

Speech

Some Reflections on the MPC

Speech given by

Dr Sushil B Wadhwani, Member of the Monetary Policy Committee, Bank of England and Visiting Professor at the City University Business School and the London School of Economics

To the National Association for Business Economics in Washington DC 21 May 2001

I am extremely grateful to Nick Davey and Jennifer Greenslade for their help and advice. Helpful comments on an earlier draft were received from Joanne Cutler, Sir Edward George, DeAnne Julius, Kathy McCarthy, Edward Nelson, Gus O'Donnell, Ian Plenderleith and Peter Rodgers. The speech is entirely personal and does not in any way express the views of either the Monetary Policy Committee or the Bank of England.

All speeches are available online at www.bankofengland.co.uk/publications/Pages/speeches/default.aspx

SUMMARY

1. The New UK Monetary Framework

The new monetary policy framework in the UK has made an encouraging start as inflation expectations have fallen to around target. This does not, at first sight, appear to have come at the cost of growth, as the unemployment rate has continued to fall, and output growth has been slightly above its average rate.

2. Are we Biased Towards Undershooting the Target?

Inflation has been below target for the last two years and is projected to remain below 2½% for much of the next two years as well. A critical feature of our framework is that it specifies a symmetric target. If we were persistently to undershoot the target for well beyond the current anticipated duration, this might, at some point, come to damage our credibility. Therefore, it will remain important for us to make sure that we continue to respond to the possible changes in the structural relationships that underlie our forecasting processes.

3 Transparency and Predictability

It is generally acknowledged that UK monetary policy is more transparent than in many other countries. Somewhat unexpectedly, there is some evidence which suggests that our interest rate decisions have, on average, surprised the markets more than the corresponding decisions by other central banks over the last four years. This might be the price one pays for a system of <u>individual</u> accountability, since it is less easy to 'guide' markets in advance of our decisions. However, it is also possible that these empirical results are distorted, because, in the early years of the MPC, the markets were trying to learn how we would react to developments in the economy. Somewhat reassuringly, the average market surprise associated with our decisions over a more recent period is broadly in line with other major central banks. Of course, we should continue to endeavour to explain our actions better.

Good afternoon.

It is a great privilege for me to have the opportunity to discuss the process of policy formulation in the UK with you today.

THE NEW UK MONETARY FRAMEWORK

I shall start today by briefly outlining the monetary policy framework in the UK. We have just passed the fourth anniversary of the announcement that the Bank of England would be independently responsible for the operation of monetary policy. Decisions concerning interest rates are now taken each month by a nine-member Monetary Policy Committee (MPC). Our responsibility, as defined in The Bank of England Act (which came into effect in 1998), is "to maintain price stability, and subject to that, to support the economic policy of Her Majesty's Government including its objectives for growth and employment".¹ The Chancellor gives an annual remit to the Bank, currently specified as a symmetric target for the annual growth rate of retail prices excluding mortgage interest payments (the RPIX index) of 2½%, and so there is a clear objective for monetary policy.

The new monetary policy framework is intended to be transparent, so we publish a quarterly Inflation Report, which contains the MPC's inflation forecast. The minutes of our monthly policy meetings are also published, now just two weeks after the decision (though the legal requirement is six weeks), and these show the individual votes. We are individually accountable to Parliament through appearances before the relevant Select Committees.

HOW HAS THE NEW FRAMEWORK PERFORMED?

The new system appears to have made an encouraging start.² Inflation averaged around 7% during the 1980s, and around 4¼% over the 1990 - 1997 period. But, between May 1997 and March 2001, annual RPIX inflation has averaged 2.4%, slightly below target. Since the introduction of the new framework, inflation has also

¹ Chapter 11, Part II, Section 11.

² For a detailed discussion of the framework and its performance, see HMT (1999).

been remarkably stable, lying within a rather narrow range (actually just 1.8% - 3.2%) during this period (Chart 1).



Note that the arrangements that existed prior to May 1997 appear to have lacked credibility in the markets. For example, in June 1995, an inflation target of 2½% or less was announced and yet inflation expectations 10 years ahead (derived from financial markets) generally remained above 4%. But market measures of inflation expectations fell sharply on 6 May 1997 following the announcement of the new monetary framework, and there have since been further falls to a level slightly lower than the target (Chart 2). This suggests that the markets believe that the current framework will deliver the target in the long-run.

Chart 1

Chart 2





Credibility may also be considered with reference to the inflation expectations of independent economic forecasters. There have been substantial falls in the consensus one-year ahead RPIX inflation forecast³ since the new monetary arrangements were put into place. Since then, these expectations have remained very close to target (Chart 3).

