Glenn Stevens: Recent issues for the conduct of monetary policy

Speech by Mr Glenn Stevens, Deputy Governor of the Reserve Bank of Australia, to the Australian Business Economists and the Economic Society (NSW Branch), Sydney, 17 February 2004.

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Thank you to the ABE and the Economic Society for putting on such an enjoyable occasion and inviting me to speak.

I don't intend to say much about current economic conditions or the short-term outlook. The Bank has just released its *Statement on Monetary Policy*, and there is no end of discussion at this time of year in various conferences about what may lie ahead.

Instead, I want to make some observations about several issues which have been important in the conduct of policy over the past couple of years. These issues of principle are worth clarifying as they are likely to be of more enduring importance than comments about the current state of the economy.

Background

The past two or three years have seen some highly unusual circumstances for the conduct of monetary policy. Internationally, we saw in 2001 and 2002 the weakest economic conditions in the major countries as a group for about twenty years. Several of them encountered recession - and recovery tended to be rather halting, which seems related to the unwinding of the share market bubble and associated excesses in the US and elsewhere. It has also been a period of very low and declining inflation, as conventionally measured by CPIs. The long disinflation which began in the early 1980s has resulted in price stability in most countries, and the possibility of inflation falling too far - becoming deflation - was openly talked about around the world last year in a way which had not happened in half a century.

A result of all of this has been that interest rates in the world's key financial centres have fallen to exceptionally low levels. At present, the average short-term interest rate in the 'big three' economies is 1 per cent, the lowest in a hundred years. There have also been major changes in exchange rates over the past year or two. The US dollar, formerly very strong, has weakened considerably against the euro and other major floating currencies; most Asian currencies have depreciated against other currencies roughly *pari passu* with the US dollar.

Through all this, the Australian economy has to date maintained a pace of growth envied by most others, in the face of some pretty unfavourable shocks. It is the first time anyone can recall the US having a recession without that also being followed by a recession in Australia. The reasons for this have been discussed on other occasions, so they don't need detailed repetition. One of them was, in our judgement, a fairly expansionary setting of monetary policy.[1] At the same time, there has been a very substantial build up in debt in the Australian household sector.

During the second half of 2003, it became increasingly clear that the US economy, after a period of rather mediocre growth and a moment of genuine concern about deflation, was starting to experience the stronger performance for which people in the US - and everywhere else! - had been waiting. Other regions seemed to be noticing an improvement too. People became more confident that prospects for 2004 were looking up. At the Reserve Bank, we concluded that the stance of monetary policy in Australia should adapt to changing international and domestic circumstances, and we adjusted interest rates up by a total of 50 basis points in the closing months of the year.

During recent discussion, several quite important issues have come more clearly into focus. I'd like to take up three of those today:

- the role of inflation forecasts in making monetary policy under inflation targeting;

[1] Australian households and businesses having had less of the over-confidence and associated excesses than in some other countries in the late 1990s is another part of the explanation. Allowing the exchange rate to move has been a third. And, of course, a background of sound structural and budgetary policies over a number of years has made the economy more robust to shocks. All of these have been important.

- the concept of the natural or neutral interest rate - its uses and limitations; and
- the importance of asset prices and credit, and how policymakers take account of them.

Inflation targeting and the use of forecasts

Inflation targeting has been in operation for a decade or so in Australia, and a little longer in some other countries. The general idea, put at its most simple, is that policy seeks to keep inflation roughly in line with an announced numerical goal, over time. There is no pretence to fine tuning here. The framework simply embodies the things we know about monetary policy from long experience: that its long-run goal should be (and can only be) prices; that its capacity for short-term control of inflation is limited, and its short-run effect on economic activity important, so the price goal should be pursued gradually; and that expectations matter, so it is helpful to tell people what the goal of policy is and how we are going about achieving it.

