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# Monetary Policy in the UK

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## I. INTRODUCTION

I was delighted to be asked to give the IFS Annual Lecture for 1994, not least because of my own connections with the Institute. These began with my participation in the meetings of IFS, and continued as a member of the Meade Committee in the 1970s. The work of that Committee — led by James Meade and Donald Ironside — proved to be one of the formative experiences of my professional career and led to my collaboration with John Kay on our book, *The British Tax System*. The Meade Committee Report represented a turning-point in the history of IFS, and since then it has gone from strength to strength under the successive leadership of Dick Taverne, John Kay, Bill Robinson and, now, Andrew Dilnot. I would like to take this opportunity to welcome the recent initiative to set up a Tax Law Review Committee. I know that IFS is seeking 50 sponsors to underwrite this venture, and I am happy to announce this evening that the Bank will be one of those 50.

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The author would like to thank members of the new Monetary Stability Wing of the Bank, especially Alex Bowen, for help in the preparation of the text of this lecture, and colleagues in the Treasury with whom it has been a pleasure to work and develop the new framework of monetary policy over the past 18 months. The author is also grateful for comments and suggestions to Stanley Fischer, John Flemming, Otmar Issing and Arnout Wellink.

Although very different institutions, IFS and the Bank of England share one important feature — both are advisers to government rather than responsible for setting policy directly. Their influence depends upon the quality of the analysis which they present. In the modern world, central banks must rely more on a willingness and ability to explain and convince, and less on the power of mystique. The proposition that winning the intellectual argument is a means of acquiring and maintaining credibility will be a theme of my lecture. But the *title* of my lecture should prompt one question. Why is the Institute for Fiscal Studies's Annual Lecture on the subject of monetary policy? There are two answers. First, inflation is a tax. Indeed, in some countries, seigniorage is an important source of government revenue. To take one example, in Chile, seigniorage amounted to over 20 per cent of total government revenue in 1992. But, in the G7 countries, the inflation tax accounts for around only 0-2 per cent of total revenue, and even less in the UK where holdings of currency are comparatively small. In the major economies, the effect of inflation, in a less than perfectly indexed tax system, is to create distortions in the tax treatment of saving and investment, even if inflation is completely anticipated. These distortions were a major theme of the Meade Report. There is a further analogy between unanticipated inflation and taxation. High and variable inflation - and the two go together — create arbitrary redistributions of wealth and so constitute a random wealth tax. No public finance economist would advocate the latter, so we should not tolerate the former.

Second, although the course of tax reform is far from run (especially in the area of savings), the focus of interest in economic policy over the past two years has surely been monetary policy. There have been major changes in both the economic and institutional framework of monetary policy. These deserve to be discussed at greater length than was possible in the hectic months following our departure from the ERM during which the new framework was evolving.

When my predecessor, John Flemming, gave this lecture four years ago, he chose to speak on fiscal policy. I recall him saying then that in the relationship between the Bank and the Treasury, both sides marked each other very tightly, with the Treasury covering monetary policy and markets and the Bank watching closely over fiscal policy. Although communication with opposite numbers is well-developed in government, I imagine the system John was describing was more one of zonal defence than man-to-man marking. And since that time, both teams have acquired new managers with a preference for a more open style of play.

Since IFS was set up in 1969, inflation in Britain has averaged almost 9 per cent a year. Last month, inflation, excluding the effect of changes in mortgage interest payments, fell to 2.3 per cent, the lowest figure recorded since that particular index was constructed. Figure 1 shows monthly inflation figures from 1990 to April this year. Two series are shown: the government's measure of underlying inflation, denoted by RPIX, and the Bank of England's (RPIY)

measure, which excludes the impact not only of mortgage interest payments but also of indirect and local authority taxes. Measured in this way, inflation fell to only 1.6 per cent in April.

## FIGURE 1 UK Inflation, 1990-94 10 Percentage increase in prices on a year earlier 8 RPIY 6 4 2 0 \_\_\_\_ 1990 1991 1992 1993 1994

Note: RPIY = RPIX excluding VAT, local authority and excise duties (Bank calculations) Source: Bank of England

Monetary policy is aimed at keeping inflation below  $2\frac{1}{2}$  per cent by the end of this Parliament. How is this to be achieved? Will the sacrifice in lost output and employment that was made to bring inflation down prove to be in vain? Reducing inflation is like giving up smoking. It can be done often and frequently is. The challenge is to do it only once, and kick the habit for good.

