

Mr. Macfarlane gives an overview of the Asian situation from an Australian perspective Talk by the Governor of the Reserve Bank of Australia, Mr. I.J. Macfarlane, to the American Australian Association, in conjunction with the Asia Society, The Downtown Economists Inc., New York Association of Business Economists and the International Economists Club held in New York on 11/3/98.

This is my first opportunity to address such an important audience in New York, but I hope it will be the first of many such occasions. I have chosen as my topic the current Asian situation, which as you can well imagine is exercising a lot of our time and thought in Australia at the moment. We like to think that there is a lot of expertise in Asian affairs in Australia among our policy-makers, in our universities and in our press, and that therefore an Australian perspective could have interest for a wider audience.

Forecasting economic crises

The events in Asia over the last 18 months have raised again the issue of whether it is possible to forecast economic crises. The international community went through the same self-examination after Mexico in 1994, and a large amount of research was done on the subject - much of it by the IMF.

It sounds as though it should be easy. We can all point to obvious signs of trouble in particular countries - in Mexico, the over-valuation of the real exchange rate; in Thailand, declining exports and widening current account deficit; in Korea and Indonesia, the large amount of unhedged foreign borrowing. This type of casual empiricism, however, is not good enough; it tends to highlight a different factor for each country. To be a useful forecasting device, we need to identify a set of characteristics that is nearly always present in all countries that are about to experience an economic crisis. A number of economic studies have set out to do this, and have found a few useful regularities, but not much more. The results have disappointed those who hoped for a forecasting kit which would enable them to pick the timing of the next crisis and the countries involved.

The private sector has not done any better as a forecaster, judged by interest rate spreads and credit ratings. The spreads between Asian interest rates and comparable US rates narrowed during the 1990s to reach a low point in the first half of 1997 just as the problems were about to unfold. The ratings agencies made no downgrades in the first half of 1997, and compounded the problem by making a flurry of downgrades after Asian currencies had already fallen sharply.

Notwithstanding the disappointing results of these forecasts, I intend to examine some of the characteristics that seem to lie behind the economic crises of the past decade. But before doing so, I should say a word or two about what is meant by an economic crisis - it could be something temporary and manageable, or, on the other hand, it could be an economic disaster.

What do we mean by an economic crisis?

Most of the studies on this subject concentrate on a very specific sub-species of economic crisis, namely a currency crisis. This has the advantage that it can be measured by one variable - a currency crisis can be defined as any episode when the exchange rate falls by a large amount in a short period. A definition of this type would usually include, among others, Thailand, Indonesia, Malaysia, Philippines, Korea and the Czech Republic in 1997, Mexico in 1994, the United Kingdom and Italy in 1992, and Australia in 1985. I could add a much bigger list if I wanted to, but the above selection is sufficient to illustrate the points I want to make.

The most important point is that a currency crisis need not be much of a crisis at all, in that it may not lead to a broader economic crisis. While it often does lead to a broader crisis - as in Asia today - there are examples in the above list where it was not the case. Few would argue that the United Kingdom's or Italy's departure from the ERM precipitated an economic crisis or led to any lasting hardship. I would make the same case for Australia in 1985. The depreciation of the exchange rate in these cases led to a beneficial policy response, had only short-term inflationary impact, and was soon followed by a significant appreciation.

It seems to me that a fruitful approach would be to look at the factors which are likely to precipitate a currency crisis, and look elsewhere for another set of factors which would cause a currency crisis to lead to a full-blown economic crisis. By this, I mean a deep recession, high inflation and widespread corporate and banking collapses.

Factors leading to a currency crisis

There is a literature dating back to the 1980s which deals with speculative attacks on currencies. Not surprisingly, this points out that any country that has a combination of a fixed exchange rate and the free movement of international capital is particularly vulnerable to a successful speculative attack. The ERM departures of 1992 and the Asian currency crises of 1997 fit neatly into this pattern. But other countries with fixed exchange rates have been successful in avoiding depreciation. For example, France maintained its peg in 1992 and Hong Kong has done so for the past 13 years, despite the turmoil in its region. As well, some countries with floating exchange rates have experienced currency crises. All that can be concluded at this stage is that a fixed exchange rate is more likely to result in a currency crisis than a floating one. It is more "brittle" - it allows speculators to build a position without turning the price against themselves. Also, it does not allow the monetary authorities a tactical retreat - they have to keep supplying foreign reserves at a fixed price.

The situation described above becomes more marked if three other conditions apply:

if there is evidence that the currency is becoming over-valued, either because of domestic inflation (as in Mexico), or because it is fixed to an appreciating currency (such as in Asia in 1997);

if there have recently been other currency crises in countries with similar characteristics. Currency crises come in bunches; contagion is as good an indication of impending trouble as are any "fundamental indicators";

if there is evidence to suggest that the Government will not have the necessary support to be able to resist depreciation. Such resistance would normally involve tightenings of fiscal and monetary policy which would be hard if the economy is in or near recession, or where the balance sheets of the corporate sector are very weak.

