MONETARY POLICY AND INFLATION: HOW DOES IT WORK?

Remarks by Mr Glenn Stevens, Governor, at The Australian Treasury Seminar Series, Canberra, 11 March 2008.

When I was originally approached to speak to this audience, I was asked to give a Reserve Bank perspective on the economy. That was a fairly general brief. Given the current state of affairs, it makes sense to fulfil it by talking specifically about inflation and monetary policy.

There is extensive commentary around at the moment about 'blunt' instruments, concerns over the effect of rising interest rates on particular indebted sections of the community and the appeal in various quarters for some other way of dealing with inflation. Hence, it seems a sensible moment to re-visit just how monetary policy works. It is also important to have a realistic assessment of the extent to which other instruments are available to help in the job that monetary policy is charged with.

But before tackling either of those issues, there is a prior set of questions that have to be addressed, about what is actually happening to inflation. Unless we are clear about that, then the subsequent discussion about monetary policy's role in controlling it is not well based. If there is not actually an inflation problem, then presumably monetary policy should proceed differently than it would if there is, in fact, a problem.

So the plan of these remarks is as follows. First, I will address the questions about what is happening to inflation and why. Then I will turn to questions of what monetary policy can do about it, and what other instruments can do. In both instances, the way I propose to do this is to recount some of the questions that we have seen raised in various places. In some cases, these are reasonable questions. But there are reasonable answers, and I would like to offer them. Finally, I would like to step back from this approach focused on the particular details of the current situation to give some broader historical perspective. It is important to keep that perspective in mind, not just to be clear how big the challenge is, but also to be clear how well the economy has done, so far at least, in meeting it.

Arguments about Inflation

One argument which has been around is that **there isn't much inflation**. On the face of it, this is not an unreasonable starting point. The latest CPI headline rate is, after all, only 3 per cent. If that is as high as it gets and it comes down at some point before long, then presumably there is not that much of a problem. It would, in fact, be quite consistent with the inflation-targeting framework we have been operating on for well over a decade now. The average inflation rate over a run of years would still be 'two point something'.

Unfortunately, the situation at present is not quite as benign as that. The headline figure owes quite a bit to the unusually low result in the March quarter of 2007, which was affected by some unusual and temporary effects. When we get the March 2008 figures towards the end of April, we will most likely find that the rise over the four quarters is more like 4 per cent.

That result itself will have various temporary factors affecting it, so it is not necessarily an immediate guide to how concerned we should be. To get a better feel for the component of inflation that is likely to be more persistent, we look at various measures of underlying inflation. As you know, there is more than one way of doing this, and in my judgment it is not sensible to be doctrinaire about any one underlying measure. But what is clear is that these series have all picked up, with the exact extent varying by measure. Overall, the Reserve Bank, in its February 2008 *Statement on Monetary Policy*, put the pace of underlying inflation over the past year at about 3½ per cent. That is no disaster as a temporary phenomenon either, but monetary policy has to be set with a view to winding that increase back within a reasonable period.

Now I need to be clear about the status of these underlying measures. The target for monetary policy is set in terms of the consumer price index. The objective is to achieve an average rate of CPI inflation of between 2 and 3 per cent. The 'on average' specification is used precisely because the CPI is sometimes affected over short periods by factors that will not be there in a year or two's time, when the effects of any monetary policy changes will still be coming through. For policy to chase those short-term fluctuations would risk making the economy less, rather than more, stable. So we need to look ahead to where the CPI is likely to be in future, as well as where it is now. For that purpose, we employ analytical devices to help us detect what the ongoing trend in inflation is likely to be, and this is where the underlying measures are useful. They are not, themselves, the target variable. But a policy that targets future CPI inflation, using underlying inflation as an analytical tool and/or as a predictor of the headline CPI, would probably look very similar to one that was targeting underlying inflation *per se*. So, in this sense, if one is trying to assess what economists would call the Bank's 'reaction function' using particular price series, underlying measures would probably be more helpful than the headline rate.

Another argument we hear is that inflation *is* higher, but that is due to **a few things on the supply side that we cannot help, and that cannot be influenced by monetary policy**.

