Exchange Rate Regimes and Crisis Prevention in Emerging Market Economies

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It is a great pleasure to be here today, to take part in this Fourth Annual Brookings-Wharton Conference on Financial Services, on integrating emerging market countries into the global financial system – a topic of central importance to the developing countries, and to the IMF. As the speaker at the closing lunch, I should reflect on the proceedings of the last two days. Judging by the titles of the papers, you have covered many of the critical issues that need to be faced in building the infrastructure for the participation of emerging market countries in the global economy; and judging from what I have heard from several participants, you have had very good papers, and some lively discussions.

However, since I was not here, I cannot in good conscience do that. Instead I will start by talking very briefly about the progress that the IMF has been making in measures of crisis prevention. Then I want to talk about one of the most important determinants of any emerging market country's vulnerability to crisis: namely, its choice of exchange rate regime. I will argue that there has been a move away from softly pegged exchange rates in recent years to hard pegs and floating regimes - and that this move is welcome and set to continue.

There are two well-known exchange rate quotes in the literature. The first, which I first read in Samuelson's *Principles* when I was a schoolboy, comes from Oscar Wilde's *The*

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Importance of Being Ernest. In it, Miss Prism tells Cecily that she can omit the chapter on the fall of the rupee when reading her political economy. "It is somewhat too sensational. Even these metallic problems have their melodramatic side," she explains. Well, today financial crises may no longer be metallic. But they certainly remain dramatic. The other quote is less printable. It comes from the Nixon White House tapes, and relates to the President's views on the lira, namely "I don't give a [expletive deleted] about the lira." That's the sort of thing we're going to talk about today.

1. The IMF and Crisis Prevention

Let me start by saying a little about the Fund's recent work on crisis prevention. Much of it comes under the sinister sounding rubric of IMF surveillance. As you all know, this is not a sign of mission creep, muscling into the territory of the CIA, but rather our responsibility to monitor the economic health of countries, regions, and the international financial system.

I will make five points: First, in our surveillance of individual country policies, we are trying to be more candid and more focused on those areas that determine vulnerability to crisis. In addition to exchange rate arrangements, these include macroeconomic policies, management of debt and reserves, and – to an increasing extent – the health of the financial sector.

Second, in the last of these areas, we have made real progress in the shape of our *Financial Sector Assessment Program*, piloted jointly with the World Bank and drawing on the expertize of national authorities. These assessments –one of the most important innovations of the last few years – use a range of tools to identify the strengths and weaknesses of national financial systems. Developed and developing countries alike are finding them useful and by the end of the current fiscal year 36 countries should have gone through the process.

Third, surveillance of national policies is also being given greater focus and structure by *the development of international standards and codes of conduct, and their monitoring*, either by

the Fund or other relevant bodies. These now cover a wide variety of policy areas, including statistical dissemination, monetary and fiscal transparency, banking supervision, accounting and corporate governance. You have discussed several of them here. I understand there was some controversy about them, but there should be little doubt about their utility. A pilot scheme is also under way to build up Reports on the Observance of Standards and Codes for individual countries, pulling together information on different policy areas.

Fourth, the effectiveness of both surveillance and these international standards is much enhanced by *transparency*. It is no exaggeration to say that there has been a revolution in the extent of transparency and the Fund's approach to it in the last five years. For example, the great majority of countries now publish the conclusions of their annual policy discussions with the Fund, and a growing number also release the staff analyses on which these discussions are based; in addition, almost all Letters of Intent that describe country programs supported by the Fund are published.

Transparency of course helps ensure better-informed citizens and investors. But also, and no less important, it encourages policymakers to strengthen their policies and institutions, and the IMF staff to strengthen its analysis – for the incentive provided by knowing the press and professional colleagues are waiting to pounce on any weak analysis is a very strong one.

Fifth, the IMF's *Contingent Credit Line facility* should be a further spur to crisis prevention. It provides a precautionary line of credit to countries which have demonstrably sound policies, but which are nonetheless vulnerable to contagion from crises elsewhere — and by being available it can make them less vulnerable to contagion. No country took advantage of the CCL in its first year, but important steps have since been taken to make it more attractive. I hope and believe the CCL can now play an important part in our crisis prevention efforts.

