

# Private Capital Flows, Living with Volatility, and the New Architecture

---

W Max Corden

This is a ‘think piece’ covering the major – and very large – issues of the conference.

I will have in mind the Asian crisis countries and not Russia or Brazil – the latter being countries with high budget deficits and hence public sector borrowing. Much of what I have to say also applies to Mexico 1994–95. I shall not have in mind the special moral hazard problem in the Russian case. I am focusing on international lending by the private sector in developed countries to private-sector borrowers in developing countries.

In preparing for these notes I have greatly benefited from reading, and indeed, intensively studying the comprehensive and very sensible book by Barry Eichengreen (1999). This acknowledgment takes the place of continuously referring to this study for fuller exposition of the relevant issues.

## 1. Volatility, Herding and Financial Sector Inefficiency

The heart of the problem has been – and is very likely to be in the future – the extreme volatility of private capital flows to emerging market countries. Market psychology shifted suddenly from euphoria to panic. It was reasonable to expect very high capital inflows to slow down, and exchange rates to be forced off their informal pegs and to depreciate. There is no shortage of ‘fundamentals’ to justify this. But the extreme and sudden movements in the Asian crisis countries were unexpected and have not seemed reasonable, other than in terms of *ex post* theories which can always make anything seem rational. There was certainly an element of self-justifying expectations.

The volatility of market psychology led to extreme movements in net capital flows only because so much borrowing had been short-term. Thus, it is important to discuss why there was so much short-term borrowing, and why it was particularly high on the part of the banks and firms of some countries (notably Korea) and not by others (notably Malaysia and Taiwan). Furthermore, this volatility did not apply to direct investment, though it did apply to portfolio flows, reflected in (and both caused by and causing) stock market fluctuations.

A plausible rational explanation of this extreme volatility is ‘herding’ behaviour caused by lack of information by lenders about the way the borrowers used their funds and what their financial situations actually were. Such borrowers included banks, non-bank financial intermediaries and non-financial corporations. Perhaps there was also a lack of information about the macroeconomic situations in the countries concerned. To some extent the information was actually available but was not used or assimilated. In the absence of detailed knowledge, there is a tendency to

move with the herd, the herd being led by those particular sheep that appear to have better information. I must add that personally, I do not rule out a substantial element of irrationality, as in many manias and panics in financial history. But let me pursue this rational approach further.

If one accepts the information problem as one possible cause of extreme volatility, it follows that measures to improve information are desirable from this point of view. This seems to be the implicit logic of various proposals for measures designed to improve accounting and auditing, make corporate governance more transparent, avoid insider trading, reduce crony capitalism and so on. The many proposals that have been made along these lines, if implemented, would improve the efficiency of the financial and managerial system, and thus raise the marginal productivity of capital. This is, in any case, desirable, though not necessarily an urgent objective for the Asian crisis countries. But, insofar as such measures involve improvements in information, they should also reduce volatility.

I shall not go into details here, but only observe that many developing countries may need many years to bring about the suggested improvements because of lack of human resources, cultural factors, and so on. I also wonder whether all the changes that are proposed (such as turning family businesses into public companies) are wholly desirable, bearing in mind some advantages of what used to be described as 'the Asian model'.

Other reforms that have been proposed are designed to make renegotiation of private debts in a crisis easier. This includes putting new provisions into loan contracts and establishing adequate bankruptcy procedures. This is a different issue and comes under the heading of 'living with volatility', referred to further below.

## **2. Moral Hazard – Does it Explain Volatility?**

One might ask why moral hazard should give rise to volatility. If lenders expect to be rescued when there is some trouble, why do they suddenly panic? Do they no longer expect to be rescued? Moral hazard can help to explain excessive capital inflows during the boom but does not, it seems to me, explain the panic. Perhaps market participants have suddenly become aware of new information, but does that have anything to do with moral hazard? Perhaps it can be argued that the greater is the inflow in the boom period, the bigger can be the fall when the herd thinks it has new information. More generally, one might argue that the perception of expected rescue can be unstable, so that the existence of moral hazard does indeed contribute to volatility.

Much has been written about the likelihood that moral hazard has been an important factor in the Asian case. It seems fairly clear that many borrowers had reason to expect to be rescued, or at least somewhat protected, by their governments. But this does not apply to all. Perhaps foreign banks also felt more secure because of the Mexican rescue, though they might have realised that Mexico's relations with the United States made it a special case. But the euphoria also affected portfolio investors who had no reason to expect to be rescued, and who did indeed incur substantial losses.