Because monetary policy operates with quite a long lag, it is important to think not just about where inflation has been, but where it is likely to be in the future. Hence the practice of inflation targeting, and the rhetoric of inflation targeting, have emphasised the importance of being forward-looking. Unavoidably, this means that forecasts have become more prominent. Indeed, many descriptions of inflation targeting have adopted the shorthand of saying that it involves adjusting the instrument so as to keep the conditional forecast of inflation at target, over some given horizon. I have used that shorthand myself as a way of getting across the essence of the approach.

But like all simplifications, this abstracts from some important practical issues, and it may easily convey an impression that inflation targeting is rather mechanical, focussing exclusively on the inflation forecast at one horizon. That impression would be unfortunate, because inflation targeting is not, and never has been, a policy *rule*, and the inflation forecast *per se* does not determine in some mechanistic way the central bank's policy reaction. Forecasts are very important in assessing the need for policy adjustments, but there is no unique mapping from one to the other, and other considerations than just the numerical forecast have, quite properly, a bearing on the decision. In elaborating on this, there are a couple of points to make.

First, the notion that inflation might be targeted at one particular horizon - six or eight quarters ahead or whatever - may be useful as a pedagogical device, but in fact policymakers care more about the general path of the inflation rate than about how it looks at one particular point. Policy settings which could be expected to achieve an 'on target' result x quarters ahead, but at the risk of significant problems in quarters x+1, x+2 and so on, will see policymakers looking for an alternative course of action. While, again, no one is pretending that the path of prices can be fine-tuned, a concern for the general path of inflation, as opposed to one point on the path, offers the best chance of achieving the inflation target on average.[2] This is relevant to the late 2003 decisions, which saw inflation at 2½ per cent during 2005 but most likely on the way higher than that subsequently. That general trajectory, as opposed to one point on it, was given some weight.

More generally, economic forecasting is difficult and imprecise. In practice, it can sometimes be hard for the forecasters to make a confident call that higher or lower inflation is on the cards until it is imminent or even under way. Similar problems characterise forecasts for other variables. This is just inherent in the forecasting process.

One reason is that there are a host of potential factors which cannot be incorporated easily in a numerical forecast. Unexpected changes in exchange rates, bond rates, property prices and share prices, the effects of financial structure changes, and so on can have important effects. Typically, they are assumed not to occur for the purposes of making formal forecasts. Even when changes are observed, their effects can in some cases be particularly difficult to quantify. Hence, they are normally listed under 'risks'.

This doesn't mean we should disregard forecasts or try to make policy without them. But it does mean that policymakers cannot assume that the forecasts will give a signal which is sufficiently reliable on its own to be the sole basis for policy. It also means that risks often feature more prominently in policy deliberations than do the forecasts themselves.

[2] In principle, the central bank is seeking to solve a dynamic optimisation problem in which the variability of the whole path of prices around the target (and the variability of output) is minimised, in expectation, by the path of interest rates we choose.

This is an appropriate moment at which to deal with an argument which is sometimes heard, that our 2-3 per cent average inflation target means that we should tighten policy if, but only if, our forecast for inflation exceeds 3 per cent. By the same logic, we should ease policy if, and only if, the forecast is less than 2 per cent. This interprets the 2-3 per cent specification not so much as a target to be achieved on average, as a zone of inaction for policy: do nothing until a trigger point is reached, regardless of the level of interest rates currently in place.

I think this is not the right way to operate policy. To see why, remember that it is the level of interest rates which matters. To be sure, *changes* in interest rates make the news, and may well have some announcement effect in themselves - mainly if they shift expectations about the level of interest rates in the future. But monetary policy does not stop working when the changes in interest rates stop. A persistently higher or lower *level* of interest rates affects cash flow positions, relative rates of return on assets, discount rates and so on, and hence behaviour, over quite a long period. Very low, constant, interest rates do not produce a one-time lift in inflation. They will eventually produce, in a normal economy, continually rising inflation. High rates will produce, if held long enough, continually falling inflation and eventually deflation.