Chart 3



³ See "Consensus Forecasts".

It is interesting to note that UK expectations have fallen by more than US expectations, whether measured in terms of 10 year ahead market expectations or survey based measures (Charts 4 and 5). This suggests that the fall in inflation expectations may be a reflection, at least in part, of the change in the policy framework in the UK. But other factors, such as disinflationary pressures in the global economy or supply side developments may also have helped to keep inflation low.



At the time of the creation of the MPC, there were those who thought that we would act as 'inflation nutters', and that low inflation would be achieved at the cost of high unemployment. However, unemployment⁴ has continued falling, from 7.2% in May 1997, to around 5.1% now (Chart 6). Output growth has averaged 2.8% under the new monetary framework, which compares favourably with the 40 year historical average of 2.5%.

⁴ As per the Labour Force Survey definition.







ARE WE BIASED TOWARDS UNDERSHOOTING THE TARGET?

Although much that has occurred has been encouraging, some have, nevertheless, argued that we have been biased towards undershooting the target. If we focus on the profile of inflation over the last two years or so, the period over which the MPC has had more influence, there has been a tendency for inflation to undershoot the target (Chart 1). Moreover, recent forecasts, including those incorporated in the May 2001 Inflation Report, are for RPIX inflation to remain below target for much of the next two years (Chart 7), suggesting an undershoot lasting nearly four years.

Chart 7



Relatedly, if we look at recent two-year ahead forecasts for RPIX inflation, the out-turns for RPIX inflation have **always** been lower than the forecast. This is demonstrated in Chart 8 below, which shows actual RPIX annual inflation together with the two-year ahead forecast.⁵

Chart 8



MPC Forecasts of Inflation vs Outturns

Of course, we have not been alone in making such forecast errors. Note that economic forecasters have been persistently too gloomy about the UK economy since the departure from the ERM in 1992. Table 1 displays the average (ie 'consensus') one-year ahead forecast errors that have been made since 1993.⁶ On average, GDP growth has been <u>underestimated</u> by about 0.5% pa, which is a large error in relation to the actual average annual growth rate of around 2.9%. Now, if GDP growth were faster than expected over a sustained period of time, then standard economic theory⁷ would suggest that on average, actual inflation must also be <u>higher</u> than expected. However, the actual inflation out-turn over this period was, on average, 0.5% <u>lower</u> than the 'consensus' inflation forecast and so most economic forecasters (including the Bank of England) appear to have been simultaneously too gloomy about, both, GDP growth and inflation.

⁵ Ie, the value shown in Chart 8, for say, 1999 Q3, is the two-year ahead forecast of RPIX inflation that was made in 1997 Q3, plotted against the actual RPIX inflation outturn for 1999 Q3.

⁶ These numbers are based on preliminary work by Nick Davey and Jennifer Greenslade of the MPC Unit at the Bank of England, i.e. they are a part of the group of economists who work with the 'external' members of the MPC.

⁷ Conditional on potential output growth having remained constant.

TABLE 1AVERAGE FORECAST ERRORS1 IN THE UK, 1993-99

	AVERAGE ³ ERROR	SIGNIFICANT ⁴ AT 10% LEVEL
GDP GROWTH FORECAST		
CONSENSUS ²	+0.48%	YES
INFLATION (RPIX) FORECAST		
CONSENSUS ²	-0.53%	YES

1 Four quarter-ahead forecast errors.

2 Consensus forecast taken from 'Consensus Economics'.

3 Sample period: 1993 I – 1999 IV.

4 Using a t-test over this sample period, with Newey-West standard errors.

There are a variety of possible explanations for this phenomenon. Some point to the strong exchange rate since 1996. Obviously, this does not explain the forecasting errors in the 1993-96 period, when the exchange rate was weak. As for the post-1997 period, some preliminary work using the Bank's Medium-Term Macroeconometric Model suggests that even perfect foresight about the exchange rate would not have been sufficient to explain our persistent tendency to predict wage growth and price inflation to be higher than what materialised. An alternative class of hypotheses would envisage a significant change in the structural relationships that underlie the forecasting processes, perhaps an appropriate characterisation of the 'New Economy'. Reasons for such a change in behaviour could include the far-reaching changes in the labour market over the last two decades, a possible intensification of product market competition (in part, because of globalisation) and advances in the information and communications technology area (see Wadhwani (2001) for a further discussion of

this issue). Therefore, the MPC has, in its Inflation Forecast, made some allowance for these possibilities,⁸ and we continue to monitor developments in this area.