I believe that the exceptionally favourable economic histories of all the Asian crisis countries led to some excessive euphoria, and to a failure to take adequately into account certain signs of economic problems ahead (deteriorating terms of trade, diminishing returns to investment, rising real wages).

In view of Korea's history, I doubt that the thought of the possible need for an IMF rescue for Korea crossed the minds of many market participants.

Still, this is not to deny that there is a moral hazard problem, especially in the case of banks, which need to be adequately regulated and supervised. Moral hazard may have led to excessive borrowing in the case of banks, and also by corporations in Korea and Indonesia. It is a matter of discussion whether it also contributed to excessive volatility.

### **3. Living with Volatility – More Reserves, Contingent Credit**

If capital inflows are volatile and unpredictable, and this volatility severely damages the domestic economy, as well as creating the danger of default, then the more foreign exchange reserves the country has, the better. If defaults and crises are to be avoided, at the minimum, short-term foreign borrowing by the private and public sector should be backed by comparable reserve levels. This assumes that sufficient help from outside – e.g. the International Monetary Fund – cannot be relied upon. It is now well accepted that the ratio of short-term debt, private and public combined, to reserves is crucial. Indeed, the whole of the domestic money supply, broadly defined (M2), is a potential foreign liability of the government.

It is worth noting that the Asian crisis countries did accumulate considerable reserves during the period of capital inflow – the result of interventions designed to avoid nominal exchange rate appreciations. It is also true that the two east Asian countries that avoided a crisis, namely Taiwan and Singapore, had exceptionally high reserves relative to GDP.

But the accumulation of foreign exchange reserves has costs and problems. The accumulation of reserves really represents very short-term lending by the public sector abroad. If the private sector is borrowing short-term abroad and the public sector is lending short-term and if, as is usual, the interest rate on the borrowed funds is higher than that received on highly liquid reserves, a cost is incurred. If the private sector had to accumulate its own foreign exchange reserves to match its borrowing, it would not engage in such activities. One might then say that the problem is the implicit transfer of risk from private to public sector – that is, the moral hazard problem. The private sector acquires liquid liabilities and this then requires the public sector to acquire liquid assets.

But there is also an externality factor. A private-sector crisis turns into a national domestic crisis through the Keynesian multiplier effect, and it is this effect that can be modified or even avoided through the use of fiscal policy which would involve a decline in reserves. (I discuss fiscal policy further below.)

Reserves can also be accumulated through current account surpluses and through long-term capital inflow. Here I will focus on current account surpluses. Taiwan has had large surpluses over long periods. China (PRC) has also had substantial surpluses. Even Korea ran surpluses for four years, from 1986 to 1989. If a high level of reserves can protect a country from the kind of severe downturns we have recently seen in east Asia, then reserves accumulation seems to me a very sensible use of private and public savings. It would reflect a spirit of self-reliance.

But one has to take note of the US problem, namely, an excessive political concern with bilateral ‘imbalances’ even if only lasting for a few years. Overall, current account surpluses in east Asian countries inevitably lead to large bilateral trade surpluses with the United States. For example, the Korean current account was in deficit in every year from the early 1960s until 1985, and then followed four years of surplus. This generated complaints from the United States – and pressure on Korea to open its markets – as if Korea were a chronic surplus country. Only deliberate trade distortions causing Asian countries to discriminate in their imports in favour of the United States can break this link.

In addition to reserves accumulation, countries might negotiate contingent credit lines with international banks. Argentina has done so, as has Mexico, and perhaps a few others might also succeed in doing so. I am not sure how realistic this is for many countries. But I do have one question. Membership of the IMF actually involves a form of contingent credit provision. One might ask why developing countries’ governments should be advised to go to the private sector for this purpose when this is exactly the role of the IMF, which has more experience and competence in this activity. The moral hazard problem is the same in both cases. The IMF deals with this problem with conditionality. I suppose the standard arguments for privatisation apply here. It might be worth pursuing this question further. Perhaps encouraging countries to establish contingent credit lines with international banks is simply a way of overcoming the political difficulties of getting more resources for the IMF.

#### **4. Living with Volatility – the Question of Capital Controls**

Here is ‘the hottest subject in town’. On the basis of an interpretation of the experience of the 1930s, the IMF Articles of Agreement did not require countries to open their capital markets, and only exchange restrictions on current account transactions were to be removed. This reflected Lord Keynes’ view, among others, that capital movements in the 1930s had been destabilising. In fact, from the 1970s capital markets did become more open, partly because of the increasing difficulty of controlling capital movements when trade restrictions were lowered or removed (and trade increased), and multinationals became more important. I need hardly add that, in more recent years, ideological commitments to liberalisation, pressures from interested parties, and technological developments have played major roles.