It follows that the setting of the policy instrument which starts a movement in inflation back to the target following a deviation is not the setting which will keep inflation at the target once it gets there.[3] Equally, a setting which is designed to counter some shock which would otherwise push the economy off course will no longer be appropriate once that shock has waned. Once the circumstances that required an unusually high or low setting of interest rates pass, interest rates will need to be re-adjusted. The only question is when that should occur.

For policymakers to wait until they are sure there will be a significant over-shoot or under-shoot of inflation from the target means that they would hold unusually low or high rates far longer than really needed - and would then need to correct very sharply, with quite large policy adjustments to recover the situation. Compared with a strategy of earlier but more modest adjustments, this could still achieve the same average inflation rate, but with more instability in the economy.

The RBA has not conducted policy in that fashion. In late 1999 and the first half of 2000, we had a forecast that inflation would rise from 1½-2 per cent to about 2½ per cent by end 2000, and to close to 3 per cent by mid 2001. Consistent with the judgement that the interest rate which helped move inflation up to the target was not the interest rate which would keep it there, we moved rates up by 150 basis points in five steps. We didn’t wait until we had a forecast that inflation would clearly exceed 3 per cent before moving. In the event, inflation did end up exceeding 3 per cent in 2001 - which confirms that some tightening had definitely been required.

In 2001, policy was being eased given the anticipated effects of the global recession and so on, even though inflation was turning out a bit higher than expected. The forecasts at the time said that inflation would, after a lag, come down to about 2½ per cent. We didn’t wait to get a forecast of below 2 per cent inflation before easing. We would have had to wait, most probably, until quite recently for that, which would have been too late.

So policymakers have not followed the ‘zone of inaction’ approach in the past, nor are they doing so now. More generally, to return to the main topic of this section, they do not rely on the inflation forecasts alone to drive the policy decision. Policymakers have to consider the best numerical forecast available as a key input. But in making their decision, they must also develop their own sense of the balance of risks, and the consequences were some of those risks to crystallise. I think the historical record is clear that, in doing so, they have made better decisions than would have been the case had they been driven exclusively by forecasts, even forecasts which by most standards were pretty good.

The ‘neutral’ rate of interest

The idea that there is a neutral setting of monetary policy has been prominent in policy discussion in the past few years. In Australia, the Bank has used this language on occasion when explaining adjustments to interest rates.

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[3] This, of course, is not a new point. See the Governor’s November 1999 remarks to the House of Representatives Standing Committee on Economics, Finance and Public Administration at http://www.aph.gov.au/hansard/reps/commttee/r2791.pdf.

A key reason that we think it is a useful concept stems from our conviction that, as noted earlier, it is the *level* of interest rates which does most of the work in monetary policy. Given that, we need some basis on which to assess whether the level of rates is high or low. This is where 'neutral' comes in.

This notion is not something we just dreamed up. It has quite a long pedigree in economics, stretching back at least as far as the great Swedish economist, Knut Wicksell, writing over a century ago. For Wicksell, the 'natural' rate was the rate of return earned by fixed capital. He distinguished it from the 'money' rate of interest, which was set in the money market by the combined actions of the central bank and the private banking system. When the money rate was below the natural rate, there would be an incentive to borrow to invest and credit would expand, pushing up prices. The reverse occurred in the case where the money rate rose above the neutral rate. This was known as Wicksell's 'cumulative process'. The idea was taken up by Keynes in the *Treatise on Money*, and further refined in the *General Theory.*[4]

The modern world is more complex than the world of Wicksell and Keynes. We do not expect to drive monthly policy decisions direct from the dusty pages of old books, however classic they may be. But the essential insight is still useful. Imagine aggregate demand in the economy growing along a path which uses the economy's productive resources fully - no more and no less - so that the economy is operating at its potential level of output, inflation is at the target and is expected to remain there. The level of interest rates which would, absent other shocks, perpetuate this happy state of affairs is the 'neutral' rate, so named because it does not move the economy off the hypothetical path in either direction. When, due to some shock, the economy is operating below its potential for other than a brief period, we would expect that part of the stabilising mechanism would be that interest rates would be lower than neutral. And they would be higher than neutral when the economy was tending to overheat.

