Macroeconomic Management in Emerging Economies and the International Financial Architecture*

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Abstract

In the last few years, and most recently with the crisis in Argentina, views about emerging markets and the international financial institutions have changed significantly. This paper reviews macroeconomic management in emerging economies and the role of the international financial institutions in helping to secure their stability. It discusses the role of macroeconomic policies, in particular exchange rate policies, arguing that a very strong case can be made for exchange rate flexibility. However, as recent evidence confirms, this choice requires an institutional framework that credibly commits the economy to low inflation, preventing price instability even in the presence of strong fluctuations in the exchange rate. Also discussed is the role of the international financial institutions in a world of recurrent currency crises and contagion. Despite the need for increased transparency, accountability, and greater independence for the International Monetary Fund, to avoid its being seen as an institution that primarily serves the political goals of its main shareholders, and despite the need for improved procedures to handle crises, the best recipe for stability is at the domestic level. Good macroeconomic policies are those that bring about low inflation, fiscal prudence, and a strong financial system: these are necessary and almost sufficient conditions to avoid the type of crisis experienced repeatedly in the last decade. However, strong institutions must support this set of policies. The ultimate goal of macroeconomic policy is to serve as the basis for prosperity and for improving the well-being of the entire population, and here there is no substitute for macroeconomic stability.

Keywords: Exchange rates and inflation, exchange rate flexibility, contagion, currency crises, IMF.

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1. Introduction

In the last five years, views about emerging markets have changed. Views about the international financial institutions, especially the International Monetary Fund (IMF), have changed as well. Having been the stars of global financial markets until 1997 (despite the eruption of the Mexican crisis in the meantime), today emerging economies are struggling to return to better times.

For the pessimists, the 1990s were just an exception to an otherwise chronically poor economic performance. For the optimists, and I do not know many, the present difficulties are just a small detour from a success story that began for many countries in the 1990s. The truth, as usual, is in between. There is no reason to be pessimistic, since wellmanaged emerging economies have great opportunities. However, and as I will argue later, most of the responsibility for their future success is on their own shoulders, and they must focus on the need to establish policies and institutions consistent with long-term growth and stability. One thing that is clear is that there are no shortcuts.

These issues are particularly relevant in the case of Latin America, where the extremely grave crisis in Argentina, together with severe turmoil in other parts of the region, has led to a general reexamination of what are the right economic policies for developing countries. At the macroeconomic level, the discussion is about fiscal and financial policies, exchange rate regimes, and the international financial architecture. Perhaps this is a good time to review the current status of the discussion and to identify where the weaknesses of developing countries lie as they struggle to move forward on the elusive path to prosperity.

The purpose of my lecture is to review macroeconomic management in emerging economies and the role of the international financial architecture in helping to secure stability in those economies. I will focus on three areas. First, I will talk about macroeconomic policies in emerging markets, with special emphasis on exchange rate policies. Second, I will discuss the sources of crisis and contagion, and then discuss the role of international financial organizations, in particular my views about the role of the IMF. And third, I will conclude by emphasizing the key role of institutions as a complement for

sound macroeconomic management, which are at the basis of fostering growth and prosperity.

This is not the place to review all the arguments advanced in the rich and extensive literature on international and development economics to justify my assertions. The latter come not only from my reading and my own research, but also from my experience and my beliefs, which arise from a perhaps disorganized but, I hope, coherent framework. This is particularly important when interpreting the real world. It is very common to find economists in the real world talking about and promoting almost every idea under the sun, without consistency, on the grounds that the real world is very different from the world in our economic models. This is obviously true, but it is not an excuse to speak nonsense. For my part, rather than document the facts and arguments that support my prescriptions or ideas, I will report what I hope to be educated beliefs.

Those who are familiar with the economic reality of Chile will realize that to a large extent my discussion is based on the Chilean experience. For those who are not familiar with this experience, I have to warn you that even when I do not say so explicitly, Chile is in the background of my arguments. This is not chauvinism, but rather the conviction that, after a history of experiments aimed at stabilizing the economy and achieving prosperity, we in Chile have learned the hard way, finally, how to achieve stability and create the basis for growth. Of course, this is not to imply that nothing more remains to be done. Improvements are still needed in many areas, and the current discussion in my country is about how to ensure faster growth and better social integration.

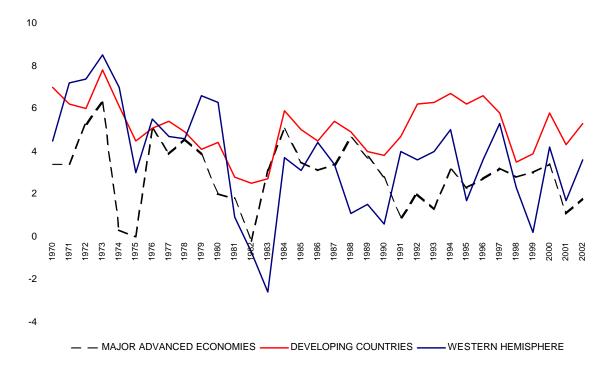
2. Macroeconomic Policy in Emerging Economies

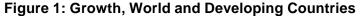
One of the key features of the current international economy is the high degree of global integration, both in trade and in finance. Capital today flows with almost total freedom across borders, and any attempt by the authorities to curtail these flows usually fails. The sophistication of today's markets, the interrelationship between domestic and off-shore markets, and the ability of these markets to create new derivatives and to exploit arbitrage opportunities without possessing the underlying assets makes it almost impossible for authorities to control capital flows and avoid extreme movements. It is in this more

integrated world that economic authorities have to make policies. Unlike 50 or even 20 years ago, when domestic markets were small and easily monitored and guided by government authorities, such control is today almost impossible, except under very special circumstances.

The first recommendation from those who oppose globalization is that we should turn our backs on financial opening, in order to avoid the risks of crisis and contagion. But when a student has a headache, you do not cure it by kicking him out of school. Instead you give him an aspirin, or you prescribe an appropriate combination of work and rest. In the present context, policymakers should certainly take precautions when integrating financial markets. The sequencing of liberalization and the structure of regulation are some of the key issues to take into account, and errors in these matters have caused crises in the past. However, financial integration is a good thing. It allows households in poor countries to smooth their consumption by bringing future consumption forward. It allows firms to invest in profitable projects that they could not finance in a closed economy, and even more projects will become profitable in these countries as the cost of capital declines. As funds continue to flow from industrialized economies to emerging markets, there is enormous scope for increasing the income and the well-being of the population.

Again, I think that having a good domestic economic environment is key for developing countries to take advantage of the global economy and to protect themselves against bad international economic conditions. This does not mean ignoring the role of the world economy in affecting the economic performance of developing countries. Indeed, as figure 1 shows, the growth of developing countries, and of Latin America in particular, is highly correlated with growth in the Group of 7 major industrial countries. The correlation between growth in developing countries and growth in the G7 during the period from 1970 to 2002 is 0.40, and it is even higher when one considers only main trading partners. However, in the more recent period, characterized by more integration but perhaps fewer common shocks, the correlation is smaller. In contrast, in the period from 1970 to 1985 the correlation between growth in developing countries and growth in the G7 was a much higher 0.59.





More recently, the slowdown of the world economy, with the consequent decline in commodities prices, the growth in the U.S. current account deficit, the bursting of the dotcom bubble, and the increase in oil prices have all been important factors explaining the poor performance of those developing countries that are not oil exporters. The issue, however, is not how to avoid the world business cycle, but how to minimize its costs. Small open economies will always grow more slowly when the world economy is growing slowly, or when they face adverse terms of trade, but there is a huge difference between a slowdown, or even a recession, and a collapse. Even the welfare cost of the business cycle will depend on the abilities of economies to make the necessary adjustments.

2.1 Exchange Rate Regimes

A first issue, and one that has received considerable attention not only in emerging markets but also in Europe, with the launching of the euro, is that of the exchange rate regime. In general we can conclude that, although one size does not fit all, there is a clear case for recommending more strongly than in the past that countries adopt a flexible exchange rate

regime. The recent experience of Argentina and the not-so-recent experience of Asia have shown that the straightjacket of a fixed exchange rate is too costly, especially during periods of turmoil, in which not only the exchange system collapses but the fiscal and banking sectors as well. Strictly by definition, a fully floating exchange rate regime cannot collapse. However, we have to recognize that large fluctuations in a floating exchange rate may impose costs, not only on macroeconomic management but also in the financial position of the banking and corporate sectors, especially when financial markets are thin. Indeed, the stability argument is the most pervasive one in favor of fixed exchange rates. But the main counterargument is that fixed exchange rate regimes are too rigid and often not sustainable.