It is important to stress that the more open a country is to trade, the more need there is for trade credit, and the more opportunity there is for speculation through leads and

lags. All this makes evasion of controls on short-term flows easier. In addition, shifts of funds and transfer pricing by multinationals provide evasion opportunities. I would guess that the ability of India to have effective capital controls is partly the result of its general lack of openness.

But we are fortunate to have two very valuable laboratory experiments in economies that are very open, namely, that of Chile with its now-famous taxes on short-term inflows (in the form of requiring inflows to be accompanied by non-interest bearing deposits), and that of Malaysia with its controls on outflows. The Chilean measures appear to have been successful not in reducing total inflows (which was not necessarily desirable, in any case), but in reducing the share of short-term relative to longer-term inflows. The Malaysian case is very recent but no doubt is already being studied.

The argument that the monetary authorities should try to limit short-term capital inflows, when they seem to be getting excessive, seems to be overwhelming. If there is a typical domestic 'euphoria' boom, it is desirable to raise interest rates and tighten credit so as to tone down the boom. But the problem then is that this will attract more capital and lead to further real appreciation of the exchange rate. Controls or taxes on inflows are then surely appropriate. Naturally taxes (whether explicit or implicit) are preferable to quantitative controls, for the same reason that tariffs are preferable to import quotas. In addition, prudential controls should obviously be imposed on banks.

The case for controls (or taxes) on outflows is weaker. For one thing, when a country is in a serious crisis, the pressures for capital flight by local residents as much as by foreign lenders, are then immense and can overwhelm the effort. There are good examples of this from Latin America (especially Mexico and Argentina) in the 1980s. Hence there is an enforcement problem. Furthermore, with regard to controls or taxes both on inflows and outflows, I need hardly mention the administration/corruption problem. What is possible for Chile may not be possible or desirable for Indonesia, for example.

## **5. Living with Volatility – Need for Functional Finance**

Reserves are meant to be available in a crisis. This applies not only to reserves accumulated through earlier private capital inflows (and even current account surpluses), but also to reserves boosted by drawing on contingent credit facilities from international banks and on credit from the IMF. They can have three uses: to pay off foreign credits that are coming due and cannot be refinanced, so as to avoid default; to maintain the exchange rate or at least to finance intervention to moderate depreciation; and finally, to finance continued current account deficits resulting from Keynesian countercyclical fiscal expansion.

In the future there should be less of the first use if proposals to encourage or require 'bailing-in' private creditors are adopted, and there should be less of the second use if fixed exchange rate commitments have been avoided and borrowers have been encouraged to hedge against possible depreciations or to borrow in domestic

currency. (I discuss the exchange rate regime issue below.) The primary purpose of building up reserves for a crisis situation should be to finance continued, if reduced, current account deficits for a transitional period until the switching effect of devaluation boosts exports and reduces imports. These continued deficits would then result from temporary fiscal expansions. The aim would be to avoid, or at least moderate, the deep recessions into which both Mexico in 1995 and east Asian countries in 1998 were plunged.

If countries are to live with private-sector volatility, they will have to relearn the lessons that were taught in the 1950s by the advocates of ‘functional finance’: lessons that went out of fashion in academic circles in later years, though such policies were still practised to some extent. In boom times countries need to have fiscal surpluses so that they can have deficits when the boom-time music stops. These deficits may need to go beyond the levels that would result from the automatic stabilisers. (This was certainly required in the recent Asian episodes.) In other words, public spending may actually need to increase.

Of course, to some people it is counter-intuitive that when a country is in trouble and a fiscal deficit naturally increases, the fiscal deficit should be increased even more by deliberate policy. Herbert Hoover certainly found it counter-intuitive in the 1930s. Governments should have infrastructure projects prepared for this kind of situation, and some part of the increased spending should take the form of social safety-net expenditures (which is really a form of automatic stabiliser).

The market does not like budget deficits, especially ones that are deliberately increased. And in a crisis, market opinion certainly matters. That is a serious problem for the functional finance approach. The answer here is that a credible, conservative fiscal policy should be established in good times. Indeed, to a great extent the Asian crisis countries had done so, certainly more so than countries in Latin America. Substantial surpluses in boom times should be regarded as normal (a message for US politicians!). This would be rational from the point of view of optimal public borrowing even if market opinions did not matter.

