

## **Sir Andrew Large: Monetary policy - significant issues of today**

Speech by Sir Andrew Large, Deputy Governor of the Bank of England, to West London Business, London, 1 December 2005.

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### **Introduction**

This is the last official speech I will make while at the Bank and a member of the Monetary Policy Committee (MPC). So perhaps as my term draws to a close you will permit me to make a few personal observations, both on the process of the MPC itself and on a few of the significant issues we face

### **The process**

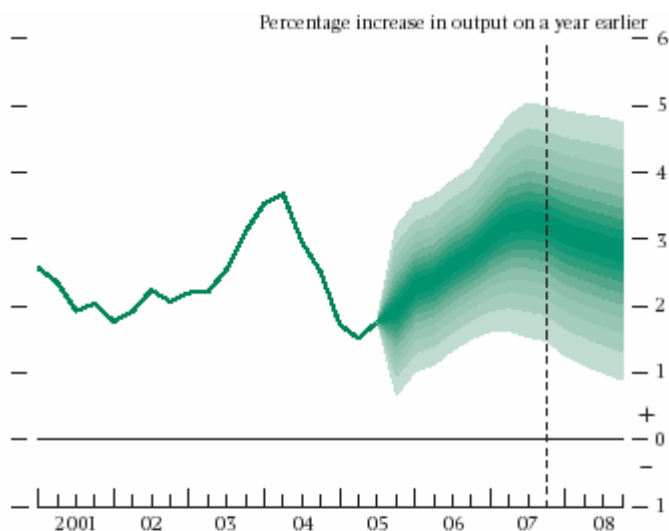
You cannot fail to be impressed by the integrity and substance of the framework. It has a well defined and measurable target. It is independent of Government. Each of the nine members is chosen for their particular area of expertise and to give breadth of experience. They are individually accountable. And a real strength is the transparency of the process. Communication through the publication of the minutes of each meeting, including details of each member's vote, Treasury Select Committee appearances, the Inflation Report, and speeches such as this today provide the markets and the public with an understanding of decisions and, importantly, how they are reached. Furthermore, it has delivered: however much we are aware of perils that could blow us off course.

For me being a member of the MPC has been a steep, but incredibly rewarding, learning curve. The process itself poses some challenges. In particular how best to assess the sometimes bewildering quantity and variety of data; yet to keep a sense of perspective in relation to the big issues. There is for example the need to understand the implications of the frequent data revisions and updates: how to think about them and what conclusions we need to draw ahead of the next policy decision.

But it is the big picture issues, all of which have puzzling unknowns, which have fascinated me most. We spend considerable time reflecting on these in our quarterly forecast round, when we estimate the course of the economy and inflation three years ahead. The November Inflation Report was published a couple of weeks ago and provided an analysis of the UK economy, the factors influencing policy decisions and the MPC's latest forecasts for inflation and output growth.

The models of the economy that we use to produce these projections provide a framework to organise thinking on how the economy works and how different economic developments might affect future inflation. The forecasts need to reflect the uncertainty in the economy. The technique we rely on is "fan charts". [Chart 1] They show the Committee's best collective judgement about the balance of risks and uncertainty around the central case. It means that members can agree on the overall outlook and balance of risks, even though they may come to that view for slightly different reasons.

**Chart 1: Fan chart, current GDP projection based on market interest rate expectations**



The fan chart depicts the probability of various outcomes for GDP growth in the future. If economic circumstances identical to today's were to prevail on 100 occasions, the MPC's best collective judgement is that GDP growth over the subsequent three years would lie within the darkest central band on only 10 of those occasions. The fan chart is constructed so that outturns of GDP growth are also expected to lie within each pair of the lighter green areas on 10 occasions. Consequently, GDP growth is expected to lie somewhere within the entire fan chart on 90 out of 100 occasions. The bands widen as the time horizon is extended, indicating the increasing uncertainty about outcomes. See the box on pages 48–49 of the May 2002 *Inflation Report* for a fuller description of the fan chart and what it represents. The dashed line is drawn at the two-year point.