The case of Argentina, although extreme, helps to illustrate the problems of fixed exchange rate regimes. After the depreciation in Brazil in 1999 and the problems in the international economy that followed, Argentina found itself under great stress. In a world of flexible exchange rates, the solution would have been very simple: just let the currency depreciate. To be sure, a depreciation in Argentina would have had negative consequences for Brazil's external position, but with the help of hindsight, it is clear that it would be better than in the current scenario. In addition, with monetary policy credibly committed to achieving low inflation, the real exchange rate would have depreciated. Had there been an increase in inflation, monetary policy could have been tightened. In this way the economy would have gained competitiveness and eventually would have been able to grow again.

In contrast, under a fixed exchange rate regime, the only mechanism available with which to regain competitiveness was to maintain domestic inflation below the international rate of inflation for a prolonged period. The problems in Argentina were aggravated by the strength of the U.S. dollar, against which the peso was pegged. In a world of sticky prices, the recessionary costs of such a strategy are high, sometimes unbearable.

Another option is to avoid real depreciation through productivity gains achieved by greater stability and by productivity-enhancing reforms that accompany the choice of a fixed exchange rate. Such a strategy explains some of the success in the early phases of a fixed exchange rate regime with a large appreciation. Deregulation, privatization, opening up to international trade and capital inflows, and fiscal consolidation, among other things, allow a country to face a period of appreciation of the real exchange rate without loss of

competitiveness. As the theory advanced by Harrod, Balassa, and Samuelson tells us, an economy where the rate of productivity growth is high, especially in the tradable goods sector, must experience a real appreciation, and so there is no reason under such circumstances to assume there is a misalignment.

As we say in Latin America, "después de la batalla todos somos generales"—after the battle, everyone is a general—and we have to recognize that Argentina's initial choice of the convertibility plan had a plausible rationale. There were even serious reasons (I will say more about this later) for favoring dollarization of the economy as a means of committing irrevocably to a fixed exchange rate. Indeed, toward the mid-1990s there were no signs of misalignment in the Argentinean economy: the economy grew, and so did exports. The problem, however, arises, when external shocks require an adjustment in relative prices.

The literature on optimal exchange rate regimes owes its greatest debt to Robert Mundell. Indeed, I think that even today, despite some qualifications emphasized recently by a number of scholars, Mundell's framework remains the best one for analyzing the appropriateness of different regimes. According to Mundell, when shocks to the economy stem mostly from the monetary side, a fixed exchange rate is desirable. Such a regime insulates the economy from monetary shocks that are transmitted to the rest of the economy via changes in the interest rate and the exchange rate when the latter is allowed to float. The basic theory also tells us that the main instrument with which to stabilize the economy under a fixed exchange rate regime is fiscal policy. In such an economy, money becomes endogenous, and therefore an economy with a weak fiscal position will run out of stabilization policies that it can apply. Indeed, fiscal transfers across the states of the United States are one of the main explanations for the success of its monetary union, and the absence of transfers of that magnitude is one of the main reasons for skepticism about the euro. Moreover, a serious risk for an economy with a fixed exchange rate and a weak fiscal position is that a negative shock from outside the economy may increase the cost of borrowing, further deteriorating the fiscal position and harming economic activity, with a strong chance of destabilizing the economy.

In contrast, when shocks to an economy come mostly from the real side, Mundell's recommendation is to adopt a flexible exchange rate. A shock to the terms of trade is the

most common form of real shock in small open economies. And a real shock that calls for a depreciation is magnified in the presence of a fixed exchange rate.

Argentina, like many other countries that have chosen fixed exchange rates, has a history of severe monetary instability and weak monetary institutions, and therefore getting rid of monetary policy by means of a fixed exchange rate may not be the optimal solution, but it may be the best one at hand. However, the decision to adopt a fixed exchange rate should be made prudently, and the exchange rate regime should be carefully designed, taking into account the future path of policy. To avoid using the fixed exchange rate to postpone a collapse, an exit strategy must be devised: there should either be movement toward an irrevocable commitment, such as dollarization, or movement toward a more flexible regime. The latter, however, is usually not feasible, because it is precisely the commitment not to abandon the exchange rate parity that makes the fixing of the exchange rate successful. On the other hand, irrevocability is a way to achieve credibility, but it is also the main handicap for having a fixed exchange rate regime.

The arguments that I have used here to criticize fixed exchange rates are precisely the same ones that favor the use of flexible exchange rates. Flexibility makes a real adjustment easier, because it can take place through the exchange rate rather than through prices. Developing countries have highly volatile real exchange rates compared with industrialized countries, which may indicate the need for a high degree of flexibility. Table 1 shows the standard deviation of the broad effective real exchange rate computed monthly by JP Morgan for the group of countries for which they report data. Of course, this computation ignores the source of movements in the real exchange rate, and in particular whether the change results from changes in the fundamentals or is induced by policy. Even though developing countries have usually managed their exchange rates in order to avoid volatility, the data show that the variance in exchange rates is higher in most developing economies. Here I have ignored such technical issues as whether the exchange rate series has a unit root, but the variances of the first differences follow the same patterns.

Table 1: Real Exchange Rate Variability

	0.00	1.10	10 57		40.40
Norway	3.62	US	10.57	Saudi Arabia	19.18
Netherlands	4.01	Philippines	11.00	Chile	19.83
Ireland	4.17	UK	11.27	Mexico	20.49
Germany	4.79	Japan	11.50	Malaysia	21.23
France	4.90	Switzerland	11.78	Peru	23.03
Sweden	6.52	Hong Kong	12.08	Pakistan	26.08
Finland	6.77	Morocco	12.33	Kuwait	28.18
Canada	6.78	Singapore	12.53	Argentina	28.20
Spain	7.11	New Zealand	12.83	Colombia	29.47
Taiwan	7.18	Turkey	13.99	India	34.97
Italy	7.22	Brazil	14.04	Venezuela	35.53
Greece	8.57	Belgium	14.20	Ecuador	44.37
Denmark	8.81	South Africa	14.43	Indonesia	46.33
Austria	9.16	Korea	16.79	Portugal	69.88
Australia	9.52	Thailand	17.44	Nigeria	140.65

(standard deviation, monthly data, 1976-2001)

Source: JP Morgan

In a moment I will discuss the potential inflationary impact of a flexible exchange rate regime. But first I must point out that, in order to implement a flexible exchange rate regime, some preconditions are necessary.

First, if people are to trust in a currency that is free to float, there must be the credible expectation of low inflation. A fixed exchange rate provides a simple nominal anchor, which has no direct counterpart in a flexible regime. For this reason it is useful in a flexible regime to provide a good alternative anchor for inflationary expectations. A credible inflation target as a basis for conducting monetary policy provides such an anchor. In addition, to avoid pressures for monetary financing of the government's budget and other interferences with prudent monetary policy, a solid fiscal position and an independent central bank that runs monetary policy with low inflation as its principal objective are two important ingredients for reasonable success with floating.

There is always the temptation for authorities to intervene in currency markets when markets fluctuate excessively, and indeed there is a case for intervention on an exceptional basis. But to avoid becoming addicted to intervention, the rules of intervention must be transparent, they must be publicly announced with minimal lags, and a reasonable explanation for any intervention must be given. For example, Brazil and Chile intervened in the second half of 2001 on the grounds that the Argentinean crisis was making exchange rates extremely volatile. Casual observation indicates that intervention provided some

anchor to an otherwise extremely unstable situation, but in any case the interventions were transparent, for a limited time, and therefore exceptional.

2.2 Fear of Inflation and Floating

The main reason that policymakers are reluctant to adopt a fully floating exchange rate regime is the risk that at some point they will either have to abandon it in order to control inflation, or else follow a very restrictive monetary policy in the event of a large depreciation. This concern is understandable given the high volatility of exchange rates observed under flexible regimes, especially in emerging economies where large swings in exchange rates are common. Combined with the need to fight chronic high inflation, this may lead to fear of floating.

The reason for this skeptical view is that a depreciation of the currency will lead to a shock to prices, and from there, via indexation and other propagating mechanisms, to high and sticky inflation. The classical view, based on the notion of purchasing power parity (PPP), holds that all changes in the exchange rate should translate one for one into changes in prices. Of course, and as should be clear from the previous discussion, this is an exaggeration, but it still represents an important warning in allowing exchange rate fluctuations.