In this lecture, I want to explain the basis of the inflation target approach to monetary policy and how the institutional changes to the framework of monetary policy which have been introduced since our departure from the ERM, and which are designed to enhance the transparency and openness of policy, give us a good chance of achieving the objective. I shall organise the lecture around four questions:

(1) Why does the Bank attach so much importance to the objective of price stability?

- (2) What is the framework for monetary policy which replaced our membership of the ERM?
- (3) How, in practice, are decisions on interest rates made in the new framework?
- (4) Why are transparency and openness important to the success of the new framework?

## **II. OBJECTIVES OF POLICY: INFLATION AND GROWTH**

The reason for the Bank's commitment to price stability is simple. Inflation — and the macroeconomic instability associated with it — have proved costly to the UK economy and unpopular with the electorate. It is possible to control inflation — not precisely nor quickly, but within a reasonable range over a period of time. And to do so does not require a sacrifice of other economic objectives. It is hard to see how any long-run strategy for improving the economic performance of the UK would not include the objective of price stability. Friedman (1960, p. 9) argued that 'The failure of government to provide a stable monetary framework has thus been a major if not the major factor accounting for our really severe inflations and depressions'. This proposition does, I think, seriously understate the role of real shocks to the economy, but we can agree with Friedman (1960, p. 23) that it is essential 'to prevent monetary arrangements from themselves becoming a primary source of instability'.

Of course, governments are rightly concerned with a much wider range of issues, many of which are more relevant to the fundamental objective of raising the long-run rate of economic growth than is the control of inflation. But that is no more an argument for tolerating inflation than would be a refusal to take medicine for a cold on the grounds that the treatment was not the elixir of eternal youth. Indeed, a government which expressed indifference to the inflation rate would reveal its reluctance to give up the option of raising revenue by resort to the printing press, raising doubts about the likely consistency over time of its other policies.

In the 20 years following the end of the Second World War, such a view was not generally accepted. The task of government was seen as judging the appropriate trade-off between output and inflation. The aim was to choose the optimal point on the Phillips curve. But, in the 1960s and 1970s, the trade-off deteriorated and it became apparent that there was no real long-run trade-off to exploit — in the long run, the Phillips curve is vertical. It is a pity that the empirical regularity discovered by Phillips was misused. Phillips himself did not think of it as his best work ('done just in a weekend' in his own words) and did not encourage the popular interpretation. He wrote that the main objective of policy was 'to prevent continually rising prices of consumer goods' (Phillips, 1958, p. 299). As Leeson (1994, p. 616) argues in the current issue of the *Economic Journal*, it was unfortunate that 'Phillips remained silent, in print at

least, while the curve with which he was eponymously associated, was used, by others, to justify the policy of tolerating inflation in order to achieve permanently low levels of unemployment, which he had specifically cautioned against'.

We still know rather little about the nature of the long-run trade-off between inflation and output. A climate of low and stable inflation will, because it avoids the arbitrary redistributions of a random wealth tax, encourage investment which, in turn, may raise the rate of productivity growth. In an international cross-section study of 80 countries, Fischer (1993) found a negative correlation between inflation and total factor productivity growth over the period 1961-88. Although other investigators have produced similar findings, not all studies have found a clear negative correlation. Be that as it may, let me briefly explore the cost-benefit analysis of policies to reduce inflation which have the property that by accepting lower output in the short term, it is possible to raise growth in the long term. Assume that it were possible to raise the rate of productivity growth indefinitely by one-hundredth of one percentage point, from 2.5 per cent a year to 2.51 per cent a year, for example. If future incomes grow at the rate g and are discounted at the real rate r, then the present discounted value of the benefits of such a policy expressed as a proportion of current GDP, denoted by b, would be as shown in Table 1. At a growth rate of 2.5 per cent a year, and with a real discount rate of 4 per cent a year, the benefits of this very small increase in the growth rate are very large — 44 per cent of current GDP. On this basis, the costs of inflation appear extremely high. But since the policy involves depressing output in the short run, the benefits are likely to be correlated with current output, and so a risk premium should be incorporated into the discount rate. At a discount rate of 7.5 per cent, closer to the real return on equities, the benefits fall to only 4 per cent of current output.

#### TABLE 1

#### **Cost-Benefit Analysis of Inflation Reduction**

Benefits	<i>b</i> =	$\frac{1}{\left[100(r-g)\right]^2}$
1	g = 2.5%,	r = 4
		b = 44%
2	g = 2.5%,	<i>r</i> = 7.5%
		b = 4%

Costs

 $c = 0.55 \times (\text{sacrifice ratio} = 5.8\%) = 3.2\%$ 

Break-even discount rate is 8.1%.