Source: Bank of England, November 2005 *Inflation Report*

#### **Four significant issues**

In contributing to the forecast rounds and when voting I have considered the likely course and impact of a whole range of important developments and trends. Today I would like to make a few observations on four such areas, which for me have been particularly fascinating. For each I will comment on the key monetary policy issues that seem most relevant. The first is oil – a continuing interest for me having started my career in that industry - and clearly of immense significance today. The second is debt – and in particular the rise of household debt, perhaps because I have studied debt as a practitioner in my banking life, and have observed its impact on borrowers and lenders. The third is the labour market – in part because the subject encompasses broad issues affecting all of us such as globalisation and the entry into the modern world economy of Asian countries. And fourth, something both highly topical today and of fundamental relevance for all our futures, is the area of longevity and pensions.

I shall keep my remarks to the key issues which each of these raise for me in relation to monetary policy. Consequently, I will try not to trespass on political or social issues, or on your lunch break.

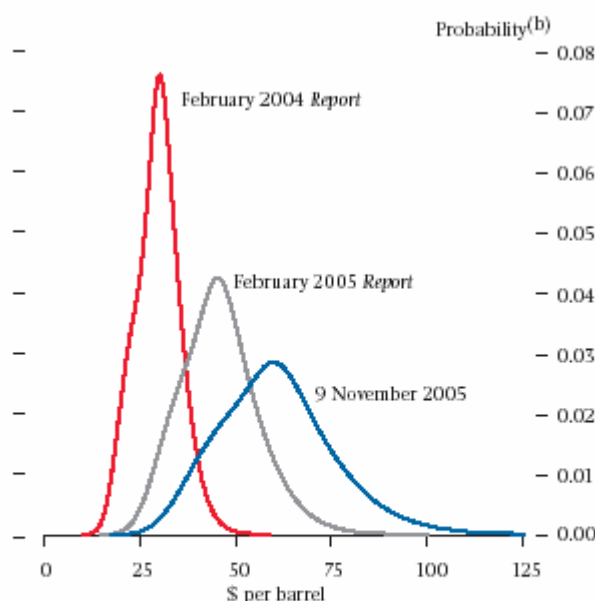
#### **Oil**

You will not be surprised that the increases in the oil price have featured highly in many recent MPC discussions. We have observed the significant increase in demand for petroleum products, particularly from China and the USA. But did you realise that China's average annual consumption of oil is currently almost two barrels per capita per year, but Brazil's is about 4 barrels, and the USA's just over 25? Depending on the assumptions one makes, it seems to me to be plausible, despite efficiency gains and possible replacement of oil by other sources such as nuclear power, that China with its growth rate of 9% per annum will reach Brazil's per capita level in just over 15 or so years. And with its population of 1.3 billion that could mean an additional demand of some 3.5-4 billion barrels per annum roughly equivalent to the 2004 production of Saudi Arabia or around 13% of global production. Add India in with a slightly lower growth rate and you easily approach 5-5.5 billion barrels per annum - which is not far off the 2004 production of the whole of the North American continent - getting on towards 20% of world production. So on the demand side there is clearly a challenge.

There is also great complexity in assessing the evolution of supply. The supply and price of crude is complicated by OPEC politics, and the length of time that it will take to get non-OPEC production such as Canada's tar sands significantly on stream. And due to under-investment there is evidence of bottlenecks in the refinery arena which will take time to be rectified. So supply constraints too are for the time being a real possibility.

The November 2005 Inflation Report explained that the oil futures curve indicated in early November that the oil spot price would remain around current levels for the next few years. However, there was considerable uncertainty around this. The Report cited illustrative estimates that market participants thought there was a one in four chance that oil prices would be \$10 per barrel higher or lower in six months time. This is a significant increase from February 2004, when the probability of such a change was thought to be less than one in fifty [Chart 2].