However, experience has shown not only the failure of PPP as a policy guide, but also that the actual pass-through from exchange rate changes to inflation is rather low. Indeed, the pass-through seems to have declined in recent decades. Of course, there must be some more fundamental economic reason than just the passing of time to explain this phenomenon.

Figure 2 shows, for a sample of countries that experienced large depreciations in the 1980s and 1990s, the pass-through coefficients at 6 months and 1 year after the depreciation. The coefficient is calculated as the ratio of accumulated depreciation (with respect to the U.S. dollar) to accumulated inflation during the same period. For all of these countries, with Mexico the only exception, the pass-through from depreciation to prices was much smaller in the 1990s than in the 1980s.

Some recent research has tried to explain this low pass-through. My own concern stems from my experience in the European Department of the IMF, where I witnessed

firsthand the 1992 crisis in the European Monetary System. At that time many argued that the abandonment of the system's Exchange Rate Mechanism would be a disaster from the point of view of inflation control, but that disaster did not happen. Within academic circles, the study of this issue started with the observation that the depreciation of the U.S. dollar in the 1980s did not result in high inflation in the United States. The first suspect was the prices of nontradables, which do not face international arbitrage, and so are much less related to international prices than are the prices of tradable goods. However, the evidence shows that even the prices of imported goods reflected low pass-through, and this has led many to argue that prices are set in local currency, rather than at producer prices, mainly because of imperfect competition within tradable goods markets--a phenomenon known as "pricing to markets."

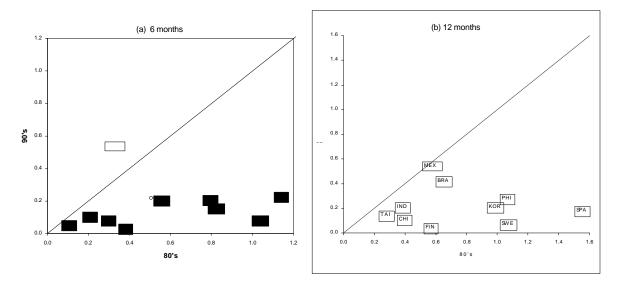
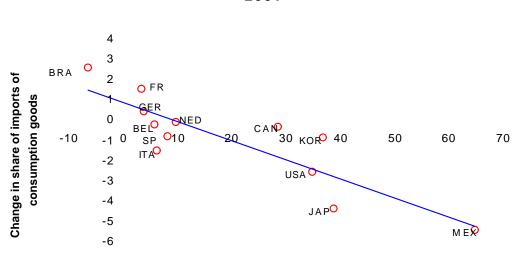


Figure 2: Pass-Through Depreciation to Inflation

The recent experience with large depreciations has renewed interest in this topic, particularly with respect to its causes and policy implications. Even for tradable goods the distribution channels are part of the nontradables sector, and many other goods we think of as tradables are actually nontradables. These two facts support the notion that nontradables are actually a much larger fraction of the total than the roughly 50 percent we use as an educated guess from looking at the sectoral composition of output. Perhaps almost three-quarters of domestic production is actually composed of nontradable goods.

But how do we explain the changes over time, and what are the policy implications? If more trade means more tradable goods, and more competition implies a higher passthrough, an instability-averse policymaker could conclude that limiting trade may be a solution to limiting the inflationary effects of exchange rate movements. However, I think the contrary is true, and indeed that globalization may have helped to reduce the passthrough. In a more integrated world there is a greater diversity of suppliers from cheaper places, and this allows for a reallocation of consumption to take advantage of changes in relative prices in world markets. Increased trade also allows for more variety in terms of the quality of goods, all of which reduces the inflationary consequences of depreciations. Therefore it is quite plausible that more trade around the world may help changes in nominal exchange rates have enduring effects on the real exchange rate.





Change in bilateral Real Exchange Rate

Figure 3 shows the changing patterns in the origins of imports of consumption goods in Chile since the real exchange rate started depreciating in 1998. The figure clearly shows an increase in the share of imports from countries against which the real depreciation was the smallest.

However, macroeconomic policy must have played a role here. Although we have not accumulated enough empirical evidence to settle this issue, or to pick the evidence that fits our presumptions, we can explore some policy factors that may help to explain the low pass-through:

The first is inflation that is initially low and can be credibly expected to remain low in the future. Europe's experience with the EMS crisis in 1992 is perhaps the best example. Those countries whose currencies depreciated sharply had low inflation at the beginning of this process. If prices are costly to change and wages costly to renegotiate, the expectation that inflation will remain low may increase the costs of changing prices, and therefore price setters may prefer to wait. When inflation does not pick up, these expectations are fully consistent, preventing price increases.

The second factor is flexibility itself: if, after an exchange rate collapse, the exchange rate is fixed again, perhaps at a very depreciated level, expectations will be "censored." That is, markets will only expect the currency to depreciate further, and therefore it will be reasonable to adjust prices to at least this new rate. In contrast, if the regime following the depreciation is flexible, the expectation that the currency may bounce back will prevent a widespread increase in prices. In fact, it is not the current level, but the entire current and future path of exchange rates, that affects inflation. Exchange rate changes are by construction less persistent in a flexible exchange rate regime than in a fixed regime, and hence we should expect a lower pass-through in the former.

Some countries have not suffered currency crises and have been able to achieve low inflation despite large depreciations. My favorite cases are Australia and New Zealand, and of course, more recently, Chile. After the Asian crisis, the currencies of both Australia and New Zealand depreciated substantially. Although the response in both countries was not the same (New Zealand tightened monetary policy whereas policy in Australia remained mostly unchanged), the pass-through from the exchange rate to inflation was very small. Both countries have a flexible exchange rate regime, with sporadic interventions in the case of Australia, and a credible inflation target as a guide for monetary policy.

As I said before, intervention may be exceptional, but it could be justified when a depreciation of the currency occurs that is not in line with the fundamentals, in which case there are good reasons to think that an excessive depreciation may translate into higher prices and increases in inflation. Since nonsterilized intervention may be ineffective, an increase in inflation may call for a stronger defense in the form of an increase in interest

rates, with a cost in terms of output, but with a longer-term benefit in terms of stability. A strong anti-inflationary stance may be especially helpful in periods of high turbulence, in order to build credibility. Here there is a clear tension for a flexible exchange rate regime, namely, whether to fight fluctuations in the exchange rate that are not in line with the fundamentals, because they will induce inflation. The problem is that there is no way to know for certain what is nonfundamental, especially since short-run shocks can cause large fluctuations. It is tempting to control inflation by playing with the exchange rate, but this is an extremely dangerous game and should be avoided. For this reason it is worth repeating that interventions should be very exceptional, well-founded, transparent, and for a limited period.

2.3 Fiscal Policy

Fiscal policy is about the efficient provision of public goods. In developing countries this includes, very importantly, fighting poverty and promoting social inclusion. We have learned a lot about the distortions of taxation, the importance of stability of the tax burden over time, and several other principles of public finance that are key to a well-managed fiscal policy. We also know about the long-term implications of productive and unproductive government expenditure.

However, fiscal policy also has a macroeconomic impact in the short run, and it has been at the center of many crises. It has been widely documented that fiscal policy in Latin American countries is highly procyclical, that is, expansionary in boom periods and contractionary in recessions. This could be because fiscal policy is what generates the business cycle; according to this view, what is needed is to implement a countercyclical fiscal policy. However, experience shows that many times recessions have started before the fiscal adjustment, and hence, although the latter could have magnified the business cycle, it is unlikely to have been its cause.

The reason for the procyclical behavior of fiscal policy has more to do with the ability of countries to borrow and lend freely during the business cycle. The existence of borrowing constraints may be due to the lack of credibility that fiscal authorities will be able to run an intertemporally sustainable fiscal policy, and hence tightening during recessions may be the only option available to get back on track. This may be a reason why,

during the Asian crisis, fiscal policy may have appeared too tight given domestic conditions.

One simple solution to this problem would be for the international financial institutions to act as residual lenders, allowing the economy to avoid extreme tightening during recessions. However, this solution does not tackle the fundamental reason for procyclicality, which is not the borrowing constraint itself but the underlying cause of the constraint, which has to do with the sustainability of fiscal policy. If markets are not willing to lend because of the deterioration of creditworthiness, there is no reason for official agencies to lend absent a clear set of policies that will bring about sustainability; otherwise official lending would introduce moral hazard. Instead of acting as lender of last resort, the international financial institutions would lend at the first sign of problems, and the authorities would know that, inducing a lack of discipline in the management of public finance.