2. Exchange Rate Regimes

Now I turn to exchange rate regimes, an important determinant of a country's vulnerability to crisis. I will begin by making the critical point, that adjustable peg systems have not proved viable in either emerging or developed economies, and neither are they likely to become so. Time permitting, I will then take up three other issues – the use of capital controls, monetary policy in floating rate regimes, and the operation of hard pegs – before concluding.

i. The Demise of Adjustable Pegs

A simple observation: each major financial crisis over the last six years – Mexico in 1994, Thailand, Indonesia and Korea in 1997, Russia and Brazil in 1998, and Argentina and Turkey in 2000 – has in some way involved a fixed or pegged exchange rate regime. Countries without pegged rates – among them South Africa, Israel in 1998, Mexico in 1998, and Turkey in 1998 – certainly suffered; but to nothing like the same degree.

Little wonder, then, that policymakers have warned strongly against the use of pegged rates in countries open to international capital flows. As Henry David Thoreau wrote in his journal in 1850: "Some circumstantial evidence is very strong, as when you find a trout in the milk".

The warning goes as follows: that intermediate policy regimes between hard pegs – by which I mean currency boards, dollarization or membership of a currency union - and floating rates are not sustainable. Willingly or otherwise, this advice has been taken by a growing number of emerging market countries during the 1990s. (For these purposes, I regard as emerging market countries the 33 that appear in either JP Morgan's EMBI+ index or the emerging markets index compiled by Morgan Stanley Capital International.)

The distribution of exchange rate regimes changed significantly between 1991 and the end of 1999. In 1991 almost 65 percent of emerging market countries had intermediate pegged exchange rate regimes, by which I mean conventional fixed pegs, crawling pegs, horizontal bands and crawling bands. Five percent had hard pegs and 30 percent floated. By the end of the decade, the numbers were very different. The proportion with intermediate regimes had

dropped to 40 per cent, while the number with hard pegs and floats had risen to 10 and 50 per cent respectively. There had been a "hollowing out" of the middle and a move to the corners.

Of the emerging market countries that moved from intermediate regimes to floating rates in the 1990s, Indonesia, Korea, Thailand, Russia, Brazil and Mexico did so in spectacular and painful fashion after major financial crises. Colombia joined the group in 1999. This is the set of transitions that has most influenced the view that soft pegs are not viable for sustained periods – and it includes many of the largest emerging market economies.

The move to hard pegs between 1991 and 1999 was less dramatic, with only Bulgaria moving from a floating rate to a currency board in 1997. But since the end of 1999 two other emerging market countries have joined this group: Ecuador, which has moved from a float to dollarization; and Greece, which has moved from a target band to membership of the euro.

In the next few years, the hollowing out has further to go. Hungary and Poland are hoping to join the euro, Israel is likely to adopt a floating rate, and Turkey is scheduled to do so too.

Overall, it is therefore reasonable to say that emerging market economies open to international capital flows have been and are in the process of moving away from adjustable peg exchange rate systems, some towards harder pegs, more towards systems with greater exchange rate flexibility. (The same, incidentally, is true of industrial countries, largely because of the creation of the euro and departures from the European monetary system.)

Why so? John Williamson puts some of the blame on pressure from the IMF and U.S. Treasury. But the real reason is that soft pegs have not proved viable over any lengthy period, especially for countries integrated or integrating into the international capital markets. The fact that pegged exchange rates have a short life expectancy for *any* type of economy was emphasized by Obstfeld and Rogoff (1995). But the collapse of the Bretton Woods system, the EMS crises, and the recent emerging market crises drive home the lesson that this problem is especially intense for countries with open capital accounts.

When pegged exchange rate regimes have been in place for some time, and therefore enjoy some credibility, their collapse can be particularly painful. The belief that the exchange rate will not change removes the incentive to hedge, and reduces perceptions of the risk implied by borrowing in foreign currencies. This makes any crisis that does strike exceptionally damaging in its effects on banking systems, corporations, and government finances.

