

## I J Macfarlane: The movement of interest rates

Giblin Lecture by Mr I J Macfarlane, Governor of the Reserve Bank of Australia, at the University of Tasmania/Economic Society of Australia (Tasmanian Branch), Hobart, 18 September 2001.

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Let me start by thanking the University of Tasmania for inviting me to give this lecture, which commemorates one of Australia's truly remarkable men. My choice of topic tonight was made long before the tragic events in the United States last week. Before moving on to the main body of my speech, a few comments are in order about recent events.

The first order of business for central banks at times such as this is to ensure that the financial markets and the payments system can operate effectively. This has been accomplished. The Federal Reserve was open and the US payments system operating on the day of the attack. Central banks around the world operated to assure market participants that there would be ample liquidity. We here in Australia did likewise, and have added substantial additional funds into the cash market, and are continuing to ensure that additional liquidity is available as required.

Assessing the lasting economic impacts of the events will take longer. Much will hinge, obviously, on the extent to which investors and consumers in the United States respond to the tragedy by scaling back their activities and plans. That is almost impossible to predict. In the United States, where economic conditions were deteriorating and confidence waning prior to the attack, the Federal Reserve has brought forward an easing of monetary policy. Some other countries already directly affected by the US weakness (Canada), or seeing unexpected weakness of their own (continental Europe) have likewise eased monetary policy. These moves themselves will help, of course, to address the risks to global growth which already existed and those — as yet almost impossible to assess — which may result from the reaction to the attacks themselves.

I know there were some who speculated about whether Australia might join this action today, easing further the already expansionary setting of monetary policy currently in place. We have, as usual, closely monitored events abroad and at home on a continuous basis. We have had better economic data in Australia lately than observed in the United States or Europe. The weakness of global conditions in the short term will affect Australia, as we said in our statement announcing an easing of policy just two weeks ago. But we have not seen, in the past week, anything relating to Australian monetary policy's field of operation which was so urgent that it warranted the suspension of the normal timetable of the deliberative processes of our Board.

With that said, let me now return to the main body of my speech.

Sometimes it requires an effort to find the complimentary remarks that usually preface a lecture such as this. But not so in the case of Giblin. While he is remembered principally as an economist, he did not take up this calling on a full-time basis until he was 47 years old, by which time he had already done so much in other areas.<sup>1</sup> After graduating from Cambridge, during which time he played rugby for England, he spent some time prospecting for gold in Canada, became a merchant seaman, a plantation manager in the Solomon Islands, an orchardist in Tasmania, a Member of the Tasmanian Parliament, and was decorated for bravery in World War I. As an economist, he made contributions in a number of areas and had a close association with central banking through his membership of the Board of the Commonwealth Bank. But it is another aspect of this extraordinarily gifted man that I would like to commemorate tonight — his willingness to communicate difficult economic ideas to the broader public.

Giblin wrote a series of articles in 1930 called *Letters to John Smith*<sup>2</sup> in which he set out the economic issues facing Australia at the start of the Depression. This series faced economic issues head on, but did not talk down to its readers. I will try to follow his example this evening. What I intend to do is to answer three questions that are sometimes put to me by members of the public, rather than by regular participants in monetary policy debates. Because the questions are from "lay" people, they may appear naive to a professional audience, but I often find that blunt untutored questions are the hardest to answer, and they can often force a re-examination of previously unquestioned assumptions. They

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<sup>1</sup> See Copland (1960).

<sup>2</sup> *ibid.*

can also open up some interesting historical and academic issues. I should also add that my choice of topic tonight is not prompted by any current economic events, but is the outcome of some reflections going back a decade or two.

The three questions are the following:

1. Why does the Reserve Bank have to change interest rates at all: why can't they *be left constant*?
2. Why does the Reserve Bank have to be involved in the first place: why can't the determination of interest rates *be left to the market*?
3. Why do we need to set our own interest rates in Australia: why can't we just *accept the rates of another country*, e.g. the United States?

Obviously these three questions come from quite different perspectives, and the people who ask them are making very different assumptions about how an alternative system for setting interest rates should work. But there is, I think, a common thread that connects them. That is the view that it would be desirable to take away the element of discretion from interest rate setting, whether by making them constant, by "leaving it to the market" in some sense, or by ceding the discretion to another country. In other words, the questions arise out of a certain scepticism as to whether interest rate setting really requires an active decision making role for the central bank.

