



BANK OF ENGLAND

Speech

Two Current Monetary Policy Issues

Speech given by

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Summary

Two Current Monetary Policy Issues

Two issues are considered, first the impending switch to targeting the HICP inflation rate and second the implications of the steady rise in household debt. The following is a summary of the discussion, starting with the switch to HICP targeting.

1. In the longer run, thanks to differences in computational methods and the absence of the housing depreciation and council tax elements, the HICP inflation rate is likely, on average, to be around 0.8 pp lower than the RPIX(X) inflation rate. In the short run, the gap between the two rates is highly volatile.
2. The long-run stance of monetary policy should be gauged by the real interest rate. Since the switch from an RPIX target to an HICP target should have no long-run real impact on the economy, the long-run stance of monetary policy will be unaffected.
3. If the HICP target is set at 2.0%, this is equivalent, in the long run, to a switch from an RPIX target of 2.5% to an RPIX target of 2.8%, because the long-run gap is 0.8 pp. Since the long-run real interest rate is unaffected by the switch, the long-run nominal interest rate will be 0.3 pp higher after the switch.
4. If the HICP target is set at 2.0%, this is equivalent to a rise of 0.3 pp in the longer term inflation rate (ie. a switch from an RPIX target of 2.5% to an RPIX target of 2.8% or a switch from an HICP target of 1.7% to an HICP target of 2%, making use of the 0.8 pp long run gap between HICP and RPIX). This will involve slightly looser monetary policy for a limited period than would otherwise be the case. However, given the volatility in the gap between HICP and RPIX inflation and the frequent shocks to which the economy is subject, the temporary loosening would be barely noticeable in practice.
5. A switch to an HICP target of 2% today would have little or no impact on the current stance of monetary policy despite the large gap between RPIX and HICP inflation at present. This is because this large gap is only temporary, having been generated by the recent surge in house price inflation which impacts on RPIX, via the housing depreciation element, but not on HICP. As this surge fades, the gap will close to normal levels and given the structure of the August RPIX inflation projection, the corresponding HICP projection would not be far from 2% towards the end of the forecast horizon.
6. The direct inclusion of house prices in RPIX, via the housing depreciation element, only impacted on monetary policy to the extent that the MPC was able to forecast surges in house price inflation well in advance. History indicates that it was not able to do this. So excluding this element from the cost of living index will probably have little consequence for monetary policy in practice. (Of course house price booms will continue to impact on monetary policy via their impact on

debt, consumption and aggregate demand further out. This is equally true whether we have an RPIX or an HICP target.)

Turning next to the issue of household debt, we consider both the causes and consequences of its dramatic increase.

7. Household secured debt (mortgages) is around 80 per cent of total household debt and is thus more significant than unsecured debt in the macroeconomic context. The secured debt to income ratio rose rapidly throughout the 1980s and from the middle of the 1990s, so it is now more than double its level in 1980. The most important factor underlying this change has been the trend increase in the number of owner-occupied dwellings per person of working age. This trend has been generated by the shrinking average size of households and the increasing owner-occupation rate (strongly boosted by Council House sales). Other factors include the somewhat higher loan-to-income ratios offered to first-time buyers in the period of low inflation since 1992, as mortgages are no longer heavily “front end loaded”, and the short-term burst of mortgage equity withdrawal following the recent housing boom as homeowners have greater access to the lower real interest rate borrowing available on secured debt.
8. Household unsecured debt has also risen rapidly relative to income in recent years. By and large, this has reflected increasing debt levels per unsecured debtor, not rising numbers of unsecured debtors. A key factor explaining this is likely to have been the rapid trend fall in unsecured borrowing rates since the late 1990s, a vastly greater fall than in the Bank of England repo rate, probably due to increasing competition in the unsecured lending market.
9. The connection between household borrowing and consumption is a tenuous one. The proportion of nominal GDP spent on household consumption was almost the same in 2003 Q1 (63.2%) as in 1996 Q4 (62.7%) despite the vastly greater rate of new household borrowing in the more recent period. What has happened is that the rapid increase in new borrowing in recent years has been almost exactly balanced by a rapid increase in net purchases of financial assets, a fact which is rarely mentioned when household debt is discussed.
10. Looking at household balance sheets, we find that today the ratio of total household debt to total household assets (financial assets plus housing wealth) is just below 17%, very close to its average value over the last fifteen years. Furthermore, despite the recent burst of mortgage equity withdrawal, undrawn housing equity is rising and is now in excess of three quarters of total housing wealth. So overall, household balance sheets are relatively healthy.
11. Despite the health of average household balance sheets, there are many households, particularly with low incomes, which are in severe difficulties with unsecured debt. The evidence on whether this situation is getting worse is mixed, but, in any event, unsecured debt is such a small proportion of the total that the macroeconomic impact of such problems is not large.
12. While the published secured debt to income ratio has been rising rapidly since 1997, this is not a very helpful piece of information when it comes to analysing issues of sustainability. The problem is that the numerator of the ratio refers to the

sum total of mortgage debt whereas the denominator refers to the total disposable income of all households. To be informative, the denominator should be the total disposable income of households with mortgages. Up-to-date data using this measure is unavailable but we know that the ratio of total secured debt to total income of secured debt holders exhibited no upward trend from 1997 to 2001.

