I am pleased to see so many of our colleagues from the financial sector here at the first public function held by The Anika Foundation. Adolescent depression and suicide are a major problem. By supporting research, The Anika Foundation can make a major contribution to effective treatment of this disease, and thereby make a difference in the lives of our children. So on behalf of the Board of the Foundation, I thank all of you for coming along. Thank you also to Citigroup for generously donating the venue, and to the Australian Business Economists for their invaluable support.

I want also to pay tribute to Adrian Blundell-Wignall and his family, for their courage and generosity in conceiving and establishing The Anika Foundation. All of us who know them, or who ever met Anika, can only admire the way in which her memory is honoured by this endeavour. Adrian, Jane, Tate and Danae, we salute you for turning your own tragedy into such a fine idea; we want to help you realise it.

That depressive illness should be such a widespread problem in a period of such apparent affluence reminds us, of course, that there is much more to life than the mere material. Those of us paid to work at maximising the material circumstances of our citizens through the conduct of economic policies trust, nonetheless, that prudent behaviour on our part can make a difference, and in some way help to provide the resources needed for those, ultimately more valuable, non-material pursuits.

My topic is the conduct of monetary policy. It will be less a commentary on current economic conditions and prospects than an exposition of the decision process and principles that have guided our actions over recent years. Of course I can only give my own perspective, and other members of the Board, past and present, might put it a little differently. Nonetheless, I hope my remarks may help observers better to understand our decisions – even if they cannot always predict them.

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1 The Anika Foundation was established in 2005 to raise funds for the purposes of supporting research into adolescent depression and suicide. For details, see <http://www.anikafoundation.com>. Glenn Stevens is a member of the Board of The Anika Foundation.
Process

I begin with some discussion of process. For the most part, it is not much changed from the way I described it in detail in a speech about five years ago. The monthly Board meeting cycle begins with staff analysis of statistical and liaison information. A large dataset is monitored – a couple of thousand domestic and international data series are routinely tracked, including all the major ABS statistical releases, and at last count 16 privately compiled Australian business surveys. Following this, there is a sequence of meetings involving the most senior staff and the Governors, and the preparation of memoranda for the Board.

The process culminates in the Board meeting, held on the first Tuesday of the month. Papers are available to members over the preceding weekend. The meeting itself commences at 9.30 am, with presentations by the most senior staff which elaborate the main issues in the papers. These set the scene for an active discussion, following which the policy decision is taken. The Board also considers other matters, more of an internal RBA governance nature, but typically the vast bulk of the meeting’s time is taken up on monetary policy. The meeting usually concludes about 12.45 pm. The announcement of the decision is made at the beginning of the following financial trading day.

This is little changed from my earlier description. I would simply offer two further observations.

The first is to emphasise that the RBA is a very outward-looking organisation, in the sense that we pay close attention to the world economy and financial markets. The most senior staff and the Governors meet every morning to review overnight developments around the world. This is helped by the fact that, as a participant in Australian, Japanese, European and US markets, the RBA has a strong capacity to monitor and assess developments, and ample opportunity for liaison with major market players. A substantial part of the material prepared for Board meetings is international in nature. It is not that we feel the need slavishly to follow every interest rate move of the major countries – the record shows otherwise, as I will shortly demonstrate. But the environment in which the Australian economy and financial markets operate is heavily affected by events and policies in the major regions. I have in mind here not so much short-term factors, but the lower-frequency, more persistent forces at work. Even the most casual review of the rationale for our decisions over the years would reveal a keen sense of the importance of international factors for the Australian economy. It sometimes surprises us how many local market and media commentators place rather little weight on these forces.

The second observation is the value of the information of a qualitative nature gained by talking directly to firms, industry associations, State Government departments and so on. This is in addition to the insights the non-executive members of the Board bring from their other activities. The staff in our regional offices have built up a pool of over 1 500 regular contacts around the country, and visit about 100 of them each month. On the basis of those visits, they compile a comprehensive picture of trends in demand, output, labour markets, costs and prices.

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3 The meeting on the first Tuesday in November, by the way, is always in Sydney, despite assumptions made from time to time that it must be in Melbourne. We do meet once a year in Melbourne, but it is usually in the first half of the year.
This is used alongside the standard analysis of the usual macroeconomic time series in forming our assessment of the economy.

This material was influential, for example, in us forming the view that the economy was encountering capacity constraints in some areas over recent years. One would expect that to have been the case anyway after many years of pretty robust growth, but we did not base our assessment on that alone. We based it also on the fact that an increasing number of businesses were telling us that constraints were appearing, especially, but not only, in the labour market. This is just one example where being able to complement the dry statistical analysis by talking to firms has been very helpful.