This neutral rate is not, however, an observable magnitude: there is no statistical release you can consult to find out its value. Nor, of course, are other magnitudes which are common in the lexicon of macroeconomic policy, like 'full employment', 'price stability', or 'sustainable growth'. We can offer a conceptual definition of these terms, but empirical estimates of them always have a margin for error and can never be assumed to be immutable. That does not render the ideas useless; indeed, people expect us to pursue some of them as policy goals. But it does mean that there isn't much room for dogmatism about particular estimates, as the Governor has stressed over the past several years.

To the extent that we can say anything useful about where a neutral rate might be, it will probably be based on the experience of the past decade or so, during which inflation expectations have been fairly low and well-anchored, and we have been following a stable policy regime.[5]

Over that period, cash rates between 4 and 5 per cent have been associated with marked accelerations in domestic demand on three occasions. Cash rates of 6¼-7½ per cent helped to slow it a couple of times. Those crude facts suggest that 'neutral' is, or at least was, somewhere in between those two levels. Through all that, inflation has had mild cyclical swings but no trend, which might suggest that rates have been close to neutral on average. On the other hand, the fact that the economy has grown sufficiently fast to gradually reduce the degree of spare capacity, and hence faster than its likely long run sustainable rate, might suggest a setting somewhat below neutral was, on average, in place over that period.

It was this sort of rough figuring that was the basis of the range of figures the Governor gave when questioned about this issue a couple of years ago.[6] I conjecture that empirical techniques which do the computation in a more sophisticated fashion would arrive at similar answers.

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4 For those with an historical interest, Wicksell's exposition is in Interest and Prices, published in 1898. In the Treatise on Money (1930), Keynes defines the natural rate as that rate at which savings and investment are equal, distinguishes this from the market rate of interest, and goes on to say that 'every departure of the market rate from the natural rate tends ... to set up a disturbance of the price level' by causing saving and investment to diverge. In the General Theory, Keynes regards this natural rate as not being unique - there are now, in his view, a multiplicity of natural rates, and various levels of equilibrium output and employment levels - and hence not very helpful. He proceeds to define instead a 'neutral rate' as: '… the rate … which is consistent with full employment' (p. 243 of Macmillan 1973 edition). It is quite clear that these concepts, through their various manifestations, are looking towards a concept of neutrality which is associated with neither inflationary nor deflationary pressure.

5 Some earlier periods of history may be relevant, but for much of the post-World War II period, regulations on interest rates and associated credit rationing meant that monetary policy did not affect the economy in the same way as it does now. In addition, it's clear that the broad trend in inflation of this period was upward, certainly from the early 1960s until the mid to late 1970s. This suggests that, on average, monetary policy was expansionary for quite a lengthy period of time.

That, of course, means that there is no precise number for 'neutral'. To the extent we can offer a range, it is unlikely to be a narrow one.[7] This imprecision might be frustrating, if people are looking for specific guidance about the near-term path of rates. But it isn't surprising that attempts to estimate an empirical counterpart to an analytical construct come up with only pretty loose results - it has ever been thus. In fact, we should view with suspicion any claim that 'neutral' can be pinned down closely.

For those looking for short term guidance, it may be equally frustrating that, while in some fabled world without disturbances policy would be set at 'neutral' much of the time, in the real world it often isn't, because disturbances have a habit of occurring.[8] Persistent global economic weakness, for example, seen as dampening Australian growth, was one such factor over recent years. Given that Australia is open to global capital markets, the level of international interest rates can also impinge on interest rates here - causing us to be away from 'neutral' at times, possibly for substantial periods.[9]

That may be as much as we can realistically say about 'neutral'. The concept helps us to remember that the level of rates matters, and that unusually high or low rates will most likely have to give way to more 'normal' levels eventually. But while it can in some circumstances give an indication of what the direction of rate changes should be, it is unlikely to give precise guidance on the size or timing.