It is a source of frustration for economic authorities and politicians in developing countries that they cannot run a "grown-up" fiscal policy that is countercyclical, when many industrial countries are able to do so. It is also painful to have to cut social expenditure and support for the poor—and this is many times the only tool at hand—precisely when the economy is on the lower part of the cycle. To overcome this problem, countries have to establish credibility and reputation, and that takes a long time. We cannot forget that at the heart of a large share of the economic problems of emerging economies is the fact that their fiscal position is generally weak. This has almost always been the case in Latin America.

It is also important to remind ourselves that, within the basic Keynesian-Mundellian framework, fiscal policy is ineffective at changing output under conditions of capital mobility and flexible exchange rates. The upward pressure on interest rates generates an appreciation of the currency and a decline in investment, so that the latter is crowded out by the fiscal expansion.

In my view, given the traditional fiscal weakness of developing economies, some general criteria are needed if they are to run an effective fiscal policy. I think these criteria have been applied successfully in the management of Chilean fiscal policy.

First, although in the long run one can identify a certain level of deficit or surplus that an economy can run on a sustainable basis, to a first approximation that level for the budget may become infeasible, and hence it is uninteresting as a policy guide. What has become clear is that, compared with industrialized countries, the fiscal stance in developing countries should be on average more conservative. I think that running a small fiscal surplus is useful. Shocks, in particular those to the public finances, are much larger in developing than in developed economies, and hence it is straightforward to argue for a greater buffer stock. Such a cushion also allows the authorities to focus on improving the efficiency of expenditures rather than cutting whatever is at hand when an adjustment is required.

Second, in order to establish a credible commitment, and one that can be monitored, it is useful to have rules. This precept is valid not only in developing countries but in others as well, Europe being a good example. An important reason for European monetary union was the need for fiscal consolidation, which is more easily sold within a given country as part of a larger regional goal, such as integration.

Regarding rules, the case of Chile is interesting, because over the last decade Chile has improved on the set of rules governing its fiscal policy. From 1990 until 1998, a period of 7.1 percent annual growth, the task for fiscal policy was to temper expenditure growth. The rule adopted during that time was that government expenditure should grow at a rate below that of GDP. Of course, the discussion was about the perspectives for growth over the next year. This policy, although prudent in terms of expenditure growth, is clearly procyclical, and it ran into problems in the recession of 1999, when output declined by 1 percent.

During 2000, in order to establish a clear commitment but also to allow for more flexibility, a rule was implemented calling for a "structural surplus," which is similar to a cyclically adjusted surplus, of 1 percent of GDP. The rule basically consists of estimating revenue based on the long-term price of copper and the rate of growth of potential output. The latter is neither a long-run policy objective nor a wish, but rather a measure of next year's growth adjusted for capacity utilization. Regarding the copper price, an expert committee was formed to make an assessment. Thus the basic parameters have been set on technical grounds, with the help of an external advisory panel.

This rule also commits the government to the precept that policies that increase expenditures will be financed by current revenues. Given the current slowdown of the Chilean economy, to about 3 percent a year, this has resulted in a fiscal deficit of 0.3 percent of GDP for 2001, and the corresponding figure in 2002 is expected to be about 0.6 percent.

Although the expansiveness of fiscal policy is currently under discussion, there is a broad consensus about the use of the rule. The policy has also been well accepted by the markets: the risk premium for Chilean dollar-denominated public debt is about 100 basis points, by far one of the lowest among emerging markets, with an EMBI+ of about 600 basis points.

In the end, fiscal policy is much more than a stabilization tool, especially given the caveats about its effectiveness for small open economies with flexible exchange rates. It has mainly to do with the efficient provision of public goods over time.

3. Crisis, Contagion, and the IMF

The IMF was conceived in 1944 as part of the Bretton Woods agreement, under which exchange rates were supposed to be fixed, but with adjustable parities. With limited international capital mobility, the IMF could help restore balance of payments disequilibria by mobilizing resources to countries with payments difficulties, that is, by lending to those countries that were temporarily running current account deficits and having trouble financing them. Also part of the IMF's role was promoting exchange rate stability and maintaining orderly exchange rate arrangements among its member countries (of which there were 29 when it was established in late 1945, and 183 today). The role of the IMF has not changed since then. But the world economy has changed a lot.

In particular, the crises we have witnessed recently are very different from the typical balance of payments difficulties of countries in the 1950s or 1960s. Today's crises require massive amounts of financing for their resolution, and they spread around the world at high speed. Exchange rates are no longer fixed but instead fluctuate sharply, and financial markets are increasingly interconnected. The market defeats most attempts by national authorities to control capital movements. Such controls have worked at best only

over short periods, usually during a crisis. In this very different world, the original objectives of the IMF remain sound, but the appropriate strategy for meeting those objectives has changed. The IMF simply does not have enough resources to meet current needs, and even its ability to sound the alarm when crises emerge is increasingly limited.

What is the nature of today's currency crises and of financial contagion, and how can we characterize the sources and the implications of recent crises? How does the IMF work today to deal with crises, and how it can better play that role? In particular, what changes in its governance structure might help it do a better job of preventing and dealing with crises? The discussion here will again center on exchange rates. This is not an obsession on my part, but rather springs from my conviction that most crises are called "currency crises" for a very good reason: they have at the center an unsustainable exchange rate parity, and when that parity changes it can have devastating effects on the economy.

3.1 On the Nature of Crisis

Traditional empirical work defines a currency crisis as a sudden and sharp change in the exchange rate. Such a change can happen under a fixed exchange rate regime, or under some form of managed float, when the authorities fail in their attempt to defend the currency through high interest rates.¹ However, the real problem arises not when the exchange rate changes, even abruptly, but rather when such a change has disruptive effects on the economy, and in particular when it triggers a banking or a financial crisis. These twin crises are the really serious ones that need to be prevented, to avoid not just a wrenching adjustment but possibly years of prolonged correction and slow growth.

The literature on currency crises has evolved through three generations of conceptual models. The first model was based on the notion that crises stem from an inconsistency between a fixed exchange rate regime and fiscal policy. A disequilibrium in the public finances leads sooner or later to the monetization of the budget. The authorities cannot fully control domestic monetary aggregates under a fixed exchange rate regime, because to sustain the currency they must buy and sell foreign currency to support the

¹ This is the reason why many would argue that a pure float does not exist, because the ordinary conduct of monetary policy can itself influence exchange rate behavior. A currency crisis may also occur when, despite the exchange rate remaining stable, there is a large loss of reserves or a sharp increase in interest rates, or both.

parity. The money creation needed to finance the budget then leads to a decline in foreign exchange reserves. To put it concretely, when the central bank issues pesos to cover the budget deficit, the people receiving those pesos quickly exchange them for dollars, because they do not want more pesos. But because the central bank has limited foreign currency reserves, there comes a point at which it can no longer provide dollars to those seeking to exchange their pesos, and hence it cannot sustain the currency at its fixed rate. The theoretical models show that the inevitable attack on the currency will occur before reserves fall to zero, and when the attack does come, the reserves are suddenly depleted. The story is plausible, and in fact it is at the basis of many crises. And the solution is relatively straightforward. A program that combines a severe fiscal adjustment with a consistent exchange rate policy, in exchange for foreign loans to finance the current account until confidence and stability are restored, is good medicine.

However, many crises, especially some of the more recent ones, have not been accompanied by an obvious fiscal disequilibrium. The most classic case I know of is Chile in 1982. The year before the crisis, Chile had a fiscal *surplus* of 2.4 percent of GDP. Likewise, most of the countries hit by the Asian crisis were running fiscal surpluses or small deficits. However, in all these cases there was also a financial collapse, which forced the government to bail out the banking sector. The crisis comes about, according to this view, when the private sector realizes that this bailout means that deficits are coming soon and will have to be financed through the inflation tax, since there is little room to raise explicit taxes or reduce expenditure. In this context, then, one can still argue that there is an inconsistency between fiscal policy and exchange rate policy.

