Do inflation targets work?

Mervyn King, an Executive Director of the Bank and its Chief Economist, looks at the growing use of inflation targets:[1] *he considers what their use may achieve; what* has so far *been achieved; and how in the future they may help in the setting of monetary policy.*

Central banks, and especially central bankers, do not like to think of themselves as dedicated followers of fashion. Upholders of timeless values would be a more appropriate description. But there is little doubt that inflation targets have become fashionable. Following the example of New Zealand and then Canada, several European countries—including the United Kingdom—have adopted inflation targets.

But it is striking that of the countries which have turned to inflation targets, virtually all did so after a recent history of unacceptably high inflation. Countries with more successful track records—such as Germany—have not felt the need to abandon their intermediate monetary targets. Is this a case of 'better the devil you know', or is an inflation target a second-best substitute for a monetary target? As John Crow, the former Governor of the Bank of Canada, remarked: we did not abandon monetary aggregates, they abandoned us.

In trying to get to the bottom of the popularity of inflation targets, I would like to ask three questions. First, what is it that inflation targets can hope to achieve in principle? Second, what have they actually achieved in practice? Third, how will inflation targets help us to set monetary policy in the future?

In principle, an inflation target combines two distinct features. First, it acts as a nominal anchor for monetary policy. Second, it raises the cost of using inflation surprises to obtain a temporary boost to output and employment, and so reduces the inflation bias inherent in a monetary policy which relies—as it must to some extent—on the discretionary decisions of those responsible for setting official interest rates.

An inflation target is not the only way to achieve these two objectives. Money or nominal income targets could also provide both a nominal anchor and a form of precommitment not to engineer inflation surprises. But because an inflation target focuses attention directly on the ultimate objective of monetary policy—namely price stability—it provides a much clearer and more transparent framework for policy. Indeed, monetary targets can be seen as a special case of an inflation target when the velocity of money is completely predictable. And the political costs of missing an inflation target are likely to be more visible than those of overshooting the target for a monetary aggregate.

But two criticisms have been made of the use of inflation targets. The first is that by targeting the inflation rate, rather than the price level, no anchor is provided for the future price level. The target announced by the Chancellor in his Mansion House speech in June does not suffer from this problem. By aiming consistently for an inflation rate of 2½% or less, although the inflation rate in any particular year may be higher or lower as a result of temporary and unpredictable shocks, the inflation rate averaged over a long period should not exceed 2½%. And it is the predictability of the average inflation rate which provides the anchor for the future price level.

The second criticism is that the pursuit of an inflation target means that real output is more unstable than need be the case. I believe this to be incorrect. Everyone who has studied monetary policy knows that it affects inflation after long and variable time-lags. Unexpected supply shocks that have a one-off impact on the price level mean that inflation will deviate temporarily from the target level of 2½% or less. Monetary policy does not aim to contract or expand demand to offset such shocks to the price level. Rather, in the jargon of economists, the shocks are accommodated. But monetary policy can, and should, aim to prevent these shocks from feeding through to underlying inflation. That is why we target not next month's inflation rate, but the inflation rate some two years or so ahead.

For example, the fall in the sterling effective exchange rate of about 5% in the early part of this year will place upward pressure on retail prices over the next few months, as cost increases pass down the supply chain. RPIX inflation, at 2.9%, is already above the 2½% target. But the real question is how to prevent a temporary rise in measured inflation from having second-round effects which jeopardise the inflation target two years from now. Monetary policy must aim to prevent these second-round effects from taking hold.

So an inflation target does not imply that output must be destabilised in a vain attempt to offset shocks to the price level and keep the *current* inflation rate at exactly 2½%. Policy must be forward-looking. But surely, you might argue, if growth falters in one month or one quarter, should not policy be relaxed even if the outlook for inflation two years ahead remains unchanged? My answer is in two parts.

(1) In an address to the Centre for Economic Policy Research on 26 September.

First, if the fall in the growth rate is expected to persist, then it is very likely that the inflation outlook—and hence the appropriate monetary policy—would alter. Second, if, however, the decline was thought to be temporary, it would be tempting fate to try to fine tune output in this way. Our knowledge of the short-run dynamics of output and employment, and their response to changes in monetary policy, is wholly inadequate for us to behave as if monetary policy were just another application of control engineering. It would be a serious mistake for monetary policy to look backwards and respond simply to the latest quarterly growth rate, rather than look forward to what is likely to happen over the next two years, uncertain though that outlook is. And the attempt to fine tune in our present state of ignorance is likely to raise suspicions that an inflation surprise is on its way. I return to my earlier point. One of the virtues of an inflation target is that it raises the costs of an inflation surprise. A framework, or constraint, of this kind helps to keep the monetary authorities on the right long-term track. And if we want more long-termism in British industry, then there is no better place to start than to ensure long-termism in monetary policy.

What, then, has the inflation target achieved in practice? Let me point to one positive and one negative achievement. The positive effect is that the adoption of a formal inflation target has led to a more systematic and focused discussion of the monthly decisions on monetary policy, both inside and outside government. It has improved, I believe, the public debate on monetary policy and significantly improved the information provided to the public by the authorities about their analysis of the inflation outlook. This is true not just in the United Kingdom, but also in the other countries which have adopted inflation targets.