One preliminary point to be dealt with before going to the substance of these issues is what we mean by "the interest rate". There are, in fact, many interest rates – short-term, long-term, private, government, on loans or on securities, etc. – so which one do we mean? In this discussion, it makes most sense to focus on the short-term interbank rate that is typically set by a central bank – in Australia, the overnight cash rate (usually referred to as just the cash rate). The rest of the rate structure can be thought of as keying off current and expected cash rates, and it is the cash rate that is the main driver of movements in the interest rates that borrowers actually pay. So questions about the appropriate system of interest rate setting in this context really amount, in essence, to questions about how the cash rate should be determined.

Let me turn now to the three questions I have just outlined.

### **Question 1: Why do interest rates have to vary?**

A lot of people are unhappy about changes in interest rates. When rates rise, there are always a lot of complaints in the media drawing attention to the plight of people with mortgages. When rates fall, the media usually treat this as good news, but I get a lot of letters from retirees who take the opposite view. One solution would be to instruct the open market desk at the Reserve Bank to operate in a way which kept interest rates at their current level indefinitely. Why would we not wish to do this?

There are two answers to this question: one which is historical, the other more theoretical.

The historical approach is to ask whether there has ever been a monetary system that did not involve variations in interest rates. The answer is no. Interest rates have always moved up and down under all the monetary regimes that have existed, whether the regime was a gold standard, a currency board, a normal fixed exchange rate, a monetary target, an inflation target, or a regime of pure discretion by the central bank. If someone can think of an example of a successful monetary system where interest rates never had to change, I would be very interested to hear of it.

But while most people can instinctively appreciate this point, there are, no doubt, some who would like to know what would be wrong with trying to hold interest rates permanently fixed, even if it has not been done before. This brings me to the second part of the answer, based on economics: a fixed interest rate policy would be unsustainable because it would inevitably lead to either an inflationary or a deflationary spiral.

This conclusion is well established in the theoretical literature,<sup>3</sup> but it does not require any great familiarity with monetary theory to appreciate how it is arrived at. Suppose, for example, that a central bank attempted to set the interest rate at a low level which imparted a strong stimulus to demand and

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<sup>3</sup> The technical way of describing the weakness of permanently fixing the interest rate is to say that it is an unstable rule because it leads to indeterminacy of the price level. This point has been appreciated at least as far back as Henry Thornton (1802) who analysed the inflationary consequences of the fixed interest rate policy then favoured by the Bank of England.

activity. Over time, if that were maintained, it would cause inflation to rise, and, with a fixed nominal interest rate, the real interest rate would decline, thus leading to further increases in demand and inflation. This process would continue through successive rounds resulting in an inflationary spiral.

By a similar logic, if the initial level of the interest rate were set too high, a self-reinforcing process in the opposite direction would ensue, culminating in a deflationary spiral and rising unemployment. Only if the interest rate could be set at an exact equilibrium point would these two extremes be avoided, and, even then, the equilibrium would be temporary. Any economic event that pushed the economy slightly away from its equilibrium would set off one of the two self-reinforcing processes I have just described. One response to this line of argument might be to suggest that the central bank try to stabilise the real rather than the nominal interest rate, but this already concedes the main point: that the nominal rate has to be adjusted in response to information about current and prospective inflation.

Having made this point, I have to concede that there are not many people who would advocate that interest rates should literally be kept permanently fixed. But there is a more subtle version of this viewpoint which is much more widely held: that is the view that policy should always aim to keep interest rates as stable as possible. Expressed in this way, the idea sounds more reasonable, and I think it is fair to say that it pervades some of the commentary that follows interest rate adjustments – the idea that changes in interest rates (and especially increases) should be avoided if possible. We need to be clear that this is an incorrect view, for the same reasons I have just outlined. If policy were to give too great a weight to stabilising interest rates, as an end in itself, it would risk destabilising the economy, because it would fail to keep up with inflationary or deflationary pressures as they emerge.

Of course, it would also be a fallacy to jump to the opposite conclusion, that more interest rate variation is always better. Obviously, a policy which made large and hastily-decided changes in interest rates would also be a destabilising force, so it has to be recognised that interest rates can be moved by too much as well as too little. How much variation, then, is the right amount?

This is not the sort of question that is open to a precise quantitative answer, but it is certainly possible to give some general principles.