Asset prices

I now turn to the topical question of asset prices and monetary policy. It is obviously something on a lot of minds, given the events in the US over the past five years and the preceding 'bubble economy' in Japan - and of course the run up in housing prices and debt in Australia.

Among the central banking community and other observers, it is generally agreed that:

- asset prices *per se* should not be a target for monetary policy; but
- they should be analysed for what they say about the likely evolution of the macroeconomy over the coming year or two and, *to that extent*, movements in asset prices warrant a policy response.

The more difficult part of the discussion is when we confront the question of whether policy should do more than the above - that is, should it respond by more than is suggested by the estimated short-term effects of the asset price changes on the macroeconomy through the standard channels like wealth effects and so on?

The case in favour rests on the idea that credit-financed asset price booms, when they reverse, are likely to be highly contractionary for the economy. This may well be over a horizon longer than the usual one to two-year forecasting horizon, so that conventional forecasts may not capture these dynamics. But over that longer horizon, on this argument, the economy will probably be better off if the boom is smaller or stops earlier, rather than later. Policy which responds to the boom to an extent greater than required just by the short-term outlook may assist this.

The opposing case does not deny the possibility that the boom will end painfully, but essentially says that modest action will be ineffective in restraining the boom, and aggressive action risks bringing on

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6 See remarks to the House of Representatives Standing Committee on Economics, Finance and Public Administration, May 2002, at http://www.aph.gov.au/hansard/reps/commttee/r5558.pdf.

7 It is worth noting that, in principle, the neutral rate can vary, though one would not normally expect it to be a cyclical variable. For example, it will be affected by things which affect the real expected return to capital. Things like persistent changes in productivity growth, for example, might affect the neutral rate. It would, in principle, be affected by secular changes in saving behaviour. That's before we have considered the question of whether changes in interest margins (e.g. between cash and mortgage rates) or levels of indebtedness may have a bearing on it. But while it is likely that the 'neutral' rate is subject to low-frequency fluctuations, I think it is reasonable to assume that it is sufficiently slow moving that it is still a useful concept, provided we don't adopt the strong assumption that it never moves.

8 Indeed, Wicksell expected that a stable equilibrium where the market and natural rates were equal would rarely, if ever, occur for any length of time.

9 In a world in which capital flowed quickly to arbitrage away any differences in rates of return on capital across countries, there would presumably not be noticeable differences between the 'neutral' rate between countries. There would just be one global neutral rate, with country risk premia. But in the current world, while capital mobility has increased a lot in recent decades, the vast bulk of the capital of most nations' citizens is still invested at home, and differences in rates of return seem to persist. Hence, it still makes sense to think there is a neutral rate for policy which is distinct from international rates, though the actual setting of policy cannot be completely invariant to what happens abroad.

the very recession that policy meant to avoid. On this view, policy should continue as normal during the boom, but stand ready to clean up afterwards.

This debate has been going on for a number of years now. Much has been learned (although I don't think one could say that people have found substantial agreement). Some of the work at our conference last year demonstrated that the dynamics of asset booms and busts are sufficiently complex and non linear that we should take great care in any response to a well-developed boom (which, of course, is the only type of boom where the issue arises - no-one advocates dealing with incipient booms). This indicates that a cavalier attitude to 'pricking bubbles' is not in order. At the same time, it is increasingly clear that a narrow policy focus confined to the product of conventional economic analysis over a one to two year horizon can miss very important developments in the financial sector and asset markets, which often play out over longer horizons but which can have major economic implications. Surely we ignore these at our peril.