I have heard or read two arguments.

One says that a current account improvement will eventually be needed in a capital market crisis, and standard theory has taught us that this requires not only real devaluation (‘switching’) but also a decline in total spending (‘absorption’). And the only way in which public policy can bring about the decline in spending is through fiscal contraction. The answer is that the decline in absorption automatically results from the private-sector recession in demand and, in the short run, at least, it may be a bigger decline than was required.

I have also heard (and it has been said in Korea) that when the private sector has to bear the burden of the crisis, the public sector should share it. The answer is that the necessary fiscal deficit could be brought about by increased social safety-net spending, for example, or temporary tax cuts, which would reduce the private sector burden. Furthermore, extra public spending, even on infrastructure, will increase private incomes.

Let me end this Keynesian interlude by noting the political economy problems raised by the functional finance approach. Do we really think that Indonesia would have benefited in 1998 if the Soeharto regime had felt free, or even been encouraged, to spend and subsidise more? Do we think that many developing countries can manage the required flexibility of functional finance? Also, the view is sometimes expressed that fiscal expansions at crisis time would inevitably protect not only the innocent bystanders but also the owners and managers who had been guilty of unwise and excessive borrowing and misuse of the funds borrowed.

## 6. The Exchange Rate Regime

It has been a standard view that high capital mobility and a fixed-but-adjustable (FBA) exchange rate regime are incompatible or, at least, that the combination is undesirable because it is highly likely to lead to crisis. This view goes back to the breakdown of Bretton Woods and certainly finds support from the 1992 Exchange Rate Mechanism (ERM) crisis, from the 1994 Mexican crisis, and from the recent Thai and Korean crises.

In the standard view there are really two objections to the FBA regime. First, when a devaluation or depreciation is inevitable because of fundamental factors or because of self-justifying speculation, the central bank (which tries, unsuccessfully, to maintain the exchange rate) ends up making losses to the benefit of speculators who have effectively engaged in one-way bets. Second, the FBA regime ends up in political crisis: in the effort to maintain the regime, the finance minister is obliged to make a credible verbal exchange rate commitment or promise which, it then turns out, he cannot keep. Ask Mr Lamont, Chancellor of the Exchequer of Britain in 1992, what he thinks about such a regime.

Such FBA regimes have often actually lasted a long time, the best example in recent times being Thailand – even though the baht was not formally fixed to the dollar. But eventually the FBA regime ends in crisis because of a drastic change in fundamentals or because of increasing capital mobility, usually caused, as in the Thai and Korean cases, by capital market liberalisation.

It is interesting that the Asian crisis has led to a new argument against FBA regimes. The argument is that private-sector borrowers, including banks, had faith in the commitment to the fixed rate, and so borrowed in dollars (or yen or Deutsche Mark) rather than domestic currency, but without hedging against depreciation. When the depreciation came, they then incurred huge capital losses in domestic currency, and these losses severely damaged the financial system and bankrupted firms. The effect was deflationary. Through this mechanism the depreciation was contractionary. The argument goes that, if the promise of a fixed exchange rate – apparently a credible promise – had not been made in the first place, borrowing might have been in domestic currency, or foreign currency borrowing would have been hedged.

But there is something I have wondered about. Why did banks and others borrow in dollars rather than, say, baht? The answer presumably is that dollar interest rates

were relatively lower. But why were they lower (for the same borrower from the same country)? Presumably the answer is that the market did allow for the possibility of devaluation or depreciation. Of course, it was only a possibility. Why then did the borrowers feel more certain about the exchange rate staying fixed than did ‘the market’?

It may be that the borrowers simply gambled and lost. They gambled because of the general euphoria that was prevalent and perhaps because, one way or another, they expected to be rescued by their government or central bank – a case of moral hazard. It might also be said that the likelihood of losing – that is, of a depreciation – did not seem high. The common argument is that a FBA regime encourages such a gamble. In essence, in my view, the standard or classic arguments against FBA regimes given earlier are sufficient to support the now common view that when there is high capital mobility, a commitment to such a regime is undesirable.

But what is the alternative to the FBA regime? The disadvantages of free floating when it concerns the US dollar-yen-Deutsche Mark (now euro) relationships have been rehearsed so often, I need not do so here. Of course, there can be some intervention, some management, whether sterilised or not. Here it may be useful to look at the Australian and Canadian floating rate experiences in recent years to see what can be learnt.