**Chart 2: Market beliefs about oil prices six months ahead (a)**



Sources: Bank of England, Bloomberg and New York Mercantile Exchange.

- (a) Data refer to the price of West Texas Intermediate crude oil.
- (b) Each curve is a probability density function, the area under which sums to one. The area under the curve between two points indicates the inferred probability that market participants attach to oil prices being between two different levels. See footnote 1 on page 23 for further details.

Source: Bank of England, November 2005 Inflation Report

This shows that although the central case has oil prices essentially flat over the forecast horizon there is still a possibility we will see prices above those of today at some date, with corresponding significance for monetary policy.

In the UK it is difficult to say with certainty what proportion of the last year's rise in CPI inflation (that is from 1.1% in September 2004 to 2.5% in September 2005) was due to oil. But estimates suggest that up to around half the pick up can be explained by oil. The key issue for me is the possible impact of oil prices on inflation expectations. Any signs of expectations becoming dislodged would be a signal that policy might need to be tighter than otherwise, in order to provide insurance that expectations remain on track. I will revert to this theme later.

Over recent years long term inflation expectations have remained anchored close to the target level. This is important in delivering price stability: the fact that people think the MPC will be successful in sticking to the target conditions their behaviour in a number of ways. Higher prices for oil products, and indirectly other goods and services, leaves less disposable income for other things. Whilst the MPC takes comfort from the observation that so far inflation expectations and earnings growth have not risen, it is nonetheless possible that this could lead to demands for higher wages. Such demand, if granted, could be inflationary and even result ultimately in increased unemployment.

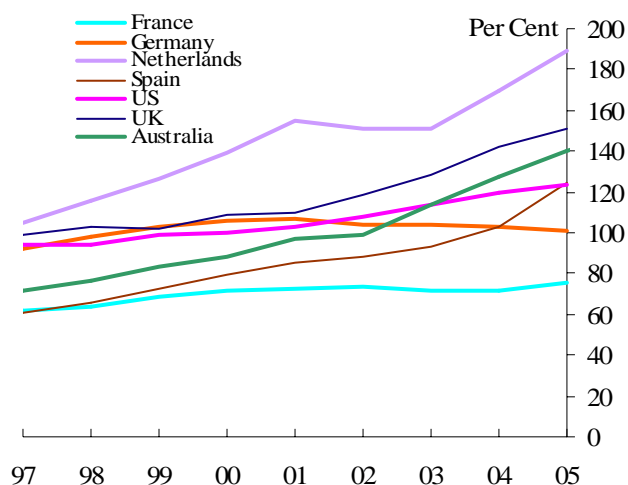
The likelihood of this happening may be slight and there is no real sign of expectations presently becoming dislodged in the UK. And it is striking that although the effects of oil may have some impact

in today's modest slowdown of consumption, that we have nonetheless managed to weather a significant price increase with so little disruption to the economy. Quite different from the late 1970s. But I think it is still too early to relax in relation to inflation expectations, and I think that the subject of oil will feature as a significant issue for some time to come in the monetary policy arena.

## Debt

There has been much comment on the build up of domestic debt in recent years. In aggregate, the ratio of household debt to disposable income is now over 150%, having risen from around 100% in the late 1990s. This upward trend is not unique to the UK, although the debt-income ratio here is a little higher than in most countries [Chart: 3].

