Glenn Stevens: Capital flows and monetary policy

Remarks by Mr Glenn Stevens, Deputy Governor of the Reserve Bank of Australia, to "Investor Insights: ANZ Asia Pacific 2006" Seminar, Singapore, 17 September 2006.

I thank Guy Debelle and Michael Plumb for their considerable contributions to the historical part of this paper.

* * *

The organisers of today's seminar have suggested the topic of Capital Flows and Monetary Policy. It seems an appropriate one in an east Asian setting.

It is common to hear of the difficulties created for the conduct of domestic macroeconomic policies by capital mobility. The fact that capital flows these days are so large, and so rapid, tends to add to the perception of policy complexity. This has only grown in the wake of the Asian financial crisis of the late 1990s, though capital flows had caused serious problems for countries in Latin America and Europe on numerous occasions long before the Asian crisis occurred. Various countries in Asia are still wary of international capital flows, and even after accumulating very high levels of foreign reserves, many seem to worry more about the possibility of sudden outflow – as opposed to the very real problems associated with large inflows.

Australia too has struggled on occasion with capital flows and their complicating role for the conduct of monetary policy. But Australia's biggest problems for the conduct of monetary policy came in the days when capital flows were more restricted than they are now, but financial prices were regulated. In those days – and I refer here to the period before the decisions in the early 1980s to allow markets to set the exchange rate and yields on government debt – the problem was basically one of monetary control: policy-makers could not accurately control the amount of settlement funds available to the banking system because domestic policy actions to control these funds were often over-run by foreign operations we had to undertake to clear the foreign exchange market at the nominated exchange rate. That fundamentally impaired the Reserve Bank's capacity to influence broader monetary conditions: we were not actually in control of the stance of monetary policy.

Those days are now long gone. The market for foreign exchange clears entirely in the private sector (unless we make a choice to intervene). The Government's financial operations are funded at market-determined interest rates, relieving the central bank of any obligation to support a particular price in the market. The result is that the Reserve Bank is able to control the total quantity of settlement funds in the system, which allows us to set, for all practical purposes, the overnight rate of interest.

That does not mean that capital flows are no longer a concern, but it does change the location, and in my view the size, of the problem they present. A deeper financial system can also absorb much larger flows with less disruption. More generally, after more than 20 years of experience, the economy and financial system have shown that they can adjust to even quite large changes in the exchange rate without undue disruption. This has involved a reasonable amount of learning by doing on the part of financial markets, businesses and policymakers – and, on occasion, the learning curve was fairly steep. But there is no doubt that the present world is preferable.

The story of how we got to this position is an interesting one, and it is that story I would like to tell today. Let me do this by referring to two episodes.

When capital flows were a problem

The first is the year 1983. At the beginning of that year, Australia's exchange rate regime was a crawling peg to a trade-weighted basket. (This regime had been in place since 1976.) The peg was determined daily by a management committee consisting of the Governor of the Reserve Bank and the heads of the main economic government departments. This group set the peg given an assessment of economic conditions, with both external and internal factors taken into consideration. The intermediate target for monetary policy was an M3 growth rate set by the Government. The

BIS Review 86/2006 1

_

¹ The Secretaries of the Treasury and the Departments of Prime Minister and Cabinet and Finance.

Reserve Bank sought to achieve this through a combination of open market operations, changes in various reserve ratios and quantitative lending guidelines. Interest rates on various financial instruments were in the process of being liberalised at that time, though some important regulations (e.g. on housing loans) remained in place. But the capacity of the Reserve Bank to control the quantity of settlements funds in the banking system, and therefore to influence broader monetary and credit conditions, was weak, because of the commitment to a particular exchange rate, even one that varied every day. An attempt to tighten conditions by withdrawing cash from the market, for example, was likely to be thwarted by the simple expedient of the private sector borrowing offshore and converting the proceeds into Australian dollars at the price nominated by the central bank. This would reverse the initial withdrawal of cash. Conversely, when private capital decided to move out, the authorities struggled to keep the system supplied with adequate liquidity.