But here I want to refer to the Indonesian case. Indonesia did not have a fixed-rate regime before the crisis, though something near it. It had a modestly crawling peg with a fairly wide band, and when the crisis came, it allowed the rate to float almost immediately. It did not follow the ERM-Mexican-Thai precedents and try to maintain the rate, to the loss of the central bank. In my view it did all the right things. (This contrasts with Korea later in the year.) The Indonesian rupiah depreciated in the market beyond all reason and with very damaging effects on borrowers and the financial system, as well as on consumers or users of imports.

The Indonesian experience is no recommendation for floating. What was needed was some stabilising speculation. No doubt there was some, but clearly not enough. Perhaps the market was too thin. It may be worth discussing this episode. Was there any reasonable basis, given the knowledge (or lack of it) at the time for the extent of depreciation in early 1998, and why was there not more stabilising speculation?

I will also not take time now to rehearse the arguments for and against currency boards and their more extreme version, namely, dollarisation. Such regimes seem to be appropriate for very small economies – of which there are many in the world – and for countries with a history of very high inflation where there has been a major problem of monetary discipline in the past. Here Argentina is the most important example. Bulgaria satisfies both criteria – smallness and inflationary history. For the choice of a currency board regime, it is also desirable that the country’s trade be heavily biased towards the countries which are in the currency area which that country has effectively joined. (But is that true of Hong Kong?)

I suspect that more countries will move in the currency board direction. But it has to be remembered that all the empirical evidence from many developing countries

suggests that nominal exchange rate depreciations do have significant *real* exchange rate – and hence ‘switching’ – effects. And there are times when significant real depreciations are needed, the alternative being massive recessions.

My provisional and rather pragmatic conclusion on the choice of exchange rate regime is that for many middle-sized or larger developing countries, some kind of managed floating or flexible peg with a band, with the peg possibly crawling, and with no strong commitment to it, may be a reasonable compromise.

## 7. New Architecture?

I come now to the pretentiously entitled ‘New Architecture’. So far I have discussed a variety of actions that developing countries – the recipients of capital flows and the victims of excessive volatility – might take to protect themselves in the future. But what can the ‘international community’ do? Numerous proposals, often of a radical nature, have been made which are simply unrealistic, and I shall not discuss them here. In the range of feasible and sensible proposals (all of which are worth pursuing and have pros and cons) are several that directly involve the IMF.

Broadly, they fall in three categories.

First, in a crisis, the IMF should be more active and speedy in encouraging and facilitating restructuring of debts owed to the private sector, and in putting pressure on lenders to come to the table (through the IMF ‘lending into arrears’). In other words, more emphasis should be placed on ‘bailing-in’ rather than ‘bailing-out’ the private sector.

Second, the IMF should be active in encouraging improvements in developing countries’ financial sectors, not only by giving advice but by setting minimum standards or making prior improvements a condition for providing funds in a crisis. Possibly the interest rate it charges could vary with the extent of prior improvements achieved.

Finally, the IMF should be more sympathetic to controls or taxes on capital inflows, and possibly even outflows, especially in cases where the financial sectors are still quite inadequate. It should advise on implementation of such taxes or controls, where appropriate.

It might be argued that in the case of countries that have grossly inefficient financial sectors, perhaps all capital inflows, other than in the form of direct investment or trade credits, should be discouraged. If lenders cannot really know how their funds will be used, owing to lack of transparency – whether caused by weaknesses in corporate governance or by informal relationships between government and business – and if bankruptcy laws are inadequate, they should have the sense not to lend. The question is whether the IMF can help, at least with information. On the other hand, the usual market response to uncertainty or lack of information is to charge high interest rates and thus gamble. And what is wrong with that, it might be asked: is not risk-taking the business of the market? The answer is that, when the gamble does not come off, there are adverse effects not just on the gambler but also on bystanders.

At the margin of political feasibility is the proposal (which I favour) that the resources of the IMF be substantially increased so that it can adequately finance transitional current account deficits resulting from functional finance policies designed to avoid deep recessions. The problem is to define the appropriate cases rather narrowly and avoid or minimise moral hazard. While the IMF can never be a real lender of last resort because its resources are limited, in particular cases it can ease the temporary pains caused by the market's volatility.

Yet the funds available to the IMF are now so small relative to the massive private capital flows to developing and transitional economies that we have seen in boom times, that this line of thought is probably unrealistic.

## Reference

Eichengreen, Barry (1999), *Toward a New International Financial Architecture: A Practical Post-Asia Agenda*, Institute for International Economics, Washington, DC.