I have not mentioned the traditional villains - large budget deficits financed by central banks, and the resulting rapid monetary expansion and inflation. I do not want to suggest that these will not lead to a currency crisis - obviously, they will, but they have not been the main culprits in recent years.¹ The interesting situations - and the ones worth studying - are where currency crises occur in countries with reasonably responsible fiscal and monetary policies, as in most of the cases cited above.

¹ In an earlier speech I called these Type I crises and contrasted them to Type II crises where problems centred on the weakness of banking systems and other private sector deficiencies (as discussed below). See "The Changing Nature of Economic Crises", *Reserve Bank of Australia Bulletin*, December 1997.

Another category of economic characteristics that are traditionally associated with currency crises are those pertaining to a country's external trade situation, such as its current account deficit or its accumulated external debts. Again, a large current account deficit is often associated with a currency crisis, but there are enough important exceptions to question whether this would be a useful indicator of an impending currency crisis. For example, neither Indonesia nor Korea had large current account deficits in the 1990s (including in 1997), nor did either the United Kingdom or Italy in 1992. The celebrated case in the opposite direction is Singapore, which ran a current account deficit which averaged 15 per cent of GDP for the decade of the 1970s without a currency crisis.

As you may have noticed, I have not mentioned any of the economic characteristics that have received so much attention in discussions of the current Asian situation. These include longstanding structural features such as soundness of the domestic banking system, the transparency of business relationships, the degree of government involvement in private investment decisions, or the quality of bank supervision. While these are important, they are important in a different way. Deficiencies in these areas clearly cannot be the cause of the recent currency crisis in Asia, because these deficiencies have been around for decades. They did not deter international capital from flowing in year after year and, therefore, could not be the cause of the change of direction in 1997.

They are important, not because they cause a currency crisis, but because they provide an environment where a currency crisis can lead to a severe economic crisis.

Severe economic crises

Whether a currency crisis leads to a severe economic crisis or not depends on two factors - how far the currency falls, and how resilient the economy is to a lower exchange rate and higher interest rates.

(a) The size of the depreciation

This may sound as though it is a small diversion from the main theme, but it is not. It is quite possible that an exchange rate may fall by an amount much greater than anyone expected on the basis of *ex ante* information (anyone can always make up an *ex post* justification). This should not surprise us because no-one has yet been able to find a satisfactory explanation for movements in the exchange rate. That is, no-one has found an equation linking the exchange rate to various economic variables that is good enough to yield forecasts that outperform crude rules of thumb. We know that certain factors, such as those listed in the previous section, are associated with falls in the exchange rate, but we do not know whether the fall will occur this month or in two years, or whether it will be 10 per cent, 20 per cent or 80 per cent.

One thing that seems clear is that in the early days of a floating exchange rate regime, we should expect some very large movements, particularly if the balance of forces is in the direction of depreciation. Markets are unfamiliar with the new system, they have no track record to guide them, there is often an atmosphere of panic among market participants or indecision among policy makers, and reliable information is hard to come by. In these circumstances, overshooting is almost bound to occur. In Australia's case, the Australian dollar moved from a relatively fixed regime to a float in December 1983 because it was under *upward* pressure. Yet within 15 months the scene had changed and it began to depreciate sharply; in the space of 17 months it fell by 39 per cent in effective terms. This was a gross overshooting, as subsequent events proved (it regained two-thirds of its fall in the subsequent year).

The situation in Asia involves an altogether higher order of uncertainty. Their currencies were floated because they could not resist downward pressure in 1997,² and they had to give up their fixed rate regimes and move to a float before anyone was prepared for the new system. In these circumstances, floating rate regimes operate very badly and are extremely sensitive to confidence factors. Great skill is required in finding the right policies and managing the crisis. The countries concerned usually have no experience of it, and therefore often turn to the international community for help. It is an equally large challenge for the international institutions and the spirit of international co-operation.

When an exchange rate falls quickly to half its former level, or a quarter (as in Indonesia), the strain on the economy becomes intense. Even in those countries with the most advanced banking systems, capital markets and regulatory regimes, such a fall is hard to handle. It is also clear that countries in this situation would have to attempt to reduce the size of the depreciation by raising interest rates, so that the economy would face a combination of a lower exchange rate and higher interest rates.

(b) Resilience of the financial sector

A large, but not enormous, fall in the exchange rate - say, something between 20 and 40 per cent - could in some circumstances be absorbed without lasting damage, but in others it could lead to a major economic crisis. On the basis of recent experience, it now seems that the factors which are most likely to lead to an economic crisis are financial in nature, and pertain particularly to the structure of the banking system, the financial health of the corporate sector and the general financial infrastructure. A shortlist of the main factors that reduce an economy's resilience, and hence mean that a currency crisis will be translated into an economic crisis, is as follows:

(a) Has it recently experienced a debt-financed asset price boom, and thus become vulnerable to a large fall in asset prices? Have there been a large rise in the ratio of credit to GDP, an increase in corporate gearing, and, of course, large increases in property and equity prices?

(b) Is the financial sector in good shape? The main thing to look for here is the quality of bank lending as indicated by the level of bad debts, the extent of lending that has been collateralised by over-priced assets, or more crudely, the proportion of lending to the property sector. It is bound to be difficult to get reliable figures, so an alternative would be to make an assessment of the quality of bank supervision. A starting point here would be to look for a good set of ownership rules; these should limit the extent of lending to related parties.

