short-Term Financing Facilities of the pre-1999 European Monetary System, there are no credit lines to be jeopardized by bad behavior. (It is revealing in this connection that the fiscal targets that South American countries take seriously are those set by the IMF, which is the source of concessionary finance.) Again, the implication is that in the absence of a broader political project, the compromises of domestic policy autonomy requires for real policy convergence would be credible.

4. Harmonized Inflation Targeting

What then are other regions to do? Neglect is not feasible, since the persistence of erratic fluctuations in the relative value of currencies would then continue to wreak havoc with efforts to liberalize trade on a regional basis. Mercosur, in particular, will not survive many more years of erratic exchange rate fluctuations. But holding currencies within narrow bands is not feasible in a world of high capital mobility. And monetary union, as I have argued, is not going to solve the problem anytime soon.

My preferred solution is inspired by the example of the three NAFTA countries. All three have floating currencies, but floats anchored by a clear and coherent monetary policy operating strategy, namely inflation targeting (IT). Their exchange rates rise and fall, reflecting fluctuations in the world market prices of primary commodities vis-a-vis manufactures (where the Canadian dollar and Mexican peso strengthen against the U.S. dollar when commodity prices are strong) and the relative pace of economic growth in the three countries. Importantly, their currency fluctuations tend to be temporary. They reverse direction when commodity prices or relative business cycle conditions reverse direction. Although exchange rates can still move in the short run, chronic misalignments which elicit a strong protectionist backlash are unlikely to occur.[20]

One explanation for the relative stability of intra-NAFTA exchange rates is that when central banks have adopted a credible inflation targeting framework, inflation today is no longer a leading indicator of inflation tomorrow. To the contrary, if inflation in one of the three partner countries accelerates for extraneous reasons, the expectation is that its central bank will step on the brakes even harder, bringing inflation temporarily below its equilibrium level to enable monetary policy to hit its medium-term target. Expectations will therefore tend to be stabilizing rather than extrapolative. The exchange rates between national currencies should grow less volatile and therefore pose less of a threat to integration. The U.S., Canadian and Mexican

[20]Fernandez-Arias, Panizza and Stein (2002) show that the main impact on import levels and the principal threat of a protectionist backlash flow from persistent misalignments, not from short-term volatility.

central banks all target inflation, either de facto (in the U.S. case) or de jure (in the Canadian and Mexican cases). They are transparent about their monetary policy rules and strategies, cultivating confidence in their policies. Their experience suggests that floating exchange rates, if anchored by a clear and coherent inflation-targeting framework, can be successfully reconciled with the desire to cultivate deeper regional links.

Together with Alan Taylor, I have tested this hypothesis using data on exchange rates for more than 100 industrial and developing countries.[21] Adopting the framework utilized in Bayoumi and Eichengreen (1997), we regress bilateral exchange rate volatility on four variables suggested by the theory of optimum currency areas: the size of the economies concerned, their openness, the extent of their bilateral trade, and the similarity of the commodity composition of their exports.[22] To test the hypothesis at hand, we then add dummy variables for whether countries are inflation targeters, using the tabulation of inflation targeting around the world from Mishkin and Schmidt-Hebbel (2001).[23]

An obvious challenge to this approach is that the decision to inflation target may be endogenous. In particular, the literature on inflation targeting in open economies points out that

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[21]See Eichengreen and Taylor (2002).

[22]In extended regressions we consider a variety of additional real and nominal control variables; the results discussed below are robust to these extensions. As the dependent variable we consider both nominal and real exchange rate volatility; again, the results are robust to both specifications.

