
Foreign reserves: some observations in an Asian context

Current issues in reserves management for Asian central banks - A conference of the World Bank Treasury. An address by Murray Sherwin, Deputy Governor of the Reserve Bank of New Zealand in Bangkok, Thailand on 9-10 May 2000.

A year ago, at a World Bank conference on recent trends in reserves management, Federal Reserve Board Chairman Alan Greenspan provided some typically insightful comments on the judgements we face in foreign reserves management. Most attention was reserved for the proposition, attributed to Pablo Guidotti, then Deputy Finance Minister of Argentina, that countries should hold external assets sufficient to ensure that they could live without access to new foreign borrowings for up to 12 months. This, of course, had particular relevance in the immediate aftermath of the Asian crisis as countries reviewed their experience and struggled to formulate policies that would reduce their vulnerability to repeated bouts of capital flight and market disruption.

In that same speech, Chairman Greenspan made a number of other comments which attracted less attention, but which I think bear repeating and assessment in the Asian context. Amongst those remarks, as I heard them, were the following:

- While we can readily conceive of a world in which there is no official sector intervention in foreign exchange markets, we very rarely see examples of purely non-interventionist exchange rate policies. Generally, national governments are disinclined to grant currency markets free rein.
- The choice to build reserves, and in what quantities, is always a difficult cost-benefit trade-off.
- In general, the willingness to hold foreign exchange reserves ought to depend largely on the perceived benefits of intervention in foreign exchange markets. An evaluation along these lines would appear to require a successful model of exchange rate determination, and a clear understanding of the influence of sterilised intervention. Both of the above have proved to be a challenge for the economics profession.
- Empirical research into the effectiveness of sterilised intervention in industrial country currencies has found that

such operations have at best only small and temporary effects on exchange rates, (but)

- Intervention operations can be effective when they signal future monetary policy operations, which are perceived to be more effective in altering asset prices, including exchange rates.
- (This means that)... sterilised intervention is not an independent tool that can be used to influence exchange rates. It needs a supporting monetary policy stance to be effective.
- Hence, reserve assets do not expand, in a meaningful way, the set of macroeconomic tools that is available to policymakers in industrial countries.

If we accept the validity of Chairman Greenspan's observations, and it is a brave central banker who chooses to challenge him these days, those of us employed to manage official reserves portfolios are confronted with some rather awkward questions. Why are we holding reserves, and what do we expect to be able to achieve with them? If we can't expect to have a significant and/or sustainable influence on our exchange rates via direct foreign exchange market intervention, how should we be thinking about the role of, and need for, foreign currency reserves?

Asian policymakers appear to have little doubt about the need for foreign reserves. Over the course of calendar 1999, non-Japan Asia added almost US\$80 billion to its aggregate reserves holdings. When we look at the relevant US and Asian interest rates, it appears that at least some Asian countries are prepared to pay a very substantial cost, and to incur significant risks, to hold those reserves. Moreover, it also appears that the fx market interventions undertaken in the course of acquiring these large reserves holdings have been only partly sterilised by way of domestic funding operations by central banks. This, of course, raises the potential for renewed risks to future stability from excessive domestic credit expansion.

If Chairman Greenspan is so sceptical of the effectiveness of exchange rate interventions and hence the extent to which holding substantial reserves adds to the armoury of available policy options for the industrial nations, why do emerging economies take a different stance? Why do we see such a strong commitment to increased reserves holdings in this region?

There could be a number of different and more or less satisfactory responses to that question:

- Most Asian governments and central banks probably feel that they have more control over their exchange rates than do their counterparts in the industrial nations. In large part, this is a function of the extent to which the financial systems concerned are integrated into global financial markets. Where there are effective controls which limit the free flow of financial transactions between residents and non-residents, then there will be some scope to exercise a degree of independent influence over the path of the exchange rate, at least in the short to medium term.
- It seems that Asian policymakers often have less confidence than do their industrial country counterparts in the proposition that open fx markets will generally function efficiently in terms of delivering exchange rates to some sort of sensible, sustainable or “fundamental” equilibria within tolerable bounds of volatility. Given that different starting assumption, it is not surprising that there is somewhat less willingness to “trust the market” in this part of the world.
- It is likely that external agents – in particular, credit ratings agencies and foreign private sector creditors – place a higher weight on the availability of “adequate” foreign reserves levels when assessing investment risks in the emerging economies than they apply when assessing risks in the industrial nations.

The consequences of a substantial shift in the exchange rate may be seen as much more serious in many Asian economies than is the case in industrial countries. We see occasions where industrial countries adopt an attitude approaching “benign neglect” with respect to shifts in their exchange rates. Partly that reflects the view that there is nothing much

that can be done to moderate the market’s view of the exchange rate’s current “fair value”. Partly, it is an indication that even large exchange rate shifts have fairly modest and manageable implications for the broader economy and political landscape in most industrial economies. Firms in the private sector are expected to cope with fluctuating exchange rates and, for the most part, ensure that their business processes and balance sheets enable them to do so. By contrast, the Asian crisis was essentially a story of the inability of private balance sheets to cope with significant movements in the exchange rate.