The negative effect has been that the need to look forward—because of the lags in monetary policy—has attracted some rather unsophisticated criticisms of forecasting. A simple, though unfortunately common view, is that forecasts are either right or wrong—a sort of spot the ball contest in which the winner takes all. This misses the point altogether. When setting monetary policy, it is necessary to assess the risks and uncertainties associated with the inflation outlook some two years or so ahead, when the lags between current actions and their consequences have unwound. It is about *probabilities,* not point estimates. That is why the Bank of England publishes an inflation forecast with an error band to give some idea of the uncertainties involved, and an explicit analysis of the risks to the outlook—in other words, a description of the probability distribution of future inflation. I would encourage others to do the same. The fact that we cannot foresee the future with perfect certainty is no reason to ignore it.

But we do not pretend to any superior forecasting ability. We pay great attention to expectations of inflation revealed in financial markets. And we are working to improve our estimates from the short end of the yield curve to give an independent market forecast of inflation over the time horizon relevant for monetary policy.

So let me assure you that the Bank of England is not trying to target a precise number for inflation, such as 2.5%, exactly two years ahead. Rather, our advice on interest rates is determined by looking at the balance of probabilities for inflation. We are *not* the Mr Micawber of the central banking world—inflation target 2.5%, inflation projection 2.4%, result happiness; inflation target 2.5%, inflation projection 2.6%, result misery. Monetary policy is about assessing probabilities.

What of the future? Inflation targets need to be seen as one—and only one—component of the institutional arrangements for monetary policy. Before I say something about how inflation targets fit into this wider view, I would like to comment briefly on two specific aspects. First, the role of the range of 1%–4% around the target of 2½% (or less). Second, the link between inflation targets and transparency in the conduct of monetary policy.

If we are consistent in our pursuit of the inflation target, then over a long period the average inflation rate in the United Kingdom will be 2½% or less. In order to monitor the performance of the authorities in achieving the target, it is necessary to look at the record. So it is tempting to evaluate our performance by looking solely at the recorded average inflation rate.

This will indeed be an important element in any evaluation of the monetary authorities. But the average realised inflation rate over any particular period is a rather inefficient way of monitoring their performance. The reason is simple—the average inflation rate is determined solely by a comparison of the price level at the beginning of the evaluation period and the price level at the end of the period. It takes no account of what happened in between, and, in particular, no account of how the authorities responded to various shocks as they occurred.

There is a clear parallel here with a famous lesson of finance theory. The only information needed to estimate the mean return on an asset is its price at the beginning of a period and its price at the end. Information about the behaviour of the asset price during the intervening period—which could be many years—provides no additional information about the mean rate of return. But it does provide enormously valuable information about the variability of asset prices within the period.

Similarly, monitoring of the authorities' determination to hit the inflation target requires an examination of how policy was set over the whole period. Decisions are taken once a month, and any outside observer is likely to look at all of those decisions in coming to an overall judgment on the success of policy. For this reason, it is helpful to have a range around the desired long-run average. It provides an indication of how variable inflation is likely to be if future shocks are similar to those in the past. That is why the description of the inflation target is embroidered with the words: 'setting interest rates consistently at the level judged necessary to achieve the inflation target of 2½% or less

should ensure that inflation will remain in the range 1%–4%'. Monitoring is enhanced if performance can be judged against a pre-announced range as well as the long-run average. From this, it should be clear that the existence of a range does *not* mean that an average outturn of 3.9% would be acceptable.

This leads naturally to transparency. Monitoring is feasible only with sufficient transparency. Publication of the monthly minutes makes it much easier for the outside world to monitor the advice given by the Bank. Indeed, there has been a much more lively and intelligent debate about monetary policy over the summer than would have been possible in the past when the Bank's advice was neither known publicly nor given quite so explicitly. However uncomfortable this makes life for us, it surely improves the quality of the public debate and the ability of the public to monitor the Bank.

Inflation targets are only part of a recent trend away from mechanistic rules for monetary policy, toward careful design of a framework within which discretion is exercised. Around the world, there have been moves to increase the accountability of monetary authorities, to create more transparency in the decision-making process and to give more independence to central banks. The United Kingdom is further along the road in some aspects—such as transparency—and less so in others, such as central bank independence. It is the set of measures as a whole, however, which matters more than any one element. An inflation target makes it more difficult for a monetary authority with a short time horizon to use an inflation surprise to boost output. In the end, though, such targets will work only if the goal of price stability has widespread public support.

This leads me to my final point. It concerns a paradox. There seem to be a number of people who believe the following three propositions:

- An inflation target of 2½% or less is perfectly sensible.
- At current interest rates, it is more likely than not that RPIX inflation in two years will exceed 2½%.
- Interest rates should be reduced.

How can we square this triangle? Leaving aside the technical issue of the inflation outlook, on which there can quite reasonably be differences of view, what concerns the Bank is that squaring the triangle means that some commentators at least are wavering in their commitment to permanently low inflation. Now that would be a return to a fashion of the 1960s.