- First, it depends on the size of the shocks that the economy experiences. Bigger interest rate adjustments will probably be needed the bigger the shocks to which you are responding. When the shocks and imbalances are small, interest rates do not need to move as much
- Second, it depends on how responsive the economy is to a given change in interest rates. Arguably in the 1970s and 1980s, when inflation was high and variable, the economy was less responsive to a given change in interest rates than it has been subsequently. Hence, larger changes in interest rates were needed to achieve a given effect. Since the early 1990s, interest rate changes have generally been much smaller than in the earlier period.
- Third, it depends on how much uncertainty there is. When you are very sure about your reading of the economy and about the likely effects of a change in interest rates, it may be possible to move rates very quickly in response to an important piece of information. But when you are highly uncertain about how to interpret events, it pays to be more cautious and gradual in your approach. To use an analogy with driving — you should slow down in a fog.

It follows from this that the "right" amount of movement in interest rates depends very much on the circumstances. Sometimes rates will be highly variable, as they were in the 1980s, and sometimes they will be quite stable, as they have been in the most recent decade. In all of this, interest rate stability should be seen not as a goal in itself, but as a by-product of a stable macro-economic environment.

Let me turn now to the second of my three questions.

## **Question 2: Why not leave interest rates to the market?**

This question, again, is based on a plausible-sounding premise, but the proponents of this view are often rather unclear about what "leaving it to the market" would really mean in an operational sense. It might mean several things.<sup>4</sup>

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<sup>4</sup> One possible meaning, that will not be discussed here, is that open market operations should be directed actively to controlling growth of the money base and thereby letting interest rates be determined as a residual. Since this suggestion involves active intervention by the central bank, it is hardly in keeping with a "leave it to the market" approach. For those

In its simplest form, leaving interest rates to the market would mean simply telling the Reserve Bank to cease all open market operations. It is worth exploring what would be the consequences of such a policy.

In a world where the Reserve Bank was undertaking no open market operations, the amount of cash that underpins the money market (exchange settlement funds, or what the academics call "high-powered money") would depend on the Government's fiscal balance, and it is not hard to see that this would be likely to result in monetary instability. Any government deficits not financed by an exactly coincident issue of debt to the public, for example, would mean a rise in cash and a fall in interest rates. Similarly, a surplus not exactly matched by debt retirement would lead to a shrinkage of the amount of cash and an escalation of interest rates. In both cases, there would be much more short-run volatility in interest rates than exists at present. This is because the day-to-day fluctuations in the Government's position, which can be quite large, would no longer be smoothed out by Reserve Bank open market operations.

A further point to add here is that even maintaining a balanced fiscal position on a daily basis would not ensure these effects would be avoided. Even with the fiscal position in balance, the system could be destabilised by changes in the public's demand for currency. Because the public's demand for currency expands with the growth of the economy, it could only be accommodated in this regime by some other source of cash such as provided by RBA open market operations. Failing this, there would be continuing upward pressure on interest rates and economic contraction.

I have spelled this out in some detail because proponents of the "leave it to the market" view often do not have a clear idea of what their position really means. But if they mean simply ceasing Reserve Bank operations, and leaving interest rates to the market in that sense, then it is clear that such a system would not be workable. It would be a recipe for more interest rate volatility, not less.<sup>5</sup>

To be fair to those saying rates should be left to the market, there are some who have a more sophisticated view. They would argue that I have made two assumptions that could easily be changed. First, if the Government did not bank with the central bank, then its fiscal position would not affect high-powered money. And second, if the central bank did not issue bank notes, but bank notes were instead issued by commercial banks, then it would not involve the central bank having to provide cash to the system. These changes would eliminate the central bank from the picture entirely, and bring us to the world of "free banking" so beloved of a small group of academics.

Among supporters of the free banking ideal, there are at least two schools of thought as to how such a system should work. One view is that money should be ultimately linked to a commodity such as gold, so that bank notes issued by commercial banks would essentially be "gold certificates" redeemable in gold on demand. Therefore, the supply of gold would act as a discipline against over-issue of notes and the system would ensure that interest rates were determined by the supply and demand for funds.

While examples that resemble this outline do exist in early banking systems such as Australia before 1910, they all eventually gave way to what are now conventional systems based around a central bank.<sup>6</sup> The reason was that such "free" banking systems were found to be prone to instability without a central bank to manage liquidity and provide last-resort funding in a crisis. Banking systems tied to a commodity standard were simply not flexible enough to cope with periodic bank runs and liquidity crises. No doubt, the true believers in free banking would argue that the theory was never properly tried, and that, if it were, the market would find a solution to the apparent problems. But that is to make the theory unassailable by pure assumption.

The other school of thought on free banking is an even more radical one.<sup>7</sup> It proposes a system of competing private currencies that would not have to be linked to any standard of value. The banks operating in such a system would compete with one another to offer sound currencies on terms that

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who would like to introduce money base targeting, see Macfarlane (1984 and 1989) and Goodhart (1995) for the contrary view.