Fischer's estimate of the fall in inflation required to bring about an increase in the growth rate of 0.01 percentage points is 0.55 percentage points a year. What is the short-run output cost of achieving a reduction in inflation of this magnitude? Ball (1993) has produced estimates of sacrifice ratios for nine major industrial countries (the G7 plus Australia and Switzerland). The average sacrifice ratio — defined as the cumulative lost output per percentage point reduction in inflation — is 5.8 per cent of one year's GDP. Hence the cost of reducing inflation by enough to raise growth by 0.01 percentage points is c =(.55) X (5.8%), approximately 3.2 per cent of one year's output. With these numbers, the benefits of lowering inflation exceed the costs at any discount rate below 8.1 per cent.

I am myself rather sceptical about such calculations. They are clearly very sensitive to the discount rate assumed. And there is no proof of any causal link from inflation to growth. The most likely explanation of the negative correlation between inflation and growth is that both high inflation and low growth (adjusted for the contribution of factor inputs) reflect a lack of 'good governance' in a country. But on one thing we can be clear — recent research makes it very difficult to argue that inflation is good for long-run growth. And that is sufficient to make the case that monetary policy should aim at price stability.

An argument which runs in the opposite direction is that the cost of bringing down inflation is a lower level of output not only during the recession but also in the long run. This is because a recession lowers investment, labour supply and productivity. It is not difficult to construct models which do have this property - whether of hysteresis effects in the labour market or endogenous growth models in which the current level of investment affects the rate of productivity growth. These models have the implication that there is a trade-off between current inflation and future output. A surprise inflation today, which stimulates activity, may lead to higher output in the future. But a continuing inflation will not generate further beneficial effects, and in the long run the optimal policy is to return to price stability. Higher inflation does not lead to higher long-run growth — even in models where a recession lowers the level of output indefinitely, in itself a rather extreme position. Hence such models do not provide any justification for a policy of permanently positive inflation; rather, they point to the existence of an optimal path of adjustment from whatever is the current rate of inflation to price stability. That is always an issue for a central bank. It is not usually sensible to adjust to price stability overnight. And in the latter stages of our membership of the ERM, there was a concern that adjustment to stable prices might have become too rapid. But the counterpart to this observation is that, once low inflation has been achieved, as it has in the UK, it can be very costly to let it rise.

If it is important to be clear about the objectives of policy, then it is reasonable to ask what we mean by price stability. The definition proposed by Alan Greenspan, Chairman of the US Federal Reserve, has become widely accepted: 'For all practical purposes, price stability means that expected changes in the average price level are small enough and gradual enough that they do not materially enter business and household decisions'. Chairman Greenspan's new deputy, Alan Blinder, has suggested a variant: 'Price stability is when ordinary people stop talking about inflation'. The useful aspect of this definition is that it reminds us of the consequences of the long and variable time lags between changes in monetary policy and their impact on inflation. For the role of the central bank is to think — indeed worry — about inflation *before* ordinary people start talking about it.

That is why the Bank has no time for those who say that 'inflation is dead'. This is a wholly inappropriate metaphor. Inflation is not a beast to be hunted and then slain once and for all. It is a process which reflects the stance of monetary policy. And I shall suggest a more appropriate metaphor at the end of my lecture.

## **III. THE FRAMEWORK FOR MONETARY POLICY**

After 16 September 1992, which I shall call 'Grey Wednesday' for reasons to be explained later, it was necessary to put in place a new framework for monetary policy. This had two key elements. The first was an explicit inflation target. The second was a degree of openness in the making of policy unprecedented in UK monetary history, of which the most visible signs are the Bank of England's *Inflation Report* and the publication of the minutes of the monthly monetary meetings between the Chancellor and Governor. I shall return to openness later; let me first discuss the origins of the inflation target.

The history of monetary policy in the UK over the past 20 years has been the search for a nominal framework that would provide an anchor for the price level and credibility for the government's commitment to low inflation. Several frameworks were tried and, if not discarded, at least seriously modified. Targets for the monetary aggregates were introduced in the 1970s, first for broad money, subsequently for narrow money. Attention then switched to the exchange rate, first with an informal target and then with membership of the ERM, with its explicit exchange rate target expressed in terms of the narrow band. Finally, following various crises in the ERM, several countries have now adopted an explicit inflation target, following the earlier lead of New Zealand and Canada. As can be seen from Table 2, it is not just the UK but also Sweden, Finland and a number of other countries which have moved in this direction.