In essence, experience has dramatized the lesson of the impossible trinity – that while many countries would understandably like a fixed exchange rate, capital mobility, and a monetary policy dedicated to domestic goals, they can only have two out of three at any one time. But that leaves open two questions: first, why does it seem impossible to direct domestic monetary policy credibly towards the sole objective of maintaining the fixed exchange rate; and second, why should one not use controls to limit capital mobility?

Despite some exceptions, the general answer to the first question must be that if politicians have the opportunity to change the exchange rate at a time when the short-run benefits appear to outweigh the costs, they are likely to take it. And financial markets know this.

Shocks and policy mistakes may move the equilibrium nominal exchange rate away from the official rate. If the official rate is overvalued, defending it typically requires monetary and fiscal tightening to reduce the current account deficit. If the disequilibrium is small, and policy actions are taken promptly, it should be possible to stabilize the situation. But if the disequilibrium is too large, the required policy actions may not be viable – either for political reasons or because of the damage they will inflict on the banking system or aggregate demand. Under those circumstances an attack on the exchange rate peg is likely to succeed.

ii. Capital Controls

So why not impose capital controls to protect the exchange rate from the effects of unwanted capital flows? Among large emerging market economies, China successfully maintained its

pegged exchange rate through the Asian crisis with the assistance of capital controls, providing an important element of stability in the regional and global economies. Malaysia's imposition of capital controls and pegging of the exchange rate in September 1998 has attracted more attention, but in this case it is less clear that they were an important factor. The controls were only imposed once most of the capital that wanted to leave had already done so and when regional exchange rates were already beginning to appreciate.

We should distinguish between controls on capital outflows and inflows. For controls on outflows to succeed, they need to be quite extensive. As a country develops, these are likely to become both more distorting and less effective. And they cannot prevent a devaluation if domestic policies are fundamentally inconsistent with maintenance of the exchange rate.

Where controls on capital outflows are reasonably effective, they would need to be removed gradually, at a time when the exchange rate is not under pressure, and as the necessary infrastructure – in the form of strong and efficient domestic financial institutions and markets, a market-based monetary policy, an effective foreign exchange market, and the information base necessary for the markets to operate efficiently – is put in place.

Unless the country intends to move to a hard peg, it would be desirable to begin allowing some flexibility of exchange rates as the controls are eased. Prudential controls that have a similar effect to some capital controls, for instance limits on the open foreign exchange positions that domestic institutions can take, should also be put in place.

Some countries have tried to impose controls on outflows once a crisis is already under way. This generally does not work. Imposition of controls in this situation is also likely to have a longer-term effect on the country's access to international capital.

The IMF has cautiously supported the use of market-based capital inflow controls, Chilean style. These can help a country avoid the difficulties posed for domestic policy by capital inflows. The typical instance occurs when a country is trying to reduce inflation using an

exchange rate anchor, and for anti-inflationary purposes needs interest rates higher than those implied by the sum of the foreign interest rate and the expected rate of currency depreciation. A tax on capital inflows can in principle help maintain a wedge between the two interest rates. In addition, by taxing short-term capital inflows more than longer-term inflows, capital inflow controls can also in principle influence the composition of inflows.

In Chile the controls seem to have been successful for a time in allowing some monetary policy independence, and also in shifting the composition of capital inflows towards the long end. But empirical evidence presented by Edwards (2000) suggests that they lost their effectiveness after 1998. In any event, they have recently been removed.

In sum, controls on capital outflows can be used to help maintain a pegged exchange rate, given domestic policies consistent with maintaining the peg. But these controls tend to lose their effectiveness and efficiency over time. Inflow controls may for a time enable a country to run an independent monetary policy when the exchange rate is softly pegged, and may influence the composition of inflows. But their long-term effectiveness is doubtful.

iii. Monetary Policy in Floating Rate Regimes

Calvo and Reinhart (2000) and others have emphasized that many countries that claim to have floating exchange rates do not allow the exchange rate to float freely, but rather deploy interest rate and intervention policy to affect its behavior. From this valid point they appear to draw two conclusions: first, that the claim that countries are moving away from adjustable peg exchange rate systems is incorrect; and second, that countries for good reasons hanker after fixed exchange rates, which they can best obtain through hard pegs.