**Decision-making**

I turn now to the more important, and altogether more subtle, process of actually coming to a policy decision, and the way in which the decision is understood in the community. Over the past decade or more, we have come a long way. The inflation-targeting model is pretty well understood. The community understands that our goal is inflation control, and that low interest rates can only exist with low inflation. Thoughtful people also understand that the way to keep inflation and interest rates low on average is to be prepared to put rates up modestly, but promptly, when inflation pressures start to increase.

Generally speaking, financial markets and most of the commentators apply a filter to the data, not dissimilar to the one we apply ourselves. They respond to the ebbs and flows of the economy by pricing in, with varying degrees of probability, responses by monetary policy. To the extent that this minimises unnecessary surprises, which can be costly, and even does a little bit of policy’s job for it, these adjustments are helpful.

Yet reflecting on experience of the past several years, there are a few further things which can usefully be said about the proper conduct of policy under this system. Two questions in particular seem worthy of attention.

First, what information is relevant to the decision?

I have often been asked something along the lines of ‘which particular indicator is the RBA paying most attention to at the moment?’. This is usually by people who think that, if they watch that variable too, they will get an early steer on our future behaviour.

My answer to the question has always been the same: ‘all the indicators’. Of course, we target a measure of price inflation – the CPI – since price stability is the main contribution that monetary policy can make in the long run. So if we could only have one statistic that would have to be the one. But since we are blessed with many data series, we can adopt a ‘full information’ approach: every piece of economic information we can make sense of is part of the jigsaw puzzle that is the Australian economy.

Some variables are perhaps given more prominence in our public utterances from time to time – house prices, for example, a couple of years ago, or the exchange rate a few years earlier. But that is not because we have given up on the standard framework in order to ‘target’ that variable, as has on occasion been claimed by some market commentators. Rather, it is simply because we see something in the behaviour of those variables that seems to be having a big
bearing on how the economy is travelling. So there is no single variable which is the key, and the best guide to our behaviour is going to be to look at the whole picture, to remember what policy is aiming to do – that is, to keep average inflation at 2–3 per cent, ameliorating where possible fluctuations in the real economy – and go from there.

I hope, by the way, that by now it is clear that the factual information available to the Board is, with very few exceptions, available to everyone else too. The liaison information is not freely available, of course, but it cannot be at a detailed level because it is given to us in confidence. Insofar as its general tenor affects decisions, however, we try to be clear about how and why it does.

While on the question of information, an assumption which seems on occasion to be made by market participants and commentators, though it is not explicit, is that each monthly decision is (or should be) based on very short-term information – even just the information arriving that month. People will then ask whether this information is enough in itself to warrant an interest rate change.

But this month’s decision is not based only on this month’s information. The fact that the data available last month did not elicit a change in policy then does not mean that those data do not count in this month’s or next month’s decisions. On the contrary, the accumulation of information over many months remains relevant to each decision, and it is quite possible for a decision to move rates to be made after only a relatively small further strengthening in a case which had already been building for some time.

I turn now to the second question: in deciding whether or not the evidence available warrants a change to the level of interest rates, what ‘standard of proof’ should the Board apply? Should it be the ‘murder trial’ standard – beyond reasonable doubt? Should it be a ‘hair trigger’ standard: the latest piece of information says that, all other things equal, inflation could deviate slightly from the target at some future horizon, hence we automatically act – knowing we will quite possibly act in the reverse direction based on next month’s data? Or should it be something else?

Some popular discussion seems to assume that the ‘murder trial’ standard should be applied, at least to rises in rates. The presumption is that a rise in interest rates should only be contemplated when there is clearly no alternative, and no doubt that something must be done to slow the economy in order to contain inflation.

You will not be surprised to hear that I think the ‘murder trial’ standard of proof is not the one we should apply in making monetary policy. By the time it is beyond reasonable doubt that something must be done, it is usually clear that something should already have been done – and, given the lags in policy’s effect, it probably should have been done some time ago. By delaying action, this approach would mean that action, when it comes, will almost certainly need to be more aggressive.

So we should not apply this standard of proof for a rate change – it imparts too much inertia. At the same time, we obviously want to avoid the other problem, of excessive activism. We do not want a system that sees rates moving around in response to short-term trends which portend
no significant change in the medium-term outlook. That would impart unnecessary instability to the economy and financial markets, and reduce the quality of the signal that policy is sending.

So how do we achieve the right balance?

It starts by being wary of strong conclusions drawn from short runs of data. Policy has to be more cognisant of the longer-run, usually more powerful, forces at work and not be distracted by ephemeral developments. And, of course, it is well understood that policy has to be forward looking. That means it has to use forecasts. After all, if monetary policy takes some time – several years – to have its full effect on the economy and inflation, forecasts have to be at the centre of things, don’t they?

There is no doubt that the process of forming the forecast is central to the conduct of policy under an inflation target. For that matter, this is not unique to inflation targeting. Any policy system which has any degree of discretion and which recognises lags in policy’s effect shares this characteristic.