**Chart 3: Debt-income ratio across countries**



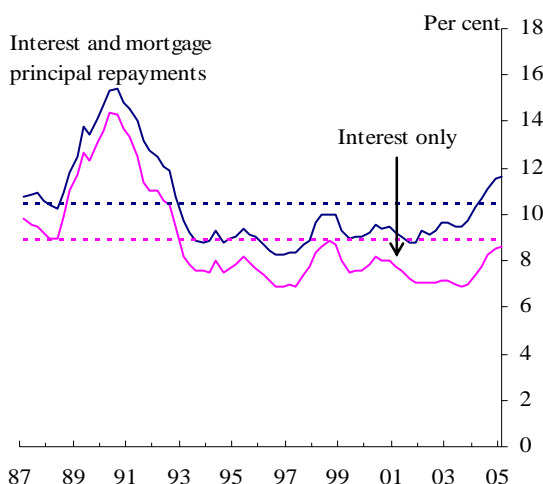
Source: Data from Eurostat, the Federal Reserve and data sent direct from Reserve Bank of Australia.

There are a number of key reasons for the increase, coming from changes both in demand and supply.

Supply side factors include: a liberalised financial market place with new categories of lender and greater competition; new technology, in particular the widespread adoption of credit scoring techniques and data sharing that have given confidence to lenders in granting unsecured loans; and greater securitisation, enabling firms to write more business by diversifying and laying off the risk onto third parties without burdening their own balance sheets.

On the demand side, there appears to have been a change in social attitudes towards debt that has made people more willing to borrow. This might in part be due to low inflation and nominal interest rates that have helped to keep the cost of debt payments down particularly in interest terms [Chart 4], while greater macroeconomic stability and low unemployment have given households the confidence to borrow and lowered the risk to lenders. There has also been a decline in real interest rates that has reflected many factors, including to some degree the accommodatory actions of monetary policymakers. And the rise in house prices has led to a natural increase in debt as people need to borrow more money to finance the purchase of a house.

**Chart 4: Aggregate income gearing**

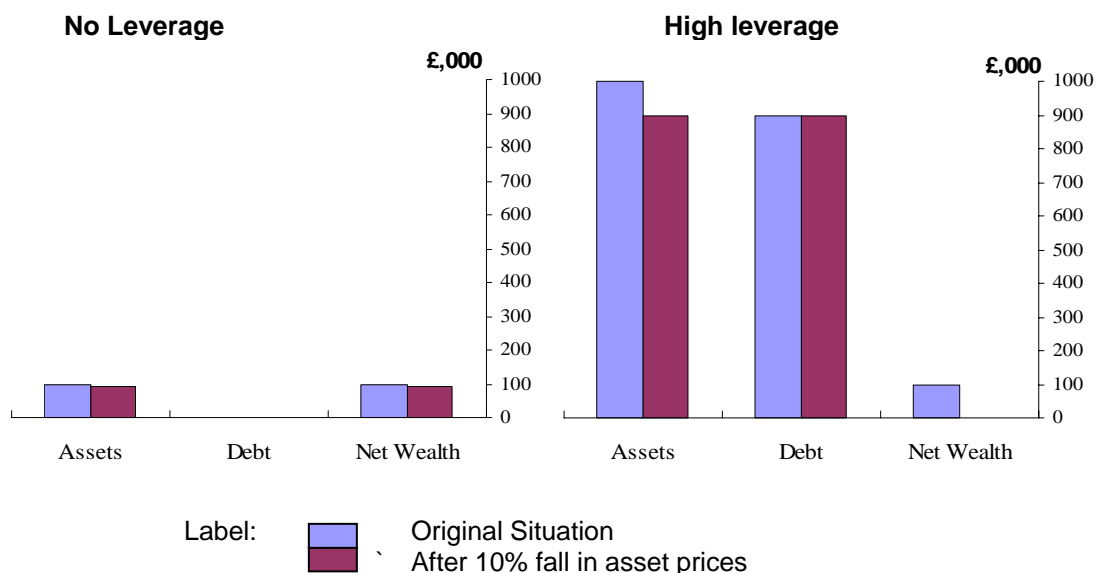


Source: ONS and Bank of England

As far as debt levels are concerned, for me the key issue for monetary policy is that the more capital gearing or leverage increases the greater the vulnerability to shocks and the consequent adjustment to consumption behaviour. I think this is true for individuals and for the economy at large.