There are some prices that historically have been subject to large but temporary supply disturbances. Agricultural produce is a classic example – with droughts, floods or other phenomena sometimes having significant, and even large, impacts. But these effects should be expected to be only temporary – when weather conditions change, prices should revert back to trend. So there is no need for monetary policy to respond to them, and the various underlying measures help us to abstract from their effects in the short term. When Cyclone Larry devastated the banana crop in early 2006, the effect was to help push the CPI inflation rate up to 4 per cent. That impact has now been reversed. Contrary to what was asserted in some quarters, monetary policy did not respond to this event at the time, nor has it since.

There are certainly some food prices that have been pushed up because of the recent drought (though others have been pushed down). It is less clear, however, that some of the other unusually large price movements currently affecting the CPI can be passed off as temporary supply disturbances. Global oil prices have certainly risen sharply, but not because the supply of oil has been reduced. In fact, the supply of oil has never been higher. The biggest reason for the rise in the price of oil (measured in US dollars) has been the rise of demand. Of course it is not Australian demand (though that has risen), but demand in Asia, and especially in China, that accounts for much of the rise in global demand. So the rise in energy prices is not 'our fault', so to speak, but nor is it temporary. Higher Chinese demand is not going to go away. So we have to adjust to higher energy prices.

People have also pointed out the prominent increases in rents in the CPI as a special factor, and it is certainly true that rents are rising quickly. The reason that is happening is pretty clear too: there is strong demand for that type of accommodation, and rents as a yield to the supplier have been unusually low. Hence, rents are bound to rise.

Interestingly, this shows the lengthy and rather complex connection between asset price changes and consumer price inflation. A key factor behind rental yields being very low was that the price of residential property rose so strongly – far faster than rents – in the earlier part of this decade, and has stayed high in most places in the country. While capital gains were occurring, it mattered little to many investors that rents as a running yield were low. But this was not sustainable. Once capital gains slowed, the low rental yield mattered a great deal. Low yields also prompted more demand for rental accommodation than otherwise. That combination was bound to lead to an adjustment in rents, unless property prices actually declined to restore the yield. Since, in most locations, they did not, an adjustment something like the one we now see became very likely. It seems likely to continue for a while yet, until either rental yields regain more attractive levels or some other factor raises the effective return for investors.

Suppose, though, that we did take out some of the 'special factors' that people nominate. Let's, for the sake of argument, remove from the CPI rents and petrol, as well as the calculation of deposits and loan facilities. If we do that, the rate of inflation of the remaining items over the year to December 2007 is 2.1 per cent. No problem, right? Well, not exactly.

To assess the trend in inflation objectively, you cannot just take out items that rise in price, which is why we typically use underlying measures, which trim both extreme rises *and falls*. Suppose for the current purpose, then, that we also remove fresh fruit, as a very volatile item and one that happens to have held down the CPI over the past year, due to the unwinding of the great banana episode of 2005/06. Let's also remove the effects of the child care rebate changes, treated as a price fall in the CPI, but which we know is a one-time effect and which reduced the CPI by 0.2 per cent.

If we do all that, we get a rate of inflation of 3.0 per cent over the year to December 2007. A little elementary figuring and a look at the quarterly profile, moreover, will tell you that, when this calculation is done for the year to March 2008, the answer is likely to be higher again. This is not all that far from what the statistical underlying measures, which dampen the effects of large rises and falls in a more systematic way, are telling us the trend inflation rate is now.

So, unfortunately, it will not do to say that just a few items explain it all away. What is really going on is that price rises across a pretty wide range of items have picked up. About two-thirds of the items in the CPI by weight have risen at more than 2½ per cent over the past year. Normally, we experience about half the price rises at that pace (which you would expect if average inflation is 2½ per cent). In essence, to explain away the rise in inflation we have seen, the list of special factors to which we have to appeal is growing rather long.

At the same time, there is no question that aggregate demand in the Australian economy rose strongly through 2007, and indeed in recent years generally, at a pace well above the economy's likely growth of potential supply. Nor is there much serious argument against the proposition that usage of capacity in the economy is very high – business surveys uniformly tell us that, as does the measured level of real GDP relative to trend, and the low unemployment rate and high level of vacancies. Firms have struggled to find the additional workers to expand their activities – that is what they tell us.

In short, it is hard to avoid the conclusion that there has been genuine pressure on prices, caused not just by temporary supply shortfalls in a few areas, even though there have been some of those, but also by persistent strength in demand.