[23]Specifically, we constructed two variables: one that equals unity when one of two partner countries targets inflation, and another that equals unity when both countries have adopted this monetary regime. Since inflation targeting is an alternative to attempting to peg the exchange rate, we also control for the choice of exchange rate regime when testing for the effects of this inflation-targeting variable.

countries with more volatile exchange rates may find it more difficult to inflation target because, inter alia, the domestic price level will be more difficult to forecast and exchange rate fluctuations will have disruptive output effects. In addition, countries with deeper financial markets, less short-term debt, and greater transparency are more likely to inflation target. For example, insofar as inflation targeting relies on transparency for the credibility of monetary policy, countries with a culture of transparency are presumably more likely to adopt this regime.[24] Thus, there is the danger that while countries with these characteristics may both prefer to inflation target and enjoy more stable exchange rates, while the causal connection between inflation targeting and exchange rate stability is actually weak or nonexistent.

To deal with the potential for endogeneity, we therefore instrumented our dummy variables for inflation targeting using a first-stage probit regression on the M2/GNP ratio, the short-term debt/GNP ratio, and *Transparency International's* measure of transparency and corruption. These are some of the obvious structural and cultural characteristics of countries that choose to inflation target, and at least some of them – a culture of transparency, for example – are plausibly exogenous with respect to the choice of exchange rate regime.[25] We find that countries that target inflation have significantly less volatile exchange rates, even after controlling for a variety of other economic and financial determinants of realized volatility and even after

[24]In addition, large amounts of short-term debt make it difficult to inflation target, since the interest rate adjustments needed to stabilize inflation will cause correspondingly larger spikes in debt-servicing costs. Similarly, countries with shallower financial markets will presumably experience larger disruptions to real and financial conditions as a result of the interest-rate activism that must be pursued by an inflation-targeting central bank. On these and other determinants of the choice of inflation targeting, see Mishkin and Schmidt-Hebbel (2001).

[25]We get the same results when we limit the instrument set to the "most exogenous" variables.

adjusting for the endogeneity of the regime.

My interpretation of these results is that inflation targeting is a better way of delivering low levels of exchange rate instability than attempting to peg the nominal rate. Pegs have a tendency to collapse, unleashing pent-up volatility. These results suggest that agreement by the partners in a regional arrangement to simultaneously move to inflation targeting – and, ideally, to agree on a common inflation target – may go some way toward alleviating the tension between floating rates and trade liberalization. The hemisphere's finance ministers already meet together in the context of the Summit of the Americas and the Interamerican Development Bank annual meetings. There is no reason why they could not be joined by central bank governors and use these meetings as an occasion to agree on harmonized inflation targets.

What should be the consequences for countries that chronically miss their agreed targets? One answer is that their commitment to inflation targeting should be incentive compatible. It will benefit the initiating country as much as its FTAA partners; since there is therefore no reason to expect chronic divergences, there is no need for sanctions. Among the mechanisms making for incentive compatibility is market discipline, since countries that chronically miss their inflation targets will be punished by investors.

Should FTAA partners also contemplate the imposition of countervailing duties against countries that overshoot their inflation targets and see their real exchange rates depreciate, creating an unfair competitive disadvantage for their neighbors? The threat of countervailing duties would raise the stakes for central banks and governments contemplating policies that might jeopardize their inflation targets. But those same sanctions would compound the problems of inflation- and depreciation-prone countries, at precisely the worst possible time, and potentially jeopardize the cohesion of the free trade area, especially if sanctions were widespread. Ultimately, the appeal of this idea depends on why one thinks countries may miss their inflation targets. If the problem will be reckless populism leading to chronic deficits and inflation, then there may be a case for countervailing duties as additional pressure for countries and polities to live within their means. But if one thinks that countries are likely to overshoot their inflation targets because of shocks largely beyond their control (earthquakes, terms-of-trade fluctuations), then the case for such measures is considerably weaker.

5. The Limits of Inflation Targeting

There are three main arguments why exchange rate flexibility backed by inflation targeting is either infeasible or undesirable for emerging markets, and why harmonized inflation targeting will not succeed in reconciling national policy autonomy with regional integration.