(c) Have banks and commercial firms financed themselves by unhedged foreign borrowing? Every crisis focuses attention on at least one important cause, and this pattern of financing seems to be heavily implicated in each of the current Asian troublespots.

(d) Is the financial infrastructure strong enough to handle a crisis? By this, I mean the accounting standards, commercial law, disclosure requirements and bankruptcy procedures. In current parlance, this is often discussed under the title of "governance", and means an institutional framework that limits the extent of related party transactions (also known as "crony capitalism"). A favourable score in this area is needed to

² Of course, we should not lose sight of the fact that in the preceding years of the 1990s, these countries were under chronic upward pressure.

help investors and lenders gauge whether they are dealing with a solvent or insolvent counterparty.

A feature of all these underlying financial characteristics is that they are very slow to change. Just as deficiencies in this area cannot have been the cause of the recent currency crises, it is hard to believe that meaningful improvements to them can be made quickly enough to restore confidence to currency markets. A tax or an interest rate can be raised immediately, and so cause a rapid turnaround in fiscal or monetary policy. Domestic demand can fall sharply, leading to a quick move into surplus in the current account, as we have already seen in Asia. But improvements to financial infrastructure and the sorting out of a weakened banking sector inevitably take a long time, and any immediate measures are more in the nature of a "promise" than an achievement. They will not quickly prevent capital outflow or restore inflow: the immediate solution lies elsewhere.

Concluding comments

Neither the financial markets, international organisations nor academic economists are good at predicting currency crises. In the past, they have happened in circumstances that appeared quite tranquil, for example mid-1997.

The likelihood of crises happening is greatest for countries that have a relatively fixed exchange rate and are open to international capital flows. The speed with which these flows can turn around is astonishing. The five Asian countries at the centre of the current troubles - Thailand, Malaysia, Indonesia, Philippines and Korea - received private capital inflows equivalent to 8 per cent of GDP in 1996, and outflows of nearly 2 per cent in 1997.³ Such a turnaround in capital flows, to quote Chairman Greenspan's understated style, "do not appear to have resulted wholly from a measured judgment that fundamental forces have turned appreciably more adverse. More likely, its root is a process that is neither measured or rational . . ."⁴

It is not surprising that these countries' exchange rate regimes collapsed and they were forced into a rather hurried float. It should also not be surprising that the ensuing depreciations were extremely large, because that seems to be a common pattern. The smallest of the depreciations was still of the order of 40 per cent, and this plus the rise in interest rates was bound to put enormous pressure on domestic financial systems.

In my analysis, I have distinguished between factors that are likely to cause a currency crisis and factors that are likely to mean it will become a general economic crisis. I have also said that I do not think the second set of factors - essentially deficiencies in the financial infrastructure - could have triggered the currency crisis, because they have been around for years. The problem, however, is that they can interact with the currency crisis once it has started. Market participants who may have been indifferent to deficiencies in the financial infrastructure at the old exchange rate start to voice disapproval of it once the exchange rate has fallen. But nothing may have changed with respect to financial infrastructure: the only new information on which the change in judgment could be based is the lower exchange rate itself. This could become self-reinforcing and lead to further capital outflow and a yet lower exchange rate.

There has been a tendency for this to occur over the past 12 months. For this reason, and others, we have seen exchange rates in some Asian countries that have fallen to half of their level a year ago or, in Indonesia's case, a quarter. Falls of this size defy economic logic and serve no useful

³ Institute of International Finance.

⁴ Remarks before the Annual Financial Conference of the Federal Reserve Bank of Atlanta, Miami Beach, Florida, 27 February 1998.

economic purpose. Indonesia was a successful trading nation a year ago at its former exchange rate, with a healthy growth of exports and a modest current account deficit. There is no value to Indonesia, to the region or the world in now having an exchange rate at a quarter of its former level.

Any collective solution to the current troubles in Asia should have as a priority the aim of restoring exchange rates a fair way towards their former value. We should not lose sight of what we originally intended to do when the international support packages were put together for Thailand, Indonesia and Korea. Our aim was to allow an orderly economic adjustment and to minimise the risk of further contagion into other parts of Asia and the rest of the world. Our aim was not to capitalise on any of these countries' difficulties in order to bring about a political transformation.

Some of the steps towards the restoration of a more realistic set of exchange rates are already occurring. Most, if not all, of the troubled Asian countries have returned to trade surplus and, probably, current account surplus. Although it would be a great help, it is not absolutely necessary to restore capital inflow; in the short term, all that is needed in order to provide some upward pressure on currencies is to prevent further capital outflow. The collective agreement among major banks to rollover Korean bank debt, and then to reschedule it, was a good example of what can be done. If there is insufficient initiative or cohesion among private lenders to Indonesia to follow the Korean lead, then a greater involvement of governments and the IMF is required. Whatever the details that are finally worked out, there can be little doubt that the overwhelming priority is to rollover, reschedule, restructure existing debt or do whatever else is necessary to prevent further capital outflow.