In each of the cases just mentioned there was a promise, explicit or implicit, that the exchange rate would remain fixed, or at least stable. And this promise gave rise to a moral hazard problem, in which the banking system and the corporate sector took excessive risks. The banks entered into both a currency mismatch, incurring liabilities in dollars while lending in domestic currency, and a maturity mismatch, lending long and borrowing short. Then, when the promise was broken and devaluation occurred, they were bankrupted. Thus, in this more elaborated story, a contingent liability arises in public finance that does not appear in the budget figures, and this gives rise to a clash between fiscal policy and the exchange rate.

This story is fine as far as it goes, but it is still incomplete as a description of other countries' experiences. With the currency crisis in the European Monetary System in 1992, a second generation of model was proposed. Here the countries in question had no serious fiscal problems, visible or hidden. Their financial systems were strong. Instead the problem was that the defense of the parity led to a misalignment of the currencies in the system and to high interest rates in some countries, thus causing them to go into recession. The only way to restore growth was to let go of the fixed exchange rate. And the longer a country tried to defend that rate, the more costly, in terms of lost growth, the defense became. It is possible to derive models with multiple equilibria, in which a currency crisis happens with a certain probability. But sooner or later, currency realignment is the only way to restore equilibrium in this model. This is a powerful story, because most currency crises in fact begin with a slowdown, or at least a prospective slowdown, of economic activity.

In analyzing the causes of crisis, I find it useful to think in terms of the country's intertemporal budget constraint. The present discounted value of the country's net exports must equal its current net external liabilities. A widening of the current account deficit in the present will require a narrowing of the deficit in the future. A country seeking to generate future current account surpluses has, broadly speaking, two options: it can grow more slowly, or it can gain competitiveness through a depreciation. The longer the relative price adjustment is postponed, the larger the eventual depreciation will be. Sooner or later relative prices will adjust, and the currency will fall. In all the crisis countries—Chile in 1982, Mexico in 1994, the Asian countries in 1997-98, Brazil in 1999, and Argentina today—the reversal in the current account shows that indeed such an adjustment took place. Regardless of the fiscal position, the current account had become unsustainable: there is a limit to which the economy can sacrifice output, and therefore relative prices had to adjust. As the exchange rate parity loses credibility and interest rates increase, the recessionary costs of maintaining the exchange rate become unbearable. The crisis is usually triggered by an unfavorable international environment, such as a decline in the terms of trade or a shortfall of capital flows, but the underlying cause is an imbalance in either the current account or the fiscal position. Therefore, as the output cost that the country would have to incur to avoid a collapse rises, the credibility of the exchange rate regime is undermined,

whatever the original cause of the problems. Such a rise seems to have been present in most of the recent currency crises.

However, the severity of the most recent crises, most of which have been coupled with financial crises, has led many scholars to analyze another mechanism by which a twin crisis can be triggered. In the wake of the Asian crisis, several models attempting to explain these crises as self-fulfilling prophecies have been developed. The basic idea of these third-generation models borrows from the literature on bank runs, pioneered formally by the seminal work of Douglas Diamond and Philip Dybvig, and can be described as follows. When all depositors come to expect a bank run in the near future, the optimal strategy for depositors is to withdraw their money from the bank immediately. Of course, the banks are unable to pay back all the depositors at once, and so the banking system collapses. Similarly, under a fixed exchange rate regime, if all holders of a currency come to believe that the central bank will not be able to convert all of it into foreign currency, a run on the currency will occur, and the fixed rate regime will collapse. Even if the central bank has sufficient reserves to cover its high-powered money, that is not enough, because the public can still seek to convert all of its liquid liabilities, or M2, into foreign exchange.

The mechanics of these models are very interesting, especially because they tell a coherent story of how a currency crisis may become a banking crisis. But the idea that a crisis is purely and simply a self-fulfilling phenomenon is unrealistic, useless, and depressing. If it were so, then all fixed exchange rate regimes would be subject to collapse at any time. In fact, in none of the currency crises of the last decade did the crisis occur without some serious imbalance. Crises may be triggered by external developments, but the economies affected are never entirely innocent, because crises do not occur at random. Contagion and frantic financial markets may make a bad situation worse, but in the end there is no substitute for sound domestic policy.

The important lesson from these third-generation models of balance of payments crisis is that they can arrive with a violence far out of proportion to whatever policy sins were committed. A crisis of this type, although initiated by old-fashioned disequilibria, can suddenly become a full-blown financial crisis. It becomes necessary not only to find a way to resume transactions with the rest of the world, but indeed to restore the entire domestic economy, and for this reason traditional IMF programs are of limited help.

It is also important to distinguish currency crises from sharp but orderly exchange rate adjustments. One could argue that the exchange rate "crisis" of the European Monetary System in 1992, although it met the standard criteria for a currency crisis, was in fact only a sharp adjustment. It did not involve IMF programs and did not have significant macroeconomic repercussions on the financial sectors of the countries involved. Moreover, the affected economies quickly returned to strong growth, and indeed it can be argued that the currency "crisis" was the event that turned around a slowdown of economic activity.

Other countries have experienced recent exchange rate adjustments that, although persistent, were not as abrupt. Examples include Chile, Australia, and New Zealand. In all of these cases we can conclude that strong fundamentals allowed sharp adjustments in asset prices without triggering a crisis, and the adjustment was important in restoring growth.

As I have already argued, a crisis occurs because some budget constraint in the economy is violated. It could be a liquidity problem, in which case the crisis has to do with short-term imbalances, for example due to a sudden and transitory reversal of capital flows. Or it could be a solvency problem, in which the budget path of the government or of the private sector cannot be sustained on current trends. When the financial system is also weak, the adjustment becomes a crisis.

As we have seen, implicit guarantees can impair public solvency or alter the behavior of the private sector, leading to serious balance sheet problems after the exchange rate collapse, and the crisis then becomes more damaging. Not only the banking system but also the corporate sector could be the vehicle of a deepening crisis.

Again, the main conclusion calls for keeping the exchange rate flexible and avoiding being trapped in an unsustainable commitment. More recent events and analytical work stress the key role of a sound financial system in tempering exchange rate realignments—although in my view Chile learned this lesson after its 1982 crisis. Prudential regulation of the financial sector to avoid damaging currency or maturity mismatches is essential, because if a currency crisis by itself is bad enough, one that also involves the financial system is far worse.

3.2 On Contagion

Another characteristic of recent crises is what we have come to call contagion. Events happening in one country may have undesired repercussions in other, far distant countries. A crisis in Russia may affect Brazil, for example, and from there it can spread to all of Latin America. For purposes of this discussion, three issues regarding contagion are relevant. First, is contagion due simply to the exuberant behavior of markets, or does it stem from real economic interconnections among countries? Second, are there any policy prescriptions we can offer to help curb contagion? And third, what are the implications of contagion for the role of the IMF?

It is an interesting policy issue whether contagion is a transitory, although extreme, response, perhaps caused by volatile financial markets, of an economy to external events, or whether it is rooted in more permanent and real linkages between economies. If contagion is a transitory phenomenon, one strategy for dealing with it might be to introduce policies to insulate the economy from contagion, such as capital controls or a stronger defense of the exchange rate. However, if contagion is more persistent and happens because economies are interdependent, for example because of trade links, the best response is to permit the economy to adjust.

As one might expect, the evidence on this question is mixed, although in my view it is tilted toward finding that interdependence is the cause. Of course, the empirical results depend on how one defines a crisis, how one defines which countries were at the center of the outbreak and passed it on to the rest, and so on. On the other hand, there have been cases in which markets clearly overreacted. The problem is that the source of the overreaction, the channel through which it is transmitted, and the ways to curb it are all difficult questions for policymakers. Indeed, if a crisis is triggered by interdependence, but amplified by pure contagion, the belief that market pressures stem uniquely from unwarranted contagion may lead policymakers to overreact, and this may trigger further market instability.

One clear, recent example of contagion has been the reaction of exchange rates in Brazil and Chile to the events in Argentina. As Argentina's convertibility plan came under serious pressure in mid-2001, both the Brazilian real and the Chilean peso started weakening sharply. In the case of Chile, this weakening occurred despite the fact that

Chile's trade with Argentina amounts to at most 5 percent of Chile's GDP, and the real effect of the current crisis, although much greater this year than in the second half of 2001, is expected to be at most on the order of half a percent of GDP.