Following our departure from the ERM in 1992, it was clear that, because of the problems which German unification had created for the ERM, any new framework would have to be based on domestic indicators of economic performance. The Treasury and Bank discussed the alternatives, and the government moved quickly to announce a new framework built around an explicit inflation target. On 8 October 1992, the then Chancellor, Norman

Lamont, wrote to the Chairman of the Treasury and Civil Service Committee to set out the new arrangements. Having reaffirmed the government's commitment to the importance of bringing inflation down, the Chancellor continued:

I believe it would be helpful to go rather further in quantifying this objective. For the remainder of this Parliament, I propose to set ourselves the objective of keeping underlying inflation [defined as the change in retail prices excluding mortgage interest payments] within a range of 1–4 per cent, and I believe by the end of the Parliament we need to be in the lower part of the range.

Mr Lamont added that 'we need to aim at a rate of inflation in the long term of 2 per cent or less'.

Canada	Governor and Finance Minister jointly announce the inflation reduction target.
	1-3 per cent band between 1995 and 1998.
Finland	Target to stabilise underlying inflation permanently at 2 per cent by 1995.
Mexico	President announces inflation target at the State of Union Address in November for the forthcoming year. The current target is 5 per cent by end of December 1994.
New Zealand	Price stability defined by Policy Targets Agreement (PTA) signed by the Minister of Finance and Governor. To maintain inflation between 0 and 2 per cent.
Portugal	Policy target ranges 4–5 <sup>1</sup> / <sub>2</sub> per cent 1994, 3–4 <sup>1</sup> / <sub>4</sub> per cent 1995.
Sweden	Medium-term target (from 1995) for underlying inflation of 2 per cent with a $\pm$ 1 percentage point margin.
UK	RPIX of 1–4 per cent during the current parliamentary term with the aim of being in the lower part of the range by end of the current Parliament.

TABLE 2

**Inflation Targets** 

Why an inflation target? The basic reason, in my view, is that an inflation target embodies the view that inflation is the ultimate objective of monetary policy. It also corresponds most closely with the actual practice of central banks. Even if explained in terms of adherence to an intermediate monetary target, most successful monetary authorities base their policy actions on a forward-looking assessment of the likely direction in which inflation is headed, and change policy if the prospect for inflation appears undesirable. Experience with intermediate targets in a number of countries suggests that they can only too often be unreliable guides to future inflation. That does not mean that they should be

jettisoned entirely. Take the example of monetary aggregates. Money is at the heart of the inflationary process, and it would be bizarre for a central bank not to pay careful attention to the behaviour of the monetary aggregates. But there is no time-invariant mechanical link between the change in a given monetary aggregate and the subsequent out-turn for inflation. In other words, the velocity of circulation changes over time in unpredictable ways. Denis Healey, in evidence to the Treasury and Civil Service Committee in July last year, recalled the time when, as Chancellor, he asked Jasper Hollom — the then Deputy Governor of the Bank — whether he should publish a monetary target. Hollom replied, 'You would simply be redesigning your cross'. Figure 2 shows that cross, the 'velocity cross'. It plots the velocity of both narrow money (M0) and broad money (M4) in the UK since 1980. The velocity of narrow money rose rapidly in the 1980s as new ways were discovered to economise on holdings of cash. Broad money velocity fell during the 1980s when the effects of financial liberalisation meant that money became interest-bearing and an important part of

#### FIGURE 2

#### Velocity of M0 and M4, 1980-94



Source: Bank of England

wealth, and not just a means of payment. Even the Bundesbank has recently experienced problems in predicting the behaviour of broad money velocity. It is tempting, though a little unfair, to say that the Bundesbank has given more credibility to monetary targets than monetary targets have given to the Bundesbank. Unfair because the Bundesbank has always published in its monthly reports an analysis of trends in velocity, and so its explanations of the recent deviation of M3 growth from the target range carry conviction. And it is intriguing to note that at home, both measures of velocity have stabilised in the past three years. Perhaps broad money will in future be a more accurate indicator of inflationary trends than in the early to mid- 1980s.

The use of an inflation target does not mean that there is no intermediate target. Rather, the intermediate target is the expected level of inflation at some future date chosen to allow for the lag between changes in interest rates and the resulting changes in inflation. In practice, we use a forecasting horizon of two years. It is absolutely crucial to understand that the inflation target does *not* mean that policy is set according to the current rate of inflation. The latest inflation rate is relevant only in so far as it affects the projection for inflation some two years ahead.