In the lead-up to the March 1983 federal election, markets were anxious about the prospect of a change of government. In the week prior to the election, capital outflow amounted to about 3 per cent of the total money stock, or about 1½ per cent of Australia's annual GDP. This occurred in spite of capital controls that were still in place, because the distinction between current and capital transactions was blurring and market participants were becoming more adept at circumventing the controls. Exporters were by then skilled at delaying receipts when a devaluation was anticipated, while importers accelerated their payments, as did those servicing foreign currency debt.

These swings caused operational difficulties in maintaining suitable conditions in the money market. As for achieving the target for M3 growth, I can well recall, as one involved in forecasting growth of the 'money supply' in those days, the impossibility of forecasting the size and the persistence of the capital flows, which were one of the major drivers of the growth in the community's monetary assets.

The newly elected Labor Government responded to the crisis by devaluing the Australian dollar by 10 per cent against the TWI. This was successful in reversing the flow of funds and generating capital inflow, as exporters, for example, brought onshore their pent-up receipts. But the problems were far from solved. Later in 1983, Australia's external position was improving, due to a post-drought recovery in the rural sector, rising commodity prices and higher demand for mineral exports. The volume of capital inflow gradually mounted, further encouraged by Australia's positive interest differential with the major countries.

This again caused problems for monetary policy as the Reserve Bank had difficulty withdrawing the resulting increase in cash in the banking system. The plan that was devised to counter these problems was one of a gradual appreciation of the exchange rate (achieved through adjustment of the daily fix), lower short-term interest rates but increased sales of government securities to fund the fiscal deficit, which was likely to see longer-term yields increase. That is, it was thought that currency speculators would be deterred by the very low short-term rates, notwithstanding the higher yields on offer at the longer end. This would help achieve the M3 target by reducing the liquidity resulting from capital inflow. The exchange rate management committee also sought to add a random element to the daily movements in the exchange rate, around the general trend appreciation, to reduce the predictability in the movements in the exchange rate and thwart the speculation. As capital inflow continued to mount during November, the Reserve Bank actually *de*valued the Australian dollar against the TWI.²

Attempts to frustrate the speculators were unsuccessful. Inflows continued. Finally, the exchange rate was floated on 12 December 1983 and most of the remaining capital controls were removed simultaneously.

Australia was one of the few countries to have taken a decision to float when the currency was under *up*ward pressure, because the capital inflow just could not be adequately absorbed. The decision has rightly been regarded as one of the most important ever taken by an Australian Government in the field of economic policy, for a number of reasons.

Most important from the perspective of monetary policy, the system for control over the amount of settlement funds in the system became fully effective for the first time. If the Reserve Bank wanted to tighten financial conditions, by taking funds out of the system, the private sector could no longer immediately offset that by getting those funds back by selling foreign exchange to the Reserve Bank: we were no longer obliged to buy or sell foreign exchange at a given price.

2 BIS Review 86/2006

.

G. Debelle and M. Plumb (2006) 'The evolution of exchange rate policy and capital controls in Australia', Asian Economic Papers (forthcoming).

In summary, the operation of monetary policy in the pre-float period was significantly constrained by external considerations, and was hampered by capital flows. While we had a quantitative target for monetary growth, we had no way of exerting the required control in order to achieve that outcome. Eventually, this system was overtaken by events and we had to change it. Over a number of years, we evolved towards a floating exchange rate with a medium-term inflation target. Let me now turn to the more recent episode of Australia's experience during the Asian crisis, to illustrate how that arrangement worked.

When capital flows were not guite so much of a problem

At the onset of the Asian crisis in mid 1997, the Australian economy was growing at around trend rates, with domestic demand beginning to accelerate, and underlying inflation below 2 per cent. Given the inflation performance, monetary policy had been eased over the previous year as required by our 2–3 per cent inflation target. Thus, the shock hit the Australian economy at a time when it was in reasonable shape with the stance of monetary policy already relatively expansionary.

Exports to east Asia accounted for around one-third of Australia's exports at the time, so the decline in output in the east-Asian region represented a significant negative demand shock to the Australian economy. Australia's terms of trade also fell as commodity prices declined, further exacerbating the loss of income.