First, many developing countries, Latin American countries in particular, have chronic imbalances in whose presence the central bank will be unable to commit to low inflation. Under these volatile conditions, inflation targeting will lack credibility. Some readers will point to cases like Argentina in 2002 and question whether inflation targeting is feasible in emerging markets. To be sure, under the kind of extreme instability experienced by Argentina, no stable monetary regime is feasible—neither inflation targeting, nor a currency peg, nor anything else. While inflation targeting will not work well under these circumstances, neither will any other monetary policy operating strategy. But in countries where economic, financial and social turbulence is less, inflation targeting has a proven track record. This is the implication I draw from the experience of countries like Chile, Mexico, and even Peru, all of which successfully inflation target. Moreover, the experience of this last country suggests that the entire IT apparatus does not have to be adopted in order for countries to reap benefits from the regime.

The early literature on inflation targeting (e.g. Eichengreen, Masson, Savastano and Sharma 1999) points to the absence of chronic budget deficits as a key prerequisite for credible inflation targeting. If chronic budget deficits are a problem, the country will eventually be subject to unpleasant monetary arithmetic (public-sector deficits will have to be monetized by the central bank to avert the inevitable funding crisis). Recent experience suggests that the structure of the debt, as well as its level and rate of growth, is relevant in this connection. In Brazil in 2002, high levels of short-term debt meant that if investors refused to roll over the government's maturing obligations except at very high interest rates, the debt burden could quickly become unsustainable despite the maintenance of a primary budget surpluses. If the central bank agreed to buy up the debt that investors refused to roll over, its inflation target would be missed. Equally, however, if it refused to monetize the debt, the government might be forced into default, which would wreak havoc with bank balance sheets and force the central bank to engage in lender of last resort intervention, again with inflationary consequences. The short maturity of the debt left the central bank between a rock and a hard place.

I think of this as the "Fiscal Dominance Mark II" critique of inflation targeting. Credible inflation targeting requires not just the absence of chronic deficits (the absence of "Fiscal Dominance Mark I") but also success at lengthening the maturity structure of the domestic debt, delinking it from exchange rates and short-term interest rates, so that shocks to confidence cannot cause a debt run-off (the absence of "Fiscal Dominance Mark II"). Otherwise, the reduction in exchange rate volatility delivered by the authorities' embrace of inflation targeting may be no more than a temporary blessing. Thus, prudent debt management must be an integral part of inflation targeting, especially in open economies, as emphasized by Goldstein (2002).

A second objection cites the fact that the liabilities of banks, households and firms are denominated in dollars, arguing that this eliminates the advantages of greater exchange rate flexibility for many emerging markets. Liability dollarization is one of the principal financial differences between more and less developed economies. When it is present, currency depreciation will have not just a positive effect associated with increased competitiveness but also a negative effect due to the increased burden of servicing dollar-denominated debts. If the negative balance-sheet effects dominate, not only does depreciation fan inflation, but the exchange rate change is contractionary as well. It thus has no benefits of any kind. If the negative balance-sheet effects are always and everywhere dominant, then the country might as well peg its currency or go all the way to de jure dollarization.

But surely the balance of the two effects varies with circumstances -- with the current financial circumstances of the economy and the shocks to which it is subjected. In this case, a central bank pursuing a strategy of flexible inflation targeting should simply take the additional balance sheet effects into account when responding to a shock.[26] If foreign demand has fallen, for example, it will cut interest rates and allow the currency to depreciate (limiting the fall in output at the cost of a temporary acceleration of inflation) so long as it thinks that the economy is in a range where the benefits for competitiveness and demand dominate the adverse balance-sheet effects. If, on the other hand, the economy is in a range where the negative balance-sheet

[26]In Eichengreen (2001), from which this discussion is drawn, I describe how this might be done in greater detail.

effects dominate, then it will intervene to limit the depreciation of the currency (since this moderates inflation at no further cost to output). Liability dollarization modifies the operating strategies of an inflation targeting central bank, in other words, but it does not render inflation targeting infeasible.