It is hardly a surprise that most policymakers in most countries worry about what happens to their nominal and real exchange rates. Changes in the nominal exchange rate are likely to affect the inflation rate. Changes in the real exchange rate may have a powerful effect on the wealth of domestic citizens, and on the allocation of resources. This will have economic, but

also – especially in the case of appreciations – important political effects. So we would expect monetary policy in countries with floating exchange rate systems to respond to movements in the exchange rate. And other than in the US, it appears to do so.

Once a country begins to float, it has to decide on the monetary policy it will follow. Many recent converts have opted for inflation targeting. That system seems to be working well, and has much to commend it. Under inflation targeting, exchange rate movements are automatically taken into account to the extent that they are expected to affect future inflation. This will generally produce a pattern of monetary tightening when the exchange rate depreciates, a response similar, but not necessarily of the same magnitude, to that which would be undertaken if the exchange rate were being targeted directly.

Beyond the use of interest rates, some countries intervene directly from time to time in the foreign exchange markets to try to stabilize the exchange rate. So long as they are not perceived as trying to defend a particular rate, such interventions can be useful. This is one of the remaining areas in which central bankers place considerable emphasis on the touch and feel of the market, and where systematic policy rules are not yet common. There is of course controversy over whether intervention works at all – and even if it does, whether it is wise to use it. The Banco de Mexico has developed a method of more or less automatic intervention to reduce day to day movements in exchange rates, which could provide lessons in this area.

iv. Viable Hard Pegs

At the end of 1999, 45 of the IMF's then-182 members had hard peg exchange rate systems, either with no independent legal tender, or in a currency board. Except for the 11 countries in EMU, all of the 37 economies with no independent legal tender were small. Argentina and Hong Kong SAR are the biggest economies with currency boards. Since the end of 1999, Ecuador and El Salvador have dollarized, so that over a quarter of the IMF's now 183 members have very hard pegs; the proportion in terms of GDP is similar.

Opinion on currency boards, once regarded as a historical curiosity, has undoubtedly shifted. This reflects several factors: the tireless proselytizing of Steve Hanke and others, examination of their historical record, and their performance more recently in a number of economies, including Hong Kong SAR and Argentina, but also the transition economies of Estonia, Lithuania, Bulgaria, and Bosnia-Herzegovina.

In their favor, currency boards have often proven more durable than pegs. Exits have typically gone smoothly and been driven by politics rather than economics. Currency boards have also been associated with lower inflation and higher (albeit more volatile) growth than floating regimes and simple pegs. But this may reflect the fact that they have typically been introduced in the wake of high or hyperinflation, with output at depressed levels.

Having said this, introducing a currency board is far from trivial, and it is easy to imagine exits proving more problematic than in the past. After all, the strength of a currency board, the virtual removal of the nominal exchange rate as a means of adjustment, is also its principal weakness. Adjustment to shocks via differential inflation is slower than that via the nominal exchange rate. This difficulty is evident now in Argentina, but adjustment *is* taking place as domestic prices and costs decline relative to those of its trading partners.

The record shows that for a country with a history of extreme monetary disorder, introducing a currency board generates credibility for monetary policy more rapidly and at lower cost than appears possible any other way. And for a country like Argentina, with a very long and unhappy inflationary history, society may well be willing to sustain the occasional short-run costs of doing without the exchange rate as a means of adjustment, just as the memory of the German hyperinflation has colored German attitudes to inflation ever since.

When European countries first discussed how they would adjust to shocks within a monetary union, economists emphasized wage and price flexibility, labor and capital mobility, and fiscal compensation across national borders. A currency board country is unlikely to have access to fiscal compensatory measures from abroad, and nor is its labor likely to be as

mobile internationally as that in euro-zone will be. The emphasis has to lie on wage flexibility and factor mobility within national borders. Fiscal policy can play a counter-cyclical role, but only when the fiscal situation is strong enough in normal times for an easing during a recession not to raise any questions about long-term sustainability.