The reason for announcing and following an intermediate target is to convince private sector agents that the authorities will not spring inflation surprises on them, and that the inflation target is credible. In principle, the authorities could adjust official interest rates until the current projection for inflation was at the mid-point of the target range. In a recent paper, Hall and Mankiw (1993) use the analogy of steering a large ship — a highly specialised task because there are long lags between adjusting the rudder and the actual movement of the ship. After the voyage, the quality of the captain can be judged by the course actually followed, but how are the passengers to appraise his actions while still at sea? Simple rules of thumb which are easy to monitor will tell them whether the captain is following his pre-announced course. But in difficult waters, simple rules do not exist. The passengers may feel that an independent judgement based on expert knowledge of the tides, wind, engine speed and rudder settings is helpful in judging the captain's performance. Of course, if the captain's qualifications and reputation were sufficient, there would be no need to monitor his performance so carefully, but if he has steered on to the rocks before, the passengers might wish to ask for an independent view. That is one role of the Bank's Inflation Report.

Of the alternative intermediate targets that have been suggested, the most serious candidate is a nominal income or GDP target. This has an impeccable pedigree with support from James Meade, Sir Samuel Brittan and Charles Bean in the UK, and Robert Hall and Greg Mankiw in the US. Nominal income rules were proposed to reduce the volatility of real output in the face of shocks to the economy. Their attraction depends upon the nature of those shocks. But many of the benefits associated with nominal income targets can also be obtained by the

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appropriate interpretation of an inflation target. Consider an adverse supply shock such as a deterioration in the terms of trade. An increase in prices from this source might threaten the inflation target. Action to hit the target would involve a fall in output. But if in these circumstances inflation is allowed to rise to the top of the target range, or the range is explicitly adjusted, then there is no adverse output consequence. The choice of an appropriate range provides the headroom necessary for dealing with shocks. Of course, the opposite is true when the shock leads to a favourable price response. It was considerations of this sort which led the Bank to develop its measure of underlying inflation which abstracts from the effects of changes in indirect taxes. A one-off change in the price level in response to higher indirect taxes might sensibly be accommodated. Hence the measure of inflation over which to define the target would be the Bank's RPIY measure. But if the issue is understood, then an explanation of why the RPIX target might be breached temporarily should suffice.

#### FIGURE 3





Note: The range is defined as the central projections plus or minus the absolute average error on RPIX inflation projections since 1985. These projections have all been based on the assumption that short-term nominal interest rates are unchanged.

Source: Bank of England Inflation Report, May 1994.



FIGURE 4 **RPIY Level: Current and Previous Projections** 

To be formal for a moment, a range for target inflation corresponds to a statecontingent inflation target, and hence can match the flexibility of nominal income targets. An inflation target also has two advantages. First, it enables the government to make clear its commitment to low inflation and faster growth as separate objectives to be attained by different means. Any government which raised the target for nominal income growth on the grounds that its supply-side measures were beginning to work would come under the suspicion that it was wavering in its anti-inflationary zeal. Separate objectives for growth and inflation prevent any confusion. Second, the data for retail price inflation are available on a more timely basis and are not revised. Data on nominal GDP arrive several months later and are often revised. For example, the growth of nominal GDP in the fourth quarter of 1992 was initially estimated — in March 1993 — to have been a *fall* of 0.4 per cent. The latest (though not necessarily final) estimate is of a *rise* of 0.5 per cent, a difference of one percentage point in a quarterly growth rate. This second experience is not unusual.

For these reasons, an inflation target can combine the advantages of nominal income targets with a clear and visible commitment to price stability.

Source: Bank of England Inflation Report, may 1994.

There are a number of issues involved in making an inflation target operational. I have already mentioned the choice of price index. There are others. The width of the target range reflects considerations such as the volatility of the external shocks that are likely to hit the economy, and the mid-point of the range depends upon the extent to which official measures of inflation underestimate the degree of quality improvement in products purchased by UK households. Research to date suggests that quality improvement may result in an overstatement of inflation of anywhere between ½ per cent and 1½ per cent a year.

There is also a choice between stating the objective in terms of a price level or an inflation rate — the latter accommodating base drift. In most circumstances, the latter is preferable because it reduces the fluctuations in output in meeting the target. But there are occasions when looking directly at the price level is more useful, especially when it is important to distinguish between price jumps and inflation. One such is the experience of inflation over the past few months. A squeeze on retail margins in the first quarter of this year has led to an extremely low level of recorded inflation - defined as the increase in prices over the previous 12 months. This is good news. But it has the consequence that, unless a further squeeze on margins takes place next year, the level of inflation will rise in the first quarter of 1995 as the price falls of this year drop out of the 12-month comparison. The implications for both the price level and inflation are shown in Figures 3 and 4, which plot the Bank projections for the behaviour of RPIY. A shock of the kind represented by a squeeze on margins leads to lower inflation in the short term followed by a rise, even though the price level is always below the level previously expected. In this sense, good news on inflation today can sometimes create awkward developments to be explained in the future. Again, a clear explanation of the economics of what is happening to inflation helps to maintain credibility.