The next argument that I want to address is that **wages have not picked up**. Some people object to our message on inflation, including references we have made to labour costs, because they seem to think that we are somehow 'blaming' wage earners for inflation. We are not saying that. This episode has not been caused by some exogenous 'break out' in wages. Until recently, it was, in fact, possible to say that wages growth had been remarkably steady at an aggregate level in the face of a very tight labour market, with relative wages across industries and regions doing what one would expect given the shocks hitting the economy. At one stage, I described this as a textbook case of adjustment[1], in a labour market made much more flexible by a long sequence of reforms. Private-sector wages growth may be picking up a little now, and businesses we talk to say that they are having to find ways to raise compensation, and in ways that may not immediately be evident in the official data.

But we have certainly not claimed that labour costs are leading the way. It seems to me that if labour costs *are* starting to accelerate, this is mainly a symptom of inflation pressure in a very strong economy. Inflation problems do not *have* to *start* with wages. Sometimes in Australia in the past they have started that way, but it should not be assumed that it will be that way on every occasion. On the other hand, should people come to expect that inflation will be higher for a long time, and wage claims and price setting start to reflect that, we will have more trouble getting inflation down again. One of the most important jobs of monetary policy is to condition expectations. To achieve that, people have to believe we will do what is required to control inflation over time.

The final argument I want to tackle is that **the inflation target is too low**. This view accepts that inflation has increased, and that it is not just a few factors that are responsible, but argues that 3–4 per cent inflation is acceptable, and that it is unrealistic to expect to return to the 2–3 per cent standard.

I do not think that the 2–3 per cent average inflation target is too ambitious. We have achieved it for the past 15 years, and we achieved average outcomes of that order for long periods in the 20th century. If we accept that the target could slide up to 3–4 per cent, to match

1 *See Official Committee Hansard of the House of Representatives Standing Committee on Economics, Finance and Public Administration, 17 August 2007, Gold Coast. Available at <http://www.aph.gov.au/hansard/reps/commttee/R10393.pdf>.*

actual inflation, how long would it be before we were debating 4–5 per cent as a goal? If the analysis of the economy that we have set out is correct – that overall demand has been growing faster than can be sustained – it would not be long. Ongoing demand growth above sustainable rates would not mean steady inflation at a higher level, it would mean a continuing increase in inflation. If that is the situation, then demand has to be curtailed to stabilise inflation at any level. Revising the target higher would provide only very temporary respite from the measures needed to control inflation, unless we were prepared to revise it higher every year.

Furthermore, the argument that we could accept a higher trend inflation rate ignores how much the structure of the economy has adapted – in good ways – to 'two point something' inflation. The structure of nominal interest rates, to name just one thing, has been predicated on that being the medium-term anchor. If that anchor were allowed to drag, higher average interest rates in the future would be the result. This is a result amply demonstrated in history: the surest way to higher average interest rates is to accept higher inflation. To put it simply, if the community wants sustainably low interest rates, we should choose a low inflation target, not a high one.

So accepting a rise in trend inflation because of the short-term moderation in demand growth needed to contain a pick-up in prices would be a very short-sighted policy. It would very likely condemn us to a repeat of the problems of the late 1960s and 1970s, when we mistakenly thought we could live with a bit more inflation, and all the attendant difficulty we had in the 1980s in fixing the inflation problem, all over again. It is far better to resist rising inflation now.

Arguments about Monetary Policy

I turn now to arguments about monetary policy and inflation. The first one that I want to address is the assertion that monetary policy, in adjusting interest rates, is **ineffective in controlling prices, because it is failing to restrain demand**. More than once I have seen people state that the rises in interest rates seemed not to make much difference.

But if it were really true that the sequence of adjustments that took place to raise the cash rate from its low of 4.25 per cent in 2001 to 7.25 per cent today made no difference to the economy or inflation, it would follow that we could reduce the cash rate by 300 basis points tomorrow and nothing would change. If we put it like that, surely not many people could seriously believe that the changes to interest rates have made no difference.

More realistically, people might think that it is the *changes* in rates that matter, more than the *level*, and that the **changes were too small**. In this view, interest rate changes should perhaps have been bigger, so as to give more of a 'shock' to behaviour on each occasion (though they should presumably also have been less frequent – otherwise the level of rates we would have reached would have been much higher).