A critical part of our monetary policy framework is that it specifies a symmetric target - treating deviations above the target in the same way as those below the target. If for example, the emphasis were on inflation being 2½% or less, then there would be an incentive for us to drive inflation down, so that the likelihood of breaching the target would be reduced, but at the cost of a detrimental effect on output and employment. A symmetric target potentially permits the highest level of growth that is consistent with the 2½% target.

However, the aforementioned tendency to undershoot the target appears to have led some to believe that the MPC is not operating a symmetric target. Hence, for example, the Treasury Select Committee, in their recent report on the MPC,⁹ argued that –

"... we are concerned that in an effort to establish credibility the MPC may have biased policy towards undershooting the target."

Others have also argued along similar lines.¹⁰

On our current forecasts, the undershoot is expected to last around four years, so there is a risk that we shall continue to be accused of being biased for some time to come.

The MPC does, of course, have a symmetric approach to the target. It will, though, remain important for us to make sure that we continue to respond to the possible changes in the structural relationships that underlie our forecasting processes. If we were persistently to undershoot the target for well beyond the current anticipated duration, this might, at some point, come to damage our credibility.

⁸ An explicit adjustment for 'new economy' factors was first made in November 1999.
⁹ "The MPC – An End of Term Report".

¹⁰ See, for example, the evidence of Professor Willem Buiter and Mr Roger Bootle to the Treasury Select Committee, or an editorial in "The Times", 5 April 2001.

TRANSPARENCY AND PREDICTABILITY

The monetary policy framework that has been in place since 1997 has increased transparency. As already mentioned, the Minutes of the MPC meetings are published after just two weeks. In the US and Japan, the minutes are normally published shortly after the next regular meeting (around a six week interval in the US and slightly less than this in Japan), whereas the ECB do not currently publish minutes.¹¹ Another example of the high level of transparency in the UK is the publication of the quarterly Inflation Report. This contains a detailed analysis of the forecast, showing the best collective judgement of the Committee (and some discussion of different views, which will arise at times given the difficulties and uncertainty of forecasting future events). Note that not all central banks publish forecasts.

So, on the surface, the Bank of England appears more transparent. But is it more predictable? To consider this aspect, some preliminary work within the MPC Unit¹² has used the three-month interest rates implied by the nearest-to-maturity short-sterling, euro-dollar or euribor contract.¹³ The average absolute change in the relevant contract on the day of policy meetings in that country is calculated using close of business data. This is a measure of the degree to which the markets are surprised by the results of the policy meeting on that day. These numbers have been computed for the period since the inception of the MPC in June 1997.

The results of this exercise (see Table 2) suggest that the average market 'surprise' on the day of an interest rate decision has been higher in the UK compared to the US or Europe ie, around 6 basis points in the UK, versus around 3 basis points in the US or Europe. Since European and American interest rates have been lower than those in the UK for much of this period, one might want to scale the average market 'surprise'

¹¹ Note that the Federal Reserve publishes a statement containing the policy decision and an assessment of the short-term risks to the attainment of its long-run goals of price stability and sustainable economic growth shortly after each meeting. Some details of the vote are also given in this statement. ¹² I am grateful to Nick Davey and Jennifer Greenslade of the MPC Unit for help with these

¹² I am grateful to Nick Davey and Jennifer Greenslade of the MPC Unit for help with these computations.

¹³ The contracts mature during March, June, September and December. We switch contracts at the beginning of the final month because contracts tend to lose liquidity just before they mature. So, we take the June contract as the 'nearest' from 1st March.

by the level of the interest rate. The results of doing so are also to be found in Table 2 (under the heading 'average scaled change'). They also suggest that the average 'surprise' associated with monetary policy decisions in the UK has been higher than in the US or Europe. Note that Clare and Courtenay (2001) found that if one considered the top ten market-moving events for the short-sterling contract (over a 5 minute period) during the 1997-99 period, then seven of these were associated with announcements of MPC decisions, so the notion that the MPC has surprised in the past is familiar. What is less familiar about these results is that the MPC has surprised the markets by more than other central banks.

Given that the MPC has strived to be transparent, it might, at first sight, seem odd that we have been less predictable. There are various possible explanations.

First, it is possible that the markets receive greater 'guidance' about future interest rate changes from speeches made by central bankers from other countries. It is more difficult for such hints to be offered under the system of individual accountability that operates in the UK. It is plausible that, on average, a system of individual accountability would contribute to better decision-making over time than, say, a system which depended on a single individual or on 'consensus' decision-making. However, a cost of such a system may be that one occasionally surprises the markets a little more.