Reflecting this and the expected negative effect on the Australian economy, there was less demand for Australian assets (that is, *ex ante*, capital wanted to flow out). Twenty-five years earlier, such a situation would have resulted in a large loss of foreign exchange reserves, but under a floating exchange rate the adjustment was mostly borne by the exchange rate, with the Australian dollar depreciating by around 20 per cent.

On some previous occasions, such a large depreciation of the exchange rate had led to a rise in inflation expectations and a pick-up in inflation due to higher import prices, so requiring an increase in interest rates to contain and eventually reverse the inflation impulse. In contemplating whether that policy response was appropriate on this occasion, we came to the view that, even though in the short term inflation was forecast to rise above 3 per cent for a time, as the depreciation was passed through to consumer prices, performance would most likely be consistent with the target thereafter. The forecast rise in inflation was not expected to be persistent, partly because the contractionary impulse from the decline in export demand would dampen growth. But, in addition, the credibility of the inflation target was by then quite well established, and this could be expected to help keep inflation expectations in check. The flexibility of the monetary policy framework allowed the validity of this assessment to be reassessed as time passed.

In the event, inflation rose by less than was forecast, in part because of a decline in the pass-through of the exchange rate depreciation, as well as a greater-than-expected disinflationary impulse from the Asian region, which put downward pressure on foreign-currency import prices. As a result, by the end of 1998, not only had we not lifted interest rates, we actually reduced them slightly.

So the flexible inflation target served as a useful framework within which to manage the effects of the Asian crisis and the policy response to the capital flow. We also used, on occasion, intervention in the foreign exchange market to counter the downward pressure on the exchange rate, but only after allowing it to move a considerable distance. The important aspect of this whole episode for the issue at hand is that allowing the exchange rate to move provided a part of the mechanism that helped the economy adapt to the Asian crisis and the changes in capital flows that it brought about. This reduced any disruption to the domestic economy and, most importantly, did not compromise the setting of monetary policy. It has often been remarked that the decline in the exchange rate was expansionary for the traded sector and that this helped the economy through that period. That is true, but in my view the much more important point is that capital flows and exchange rate changes did not compromise the conduct of monetary policy, which remained relatively expansionary, consistent with the needs of the economy at the time. Had we been in the world of fixed exchange rates, we would not have been able to set policy in that way.

Broader macroeconomic considerations

The change to the exchange rate regime, with its accompanying improvements to monetary control, would be expected to have an effect on the volatilities of key financial prices. In particular, it would be

BIS Review 86/2006

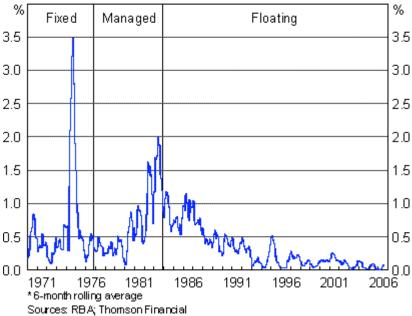
likely that, all other things equal, domestic interest rates would be less volatile and the exchange rate more volatile. Shocks in the form of swings in capital flows would show up more in the exchange rate and less in the level of domestic interest rates.

Of course, all other things were not equal in this period. There has been a well-documented decline in macroeconomic volatility in a number of countries over the same period, the so-called Great Moderation.³ Nonetheless, as shown in Graph 1, after the floating of the exchange rate, interest rates have been considerably less volatile, and it is highly likely, at least in the case of Australia, that the change in the exchange rate regime, along with other reforms and the establishment of consistent medium-term frameworks for monetary and fiscal policy,⁴ made some contribution to the decline in macroeconomic volatility.

There has been an increase in the measured volatility of the exchange rate, though perhaps not by as much as might have been expected. Prior to the float, changes in the exchange rate were infrequent but very large, as the authorities made periodic adjustments to the fixed parity in response to macroeconomic and financial developments, including some induced by capital flows as I described above. In the post-float period, the increased volatility generally reflects frequent small changes in the exchange rate, in this case determined by the market. And for significant periods in the floating era, such as the mid 1990s and the past two or three years as well, exchange rate volatility has been not very different from what it was towards the end of the managed exchange rate era in the early 1980s.