Policies to this end – to encourage internal factor mobility, wage and price flexibility, and fiscal prudence in normal times – are of course desirable in *any* economy. But the need is even greater when the exchange rate is not available as a tool of adjustment.

One disadvatage frequently cited for currency board arrangements is the absence of a lender-of-last resort. But the absence of a central bank capable of acting as lender of last resort can be compensated for by the creation, typically with fiscal resources, of a banking sector stabilization fund (as has been done in Bulgaria), by strengthening financial sector supervision and prudential controls, by allowing foreign banks to operate in the economy, and by lining up contingency credits for the banking system.

The discussion so far has implicitly centered on current account and goods and factor market adjustment. Advocates of hard pegs tend to focus on the capital account, and on asset markets. Their argument is that with respect to the asset markets, a country obtains essentially no benefit – seigniorage aside – from exchange rate flexibility. Given this, they argue for going even beyond currency boards, to dollarization and perhaps in the longer run to wider currency unions. The doctrine of original sin, that emerging market countries cannot borrow abroad in their own currencies contributes to the argument.

It is clear that if a country intends never to use the exchange rate as a mechanism of adjustment, then retaining it is counter-productive, again seigniorage aside. Hence the argument for dollarization relative to a currency board must turn on an appraisal of the gains from dollarization that would be obtained in the capital markets, for example in the reduction in spreads and the strengthening of the financial system, versus seigniorage costs and the value of the option to change the exchange rate *in extremis* by retaining a national currency.

The balance of the argument would be tilted if a politically acceptable means could be found of transferring seigniorage to dollarizing countries. This has proven possibly in the Rand area of southern Africa, but not yet in the transfer of seignorage earned by the US..

Within the last twelve months, both Ecuador and El Salvador have dollarized, but under very different circumstances. Ecuador's decision was essentially one of desparation; El Salvador's was based on careful consideration. Although much work remains to be done (particularly in the banking sector) to ensure its longer-term success, the Ecuadorian case provides much food for thought. For it was implemented without many of what were thought of as the prerequisites for success, such as a strong banking system, being in place.

The conclusion is that hard pegs are more attractive, particularly viewed from the asset markets, than seemed the case some years ago. For a small economy, heavily dependent in its trade and capital transactions on a particular large economy, it *may* well make sense to adopt the currency of that country, particularly if provision can be made for the transfer of seigniorage. While the requirements for effective operation of such a system are demanding, meeting them is good for the economy in any case. But even in these circumstances, careful consideration needs to be given to the nature of the shocks affecting the economy.

It is reasonable to believe, as EMU expands, and as other economies reconsider the costs and benefits of maintaining a national currency – and to be sure there are benefits, in terms of adjustment to current account shocks – that more countries will adopt very hard pegs, and that there will in the future be fewer national currencies.

v. Conclusion

Let me sum up. Proponents of what is now known as the bipolar view of exchange rate regimes – myself included – have probably exaggerated their point for dramatic effect.

The right statement is that *for countries open to international capital flows*: (i) pegs are not sustainable unless they are very hard indeed; but (ii) that a wide variety of flexible rate arrangements are possible; and (iii) that it is to be expected that policy in most countries will not be indifferent to exchange rate movements.

For countries open to capital flows, this leaves open a wide range of arrangements. At one end of the spectrum, there are free and managed floats and a variety of wide crawling bands. At the other there are very hard pegs sustained by a highly credible policy commitment, typically currency boards or the abandonment of a national currency.

And what is excluded? For countries open to international capital flows, the answer is any system in which the government is viewed as committed to defending a particular value or narrow range for the exchange rate, but in which it has not made the institutional commitments that both constrain and enable monetary policy to be devoted to the sole goal of defending it. In essence, this means fixed, adjustable peg, and narrow band systems.

Exchange rate regimes, like hemlines, are subject to the vagaries of fashion. Whatever regime a country adopts, at some point it is likely to wish it had a different one. But the lessons of recent experience are clear. If emerging market countries seek integration into the global financial system – and they should - adopting a soft peg is likely to be a source of regret sooner rather than later. Capital controls can help postpone it, but for countries wanting to integrate into the world economy, they will have to give way at some point.

Thank you.