#### **IV. HOW IS MONETARY POLICY DECIDED?**

For operational purposes, the inflation target approach requires a projection of inflation over an appropriate forecast horizon. When the then Chancellor invited the Bank to publish its own report on inflation in 1992, it was the preparation of such a projection that he had in mind. As an example, Figure 5 shows the Bank projection made in May 1994, where inflation is defined as the rate of retail price inflation excluding mortgage interest payments, over a forecast horizon of two years to the first quarter of 1996. It is absolutely crucial not to be misled by a spurious degree of precision in forecasting. That is why we do not publish a single number but present a chart which shows the most likely outcome (technically, the mode of our forecast distribution of out-turns for inflation) surrounded by a shaded area which indicates a band defined by the average forecast errors made over the past 10 years. And in the text of the *Inflation* 

*Report* we go to some lengths to describe the circumstances in which inflation could differ from the central projection. An appreciation of the uncertainty of the outcome is crucial to the formulation of policy. And it is an illusion to think that the use of an intermediate target would give greater precision. For if that intermediate target variable produced a more accurate forecast of inflation, then it should have been incorporated into the original projection itself.

## FIGURE 5 RPIX Inflation: Out-Turns and Projections



Note: The range is defined as the central projections plus or minus the absolute average error on RPIX inflation projections since 1985. These projections have all been based on the assumption that short-term nominal interest rates are unchanged.

Source: Bank of England Inflation Report, May 1994.

The process of reaching a judgement on the direction in which inflation is headed over the next two years is embedded in the monthly cycle of meetings on monetary policy. These start with informal meetings among economists. In the Bank, the analysis of the latest economic data and the assessment of the outlook for inflation are presented to a Bank-wide Monetary Review Committee, chaired by the Deputy Governor. The conclusions of this meeting are presented to the Governor and Directors of the Bank, who transmit to the Treasury their assessment of the economic situation and policy recommendations. There then follows a joint meeting between senior Bank and Treasury officials, chaired by

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Sir Terry Burns. The minutes of this meeting are circulated, among others, to the Chancellor and Governor just in advance of their monthly monetary meeting. A record of the discussion among officials is included in the published minutes of the monthly monetary meetings in an introductory section entitled 'Monetary and Economic Developments'. Following this summary, the published minutes report the discussion, starting with the views of the Governor, which are provided in written form for inclusion in the minutes. The ensuing discussion is reported anonymously, and the conclusions describe the Chancellor's summing-up and his decision. The numbers attending both the meeting of officials and the Chancellor–Governor meeting are much smaller than the attendance at the Federal Open Market Committee in the US.

The benefits of a regular monthly cycle of meetings are apparent to all who participate in it. The whole process is geared to a monthly decision on the level of interest rates determined by economic arguments. Those producing the analysis feel that their work is more closely related to the outcome. That is an incentive to produce better work. Of course, some outside commentators may disagree with the policy decisions, but the process of reaching a decision is now more systematic and, I believe, more transparent to those affected by the decisions.



FIGURE 6 Nominal Implied Forward Rates

Source: Bank of England

## V. TRANSPARENCY, OPENNESS AND ACCOUNTABILITY

The inflation target was only part of the new framework for monetary policy adopted following our departure from the ERM. The other part was a series of institutional changes designed to bolster the credibility of the commitment to low inflation. The need for this was apparent from the consequences of 16 September 1992. I called this day 'Grey Wednesday' because, although it enabled the UK to rebalance monetary and fiscal policy in a way precluded at the time by our membership of the ERM, it also led to an immediate loss of credibility in the commitment to price stability. This can be seen from the rise in implied future short-term interest rates between just before and just after 'Grey Wednesday', as shown in Figure 6.

