



BANK OF ENGLAND

# Speech

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## House Prices, Household Debt and Monetary Policy

Speech given by

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## Summary

### House Prices, Household Debt and Monetary Policy

1. In the November inflation report, the most likely outcome for inflation in 2004 was for a modest undershoot throughout the year. Among reasons for not cutting rates at this point are one given by the MPC and one often given in the press. This paper analyses both reasons.
2. The particular reason given in the press is that the MPC did not, and does not, cut rates simply because the boom in house prices is very strong. The MPC has often argued both individually and collectively that it is not in business to attempt to control asset prices. Setting interest rates to control house prices could easily push both inflation and the economy off course, so this simple explanation as to why rates were not cut in November will not do.
3. One important reason provided by the MPC for not cutting rates in November was so as not to encourage further debt accumulation, because this would add to the risk of sharper falls in consumption and more significant undershooting of the inflation target further out.
4. Here I analyse two distinct arguments underlying this stated reason. The first is based on the possibility that households have over-egged the pudding either by underestimating true real interest rates or by overestimating future nominal income growth. In the high inflation era prior to 1993, debts were rapidly eroded. This no longer happens and perhaps households do not fully recognise this fact. However, the young, who tend to be the most indebted (relative to their income and assets) and hence the most endangered, were not financially aware in the pre-1993 era, so there is little reason to think they are not making sensible judgements on this score. Indeed, overall, I see no strong reasons why households, or indeed lenders, should be behaving particularly imprudently. Nor is there any persuasive evidence that they are doing so.
5. The second argument is that the economy will be a more fragile place in the future if households have very high levels of debt. In particular, in response to a future adverse shock, higher debt levels would lead to bigger falls in consumption and a bigger economic slowdown. However, since debt service charges are the problem here, in a higher debt world adverse shocks could be offset by a more vigorous monetary policy response. Furthermore, of course, the additional debt which is likely to be accumulated as a result of a very modest cut in rates now is, itself, likely to be equally modest.
6. It was my view in November that the dangers noted above were not dangerous enough to outweigh the dangers in allowing a prospective undershooting of the target in 2004, particularly as I felt that the most likely projection presented in the Inflation Report was based on a slightly optimistic outlook for the world economy and for domestic investment. In the light of this, I voted for a rate cut in November.

## **House Prices, Household Debt and Monetary Policy**

A key issue in the present conduct of UK monetary policy is the high and unsustainable rate of house price inflation and the build up of household debt. To quote the October MPC Minutes, the first reason for leaving interest rates unchanged was “domestic demand was still quite resilient and the economy was growing close to potential. An interest rate reduction seemed likely at present predominantly to affect house prices, household borrowing and consumption, which were already increasing strongly. A further reduction in the repo rate risked creating an unsustainable increase in debt which might subsequently unwind sharply. This would increase the risk of undershooting the inflation target in the medium term”. This argument continues to apply. For example, a typical newspaper comment sets out a somewhat cruder version prior to the December meeting of the MPC “The Monetary Policy Committee is expected to decide that the unsustainable house price boom prevents it from cutting rates to help the ailing corporate sector” (Independent 2 Dec.).

This is an important issue for discussion because the corporate sector is indeed ailing, with business investment having fallen for seven consecutive quarters. More important for an inflation targeting committee, the latest MPC inflation projection, which, in my view, is based on a slightly optimistic view of the world economy and domestic investment growth, has the most likely path of RPIX inflation slightly below target throughout 2004. The year 2004 is important because interest rate decisions taken now will not impact much on inflation until 2004. Given this, if interest rates were cut a little now, the most likely path of RPIX inflation would move up to the target in 2004. In the light of this, it is worth considering in more detail the particular reason quoted above for not cutting rates. First, we look at the summary interpretation implicit in the Independent quote. Then, we analyse the more subtle argument contained in the quote from the October Minutes.

### **Interest Rates and the House Price Boom**

House prices in Britain are currently rising extremely rapidly. This house price boom has had, and is having, an impact on monetary policy and interest rates because house prices impact directly on consumption and aggregate demand, and hence on future

inflation prospects. Future inflation prospects have a direct impact on the setting of interest rates. However, the argument implicit in the Independent quote goes further than this. The idea is that house price booms are, of themselves, dangerous for macroeconomic stability because the bigger the boom, the bigger the subsequent slump. If policy instruments were available to restrain the boom at an early stage, they should be used in order to encourage future macroeconomic stability. This suggests, for example, that policies to raise the current (historically very low) rate of new housebuilding might be considered. But in the absence of any such policies which will impact in the short run, the argument goes that interest rates should be used directly to restrain house price growth on top of their role in hitting the inflation target. This suggests that interest rates during a housing boom should be set at a higher level than is required to hit the inflation target. Indeed, probably considerably higher, if they are to have a significant impact on house price growth.