Figure 4: Contagion, Argentina, Brazil and Chile

Indeed, by all accounts the depreciation of the Chilean peso was clearly excessive. One could argue, rightly, that part of the depreciation had fundamental causes, and that this process was accentuated by Argentina's turmoil. But had policy remained passive in the face of that clear overreaction, it might have validated a higher rate of inflation and a sharper depreciation. At that time the Chilean economy was slowing down, and hence tightening monetary policy was not a sensible option. Moreover, this year, after the markets had settled down, interest rates were cut by 250 basis points. As I noted earlier, the response in both Brazil and Chile was limited intervention, which actually turned out to be profitable for their central banks.

This case illustrates that it is often difficult to find contagion in the data. The collapse in Argentina dates from December 2001, but the contagion started some six months before, and in fact markets calmed down after the collapse, as uncertainty was

resolved. Although even a cursory look revealed the presence of contagion, I think an econometrician would have a hard time demonstrating it statistically.

The second important question is whether there are preventive policies that can ameliorate the effects of contagion, whatever its origin. Rodrigo Valdes and I analyzed contagion during the Latin American debt crisis of 1982, the Mexican crisis of 1994, and the Asian crisis of 1997. A first issue we explored was whether initial macroeconomic conditions matter for the extent of market pressure that a country faces when a crisis starts. We found, consistent with the literature on crisis prediction, that the answer is yes. In particular, real exchange rate overvaluation, a current account deficit, and a budget deficit are all factors in explaining the severity of a crisis arising from contagion. Therefore the fundamentals are important determinants of the repercussions of an external crisis on the domestic economy. We also found that the most important linkages were those between countries within a given region, rather than those between trading partners. Another important finding is that the estimates did not vary significantly from crisis to crisis. Contagion is not a phenomenon peculiar to the era of globalization of the 1990s but was observed during the debt crisis of the 1980s as well.

We also examined what policies were useful in reducing the severity of a crisis arising from contagion. In particular, we analyzed the effects of the exchange rate regime, the presence or absence of capital controls, and the structure of external debt. Capital controls were found to have no impact on contagion, but exchange rate flexibility and a large share of long-term debt in total external debt reduced the extent of a contagioninduced crisis, as measured through sovereign risk indicators. We concluded that a country's vulnerability, and hence the markets' view of that vulnerability, could be reduced by adopting a more flexible exchange rate regime and increasing the average maturity of external debt.

One has to be careful when analyzing capital controls. Although our empirical analysis calls the effectiveness of controls into question, this may be because controls have often been misused. However, on other occasions they have served as a substitute for prudential regulation, for example to induce a desired matching of assets and liabilities in the financial system, rather than as instruments to manage the inflow or outflow of capital.

Of course, as the economy's institutions develop, direct prudential regulation is a better alternative than capital controls.

Hence our results support the view that policies and initial conditions matter for the extent of contagion. Crises are neither random events nor self-fulfilling prophecies, but stem from problems with the fundamentals. However, these problems may be exacerbated by volatile market reactions: differences in fundamentals do not explain all cross-country variation, and there is scope for violent and extreme market reactions in explaining crises and how they spread.

Finally, the existence of contagion has been used to argue in favor of multilateral support, and therefore it has implications for the IMF and its policies. Fear of contagion should not be a reason for financial support of fragile domestic policies. If anything, and regardless of the size of the country, any such support should be for countries that suffer contagion unfairly. A good set of macroeconomic policies should provide a shield against contagion, but it cannot insulate an economy completely, because of real interdependence. It is difficult to imagine that the international financial institutions will ever be able to eradicate contagion, given their limited funds and the fact that most contagion happens because countries really are interdependent.

3.3 On the Role of the IMF

Let me turn now to the broader role of the IMF. Discussions of reform of the international financial architecture usually have focused on preventing major crises such as those of Mexico, Asia, and now Argentina. But we need to start by recognizing that for every major crisis in which the IMF gets involved, there are many smaller IMF programs aimed at addressing individual countries' problems on a smaller scale. No fewer than 87 countries have had at least one IMF program at one time or another since 1990; table 2 provides a complete list. Many of these programs have been designed to address the long-familiar kind of payments imbalances, and I suspect that many were a means of obtaining external technical support for macroeconomic management. On average, IMF programs have lasted 2.7 years, and some countries have had programs lasting up to 5 years.

I will not discuss here the lengthy literature on the effectiveness of IMF programs. As usual, there is evidence to accommodate all possible presumptions. Some programs

were clearly successful, others failed, and still others helped to restore stability but the real contribution to economic performance came from policies and reforms implemented by the countries themselves. One can recall many cases where programs were used to postpone serious adjustments, and perhaps a better alternative would have been to let the country adjust on its own. In the current discussion of Argentina, and before that, of Russia, many observers have argued, convincingly and forcefully, that too much support was given for too long. This is difficult to judge, because one cannot know the counterfactual—what would have happened if the IMF had not intervened. I suspect that if it had not, some analysts would now be saying that the cause of the problems was the IMF's lack of support.

Behind this concern lies a deeper and more abstract issue: does the very presence of the IMF create moral hazard? One view is that governments engage in reckless behavior because they know that the IMF is likely to bail them out in a crisis. An extreme version of this view is that the IMF should be abolished because it induces bad policies in countries around the world. Of particular concern are those countries regarded as "too big to fail" or "too politically important to fail." My view is that, although some moral hazard problems may exist, especially on the eve of a crisis, this concern is grossly exaggerated. Usually, the first effect of a crisis is the removal of the finance minister, and if the crisis is a major one, the government itself is likely to fall. So even if the country gets bailed out, the leaders who made the bad decisions typically do not. A crisis also hurts those interest groups that support the government. Thus it is difficult to argue that the likelihood of emergency support being offered during a crisis will induce a government to choose this costly option.

The proper role and conduct of the IMF is a vast topic. Therefore, rather than try to discuss all the elements that a successful IMF policy should incorporate, I will focus on two that deserve particular scrutiny. The first is IMF governance, and the second concerns specific proposals for preventing and managing crises.

Table 2: IMF programs in the 1990s

Country	Start	End		Start	End
Albania	13-May-98		Latvia, Republic of	24-May-96	19-Dic-02
Algeria	22-May-95	21-May-98		23-Sep-96	08-Mar-04
Argentina	12-Abr-96		Lithuania, Republic of	24-Oct-94	29-Mar-03
Armenia, Republic of	14-Feb-96		Macedonia	11-Abr-97	28-Nov-03
Azerbaijan	20-Dic-96		Madagascar	27-Nov-96	29-Feb-04
Benin	28-Ago-96	16-Jul-03	Malawi	18-Oct-95	20-Dic-03
Bolivia	19-Dic-94			10-Abr-96	
Bosnia and Herzegovina	29-May-98	29-May-01		25-Ene-95	20-Jul-02
Brazil	2-Dic-98			1-Feb-95	30-Nov-00
Bulgaria	19-Jul-96		Moldova, Republic of	20-May-96	20-Dic-03
Burkina Faso	14-Jun-96			30-Jul-97	27-Sep-04
Cambodia	6-May-94		Mozambique	21-Jun-96	27-Jun-02
Cameroon	20-Ago-97		Nicaragua	24-Jun-94	17-Mar-02
Cape Verde	20-Feb-98			12-Jun-96	21-Dic-03
Central African Republic	20-Jul-98			4-Ago-00	03-Ago-01
Chad	1-Sep-95			13-Dic-95	05-Dic-04
Colombia	20-Dic-99			29-Nov-95	29-Mar-02
Congo, Republic of	28-Jun-96		Papua New Guinea	14-Jul-95	28-May-01
Costa Rica	29-Nov-95			1-Jul-96	29-Feb-04
Cote d'Ivoire	11-Mar-94		Philippines	24-Jun-94	
Croatia, Republic of	12-Mar-97	,		11-May-94	29-Abr-03
Djibouti	15-Abr-96		Russian Federation	26-Mar-96	27-Dic-00
Ecuador	19-Abr-00			24-Jun-98	30-Abr-02
Egypt	11-Oct-96		Sao Tome & Principe	28-Abr-00	27-Abr-03
El Salvador	28-Feb-97			29-Ago-94	19-Abr-02
Estonia, Republic of	29-Jul-96		Sierra Leone	28-Mar-94	25-Sep-04
Ethiopia	11-Oct-96			20-Abr-01	19-Jun-02
Gabon	8-Nov-95		Tajikistan, Republic of	24-Jun-98	23-Jun-01
Gambia, The	29-Jun-98			8-Nov-96	03-Abr-03
Georgia	28-Feb-96			20-Ago-97	19-Jun-00
Ghana	30-Jun-95		0	16-Sep-94	29-Jun-98
Guinea	13-Ene-97			22-Dic-99	31-Dic-04
Guinea-Bissau	18-Ene-95			21-Dic-00	20-Dic-01
Guyana	20-Jul-94		5	6-Sep-94	31-Mar-01
Haiti	18-Oct-96			10-May-96	03-Sep-02
Honduras	24-Jul-92			1-Mar-96	31-Mar-02
Hungary	15-Mar-96		Uzbekistan, Republic of	18-Dic-95	17-Mar-97
Indonesia	5-Nov-97		Venezuela	12-Jul-96	11-Jul-97
Jordan	9-Feb-96			11-Nov-94	12-Abr-04
Kazakhstan, Republic of	17-Jul-96	12-Dic-02	Yemen, Republic of	20-Mar-96	28-Oct-01
Kenya	26-Abr-96	0	Yugoslavia, Federal Republic of	11-Jun-01	31-May-02
Korea	4-Dic-97			6-Dic-95	28-Mar-03
Kyrgyz Republic	20-Jul-94		Zimbabwe	1-Jun-98	01-Oct-00
Lao People's Dem. Rep.	4-Jun-93	24-Abr-04			