There is no doubt that the most effective way to obtain credibility is to build up a track record of low inflation. That has been the achievement of the Bundesbank. In the wake of our departure from the ERM, and the poor track record of the UK over more than 20 years, it was important to put in place measures which would help to establish, at least in a small way, the credibility of the commitment to price stability. Since October 1992, four major institutional changes have been made:

- (1) The monthly monetary meetings between the Chancellor and Governor have been formalised and are now the forum in which decisions on interest rates are made. The Chancellor makes the final decision based on the advice given at the meeting. The timetable of meetings is announced several months in advance.
- (2) In October 1992, the Chancellor asked the Bank to produce its own independent verdict on progress toward meeting the inflation target to be published in a new Bank of England quarterly *Inflation Report*. This followed discussions between the Treasury and the Bank, and the production of a dummy report which convinced the Governor and Chancellor of the merits of the idea. The first *Report* appeared in February 1993, and in total six have now been published. Since the autumn of 1993, these reports have been shown to the Treasury only in final form when they have been dispatched to the printers. This has saved resources of time and energy at both ends of town. The obsession with drafting (I distinguish between drafting and good writing) in the official world has too often been at the expense of substantive policy discussions.
- (3) On 13 April this year, the Chancellor announced that he would accept the recommendation of the Treasury and Civil Service Committee to publish the minutes of his monthly monetary meetings with the Governor. These minutes are published two weeks after the subsequent meeting has taken place, which in most cases means a lag of six weeks between the meeting and publication of the minutes. Again, this decision followed an

experimental period of seven months during which the minutes had been prepared on a trial basis.

(4) In November 1993, the Bank was given discretion over the timing of interest rate changes, with the understanding that any change in rates decided by the Chancellor at a monthly meeting would be implemented before the next meeting. In practice, unless there was a compelling reason for delay, any such move would happen sooner rather than later. To wait until after the next round of economic statistics (usually two weeks after the monthly meeting) would run the risk that the new data might cast doubt on the wisdom of the decision. In principle, decisions could be made conditional on subsequent published statistics or market disturbances, in the foreign exchange market for example, might lead to an additional meeting which in turn would result in an additional set of minutes after the appropriate delay.

In addition to these measures, there have been two other innovations. First, whenever interest rates are changed, a press notice is issued outlining the reasons for the change. Second, on the day of the monthly monetary meetings, the Treasury publishes a Monthly Monetary Report which describes the most important economic data available to the participants in the meeting.

What do these changes add up to? In the first LSE Bank of England Lecture, the then Governor, Lord Kingsdown, described the measures announced in the Chancellor's 1992 Mansion House speech - in particular the new Inflation *Report* — in these terms: 'while they may appear to be a small step for Britain, they are a giant leap for the authorities'. The further changes made subsequently, and, in particular, the decision to publish the minutes of the monthly Chancellor-Governor meetings, certainly amount to an additional leap. The policy advice tendered by the Bank to the Chancellor is now available to the public not after 30 years but after six weeks. To go from 30 years to six weeks is, by any standard, more than a small step. It is open government in practice. The raw material on which assessment of monetary policy is based is not secret — the statistics are in the public domain. Of course, there are other areas of policy — the provision of lender-of-last-resort assistance, for example — in which confidentiality of information is important and secrecy may be essential to the success of the operation. But monetary policy can and should be a matter for open public debate. The irreversibility of the decision to publish the minutes has been underlined by the announcement by the Shadow Chancellor, Gordon Brown, that a future Labour government would continue to publish the minutes, and I welcome that.

Openness can improve credibility by helping private sector agents predict how the monetary authorities will react to developments in the economy. The *Inflation Report* has already improved public understanding of the Bank's

thinking on inflation, and publication of the minutes of the monthly monetary meetings should, in time, increase the accuracy of market expectations of the authorities' 'reaction function'. Indeed, the commentaries of City and Press scribblers have already shown an increased awareness of official thinking, based not on speculation about 'who said what?' but on an appreciation of our analysis of the economy. As a result, over time the minutes should contain fewer surprises, thus contributing to the stability of macroeconomic policy.

There is one further important consequence of openness and transparency greater public *accountability* of the Bank. In the debate on the role and status of the Bank of England, one important point is in danger of being overlooked. The changes which the Chancellor and his predecessor have introduced have made the Bank more accountable for its policy advice than it has ever been in its history. There will not be any doubt about the advice tendered by the Bank. Our representations to the Treasury, and the Governor's advice to the Chancellor at their monthly meetings, are expressed in totally unambiguous terms. It will no longer be possible for misleading impressions to be formed about the nature of the Bank's past advice on interest rates, based on incorrect interpretations of tortuous circumlocutions expressed in that special language known as 'Bankese'.