Let me explain why it might matter if capital gearing rises. Imagine two states of the world. In the first an individual has assets of £1 million, and debt of £900,000. In the second an individual has assets of £100,000, and debt of zero. In each case the individual's net worth or equity is the same. Then imagine a shock that causes the average level of asset prices to fall by 10%. In the former case the wealth is wiped out, whereas in the latter the wealth has fallen but only to £90,000 [Chart 5]. This is of a course a stylised example, but it makes the point that the more leveraged you are, the more your wealth will be impacted by a given shock.

**Chart 5: An illustration of the effects of leverage**



In my experience as leverage increases, so the level of debt ceases to be a mere residual and becomes more of a determinant of behaviour in its own right, and hence becomes of real consequence for monetary policy. Until recently domestic debt in the UK has been increasing at rates of around 12% per annum, or approximately 8% per annum above the increases in post tax nominal income implying significant increases both in leverage and income gearing [Chart 6].

**Chart 6: Annual growth rate of total debt and post tax Income**

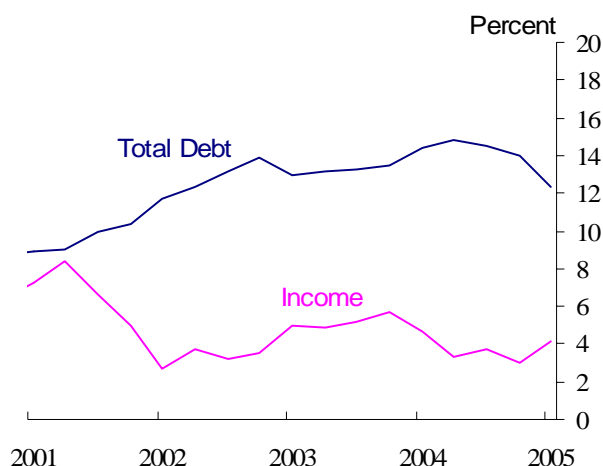


Chart 10: [www.Statistics.gov.uk](http://www.Statistics.gov.uk)

It is interesting to reflect on whether this increase has been a factor in the recent downturn in consumption. We cannot prove it, but I have been struck by two things. Firstly, has the stabilisation in house prices led homeowners to become more conservative or precautionary in their borrowing habits, realising that they can no longer assume that their debt will be offset by significant increases in house prices? Secondly, could the attitude of lenders have contributed to the downturn, through the withdrawal of credit? To my mind the jury is out as to whether their attitudes have yet had any impact. But I do believe that they could do so over time, as they change their behaviour in response to changes in their perception of risks: and recent press coverage suggests that lenders are looking seriously at their lending policies.

Given my interest in leverage, I also spend time thinking about what could happen to consumption in the event of a set of shocks to the economy. In this respect the Minutes of the February 2002 Monetary Policy Committee meeting - seven months or so before I joined the Bank - are to my mind revealing.

*'Persistently rising debt levels potentially increased the probability that any adjustment to household balance sheets would be abrupt rather than smooth, with an attendant risk of a fall in asset prices and, thus, in the value of collateral. In those circumstances, there might also be implications for financial sector behaviour and associated constraints on household credit availability, which could feed back into spending and so somewhat amplify the effect on aggregate demand. In the view of some members, therefore, rising debt levels risked increasing the volatility of output and so of inflation in the medium term, potentially making future inflation outturns more uncertain. Other members placed little or no weight on this.'*