A third objection is that inflation targeting is inconsistent with financial deepening and development. In particular, IT hinders the development of the foreign currency forward and futures markets needed to hedge exposures in a world of floating rates and to render floating compatible with trade liberalization. Virtually all of the advanced-industrial countries that have developed deep and liquid financial markets have done so behind the shelter of currency pegs. Especially in relatively small, relatively open economies, a volatile exchange rate makes it unattractive to hold assets denominated in domestic currency, since the purchasing power of those assets will fluctuate widely. Households and firms will hold a larger fraction of their savings in the form of dollar deposits, and banks will hold a larger fraction of their assets in dollar loans, both in order to protect themselves against exchange risk.[27] As a result, markets in domestic-currency-denominated assets will be slow to develop. In the absence of these markets, firms will find it harder to hedge their exposures when the exchange rate begins to move. Not only will this make inflation targeting more difficult, but it will point up the conflict between exchange rate volatility and regional trade liberalization, since importers and exporters will be unable to hedge against currency fluctuations.

This is a concern, to be sure, but the case of Mexico has shown that it is possible to develop markets on which exposures can be hedged, therefore limiting the disruptions to regional

[27]The best documentation of these tendencies of which I am aware is Arteta (2002).

trade from currency fluctuations, even when the national currency is floating. A well-developed futures market in Mexican pesos has developed on the Chicago Mercantile Exchange even though the peso has been floating for the last seven years. What is possible for Mexico could also be possible for other Latin American countries as they open and engage in more trade with the United States.[28] It is not obvious that floating backed by inflation targeting is incompatible with the development of the financial markets needed to hedge foreign exposures and reconcile exchange rate variability with increasing levels of intra-regional trade.

Thus, while the conduct of inflation targeting is likely to be somewhat more complex in emerging markets than advanced industrial countries, I find the argument that it is infeasible in Latin America to be unconvincing.

6. Conclusion

Recent experience from Europe to the Southern Cone of Latin America makes clear that there is a causal connection between macroeconomic stability – exchange rate stability in particular – and support for regional integration. Regional trade arrangements cannot flourish in the presence of high levels of exchange rate and financial volatility. Sharp misalignments that lead to import surges and distress for concentrated interests incite sharp reactions against liberalization, encouraging protectionist interventions that stymie regional integration. In the Western Hemisphere, the fear is that the kind of macroeconomic problems that have disrupted

[28]Thus, a set of individual futures markets vis-a-vis the dollar would provide the hedging services needed to reconcile floating exchange rates with an FTAA centered on the United States. In the case of Mercosur, a set of futures markets vis-a-vis the dollar would still provide the relevant hedging services, at slightly higher cost, via triangular arbitrage, and only require the Mercosur countries to also open vis-a-vis the U.S.

the development of Mercosur may also hinder the development of a Free Trade Area for the Americas.

I have argued in this paper that ambitious visions like a single currency for Mercosur or even the entire hemisphere do not provide a practical basis for addressing this problem. Monetary union has political as well as economic prerequisites and, in contrast to Western Europe, those political prerequisites are not present in the Western Hemisphere. A system of currency pegs or bands would not be durable or sustainable in today's world of highly liquid financial markets and democratic politics. And, in the absence of such a system, a mutual surveillance procedure to foster convergence like the Mercosur countries' Macroeconomic Monitoring Group would not have teeth.

Rather than seeking to solve the problem of exchange rate volatility through international cooperation, Latin American countries must find the solution at home. In practice, this means adopting sound and stable monetary policies backed by a clear and coherent operating strategy like inflation targeting and central bank independence. They must follow prudent fiscal and financial policies, not just adopting appropriately balanced budgets but also minimizing their dependence on short-term, foreign currency denominated or indexed debt. With such policies in place, exchange rate volatility can be reduced to levels compatible with regional integration. And, as regional integration deepens, the participating countries can expect to see the development of the forward and futures markets needed to hedge against currency fluctuations. Trade integration and financial integration will begin to feed on one another in a virtuous circle, but a circle of a rather different sort than experienced in Europe.

One way of putting these points is as a question: is the prerequisite for regional integration in the Western Hemisphere macroeconomic coordination or macroeconomic stabilization? In this paper I have sought to suggest that the answer is the latter.

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