Finally, some countries may be encouraged to hold substantial reserves simply because they do not perceive that to be a costly option. Accounting structures can have an important influence on how entities choose to do business. As already noted, it appears that some countries must be incurring very significant costs in their choice to build reserves. I may be wrong, but my suspicion is that the countries bearing the largest costs and risks in their foreign reserves holdings are also amongst the least transparent with respect to the publication of information that would allow those costs and risks to be scrutinised and assessed openly.

An interesting paper¹ just released onto the IMF’s website reviews the challenges for exchange rate regimes posed by increased capital mobility and rapidly globalising goods and financial markets. The study is comprehensive, and I won’t attempt to summarise its findings. But the theme most likely to attract attention is that with rising capital mobility and integration into world asset and goods markets, more countries are moving their exchange rate arrangements towards the ends of the spectrum that flows from purely floating exchange rates to very hard pegs. Clearly, as the paper acknowledges, the middle ground of managed exchange rate flexibility will not be deserted anytime soon. But the trend towards either more, or less, flexible exchange rate arrangements is now evident.

Why so? Well, if we accept that capital mobility is essentially a product of technology, and that the technological developments that facilitate and encourage growing cross border financial flows are not about to stop or reverse, then

¹ Mussa, et al, “Exchange Rate Regimes in an Increasingly Integrated World Economy”, IMF April 2000.

we must also accept that capital mobility is here to stay. Our challenge, as policymakers, is to find ways to live with that reality.

In my view, living with that reality will almost inevitably involve governments shifting risk from the public sector to private sector. That will occur because governments will increasingly find that their ability to control cross border capital flows directly and therefore to shield the private sector from the occasional shocks associated with them is diminishing. Moving towards more flexible or less flexible exchange rate arrangements is consistent with a policy of pushing more of the responsibility for the management of risk associated with capital mobility onto the private sector.

Within this region, we have successful examples at both ends of the spectrum of exchange rate regimes.

We saw in Hong Kong from around 1996 a growing focus on the possibility of disruptive capital flows. Responding to that prospect, the Hong Kong Monetary Authority became concerned not to stabilise or eliminate the capital flows, but rather, and using their term, to “raise the pain threshold”. In other words, they were interested in what they could do to enable the Hong Kong economy to ride out the spikes in interest rates that would inevitably accompany any sharp capital outflow under their currency board regime. Of course, Hong Kong had the opportunity to test its readiness in 1998 – and clearly did not leave all of the response to the private sector. While its experience plainly was not comfortable, nor was it catastrophic or permanently damaging to the economy. For the most part, the private sector was able to cope with the interest rate spike and accompanying asset price adjustments.

At the other end of the spectrum, both Australia and New Zealand experienced very sharp declines in their (floating) exchange rates in the wake of the Asian crisis. With falls against the US Dollar of around 20 to 25 percent peak to trough, these were adjustments of a similar order of magnitude to the adjustments seen in some of the Asian crisis economies. As with Hong Kong, however, this was a period of discomfort – more so in New Zealand. But it was not a disaster.

Again, it was the strength of balance sheets, both private and public, and the attention to understanding and managing risk, that made the difference.

Small, open economies tend to feel particularly vulnerable and exposed to volatility of capital flows. They are less likely to be able to muster the resources needed to “take on” the financial markets in the event of capital flight. So how do we deal with these issues in my own very small economy, especially given the very high degree of openness and integration in financial markets?

In New Zealand’s case, we concluded 15 years ago, after our own home-grown version of the Asian crisis, that there is only a limited role for fx market intervention, and therefore for foreign reserves, in our overall policy framework. We have no expectation of being able to maintain any particular level of the exchange rate against the weight of private market opinion. Consistent with that, our exchange rate regime has been as close to the non-interventionist end of the spectrum as can be found. Since floating the Kiwi dollar in March 1985 there has not been a cent committed to fx market intervention.

So in this environment, how do we in New Zealand think of the role of fx reserves? Firstly, some background on our reserves.

Our holdings amount to around US\$2.5 billion, or around 10 weeks of imports. Note, however, that our NET fx reserves are exactly zero – or as close to zero as we can efficiently get day-to-day. Our reserves are entirely borrowed, with the matching liabilities carried directly on the RBNZ balance sheet. The portfolio is monitored and managed as an integrated whole.