I suppose it is possible that a different sequence of changes, including some bigger ones, would have changed behaviour in the economy. We cannot know because that alternative scenario cannot be run, but as everyone knows, the Board has on occasion in the recent past considered larger movements. So the idea of larger changes is not absurd.

Yet it is hardly as though interest rate changes were so small that no-one noticed. There are few issues reported at more length than interest rates; no-one could say they were unaware of what was happening. Beginning with the March 2005 rate change, moreover, the extent of coverage in the media has been far more intense than it had been prior to then, and far more intense than is the case in other comparable countries. We could debate the reasons for that, but they do not matter for present purposes. On every one of those occasions, there was no shortage of dramatic media coverage, and no shortage of predictions of serious consequences for indebted households, the economy and so on. If we were looking for announcement effects, surely they should have been at work through this period.

My own view is that monetary policy is most effective when actions are seen to be consistent with the factual evidence available on the economy, a sensible assessment about future risks, and a framework that has a clear medium-term objective for policy. Apart from that, we have to accept that the likely effect of any one move of 25 or even 50 basis points is, while uncertain, probably only modest. It is the combination of changes, and more particularly the level reached, that will do most of the work.

A second version of the 'ineffectiveness' argument holds that **(1) the price rises are coming from factors beyond the control of any Australian policy, and particularly from abroad, from which it follows that (2) monetary policy cannot do anything about them**. For some people, **it follows that it is therefore (3) futile, and unnecessarily disruptive, to try**.

I have already addressed the question of whether all the price rises can be put down to a few special factors, obviously not under our control. The fact is that the price rises are broader than that.

But even if all the initial impetus for higher prices comes from events abroad, we still have to decide how we will respond to that shock. In the case of energy prices, while the world price of oil in US dollars certainly is completely outside our control, it is the *Australian* dollar price of oil that actually matters for the Australian motorist. That price is lower at present than it might have been, because of the rise in the exchange rate. Insofar as interest rates have a bearing on the exchange rate, they can affect petrol prices, indirectly, and have done so.

Looking across the economy more generally, we can all see that the main external event of recent years is the rise in the terms of trade, which is obviously completely exogenous as far as Australia is concerned. But higher resource prices generate additional income, which then affects demand for goods and services at home. That is expansionary, and puts pressure on prices for non-traded goods and services. Even though monetary policy cannot stop the initial shock – of course we cannot stop the Chinese demand for resources – we can, and should, seek to condition the economy's subsequent response to that shock, rather than simply letting domestic overheating go unchecked. Tighter policy will dampen domestic demand and contain the pick-up in non-traded prices as well as raising the exchange rate, which makes imports cheaper, exports less competitive and fosters a move of productive resources into the parts of the economy where more production is needed. That is an appropriate form of adjustment to such a shock, particularly if the shock is likely to be fairly persistent.

So even when events beyond our control occur to put pressure on prices, we should still respond, and that response can be quite effective.

Another line of argument takes quite a different tack. It argues not that monetary policy is ineffective, but in fact that it **makes the problem worse** by actually raising prices. The logic here is that interest payments are a cost to business activity, and that raising this cost will simply result in businesses passing it on.

It is obviously true that interest is a cost, and for a business to stay solvent it has to cover that along with its other costs in its selling price. But when interest rates rise, can business just pass this cost on without losing sales? It might be possible initially, but since higher interest rates do eventually slow demand, it will get more difficult to raise prices in due course. So when some people say that higher rates will just push up prices, I think the answer is that it is the strength of demand that allows that, and the rise in interest rates will, in time, dampen demand. All the historical evidence is that monetary policy is quite effective in that regard.

I turn now to other arguments, not that monetary policy is ineffective, but that it is not terribly precise. One common expression is that it is a **blunt instrument**. People rarely define what they mean by that term, but I think they have in mind two things. First, if inflation is rising because particular prices are moving a lot, monetary policy cannot focus precisely on exactly those particular prices, or those particular features of economic behaviour causing the price rises. It is a general, rather than specific, instrument in that sense. Second, I think that when people say 'blunt', they mean 'unfair' – particularly that when interest rates rise, this affects households who owe money on a home loan. (Presumably the same argument would mean that it is equally unfair to savers to put interest rates down when the economy is weak.)