But equally, we need to be wary of reducing the whole regime down to the number for the central forecast. That would give too little attention to the possible outcomes other than the central forecast. I have made this point on several other occasions but it bears repeating. Simply asking ‘what’s the number?’ will not be a good guide either to making policy decisions or to understanding them.

For policy-makers need not only to ask their forecasters what their best guess is, but to think about how good that guess is likely to be. A portfolio manager asks not just about the expected return to a proposed strategy, but also about the range of possible outcomes. He or she asks: if the strategy were to turn out not as expected, what would be the associated costs? The manager then – we trust – makes a decision in light of those risks, seeking to contain the costs of unexpected outcomes. Likewise, policy-makers ask not just what is the central forecast, but what is the range of plausible outcomes – with associated economic costs – either side of that central estimate? Put more bluntly, they ask: what could go wrong? They then frame their policy setting accordingly, seeking to have a high probability of avoiding the most costly outcomes. That is, they too practise a form of risk management.

This will mean that the setting of policy is altered on the basis of a shifting assessment of the balance of risks. This might be associated with a significant change in the central forecast, but need not be and often is not. On such occasions, those looking for a ‘justification’ for the policy move in a shift in the central forecast itself might not find it. There can, equally, be other periods in which the forecast is signalling that some action is likely to be required in due course, but not necessarily immediately, and where policy-makers believe that there is uncertainty about the outlook or about the effect of policy on the economy. They might perceive some benefit in waiting a little while for further information before acting, judging that, even if that turned out to be an error, it would not be a costly one.

The assessment of risks is, however, inherently judgemental: there is no data series called ‘balance of risks’ that can be looked up, no econometric model to produce an answer. So not everyone will reach the same assessment of the balance of risks at any given time, and it would not be uncommon for a significant proportion of observers to be unable to pick the exact timing
at which policy, in its efforts to manage risks, might be adjusted. Indeed, if policy is about right most of the time, incremental adjustments are highly likely to be ‘on balance’ decisions. There may therefore be plenty of people disagreeing with the decision on the day.

That said, the RBA has not in recent years been, by international standards, what one could call an activist central bank. The evidence is that the RBA has actually been rather less likely than most of its international counterparts to move rates in any given month, having made an average of just over two rate changes per year over the past decade (Table 1). The range within which the cash rate has moved has also been narrower than those of most comparable central banks.\(^4\)

I might add that, despite occasional claims that we are insufficiently transparent, the evidence is that we are no more likely to surprise markets than other central banks that score more highly on some of the transparency tests favoured by academic studies.\(^5\)

### Recent History

The ‘risk management’ approach to decision-making I have sketched out above can be seen at work over the past several years. In the early part of this decade, the world economy slowed noticeably. The majority of G7 countries experienced mild recessions. Market interest rates declined, and policy rates in major countries fell to exceptionally low levels; in the case of the US, they fell very quickly, beginning early in 2001.

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\(^4\) Alert readers will notice that the Bank of Japan is not included above. The reason for that is that the zero lower bound for interest rates was a binding constraint in Japan – hence there was a long period of unchanged rates. Had it been feasible to lower rates further, the Bank of Japan would surely have done so.

\(^5\) See Connolly E and M Kohler (2004), ‘News and Interest Rate Expectations: A Study of Six Central Banks’, in C Kent and S Guttmann (eds), The Future of Inflation Targeting, Proceedings of a Conference, Reserve Bank of Australia, Sydney, pp 108–134, for an example of empirical work that studies how financial market prices respond to policy announcements and other forms of communication. Responses to RBA communications are little different to those of other central banks, suggesting that the RBA is conveying a similar amount of information to the market as other central banks.

These international factors, along with domestic developments, made for a marked change in the outlook for economic activity and inflation in Australia. The central forecast changed, but the assessment of the broader risks to the economy also changed. In the statement announcing the initial reduction in cash rates in early 2001 were the following words:

The Board judged that the balance of risks to the outlook over the next year had changed sufficiently to warrant a shift in the stance of monetary policy.

Australian interest rates did not fall as far as US rates, since our economic situation was not as weak as in the major countries, but even so they fell by 200 basis points over the course of the year. By the end of 2001 they were at the lowest levels in a generation, with the weakness abroad a very important consideration. The concept of risk management was key throughout this process. Consider the following, from the September 2001 media release announcing a reduction in cash rates:

In reaching its decision [to lower rates], the Board carefully weighed one other factor, namely the rapid pace of borrowing by households and the associated pressure on house prices. A further reduction in interest rates runs some risk, at the margin, of unnecessarily boosting this trend in the short term. But this risk has to be set against those which would come over the medium term from not responding to the likely effects of the continuing weakness abroad. On balance, the Board’s judgement is that prospects for maintaining the economy’s good medium-term performance will be improved by today’s action.