One consequence of greater public accountability has been the spur to improved performance within the Bank. The publication of our analysis and advice is a great incentive to getting it right. I am one of those who believe that the strongest incentive to provide good economic advice is the prospect of having to defend that advice in public. Robert Solow, the American economist and Nobel prize-winner, said once that three qualities were needed for the study of economics: faith, hope and clarity — and the greatest of these is clarity. I believe that the new monetary framework in the UK exhibits clarity, as well as faith and hope. If the Chancellor rejects the Bank's advice, that will be clear. The Bank will not have to obfuscate if a decision is made with which it disagrees. And future Chancellors will no longer experience the frustration of seeing the Press assume that the Bank must have given good advice if it did not.

Both the Treasury and the Bank have welcomed the opportunity to make clear our respective views. Far from creating tensions between the two institutions, the change has led to a sense of relief that attention can be focused on substance, not form. What better celebration of 300 years of central banking history than the opportunity to say what we think in plain English. Of course, there will be those who think that no group of economists could possibly talk in plain English for more than a minute without repetition and deviation, if not hesitation, and a descent into economic jargon. Doubtless we shall fail to live up to the standards of the King's English, but try we shall.

## **VI. CONCLUSIONS**

Mr Chairman, I have tried this evening to answer four questions — why does the Bank attach so much importance to the objective of price stability? what is the framework within which decisions on monetary policy are made? how are those decisions made? and why are openness and accountability vital to the success of the framework? The new framework, based on an explicit inflation target, focuses attention on price stability as the underlying objective of policy, and avoids putting all one's eggs in the basket of a single variable as the intermediate target. It does, I believe, correspond with the way most monetary authorities behave in practice, and, if that is the case, then why not be open about it?

I also promised to offer an alternative metaphor to the mistaken 'inflation is dead' school of thought. The control of inflation is like weight-watching. If you allow yourself to become overweight — excess inflationary pressure — a rather unpleasant crash diet may be necessary for a while. But alternating between binge and starvation — boom and bust — is not a sensible way to live. The only satisfactory solution is to find a healthy diet which allows you to eat well on a sustainable basis. So it is with monetary policy.

I have suggested that bringing down inflation is like giving up smoking, and keeping it down is like learning to eat and live healthily. I am not sure that either the Governor or Chancellor would approve of these analogies, but I do know that both are fully committed to the underlying objective of price stability.

The role of the Bank of England has changed in important ways in the past 18 months. What of the future? Both the Treasury and Civil Service and the Roll Committees argued last year for greater statutory independence for the Bank. As I have argued, much has already been achieved. But I have no doubt that the future influence of the Bank of England will depend less on changes to its legal status and more on the quality of its advice and intellectual contribution to discussion of the British economy. If our analysis of the British economy is correct, we shall influence policy decisions; if not, we shall be ignored. As Michael Bruno, the former Governor of the Bank of Israel, has argued in a different context, 'the special status that the Bank of Israel, and its Governor, have in the Israeli economy derives at least as much from intellectual leadership ... as from its monetary, foreign exchange or bank supervision functions' (Bruno, 1994). He goes on to quote David Horowitz, who founded the Bank of Israel, that the central bank fulfil the dual role of 'Matzpen and Matzpoun' in Hebrew, both a 'compass and a conscience' for the economy. I do not envisage the Bank of England being required to play quite this role in Britain, but the Bank does have a special responsibility to champion the cause of price stability. Nor is this a new position for the Bank. In 1923, Maynard Keynes dedicated his Tract on Monetary Reform to the Governors and Court of the Bank of England who, and I quote, 'now and for the future have a much more difficult and anxious task entrusted to them than in former days'.

The pursuit of price stability is an endless marathon, not a sprint for the line. As Alan Greenspan said in an interview last year, 'You never reach the point where you shut up shop and break out the champagne. Nor should you'.

## REFERENCES

Ball, L. (1993), 'What determines the sacrifice ratio?', National Bureau of Economic Research, Working Paper no. 4306, mimeo.

Bruno, M. (1994), 'Political autonomy of central banks: theory and practice', mimeo, World Bank.

Fischer, S. (1993), 'The role of macroeconomic factors in growth', National Bureau of Economic Research, Working Paper no. 4565, mimeo.

Friedman, M. (1960), A Program for Monetary Stability, New York: Fordham University Press.

Hall, R. E. and Mankiw, N. G. (1993), 'Nominal income targetting', National Bureau of Economic Research, Working Paper no. 4439, mimeo.

Leeson, R. (1994), 'A.W.H.Phillips M.B.E. (Military Division)', *Economic Journal*, vol. 104, pp. 605–18.

Phillips, A. W. (1958), 'The relationship between unemployment and the rate of change of money wage rates in the United Kingdom, 1861–1957', *Economica*, vol. 25, pp. 283–99.