The general view is that this is not a good idea. The proposition expounded by Bernanke and Gertler summarises the current consensus, “it is neither necessary nor desirable for monetary policy to respond to changes in asset prices, except to the extent that they help to forecast inflationary or deflationary pressures” (Bernanke and Gertler, 1999, p.115). The analysis underlying this proposition is clearly set out in any of Bernanke and Gertler (1999), Vickers (1999), Allsopp (2002), King (2002). The basic argument is straightforward. Raising interest rates simply to restrain asset price booms may reduce one of the shocks hitting the economy. But this will be at the probable expense of systematically moving inflation further from target which will add extra instability of its own. Allsopp summarises the situation as follows: “It is hard enough to establish a credible (monetary policy) reaction function based on clear objectives with the interest rate being used to meet the inflation target ... If the interest rate has another role as well, being used to moderate the shock structure (eg, by heading off bubbles from time to time), the reaction function is far less rule-like and predictable, and the system is less likely to be transparent and accountable” (Allsopp, 2002, p.18). Furthermore, as King (2002) notes, in practice the response of asset prices to changes in monetary policy is so unpredictable – think of the exchange rate – that targeting asset prices is virtually impossible.

In the current context, keeping interest rates higher than is required to hit the inflation target simply to attempt to restrain the housing boom is not consistent with the consensus view described above. Since I am completely in accord with this view (see Nickell, 2002), it is time to look at the more subtle arguments sketched in the initial quote from the October Minutes.

### **Sustainability and the growth of domestic demand**

Since 1997, UK consumption and domestic demand have been growing faster than output. Basically, this means that we have been increasing our spending on consumption and investment at a more rapid rate than the growth of what we produce. So the rest of the world has been supplying us with more than we are supplying them. The extent of this imbalance since 1999 is illustrated in Table 1. We can see that on

**Table 1**

#### **Average Quarterly Real Growth Rates (%)**

	<b>Consumption</b>	<b>Domestic Demand</b>	<b>GDP (market prices)</b>
1999-2001	1.16	0.78	0.58
2002 (first 3 quarters)	0.87	0.48	0.52

**Note:** Quarterly growth rates refer to a quarter on the previous quarter. average in the period 1999-2001, consumption grew exactly twice as fast as GDP. The gap between domestic demand growth and GDP growth was a more modest 0.2% per quarter. In 2002, these gaps have narrowed somewhat.

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The first question to ask is whether this is sustainable? If domestic demand grows more rapidly than GDP growth, there must be a trade deficit. In principle, this can be funded indefinitely if UK citizens have lots of overseas assets generating high levels of interest and dividends, and these substantially exceed the interest and dividends paid out to foreign holders of UK assets. So, to consider sustainability we must add in

these income and transfer flows to the trade deficit, the result being the current account deficit. On average, in 1999-2001, this stood at just under 2 per cent of GDP. More recently, in 2002, it stands at around 1.6 per cent of GDP. Is this sustainable?

First, it is worth noting that in the period before domestic demand started growing faster than GDP, we regularly had a current account deficit. In the twenty six years from 1970 to 1994, it averaged around 1 per cent of GDP. Second, measures of the current account deficit omit capital gains and losses on asset holdings. According to the current account statistics, the UK external net asset position should have deteriorated in recent years because of the current account deficit. Yet under some measures, there has been no deterioration in the UK external net asset position since 1996 (see Senior and Westwood, 2001, p.390). Since arguably it is this net asset position which ultimately determines sustainability, the current situation in this regard is by no means clear cut.

The upshot of this discussion is that measured current account deficits at the existing level can be sustained for considerable periods without significant adjustments being required. However, a noticeable feature of the numbers presented in Table 1 is the fact that household consumption growth is substantially higher than domestic demand growth, reflecting a “domestic” imbalance which may, itself, carry some dangers for the future.

### **Consumption Growth, Debt and the House Price Boom**

Household consumption was growing at an average rate greater than 4 per cent per annum from 1997 to 2001, far in excess of GDP growth. While there has been a slight slowdown this year, it is still growing at an annualised rate of around 3 ½ per cent. By contrast, since 1999 the growth of business investment has declined sharply and has been negative since the first quarter of 2001. To understand what is happening, we first take one step back and look at the house price boom.