The initial question to ask about any IMF intervention is what one might call the Goldilocks question: was it just the right amount at just the right time? There will always be disagreement about this in any particular case, but the chances of arriving at some consensus will be greater if the IMF has in place the necessary elements for a good evaluation of its own interventions after the fact. And here the specific recommendation is a very simple one: transparency.

In countries around the world, economic policy, and particularly monetary policy, has moved toward greater transparency. Of course, there are strong reasons for

transparency based on democratic principles, but it is also valuable from an efficiency point of view. Policymakers are likely to exert more effort when their decisions have to be explained to the public. Given the sensitivity of financial markets and the very nature of the decisions being made, some caution is needed as transparency increases and as the lags with which information must be released are shortened. The problem is that complete transparency may lead to excessive conservatism and even inaction. When the choice is between taking risks and maintaining the status quo, and the former must be justified in great detail under harsh scrutiny, the latter often appears easier and more convenient.

Just as countries have increased the transparency of their public policy, so, too, the IMF has taken important steps in that direction, and it should continue to do so. Already, documents that used to be confidential, such as those describing recent economic developments (REDs) in the member countries, are now released to the public, as are summaries of board discussions and minutes. But still more can be done, especially on the release of relevant policy documents such as staff reports. Here a problem is that the staff report is a staff document and not an official statement of the board. As in any private company, or indeed any institution that properly delegates authority, the final responsibility lies with the board, not with the staff. I think IMF staff reports should be released with approval of the board, accompanied by comments from individual directors if necessary. Since markets may overreact, one could release these reports with a reasonable lag, especially for countries with IMF programs in place.

Another issue on which countries around the world have moved forward is on giving independence to certain public institutions, especially in the realm of monetary policy. There is now broad agreement that the best way to ensure that monetary policy is oriented toward price stability, and thus contributes to prosperity, is to have an independent central bank. This minimizes inefficient political pressures on monetary policy and places appropriate constraints on fiscal policy. It is therefore surprising that this principle has not yet been applied to the IMF itself.

A couple of years ago, Barry Eichengreen, Takatoshi Ito, Charles Wyplosz, and I proposed that the IMF be made truly independent and accountable. The IMF's current governance system, we argued, raises serious principal-agent problems. The IMF staff often overwhelms the board and has great ability to set the institution's agenda. In addition, and

perhaps more important, decisions are often driven by national agendas rather than the goal of global stability. Recent work by Robert Barro and Jon-Wha Lee confirms that the frequency and size of loans are influenced by political-economy factors, such as voting patterns in the United Nations and bilateral trade with the main shareholders of the IMF.

True independence for the IMF means choosing a board that represents the interests of all shareholders and making it truly responsible for its decisions. In particular, although board members could still be appointed by governments or groups of governments, in proportion to their countries' quotas, they should not receive direct instructions from them. Rather, their mandate should be global. Such an arrangement would be similar to that of central banks that have regional representatives, like the representatives of the German *Laender* at the Bundesbank, although the objective has to do with overall inflation. The proposal is of course subject to further refinement, but we believe that an independent IMF board would contribute significantly to reducing principal-agent problems and to defining the responsibilities for IMF decisions more clearly than they are defined today.

However, making the IMF's board truly independent could be counterproductive if it is not also made more accountable. Independent institutions with no accountability are very dangerous. For this reason accountability should be strengthened. The board should be accountable to the finance ministers of the member countries, to the interim committee, and to the public at large. And that brings us back to transparency, which, again, is essential. But for accountability we need to be clear about who is responsible. Under current arrangements, it is unclear whether responsibility lies with the national governments of the main shareholders, with the staff, or with the board. Although it is possible to do a good external evaluation, it is of limited help when responsibility is diluted.

Several proposals have been advanced for new instruments designed to reduce the moral hazard problem. For example, some have proposed having a list of countries that prequalify for loans. A similar proposition is the contingent credit line, or CCL, approved by the IMF board in 1999. Under the CCL, countries can be approved for a line of credit that can be used in a timely manner in an emergency. Both proposals would minimize the moral hazard problem, because countries would have to behave well in order to be eligible. Although, again, my view is that the moral hazard problem is overstated, these proposals could also help protect well-behaved economies from severe external shocks and contagion.

But even so, this kind of solution seems impractical, and it is no wonder that the CCL to date has had no takers.

There are a number of practical difficulties with these ideas. For example, might a country choose not to apply for the CCL for fear of sending a signal of weakness? After all, why would someone apply for a line of credit if they did not think they might need it? But suppose that countries do apply and are accepted. Would the conditionality associated with the facility be worth the benefit? Would well-run economies be willing to accept a yearly external review to determine whether they have satisfied the conditions and may remain on the list? What if a country at some point has to be removed from the list? Might that itself precipitate a crisis? And might not fear of such a crisis deter the IMF board from taking a country off the list, even if it deserves to be? Clearly, the countries that are the best candidates for this type of support are also those for which application and acceptance are not a sure thing, because of the costs. On the other hand, countries that would benefit are those on the margin of vulnerability, but the benefit would be real if, once on the list, the IMF will not risk excluding them in future reviews; otherwise it would be very risky.

An alternative approach would be to have the IMF, on its own initiative and without countries making the request, determine which countries prequalify for contingent loans, starting with the United States. But as a practical political matter, can the IMF make such a public assessment of a country's economy when the country itself has not asked for it? What if the IMF decided to leave a country off the list? That would be an implicit declaration that its economy is weak. Surely this would create major political problems for the IMF and is the reason why it has not taken on the task of prequalifying countries.

In any case, such judgments are properly the role of the private sector. The private rating agencies are supposed to rate countries' debt. But however good the rating agencies are at grading companies, their skill at grading countries is much more dubious, especially in times of crisis. There is evidence, for example, that the rating agencies fell behind events in Asia: only one agency downgraded Thailand before the baht was devalued. The agencies did massively downgrade countries after the crisis had begun, but this only aggravated the crisis.

In my view, neither the IMF nor the rating agencies do a very good job of sounding the alarm when problems are on the horizon. The IMF has more information, and more

professionals to process that information, but it also has more of a conflict of interest. The only meaningful step that can be taken toward improving the anticipation of crises is to strengthen IMF surveillance through increased transparency and information dissemination.

Another characteristic of the recent crises is that the IMF loans made to address them have been increasing in size. This is consistent with the growing magnitude of the crises themselves. However, it may also create moral hazard from the creditors' point of view. Creditors may decide to lend on the expectation that the IMF will again come to the rescue. On the other hand, the most recent case, that of Argentina, may prove a reminder that foreign investors can still lose everything. In addition, these larger loans strain the IMF's reserves, and therefore greater private sector participation is needed, and whenever governments find it in their self-interest to provide support, they, too, must be included in the package. The use of U.S. taxpayers' money to rescue Mexico was sound policy. But in cases where the private sector or foreign governments choose not to get involved, the IMF should limit the size of its loans. This should create incentives for all actors to collaborate in lending when a major crisis arises.