This policy of holding only borrowed assets ensures that we incur minimal risk on the central bank’s balance sheet or, just as importantly, on the consolidated government balance sheet. It means that the risks and the costs of holding reserves are obvious. And note that holding reserves is unambiguously a net cost rather than a revenue item. New Zealand borrows as a AA credit. We typically invest in instruments which, on average, carry a slightly less than AAA rating. After transactions costs, credit spreads and our own fully-costed management expenses, and net of the value added

by our managers, we expect to incur an annual cost of around 10 basis points – or about US\$2.5 million.

We don't expect to be able to alter substantially, or sustainably, the level of the exchange rate by way of direct fx intervention. For the most part, we expect markets to assess shocks and adjust to them in a tolerably efficient manner. But we still see a role for reserves.² Primarily, that role arises from three key propositions:

- Firstly, fx markets, more than most financial markets, are prone to becoming dysfunctional under stress.
- Secondly, dysfunction in fx markets may carry significant externalities affecting parties well beyond those directly involved in the market.
- Thirdly, there may be circumstances in which the central bank, via direct market operations, can usefully accelerate the return to more normal market trading.

The particular concerns on which we focus relate to the potential for loss of liquidity in fx markets in the face of rare but very large shocks – shocks that go well beyond the territory that we might expect private market participants to be efficient in preparing for, and coping with, on their own balance sheets.

Liquidity difficulties can arise because fx markets are mostly dominated by financial institutions that quickly and efficiently pass risk to other counterparties – in other words, they are efficient at distributing risk, but have limited appetite to absorb risk. Their capacity to distribute risk is crucially dependent on narrow bid/ask spreads. But as volatility and uncertainty grow, perhaps as a result of some external shock hitting the economy, bid/ask spreads widen, the cost of risk distribution climbs, and the pressure increases for more extreme price movements to induce others to take on unwanted positions. With limited risk absorbing capacity, fx dealers tend to be quick to withdraw from the market in the face of stress. That tendency is exacerbated by the particular credit quality concerns that fx dealers are subjected to in the absence of effective payment versus delivery mechanisms for the settlement of fx trades.

There is an important, if difficult, distinction to be made in this model of the role for intervention. It is between exchange rate movements that can be explained in terms of the nature of the underlying shock – ie in terms of the “fundamentals” – and those that represent significant overshooting of the fundamentals because market liquidity has been impaired.

In our view, the case for successful central bank intervention, rather than simply leaving it to private market participants to resolve any overshooting, hinges on a couple of possibilities:

- Firstly, in a period of uncertainty when credit quality concerns are impacting on the trading capability of market participants, the presence of the central bank in the market may assist in unlocking logjams between market players. This could apply even without the central bank taking significant net fx exposure.
- Secondly, central banks generally operate within a different risk/return framework from private market participants, particularly with respect to their ability to take a longer view of developments or a broader view of the interests and externalities involved in any situation. From that flows the possibility for efficient actions by the central bank in circumstances where private market participants see no scope for profitable position taking or have inadequate risk bearing capacity to exploit potentially profitable positions.

As you can see, this is a very constrained role for the central bank. After 15 years of free floating, including periods of significant discomfort as the exchange rate neared its cyclical peaks and troughs, we have not felt obliged to enter the market. But we do not dismiss that possibility. In our view, the potential gains from even rare interventions justify the fairly modest annual expense of holding reserves in the form and volume we have chosen.

To sum up, let me draw out the key themes in all of this.

Importantly, I think it is clear that markets do learn to manage risk when they are expected to do so. Extending that point, markets tend not to learn to handle risks and volatility until they have to. Governments and central banks probably have more scope to shed risk to the private sector than

² Archer D and J Halliday “The rationale for holding foreign currency reserves,” *Reserve Bank of New Zealand Bulletin*, December 1998.

they believe, but need to be prepared for, and to accept, a few broken eggs en route to the intended omelette.

Growing cross border capital mobility poses awkward questions for central bankers which are relevant to how we conceive of the role of foreign reserves. To quote Barry Eichengreen,³ the challenge of policymakers is to ensure that the benefits of capital mobility can be made to exceed its costs rather than pretending it can be made to go away. I accept the proposition that as countries become more integrated into the globalising financial markets, they will come under pressure to move out of the middle ground of heavily managed exchange rates towards either more fixed or more flexible arrangements. In that world, we are obliged to think

rather carefully about how we expect to use our reserves. Only then can we begin to answer the difficult questions of how large they must be and how they should be structured.

Finally, a theme which has already emerged in our discussions at this conference. I am in no doubt about the benefits of a reserves management framework that pulls more directly into consideration the liabilities side of the central bank's and consolidated government's balance sheets. Reserves can be very costly to hold and can entail very significant risks. Those costs and risks can be better identified, and better managed, where both sides of the balance sheet are visible and jointly considered.

³ Eichengreen B, "Toward a New International Financial Architecture. A practical Post-Asia Agenda," Institute for International Economics, 1999.