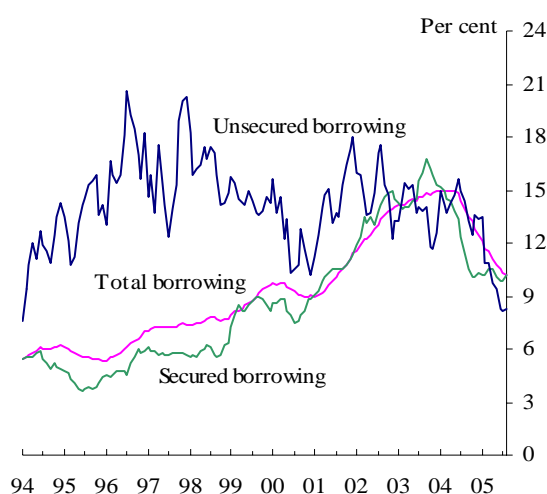
Had I been there I have little doubt that I would have aligned myself with the first group, and given this it will not surprise you that my policy decisions have from time to time been influenced by my attitude to the build up of debt vulnerability and leverage. In my view there are circumstances which can justify monetary policy being tightened in advance of potential shocks, a form of insurance or risk management if you like: keeping interest rates a little higher to prevent potential risks crystallising at some point in the future. It is sometimes important to have in mind possible trade offs between deviations of inflation in the near term from deviations from target further ahead.

So this was a factor on a number of the occasions when I voted in the minority. For the statisticians among you: I have voted in 38 MPC meetings since I joined the Bank. In this time there were 9 occasions when I did not vote with the majority – 7 times I voted for a rise when rates were maintained, and twice I voted to maintain rates when they were reduced.

In concluding this section on debt, I should say that I am moderately encouraged by the present trends. The rates of increase in domestic debt have recently slowed, and continue to do so [Chart 7]. I do take some comfort from this adjustment, which now seems to be in train. In policy terms I would like it to continue so that leverage continues to adjust downward as incomes rise. And if there were signs

of a reacceleration in debt per capita, it would once again weigh on my mind, and perhaps, if I were still there, on my policy decision.

**Chart 7: Annual growth rate of household debt**



Source: Bank of England

## Labour market

Throughout my time on the MPC we have been thinking about the reasons behind what seems to be a remarkably benign labour market environment with little pressure for higher wages, and yet with levels of unemployment that are at their lowest since the mid-1970s. This situation continues, and there are two dimensions, which mean that in assessing the size of the market we can no longer think of the labour market being constrained by the UK as a geographic entity.

The first dimension concerns migration. For a while now on our regular visits to the different regions in the UK, MPC members have been struck by the extent to which migrant labour is active in a number of sectors of the economy, particularly people from the EU accession countries such as Poland. In my own case the reality of this was reinforced by what I heard during a visit to Poland earlier this year. Furthermore, reports which we regularly receive from the Bank's Agents have painted a sustained picture of a significant increase in supply to the labour market, which did not always show up in the official statistics. The MPC began to think about this some time ago, and although we couldn't see it in the statistics, we took account of what we thought was happening in our policy discussions.

So if we have already allowed for this increase in migrant workers, a key question is whether the rate of influx will continue and, if it does, what will the net effect be on demand and supply in the economy? The UK has been in the forefront of accepting citizens of the Accession 8 countries, but other European countries are due to remove barriers to entry. The exact timing of the relaxation of restrictions is unclear, but once it occurs we could find that this has an impact on this supply source, with potential consequences for monetary policy. Another unknown is the impact on demand in the UK economy. It seems pretty clear that migrant workers will spend at least a proportion of what they earn here, even if many will also repatriate savings to their home countries.

The second dimension is bigger picture and less direct. Indeed some may not categorise it in terms of the labour market as such as it has an impact in a number of ways. But I like to think of it in labour market terms. I am talking about the entry of the new Asian economies, and in particular China and India into the world economy, and the ability of countries such as the UK to benefit from the much cheaper wages paid in those countries by sourcing the production of both goods, and increasingly services, to such countries.