## **House Prices**

House prices are currently growing at an annual rate somewhere between 20 and 30 per cent, depending on which index is used. And they are reaching a level, relative to earnings, which is close to an all-time high. Basically, this is a simple consequence of high demand (low mortgage rates, high rates of population growth, the attractions of buy-to-let relative to equity investments) meeting low supply (the lowest rate of new house building since the Second World War). Particular features of the boom at the moment are the slowdown in house price inflation in London and the South East and the weakening of the London rental market contrasting with very high rates of house price inflation in Northern Britain. Given that London and the South East led the housing market into the boom, it now appears to be leading it out again. However, there is probably some way to go, although next year we expect to see a fairly rapid slowdown in house price inflation across the board. This boom has been, and remains, a significant part of the consumption story as we shall see.

## **Consumption Growth and Debt**

Why did consumption growth take off in the second half of the 1990s? There appear to be two main reasons. First, over this period there was strong growth in household real disposable income, driven by falling unemployment and substantial improvements in the terms-of-trade (associated with higher levels of the sterling exchange rate). In so far as these shifts are gradually taken to be permanent, we should expect to see higher consumption growth over some period, accompanied by a build up of debt. Furthermore, we would expect this high level of consumption growth to fall back at some point in the future. Of course, if the terms-of-trade improvements are subsequently reversed as the sterling exchange rate comes down, we may then see a more rapid slowdown in consumption growth. However, there can be no argument for any pre-emptive moves in monetary policy to deal with the consequence of possible future moves in the exchange rate.

Until 2000, these moves in household consumption growth were supported by the buoyant equity market but, more recently, this has gone into reverse. The second main factor underlying rapid household consumption growth arises from the housing

market. The key role which housing plays arises from the use of housing equity as collateral for debt. Suppose you have just bought a house on a 100% mortgage, you have a secure, well-paid, job with rising real earnings. Despite your mortgage, you would like to take on some more debt to purchase durables. Your options are a personal loan at around 10.5 per cent (real rate, 8 per cent) or borrowing on a credit card at around 15.5 per cent (real rate, 13 per cent). These numbers are the current average rates in these categories. Now suppose your property appreciates in value by 50 per cent. You can now take out a loan secured on your property at around 5.5 per cent (real rate, 3 per cent). This enables you to behave as a consumer facing a real borrowing rate of 3 per cent as opposed to a consumer facing a real borrowing rate of 8 per cent. This makes an enormous difference to your behaviour<sup>1</sup>. It will be optimal to consume significantly more and to take on substantially more debt. In fact, this huge difference between the real interest rate payable on secured debt as opposed to unsecured debt will enable house prices to have a substantial impact on consumption irrespective of the underlying level of interest rates within, say, a 2 per cent band<sup>2</sup>. Of course, lower interest rates help to generate house price increases in the first place. But once new housing equity becomes available, we can expect this to have a significant impact on consumption independently of modest changes in the underlying interest rate.

So what has actually happened in the last few years? First, gross housing wealth has risen substantially relative to household disposable income (around 80 percentage points since 1999). Second, net housing equity (ie, gross housing wealth less secured lending) has risen significantly as a proportion of gross housing wealth, so it is now nearly 75 per cent. What this means is that there are more households with significant net housing equity and those who initially had net housing equity now have significantly more of it. So many more households now face much lower real borrowing rates, as we noted above. This is on top of the recent cuts in interest rates consequent on monetary policy decisions. The consequence of all this is obviously a significant increase in consumption and household debt as these households avail themselves of their new opportunities. To summarise, therefore, household consumption and debt have risen, first because of the rise in disposable incomes driven by falling unemployment and a significant improvement in the terms-of-trade and second because the rise in house prices has driven up net housing equity enabling



more secured borrowing at real interest rates which are hugely advantageous relative to those available on unsecured loans. Having understood what has been happening, we can now address the dangers inherent in this situation.

### **The Dangers of Record Levels of Household Debt**

As we have noted in the previous section, in the face of a sharp rise in both household disposable income and net housing equity, there are powerful reasons why rational and sensible households will raise their consumption growth rate and build up debt for a limited period. Further out, of course, they will ease back on consumption growth. What are the dangers for monetary policy makers inherent in this process?

Currently, the situation appears benign. Household income gearing is at a low level and interest rates would have to rise to around 10% if the measure of household income gearing which includes regular repayments is to reach its average value in the early 1990s. Furthermore, mortgage arrears are well below their early 1990s high and the debt build-up is concentrated on low risk groups. Those with the highest debt levels have the highest levels of net wealth. But the job of the MPC is to look to the future.