One recent proposal for increasing private sector participation would establish international bankruptcy procedures for countries. It is argued that such procedures would help in preventing crises and, most of all, in organizing an orderly workout once a crisis has started. In a domestic corporate bankruptcy, the bankrupt firm can be taken over by its lenders, who will then reorganize the firm and, in an orderly fashion, try to recover their claims. This process is designed to arrive at a fair solution while preserving the value of the firm's assets. No such arrangement for countries currently exists, because countries are sovereign, even though they may suffer the same problems as firms. A bankruptcy procedure for sovereign debt should, first of all, allow for standstills. Under a standstill, a country could suspend payments temporarily while necessary adjustments are made to resume normal operations. A bankruptcy procedure should also allow for a supermajority of creditors to make decisions that are binding on the rest; currently, bond contracts entered into under U.S. law require unanimous consent of the bondholders for any change.

The idea of promoting orderly workouts for countries in crisis through better bankruptcy procedures has recently received support from the G7, who have endorsed a two-track approach in this area. The first track is at the private creditors' level and should

be easily implemented. It consists of incorporating new contingency clauses into debt contracts. These clauses would provide for a standstill, specify how creditors shall engage in negotiations with the borrower, and allow a supermajority of creditors to decide whether to accept or reject a negotiated restructuring of the debt. The second track of the proposal is oriented more to the long term. It has to do with the role of the IMF, the necessary changes in its Articles of Agreement, and national legislation needed to implement an orderly restructuring.

The idea is interesting, and it appropriately recognizes the need for collective action. However, unless all sovereign debt contracts have the same contingency clauses, a signaling problem arises similar to that of the CCL. Argentina, for example, could easily accept such clauses in its debt contracts, but would other countries do so if they had a choice? Presumably such clauses would increase the cost of credit. Another question is whether firms domiciled in a country that accepts such clauses would also have to include them in their own debt contracts. The signaling effect and the increase in the cost of credit could worsen financial conditions for developing countries generally.

A further problem with these clauses is that they may induce moral hazard. As I have suggested, what deters countries from bad behavior, and thus renders the moral hazard issue less important, is the fact that the costs of a crisis are high, especially for the policymakers who lead their countries into a crisis. If we minimize the distress that countries experience in a crisis, we may also induce moral hazard. We should try to improve the way workouts are handled, but it is possible to make workouts excessively easy. We may end up creating a problem that currently does not exist. This may be especially costly for the dozens of countries that are unlikely to undergo a crisis, which could see an increase in their cost of foreign borrowing.

Finally, is there a role for promoting structural policies as a condition for IMF loans? In principle, I would say no. Although we might all agree with most of the structural recommendations that might be made, such as opening to foreign trade and capital flows, it is not the role of the IMF to condition loans on such policy prescriptions if they are irrelevant to the country's capacity to service its debt to the IMF. In the same spirit, I do not think independent central banks should comment officially on economic policy issues that are not directly related to their role in containing inflation and promoting stabilization.

As long as the IMF is dominated by the agenda of its main shareholders, it may end up doing a disservice to the agenda of liberalization. That agenda may come to appear as nothing more than an imposition by the world's rich countries on the world's poor countries, rather than the sound advice that it is. This is more of an advisory role of the World Bank.

When it comes to financial issues, however, the line becomes blurred. For example, should the IMF lend to a country with a bad domestic bankruptcy law that undermines the efficient operation of its financial sector? Certainly this particular concern is related to the country's ability to repay its loans, and therefore it is appropriate to require revision of the law as a condition for lending.

I am well aware that reaching international agreement on the role of potentially powerful global institutions is not an easy task. Indeed, it is extremely difficult. It is not just a matter of reforming institutions in one country, but of replicating those reforms in many countries. For example, the IMF's main shareholders will surely raise the question: Why should our taxpayers continue to have to provide financial support to the rest of the world if we are giving up control of the institution that provides that support? Under the current workings of the IMF, advances in transparency are welcome. Flexibility in policy advice and in the focus on macroeconomics is also welcome. However, there are still problems of accountability, and I am pessimistic that they will be addressed given the political difficulties involved in changing the IMF's governance structure.

In the end, the problem of good macroeconomic management is one that primarily must be addressed by national policies. The IMF can contribute its advice as part of the surveillance process, and it can provide loans in case of emergency, but it is far from being either the savior of the international financial system or the source of its problems. What will save the system is sensible domestic economic policies, and what threatens it is national incompetence.

4. Concluding Remarks

As should by now be clear, two things lie at the core of my discussion: exchange rates and institutions. Both are essential ingredients for building the basis for prosperity.

In every crisis in an emerging economy, the exchange rate is at center stage. That is why I give so much importance to this topic, and my conclusion is: the greater flexibility the better. I come from a country that has suffered severe currency problems roughly every 20 years since 1960. In the latest episode, as a consequence of the Asian crisis in 1998-99, Chile had a policy framework that did not allow for enough flexibility: it had an exchange rate band, which was narrowed during the turmoil. Nevertheless, in the resulting recession output fell by only 1 percent, compared with 14 percent in the crisis of the early 1980s. Since 1999 we have faced some very severe shocks: the copper price fell to its lowest level in history, the oil price hike of 2000 hit the economy just as it was recovering, and as we all know, we Chileans live in a very risky neighborhood. Yet despite these adversities, our policy framework of a credible inflation target, a flexible exchange rate, and fiscal responsibility has allowed the Chilean economy to grow at an expected annual rate slightly above 3 percent in the period 2000-2002. Many domestic problems remain to be addressed, but the macroeconomic bases are solid.

However, as an observer of many crises, including those in my own country, I have come to the conviction that a sound macroeconomy is necessary but not sufficient to handle difficult times. The second ingredient is institutions. Rule of law, absence of corruption, respect for private property, and compliance with contracts are what make the difference between a stable economy that still suffers crises from time to time, and an economy that gets beyond all that and is able to focus on systematically raising the standard of living of its population.

Economists can write many pages about the appropriate policy responses to different circumstances, especially during crisis. Should the IMF have allowed for a more lenient fiscal policy and a less tough monetary policy in the midst of the Asian crisis? Should Argentina have dollarized? Is it reasonable to apply capital controls during a crisis? And so on. However, I am fully convinced that what we need most is the right incentives and mechanisms. These are what produce the best policies. And incentives are properly in place when institutions work. We have recently seen in Latin America how a financial system can be destroyed, and rebuilding trust in that system is very difficult and takes a long time. It is not enough to have laws. We have seen how they can be changed. It is not

enough to have markets. They can be destroyed. It is the stability of institutions and respect for those institutions that make an economy strong.

Given that we cannot expect salvation from the international financial institutions, the question becomes: What is the role of industrialized countries in the global economy? Is there something they can do? In my view, leaving aside issues about politics, especially the fostering of democracy and the provision of foreign aid, the industrial countries have a tremendous role to play in increasing integration, by further opening trade with developing countries.

The European Union has been taking the lead in opening its markets to developing countries, and the free trade agreement recently signed with Chile is very comprehensive and far reaching. The United States, meanwhile, lags very far behind. Since announcing the Enterprise for the Americas Initiative more than 10 years ago, it has signed only one free trade agreement south of the Rio Grande, and that agreement was already in the works when the initiative was announced. Basically, the past decade has been a decade without progress in the integration of the United States and Latin America. Every country should do what is best for its people, and that holds true for the United States as well. But if we take it upon ourselves to tell the world that opening trade and finance is good for their welfare, setting an example through increasing integration would be a good demonstration of sticking to own principles, and that is not happening in the United States. The antidumping procedures and other instruments for trade protection and subsidization run counter to the objective of promoting trade and are a serious threat to developing countries committed to export-led growth.

We live in a dangerous world. In the wake of the 1990s we have come to realize that the business cycle still exists and shocks can hit hard. We should not be impatient, although we need a sense of urgency about addressing the problems of the poor. We need perseverance, a willingness to make tough social and political compromises, and efficiency in tackling the urgent needs. Some may want more taxing and more spending, others the opposite. Some may want to move quickly toward privatizing public enterprises, others may not. Some may want more regulation, others less. All this is part of the discussion in democratic societies. I have my own preferences, and I think we have to focus on fostering growth and the legitimacy of this process. But above all we have to respect the basic rules

of the game, the basic institutions, and we have to commit to macroeconomic stability. If we do that, we will have built a system that can take care of the most important problems. We will then be able to talk about how to grow faster and how to reduce poverty and inequality, instead of about how to get out of the current crisis and get ready for the next one. That is what I have learned from my country's experience. Chile is still a young success story, with some blemishes remaining, to be sure. But we Chileans hope, and I am confident, that we can someday become an old success story if we stick to sound institutions and maintain macroeconomic stability.