Graph 1

Australian Interest Rate Volatility Absolute monthly percentage point change in 90-day bank bill*



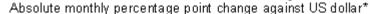
4 BIS Review 86/2006

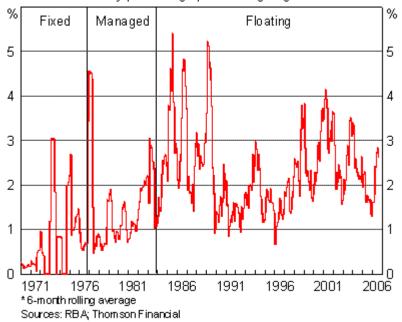
_

O.J. Blanchard and J. Simon (2001) 'The Long and Large Decline in U.S. Output Volatility', Brookings Papers on Economic Activity, 1, pp. 135–164.

D. Gruen and G. Stevens (2000), 'Australian Macroeconomic Performance and Policies in the 1990s', in D. Gruen and S. Shrestha (eds), The Australian Economy in the 1990s, Proceedings of a Conference, Reserve Bank of Australia, Sydney, pp. 32–72.

Australian Dollar Volatility





Short-term variability of the exchange rate is not necessarily costless, of course. Some people might argue that it creates a degree of uncertainty for exporters and importers, and those allocating capital. But the share of Australia's real economy engaged in international trade, and the extent to which Australians' financial assets are traded internationally, have grown over the same period. No doubt this was mostly a result of the general opening up of the economy to the international system, but it is difficult to support the claim that exchange rate variability has seriously impeded these developments. On the contrary, I think that the most serious potential problem for the internationally exposed sectors is not short-term exchange rate variability, but medium-term misalignment in the exchange rate. Allowing market forces to move the exchange rate makes such an outcome much less likely. Better monetary control afforded by the flexible exchange rate, on the other hand, has been an unalloyed benefit to all sectors of the economy, traded and non-traded.

Lest this sound as though we never have a care in the world about the exchange rate moving, however, it is important to add one caveat to this story. It is this: a strong monetary policy framework is essential. Indeed, there were plenty of times when the movement in the exchange rate, especially downward ones, made the Reserve Bank quite uncomfortable. Looking back, these were mostly periods when the policy framework was not as well developed, or as credible, as it is today. On occasion, it seemed that the exchange rate was moving because of a change in confidence about the conduct of economic policies, including monetary policy, in Australia. This was more a feature of the 1980s, when the medium-term inflation targeting framework was not yet in place, though some episodes in the early 1990s were also troublesome as the inflation target really did not acquire strong credibility until about 1995. In some such episodes, monetary policy did respond to changes in the exchange rate by altering interest rates.

But by the advent of the Asian crisis, when the exchange rate declined a lot, both we and the financial markets had developed sufficient confidence in our monetary policy framework that we were able to allow the exchange rate to do its job. The conduct of policy through that period is generally regarded as successful.

Conclusion

Capital mobility can complicate the conduct of monetary policy. In Australia, we have found that the complications which arise under a floating exchange rate – while often not trivial – are not of the same order of magnitude as the monetary control problems we had when capital was less mobile but financial prices were heavily regulated. In the system we have had for some years now, the inflation

BIS Review 86/2006 5

target, rather than the exchange rate, is our anchor for policy. When capital flows suddenly change, the exchange rate is free to move to absorb at least part of the shock, and we are able to decide how much of the shock should show up as changed financial conditions in Australia. This seems to be a pretty durable arrangement.

Of course, it took some time to get to this position. I recognise that many other countries in the region are in a different position. Many are more open, so with perhaps less scope to allow large exchange rate moves without significant first-round inflationary or deflationary effects. Others are still working to develop stronger domestic monetary policy frameworks. Hence, these countries probably tend to worry more about the flightiness of international capital flows than do we. Nonetheless, it does seem to me that Australia's experience offers reasonable grounds for thinking that, over time, these problems can be contained sufficiently so that we can enjoy the benefits of openness to capital flows without too much cost.

6 BIS Review 86/2006