So where does this leave us? I believe it should leave us trying to think about outcomes and risks, and policy settings which seek to manage those risks, over a horizon a bit longer than is common in much discussion of economic policy. Is this a departure from our long-established medium-term, flexible approach to inflation targeting? Definitely not. In fact, it dovetails quite well with the long-held view that policy should not respond *solely* to the inflation forecast at some fixed horizon and ignore other considerations. All that is new is that there is an additional dimension to the general rationale to maintain, and on occasion to use, the flexibility the system has always had.

Recent Policy

These considerations have been relevant in our conduct of policy. With the global economy improving during the second half of 2003, it was clear that the Australian economy would not need interest rates to be only just above generation lows for much longer. It is true that inflation as measured by the CPI is likely to look quite low for the coming year or more because the exchange rate has been rising. But that sort of outlook is disguising pressure in the non-traded sector. If non-traded inflation were to build up further steam, and then the currency were at some point to decline - which history suggests it will - people could get quite a nasty surprise at how quickly overall inflation could increase. Not only that, but the non-traded part of inflation also tends to be harder, once it does increase, to reduce again. If we care about the medium term path for the economy, these are all relevant considerations.

At the same time, the demand for credit was exceptionally high, and indeed picked up from mid 2003 to about October, after a number of years of sustained strength. Few people are now completely sanguine about the potential problems this could bring if it continues. There remains, as I have said, a good deal of debate about whether, and how aggressively, monetary policy might apply high interest rates to handle an asset boom. But it is hard to see a case in such circumstances for holding rates unusually *low*, in the absence of other powerful contractionary forces. It certainly seemed to us imprudent, to say the least, to leave interest rates so low, given that the international factors which had held them there were fast evaporating. A risk-management approach to policy pointed to the advisability of removing some of that stimulus.

It is possible to argue that a central bank following a narrow inflation-targeting approach could have waited longer before raising interest rates. But that view supposes a rather mechanical and short-term approach. At the risk of labouring the point, our approach has never been like that, and isn't now. It has always stressed the desirability of taking account of things other than just the narrow short-term inflation outlook where it was sensible to do so, *with the proviso* that medium-term inflation performance be in line with the announced objectives. Hence the words 'on average, over the cycle' or other similar language, have always been a feature of our inflation target. A decade ago, this language was far too vague for the tastes of many critics, who doubted we would have the resolve to keep inflation low. But the record shows that the system has worked well. Sensibly operated, it will continue to do so.

Conclusion

Good policy uses the best available analysis, systematising what we can know about the economy from past experience, without assuming that the future will be like the past in every respect. It must avoid both the hubris of thinking we know everything and the despairing assumption that we know nothing.

The apparatus I have described above has, in my view, been useful in helping sensible thinking about policy. But we shouldn't get too carried away by any sense of numerical precision, or become too wedded to the idea that forecasts, or estimates of the neutral interest rate - or various other concepts which could be cited - will give us an exact guide to policy decisions. That is asking too much of them. Monetary policy always has needed some element of judgement - informed judgement desirably, and of course subject to appropriate accountability. Policymakers have to make their decisions on the basis of incomplete information and uncertainty about the future, balancing the risks of various outcomes and the pay-offs and penalties attached to the various possibilities.

Policy frameworks also retain, desirably, sufficient flexibility to help them adapt to different circumstances and challenges. Inflation targeting began in an era in which memories of two decades of bad performance were fresh, and understandably emphasised the importance of controlling CPI inflation. Inflation in Australia has been well controlled for a decade now. Yet the challenges for policy seem as great as ever, as we have observed that asset market and financial instability can occur, and can be costly, under conditions of price stability. It is surely sensible that policymakers should care about these problems and should do what they can to ameliorate them - even if that is not very much. At the very least, we have to try hard to avoid exacerbating them. There is no inherent conflict between such an aspiration and the accepted long run goal of maintaining price stability - indeed, over any sensible horizon, the two go together. But we need to be prepared to think about the balance of risks over that horizon and to give those considerations due weight in policy decisions. Of course that may not be easy to do, and perhaps it is not straightforward to explain, but it seems nonetheless to be a worthwhile endeavour.