By the middle of 2002, with financial conditions at home and abroad quite expansionary, it seemed pretty clear that the worst of the danger of economic weakness was past. The Australian economy was in fact growing quite strongly, and global conditions were recovering. Hence the balance of risks was shifting: we were moving from a period in which it might have been a costly mistake not to let rates fall, into one where we were more likely to get into trouble by holding rates down, than by lifting them. The risk of potential problems of rates being left at generation lows was featured in the media releases announcing rate rises in May and June 2002.

As we all know, the process of ‘normalising’ interest rates turned out to be quite a lengthy one. This was partly because there were periodic bouts of renewed pessimism about global prospects – strange as it may seem, it is only three years ago that many people were seriously talking about the possibility of deflation in the United States, a far cry from the concerns being voiced more recently.\(^6\)

Those concerns faded and were replaced by rising energy and resources prices, which history suggests can be associated with wider inflation pressures. But at the same time, ongoing declines in prices for many manufactured products, attributed to the effect of the emergence of China and other low-cost producers, have meant that inflation in most countries has, so far, been more contained than would have been expected several years ago, especially had one correctly forecast oil at US$70 per barrel. Something has been happening on the supply side of the world economy as well as on the demand side.

The upshot of all this was that while we usually felt that we would most likely need to tighten further in due course, our risk assessment has prompted us to move rates only fairly infrequently,

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\(^6\) With the benefit of hindsight, it is remarkable how often over the past four years people could find any number of perceived downside risks to international growth – from deflation to rising oil prices to ‘global imbalances’. Yet the world economy has grown with a strength not seen in three decades, and this growth has been quite expansionary for Australia’s economy.
and very gradually. The fact that inflation expectations, by and large, remained pretty well anchored made that gradual approach possible. The fact that interest rates in Australia never got as low as those in the major centres also meant that we had less ‘normalisation’ to do than others. So we often felt we had the flexibility to wait a little longer for further information, on the basis that if waiting turned out to be a mistake, it would probably not be a costly one. That was a luxury that policy-makers in previous times often did not have.

Nonetheless, at various moments through this period, the focus on assessing and responding to risks did prompt adjustments. The November 2003 media release announcing a tightening, for example, said:

… the Board’s view is that it is no longer prudent to continue with such an expansionary policy stance. The strength of demand for credit increases the danger associated with delaying a tightening of policy that is called for on general macroeconomic grounds.

This statement shows risk management considerations to the fore once again. The same notions, though with risks stemming from other forces, were at work in the adjustments in March 2005 and May 2006.

On some of these occasions, the numerical central forecasts with which we work were changing noticeably. Often, though, they were not changing that much; what was changing was the risk assessment. Since February 2001, the word ‘risk’, and the notion of responding to it, has featured prominently in 11 of the 12 statements announcing changes in interest rates. I believe this way of operating a medium-term inflation target has served Australia well.

The Future

Let me finish with a few words about the way central banks internationally are managing the risks at present. It is apparent that the process of normalisation of short-term interest rates around the world is under way. It is most advanced, among the major regions, in the United States. It looks as though it is soon to get started in Japan (though presumably Japan has not as far to go as the US had when the fed funds rate was 1 per cent), and is presumably part way through in the euro area. It represents a response by central banks to changing conditions, and a recognition of the dangers which might otherwise have arisen with an even longer period of unusually low interest rates.

Thus, the former period of very predictable short-term rates in many countries – the ‘measured pace’ of adjustment in the US which amounted to a rise per meeting, no change for an extended period in Japan, etc – has given way to a period in which the future course is less obvious. That situation is actually the norm. The recognition of this is one factor that has been affecting markets in the past couple of months. Stock markets have been more volatile, bond rates have risen a little, and some emerging-market currencies have come under pressure.

But this was bound to happen sooner or later, and the sooner it did the better. Yield- (and risk-) seeking trades based on an assumption of very low volatility, underpinned by virtual certainty about short-term funding costs, would hardly be a basis for sound resource allocation over the longer term. A more sober assessment of risks, while shaking out a few positions in the short term, does not appear to have done serious damage. It will probably help to lessen
some of the financial risks which had been building up. If so, it will help to lengthen the global expansion.

The real test of the adjustments to policies around the world will be the inflation outcomes in the next several years. The intention was that the period of very low rates would foster recovery from a global slowdown, with the stimulus to be withdrawn gradually in light of the low-inflation outcomes being experienced, but in a timely enough way so as not to contribute to a build-up in inflation longer term. There is a good chance that central banks globally will be able to claim a success in achieving that intention in due course, but it is not possible to do so yet. Careful analysis and timely responsiveness to the shifting balance of risks remain the key to good outcomes. ✰