There are two distinct arguments here. The first is based on the possibility that households have over-egged the pudding either by underestimating the true real interest rates which they face or by overestimating future nominal income growth. There are two points. In the era of high inflation which ended in 1993, debts were rapidly eroded. This no longer happens. But the young, who tend to have the highest levels of indebtedness relative to both assets and income, were not financially aware during the high inflation era. Furthermore, this same group tends to have the fastest rate of real earnings growth<sup>3</sup>. The second point is that the rise in real disposable income growth in the late 1990s, generated by the improvement in the term-of-trade, may have been extrapolated into the future, producing overoptimistic forecasts of future real income growth. However, since the terms-of-trade have improved at a trend rate of only ½ per cent per year since 1999 compared with a trend rate of over 2 per cent per year in the three years prior to 1999, it seems unlikely that households will still be projecting the rapid growth rates of the late 1990s. Nevertheless, the risk

remains that some borrowers and indeed lenders, are behaving imprudently, and this risk must be thrown into the balance.

The second argument concerns the behaviour of the economy in response to shocks if households have high, as opposed to low, levels of debt. Suppose there is a future adverse shock to the UK economy – for example, the major European economies do not recover? This will lead to a rise in UK unemployment and a fall in consumption whatever the debt levels. The argument here is that higher debt levels will make things substantially worse. This is because more people will be in a position where they are unable to extend their borrowings. If they become unemployed, or are threatened with unemployment, they will significantly reduce consumption because they will be, or will have the prospect of being, unable to service their debts.

The first question is, will higher debt levels put substantially more people in this position? In aggregate, there appears to be “plenty of room”. Even now, secured debt is only around one quarter of gross housing wealth, a substantially lower level than throughout the 1990s. But the aggregate hides a wide variation across the population and it is the numbers on the margin which count. Comfort may perhaps be taken from the fact that data from the Survey of Mortgage Lenders indicate that loan to value ratios among first-time buyers are modest by historical standards. Similarly, the proportion of first-time buyers with loan to value ratios in excess of 95% is also at a relatively low level. Furthermore, there has been a significant demographic shift towards two earner households over the last two decades and these households have a greater cushion against unemployment.

Another point worth noting is that because one of the key issues in this argument is the cost of debt service, this will be moderated by the easing of monetary policy following the adverse shock. However, the excessive debt may still induce greater precautionary saving and a larger drop in consumption. Overall, it is hard to quantify whether higher debt levels will generate a significant additional cut back in consumption which cannot be modified by easier monetary policy.

### **The Final Question**

The final question is, should we keep interest rates higher than would be required to hit the inflation target during 2004 in order not to encourage further debt accumulation and increases in house prices, because these will add to the risk of sharper falls in consumption, leading to even bigger undershooting of the inflation target further out?

In the October and November MPC meetings, I felt that because of the relatively minor impact on debt and house prices of a small cut in rates and the very uncertain nature of the dangers described above, a judgment based simply on the likely outcomes in the nearer term was the correct one. Since the most likely outcome was for inflation to undershoot the target throughout 2004, albeit by a small margin, I judged that it was better to institute a small cut in rates rather than hold off for fear of exacerbating problems of uncertain magnitude yet further into the future.

### Footnotes

1. Consider a consumer who lives for 40 years, with initial real earnings  $y$  and real earnings growth of 2 per cent per annum. Her preferences are such as to generate a flat consumption profile. If she faces a real interest rate of 8 per cent, she will consume  $1.26y$  in every period and will have accumulated around  $1.65y$  in debt after 10 years. However, if she faces a real interest rate of 3 per cent, she will consume  $1.42y$  in every period and will have accumulated around  $3.25y$  in debt after 10 years.
2. In footnote 1 we saw that an individual facing a 3 per cent real interest rate compared to one facing an 8 per cent real interest rate will consume around 12.7% more in each period and will have accumulated  $1.6y$  more debt after 10 years, where  $y$  is the initial income. Now suppose interest rates rise by 2 percentage points. The equivalent numbers for an individual facing a 5 per cent real interest rate compared to one facing a 10 per cent real interest rate are the former consumes 10.7% more per period and accumulates  $1.3y$  more debt than the latter. So the gap between the two is modified only slightly.
3. Male Earnings functions estimated on Labour Force Survey data indicate that abstracting from the trend growth of real earnings (around 2 per cent), average real earnings growth for those aged between 20 and 30 tends to be around 3 per cent and for those aged between 30 and 40 it is just below 2 per cent.

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