Second, the empirical results presented above should be thought of as a preliminary exercise that deserves further investigation.¹⁴ Third, it is important to recognise that the results in Table 2 may have been importantly distorted by some 'surprises' in the early years of the MPC, when the markets were still trying to learn more about the reaction function of the newly-created MPC. Table 3 contains a comparison of the

¹⁴ For example, note that we have computed the 'surprise' over the entire trading day – yet, usually, there will be factors other than our policy announcement that will also move the prices of these interest rate contracts. Therefore, we also used intra-day data for the short sterling contract. Rather reassuringly, we found that the average absolute change computed over the 1145 - 1245 (GMT) time period (the monetary policy decision is announced at 1200 GMT) was around 80% of the average absolute change computed over the the previously cited Clare-Courtenay result that interest rate decisions account for a majority of the top market moving events over a 5 minute interval. This suggests that we are, indeed, largely measuring the effect of the monetary policy decision. Further, note that using the daily change does not, of course, impart any systematic bias to our cross-country comparisons. Nevertheless, further work using intra-day data across countries would be desirable.

average market 'surprise' in the first two years of the MPC with the subsequent two year period. Rather reassuringly, the average market surprise associated with Bank of England decisions in the 1999-2001 period is broadly in line with other central banks. This is consistent with the markets having taken time to learn how we would react to developments in the economy.

TABLE 2

AVERAGE CHANGE IN IMPLIED INTEREST RATES ON DAYS OF POLICY ANNOUNCEMENTS, 3 JUNE 1997 – 18 APRIL 2001

COUNTRY	RATE	AVERAGE ABSOLUTE CHANGE (b.p.)	AVERAGE SCALED CHANGE ¹
UK	SHORT-STERLING	6.2	0.97
US	EURO-DOLLAR	3.4	0.67
EU-11 ²	EURIBOR	3.3	0.85

1 Rescaled by implied market interest rates.

2 Using Bundesbank and DM data until 8th December 1999 and Euribor thereafter.

TABLE 3

AVERAGE CHANGE IN IMPLIED INTEREST RATES ON DAYS OF POLICY ANNOUNCEMENTS 1997-99 VS 1999-2001

COUNTRY	AVERAGE ABSOLUTE CHANGE		
	(b.p.) 1997-99 ¹	1999-2001 ²	
UK	8.3	4.1	
US	1.6	5.0	
EU-11	2.5	4.2	

Notes: 1 3 June 1997-12 May 1999

2 13 May 1999 - 18 April 2001

Of course, we should always endeavour to explain our actions better, and for that reason, the MPC will continue to review alternative communication strategies.

For example, many market participants have told me that the Inflation Report would be more useful for them if it contained more information on the distribution of individual forecasts among different members of the Committee, so although we currently provide some information on the heterogeneity of forecasts, we might need to go further. This, along with the broader issue of the link between the individual forecasts and the policy decision, is something that we might need to review.¹⁵

CONCLUSIONS

The new monetary framework in the UK has made an encouraging start, with inflation expectations having come down at a time when unemployment has also continued to fall. However, we have undershot the inflation target for the last two years, and only expect to return to target in around two years. Were we to continue to undershoot beyond the current two-year forecast horizon, this could damage our credibility. Therefore, it will remain important for us to make sure that we continue to respond to the possible changes in the structural relationships that underlie our forecasting processes.

I also argued today that although the Bank of England is more transparent than most central banks, our interest rate decisions did, in the early years, appear to surprise the markets by more than the corresponding decisions by other central banks. More reassuringly, our performance in this regard is now in line with other central banks, though we shall continue to endeavour to explain our actions better.

¹⁵ See Kohn (2000) for a discussion of some of the issues in this area.

BIBLIOGRAPHY

Clare, A and R Courtenay (2001), "Assessing the Impact of Macroeconomic News Announcements on Securities Prices under Different Monetary Policy Regimes", Bank of England Working Paper No 125.

HM Treasury (1999),"The New Monetary Policy Framework".

House of Commons Treasury Select Committee (2001), "The Monetary Policy Committee – An End of Term Report", Ninth Report of the Treasury Select Committee (HC 42).

Kohn, D (2000), "Report to the Non-Executive Directors of the Court of the Bank of England on Monetary Policy Processes and the Work of Monetary Analysis".

Wadhwani, Sushil B (2001) "The New Economy: Myths and Realities", Bank of England Quarterly Bulletin, June (forthcoming).