<sup>5</sup> Another interpretation of what "leaving it to the market" could mean is that the Reserve Bank should move the cash rate to where the market expects it to be. This could mean, for example, moving the cash rate to where the 90-day rate currently is. The problem with this approach is that the current level of the 90-day rate is mainly a reflection of where the market expects the Reserve Bank to set the cash rate 90 days hence. The process then becomes completely circular.

<sup>6</sup> See Pope (1989) for a discussion of "free banking" in Australia prior to 1910. The more commonly cited case of free banking is in the 18th century Scottish banking system (see White, 1984). Note, however, that other writers such as Goodhart (1988) express scepticism that this was a true case of "free banking".

<sup>7</sup> The best known proponent of this view is Hayek (1976).

were attractive to the public. In effect, a country operating such a system would depend upon competition between commercial banks to ensure stability in the financial system and low inflation.

To my mind, these free-banking proposals really belong in the world of technical curiosities. They can be argued to work in theory, but the fact is that there is no working example of such a system anywhere in the modern world. So I have to conclude that those who say interest rates should be left to the market are proposing something that is either not workable (if they mean simply shutting down central bank operations) or something that is much more radical than most people would be prepared to accept.

This brings me to my third question.

### **Question 3: Why not just accept US interest rates?**

The premise behind this question is that we could do away with the discretionary role of the Reserve Bank by having a rule that interest rates would always be equal to those set by the US Fed. My first comment on this is that it is hard to see why anyone would see this as a particularly attractive goal. It certainly would not do away with central bank discretion, but only replace the discretion of one central bank with that of another. And it would be a discretion tailored to meet US conditions, not to policy requirements in Australia.

But leaving aside the question of whether it would be desirable, the main question I want to focus on is: is it feasible? The answer is, it depends on how it is done. If the mechanism for achieving equal interest rates with the United States was that we adopt the US dollar, or establish a fixed exchange rate, then it should be technically achievable. Interest rate convergence would then be a by-product of fixing our currency to the US dollar, and, the more credible the exchange rate peg, the more closely our interest rates would shadow those in the United States. That was how interest rate convergence was achieved within Europe, though the same process is proving extremely difficult in Argentina. So if the people asking us to adopt US interest rates are really arguing for a change of exchange rate regime, then there is no dispute that it could probably technically be done. But this is really a different debate from the one about how to set interest rates.

If, on the other hand, someone is arguing for adopting US interest rates under the existing exchange rate regime, I would have to say that such a strategy would not be workable. The reasons for this are quite similar to those I outlined earlier under question 1.

Suppose we began such a regime in a position of equilibrium, in which Australia and the United States had the same inflation rates and there were no imbalances tending to push the exchange rate in one direction or the other. In these conditions, we could expect the level of interest rates in the two countries to be the same. But if we then established a rule that Australian interest rates would always be equal to those in the United States, the system would be extremely vulnerable to any event that affected the relative performance of the two economies. For example, if there were contractionary forces operating on Australia, but not the United States, the level of interest rates would not be able to respond, and the result would be a downturn in the Australian economy, and in extremis, deflation. An expansionary shock would likewise destabilise the economy in the other direction. The strategy could only be maintained if, by a fluke, economic conditions in the two countries remained perfectly synchronised.

Having made this point, it is interesting to note that interest rates in Australia and the United States have at times moved quite closely together in recent years. There is nothing wrong with that. We just need to be clear that when this occurs, it is a result of the two countries experiencing similar economic conditions, not something that has been set up as an end in itself.

### **Conclusion**

In the history of monetary economics there has been no shortage of proposals to make the system automatic, and thereby to eliminate the need for central banks to be involved in setting interest rates. I have looked at three simple proposals of this sort, and tried to show why they would not be viable or would have very different consequences from those imagined by their proponents. In a modern monetary system, it is not possible to have interest rates on automatic pilot, and so a discretionary role for the central bank in setting interest rates cannot sensibly be avoided.

All of this is a long way from saying how the decision-making process should work: what should be the objectives and how the process should be governed. I have given my views on these matters in public on many occasions, as have a number of my colleagues, so I will not go over the same ground again tonight. Here, I would just note that the most important modern advance is to ensure the decision-making takes place within a framework of well-defined objectives and clear accountability. This is indeed one of the strengths of the inflation targeting regimes that have been adopted in so many countries during the past decade. They recognise the need for a decision-maker, so that interest rates can be adjusted in response to unfolding events, but they also place the process within a framework of clear objectives and accountability.

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