There is nothing new about the process, based as it is on the age old law of comparative advantage. But what is new is the sheer size of those economies, containing as they do over three times the number of people in the EU and USA combined on the one hand, and the willingness and ability of management of firms in the UK to benefit from them. Small wonder that there are many who feel that this development is in economic terms the most significant event since the industrialisation and entry

of the USA on the world economy in the late 19th Century. You can think in some ways of China as the centre of the offshoring of manufactured goods, whilst India has shown the potential for offshoring services – and these include operational services with high intellectual content as any visit to Bangalore, Mumbai or an increasing number of other places in India will quickly show.

For me there are several key issues for monetary policy. Firstly we should recognise the reality of the effective globalisation of the supply of labour, even if it does not involve the physical movement of people. Secondly we need to understand the effect on wage dynamics from a large external supply of labour which this gives rise to in wage bargaining, where the strength of the position of employers is added to by the threat that if higher wages are demanded the goods or services will no longer be supplied by those with jobs in the UK but will be shifted offshore. Not only is this the case in unskilled jobs and in manufacturing, but also in services such as the medical profession and IT specialists.

But thirdly, and crucially, how long will this process continue, and for how long will its effects be felt? Will there be sudden changes along the way as, for example, China's own economy and social context changes? Or will protectionism rear its head?

Although these may be slow burn, gradual issues, they could over time have a significant effect on labour supply. I would expect that those involved with monetary policy will have this area on their radar screens for many years to come. Such a new way of thinking about the labour market alters how we need to think about capacity in the economy in general and indeed the output gap in so many areas of the economy.

### **Pensions and longevity**

The last of my four areas today is longevity and pensions. I hesitate to mention it, because for many this is an area more for social policy than for monetary policy. But for me there is a clear monetary policy dimension. I will not attempt a long commentary on the underlying issues. We are all familiar with the facts, both as they relate to the need to anticipate working longer; and to the policy of governments in many countries of transferring risk in pension provision from the state towards the individual. In addition we are increasingly aware that returns on many asset categories that are suitable for inclusion in pension funds have been more modest in recent years.

For monetary policy the key issue is how and over what timeframe will these changes impact on savings, which at a domestic level are likely to have to increase to provide adequate income in retirement. This could at one level be influenced by the fact that significant increases in housing wealth in recent years may have postponed people's consideration of these issues, though they may now feel more pressing looking ahead.

It is pretty clear that the changes are likely to be spread over a period of years, and from that perspective policy implications are likely to be gradual and manageable. Over time though the degree of change in savings habits – and therefore the impact on consumption and demand – may be quite significant. And the question is whether these changes will be smooth trends, or whether there will be more sudden, and perhaps unpredictable shifts or discontinuities in behaviour. And if the latter, will they be of sufficient magnitude to be relevant to shorter-term monetary policy?

The challenges here are considerable, both of measurement, timing, and of our ability to anticipate any relevant changes. But to my mind we certainly need to remain alert. Policy makers in Germany have for some time now wondered if the sluggish performance of domestic demand in recent years is in part the result of such precautionary saving, and here in the UK we have wondered if this could have been one factor in the recent consumption slowdown. While the data will not confirm this for a while at least, the greater public awareness of the issues, brought about by initiatives such as Lord Turner's report, suggests it is plausible that this has been a contributory factor.

### **Conclusion**

So I am leaving the scene of monetary policy with some truly fascinating issues unresolved, just as other colleagues will surely do when it is their turn to leave.

As a final comment I am very conscious that I have collected the description of being a 'hawk': of erring on the side of rate rises. Certainly my willingness to allow thoughts about insurance to influence decisions at the margin, has meant that on the occasions when I have voted with the minority it has been on the upside for rates. But equally the longer term issues, such as those of labour supply and



pensions saving, are more likely to manifest themselves on the downside. I am certainly very conscious of these factors too and perhaps my concern about these slower burn issues attracts less attention from commentators on monetary policy. Because one thing I have discovered about monetary policy is that downside issues are just as important for us as the opposite.

No matter; I for one shall after January watch from the sidelines how things progress, but with a feeling of gratitude and privilege for the welcome improvement of my understanding of this fascinating area.