As I noted before, it is not actually true that the recent rise in inflation is confined to just a few items. To that extent, the use of a general instrument would seem quite appropriate. But there are also a couple of other quite important points to make in regard to the 'blunt instrument' critique.

The first is that the transmission channels for monetary policy are much wider than just the impacts on households with home loans. Most businesses have debts, too.[2] Floating rate debt costs more for them to service as interest rates rise, which presumably causes some of them to reconsider some things they might have been doing or planning. So the 'cash flow' channel of monetary policy affects business.

Monetary policy also affects what economists would call inter-temporal decision-making. Incentives to save, as opposed to consume, alter. It is commonly observed that many Australians save rather little, but the household saving rate has in fact risen noticeably in recent years, largely unnoticed by conventional opinion. I do not claim that the increase is mainly due to rising interest rates, but I do not think we should assume that these incentives do not matter. Despite Australia's extensive use of foreign saving to build up our economy, the bulk of our productive investment is financed via domestic saving of one form or another.

Changes in interest rates affect asset values over time, through effects on discount rates, expected earnings growth and so on. These feed through into behaviour in several dimensions – via the cost of capital to firms, wealth effects and so on. Through complex channels, monetary

2 *About 35 per cent of households owe money on their home. If we include debts of all kind, closer to 70 per cent of households carry debt of some kind, though many of these other debts are relatively small.*

policy can sometimes also affect the non-price terms of credit, particularly if it manages to affect expectations about future growth, creditworthiness and risk appetite.

Then there is the exchange rate, as I have already mentioned. Numerous factors affect exchange rates, and the relationships are hard to pin down. However, interest rate differentials between countries do matter to exchange rates, along with expectations about how those differentials may change (a function of growth expectations), factors affecting trade positions (such as commodity prices in our case), investor risk preferences and so on. I have already discussed the case of petrol, but there is surely little doubt that the prices of tradable goods and services generally are lower today than they would have been if the exchange rate had been at its long-run average level. This is the case even with much more muted short-term pass-through of exchange rate changes than we used to have. In other words, changes in the exchange rate alter the terms at which the rest of the world supplies goods and services to Australia in a way that is stabilising for prices.

All these are channels for monetary policy's effects. They operate at different speeds, and to differing extents in different episodes – but they are all there, and I would say that they are all working at present. The transmission of monetary policy is not *just* about home loan rates, as important a channel as that is.

Secondly, to say monetary policy is a blunt instrument begs the question: where are the sharp instruments? It is not obvious that there are all that many. People mention supply-side reforms of various kinds and unquestionably these have been extremely important over the years. To the extent that more can be done, that is all to the good for Australians' standard of living. But they are long term. It is hard to deploy them in a hurry. And many of them are very general – 'blunt' even – rather than specific.

Many people will appeal, perhaps not unreasonably, to the possibility of using fiscal policy to counter inflation pressure. For some time now, fiscal policy has not been actively deployed to manage the business cycle. The focus has mainly been on achieving and then maintaining a structurally sound, long-run fiscal position and, subject to that, making tax and spending decisions aimed at various other objectives that governments have. This does not preclude allowing the budget's 'automatic stabilisers' to operate over the cycle (though it might be observed that, with an elongated upswing like the one we have been having, it is getting more difficult to decide what should be thought of as a temporary rise in revenue and what can be assumed to be permanent).

It strikes me that in the popular discussion about fiscal policy, many participants talk past each other because they are looking at different time dimensions. It is not unreasonable to say that if the budget is perpetually in surplus, there is no debt to speak of and no other looming large unfunded liability, taxes should probably, over some long-run horizon, be lower. This, it seems to me, is the economic case for structural reductions in taxes, which some observers articulate. Others argue that such reductions should be delayed, for cyclical reasons, given that demand needs to slow to contain inflation. So there is a structural case for taxes to fall, and a cyclical case for them not to. It is no doubt difficult for any government to reconcile these two, equally valid, points of view, the more so if the same tension persists for a number of consecutive years.

Leaving that aside, let us give some thought to just how effective an instrument budgetary policy is likely to be. If inflationary pressures were just due to specific, narrow issues (which, as is clear above, I doubt), precise targeting of the sources of inflationary pressure via tax and spending measures could nonetheless be exceedingly difficult at a technical level, let alone politically.

If it is accepted, on the other hand, that inflation is sufficiently general that overall demand has to slow, the amount of slowing has to be the same regardless of whether it comes via monetary policy or fiscal policy. It would be somewhat differently distributed across sectors and regions, as the impact of interest rate and exchange rate effects obviously would not overlap exactly with the tax or spending measures that would occur in their place. I would hazard a guess, though, that a good many people who are today paying higher interest rates would instead pay higher taxes in a world where fiscal policy was used more actively to manage the business cycle. We are unlikely, I submit, to witness a situation where income taxes are raised only for those without home loans, or only for those living in Western Australia and Queensland, or those working in the mining sector.

Then there are the time lags in implementing fiscal measures. The Budget occurs once a year, and has a very long and gruelling process in the lead-up. I am not expecting to be stampeded by people in this room wishing to do that more often. The economy could conceivably look rather different in mid May when the Budget occurs than it did when the budget processes began, and different again by the time the measures actually take effect. Monetary policy has its full effects with a long lag, but we at least get to reconsider each month, and if need be we can reverse direction quickly.

Don't get me wrong. I am not arguing that fiscal policy does not matter to the cyclical outcomes, or that fiscal policy should not be made with an eye to the cycle as well as to the structural position. To the extent it can be, of course that is welcome. I am not here to offer any particular suggestion on what fiscal policy should do at present. I am simply saying that the task of fine-tuning fiscal policy for stabilisation purposes, if that were thought desirable, is unlikely to be any more straightforward than that of using monetary policy. Fiscal policy, in its own way and for its own reasons, is also likely to prove a fairly blunt instrument. Inevitably, even with fiscal policy ideally calibrated for the conjunctural position, monetary policy would still have a lot of work to do managing inflation.

Broader Perspective

The above remarks address some reservations about the conduct of monetary policy that I have seen of late. Some of these reservations are understandable, but there are reasonable responses to them. It should also be observed that it is not the first time we have seen most of these arguments: they tend to recur each time we reach the top end of the inflation cycle and monetary policy has to control it.

Having said all that, it is important to keep some perspective about the situation in which we find ourselves. We have been living through one of the largest transformations in the structure of the global economy, as far as Australia is concerned, for a century. The rise in the terms of trade over the past five years is the biggest such event since the Korean War boom in the early 1950s. But while the Korean War event was a temporary one, all the indications are that the rise of China is not just a cyclical event, but a structural change of the first order. China certainly has a business cycle, like all other economies, and will slow at some point. Even so, it is highly likely that, short of some catastrophic event, China has many years of strong growth still ahead. It will not be at the 11 per cent per annum pace of the past couple of years, and there will be periods of weakness and instability. But the rise of China is not a flash in the pan of economic history.

In essence, we are seeing a very large change in relative prices in the world economy, and a relative price change that is more important to Australia, in particular, than to almost any other country. These sorts of events will always produce stresses and strains, including significant divergences in performance across industries and regions (though these are often exaggerated in popular discussion). Because the event is, overall, very expansionary, it was always likely to be associated with some risk of higher inflation.

But given the magnitude of the shock, when all is said and done, the economy has coped pretty well so far. Yes, inflation has risen. This is a problem, and requires a suitable response from monetary policy. But compare the outcomes on this occasion with those in the commodity price booms of the early 1950s or the mid 1970s. In the early 1950s, CPI inflation reached 25 per cent, then fell back to zero within a few years, associated with quite a pronounced recession. In the mid 1970s, inflation reached about 18 per cent, and took a very long time to come down to acceptable levels. This time, we are grappling with a peak CPI inflation rate that looks like it will be around 4 per cent in CPI terms, and trying to assess how soon it can reasonably return to 2–3 per cent. This is a far cry from the problems of yesteryear.

The reason we are doing better this time around is not hard to fathom, either. As work in the Treasury has argued persuasively, a flexible exchange rate, a reformed and flexible industrial environment, better private-sector management and much stronger fiscal and monetary policy frameworks have made a lot of difference. The fruits of those decades of effort of reform are an economy that, for all its strains, is doing well under the circumstances. The officers of the Treasury, past and present, have played a key role in achieving that. That legacy has been handed to you, and to all of us. Our challenge is to keep those improved structures in place and to develop them further, in the period in which we have the privilege of having some influence.