13. Despite the above, could record levels of household debt cause serious macroeconomic problems in the future? There are three frequently used arguments. The first is based on the possibility that households have underestimated true real interest rates. 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 judgments on this score. Indeed, overall, there are no strong reasons why households, or indeed lenders, should be behaving particularly imprudently. Nor is there any persuasive evidence that they are doing so.
14. 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.
15. The third argument is very simple. If more people have big mortgages, a collapse in the housing market has more serious macroeconomic consequences. Of course, if this were thought to be a serious issue, one solution is a policy to reduce the size of the owner-occupied sector. More council houses, perhaps. But, in the present situation, does this mean we should use policy to discourage people from taking out mortgages? In my view, this should not be the target of monetary policy.
16. This leads to the final question, should we keep interest rates higher than would be required to hit the inflation target in the medium term in order not to encourage further debt accumulation? In the light of all the previous points, my answer, at present, would be no.

1. Introduction

In recent months, two issues associated with UK monetary policy have given rise to much debate. These are the impending switch to targeting the inflation rate of the Harmonised Index of Consumer Prices (HICP) and the continuing anxiety associated with the inexorable rise in household debt.

In what follows, consideration is given to both of these topics. Concerning the switch to HICP, we look at the difference between the HICP and the RPIX measures of inflation and then discuss the changes which would occur in the economy generally were HICP to become the standard measure of the cost of living. We follow this by looking at the consequences for monetary policy. We note that in the long-run, the stance of monetary policy would be unaffected and even in the short run there would be little noticeable difference. Finally, we consider the particular consequences arising from the absence of any housing depreciation element in the HICP index.

Turning to the ever rising levels of household debt, we first consider why it is increasing so fast. In this context we distinguish between secured debt (mortgages) which is the bulk of total debt (around 80%) and unsecured debt (credit cards, overdrafts etc). We find that the long-term increase in secured debt is driven fundamentally by the rising number of households and the increasing proportion of these which are owner-occupiers. Unsecured debt, on the other hand, has risen not because of a rapid rise in the number of unsecured debtors but because of a continuing increase in the levels of unsecured debt for each debtor, perhaps encouraged by the rapid trend decline in interest rates on unsecured debt over the last five years.

Next we look at the relationship between rising debt and consumption, noting that in recent years rising borrowing has, in fact, corresponded to rising rates of accumulation of financial assets. The overall balance sheet position of households has not been worsening rapidly. Finally, we discuss whether high levels of debt will cause problems in the future. While there is some uncertainty here, our overall conclusion is probably not.

2. The Switch to HICP

The Chancellor has announced that, at some point, the MPC will switch to an inflation target using the HICP measure. Before looking closely at the implications of all this for monetary policy, it is important to understand what it means for everyday economic life.

What is the Difference between HICP and RPIX Inflation?

The main differences between the HICP and RPIX measures of inflation are as follows.

i) In the HICP, the geometric mean is used to aggregate price changes at the most basic level whereas the RPIX uses the arithmetic mean.

Since the geometric mean of a group of different numbers is always less than the arithmetic mean of the same group of numbers¹, this difference in the construction of the two measures will always tend to make HICP inflation lower than RPIX inflation. This is the formula effect and, on average, makes HICP inflation 0.5 percentage points per annum lower than RPIX inflation.

ii) HICP excludes housing depreciation, council tax and dwellings insurance. RPIX includes these.

The housing depreciation element and council taxes have tended to rise faster than the other elements of RPIX, on average. Their exclusion will therefore tend, in the long run, to lower measured inflation assuming that house prices track earnings over the long term and council tax rates continue to rise faster than 2.5% pa. The long-run impact of this housing effect is likely to make HICP inflation around 0.3 percentage points per annum lower than RPIX inflation².

iii) HICP includes university accommodation fees, foreign students tuition fees, stockbrokers charges. RPIX excludes these. Also there are numerous other minor differences. (The National Statistics web-site contains all the details.)

On average, these differences between HICP and RPIX contribute nothing to long-run average inflation rate differentials between the two measures.

The differences under points (i) and (ii), when combined, suggest a long-run average differential between HICP and RPIX inflation of 0.8 percentage points per annum. In the shorter term, there is a great deal of variation in the differential as we can see from Figure 1. While the formula effect is relatively stable, the housing and other elements of the differential are highly volatile. Currently, the differential is very large because the housing depreciation element, depending as it does on recent rates of house price inflation, is making such a large contribution to RPIX inflation³. But even the long-run average differential of 0.8 is large. So the proposed switch to the HICP measure of inflation will mean that measured inflation will be considerably lower, on average, than it would have been had we stuck to RPIX. So what difference will this make?

The Changes in the Economy Following a Switch to HICP

Suppose, for the sake of argument, that HICP gradually takes over from RPI(X) as the index used in economic life. Under HICP, on average, the measured cost of living goes up by 0.8 percentage points per annum less than under RPI(X). This change makes no difference whatever to the rate of increase of the true cost of living, of which HICP and RPI(X) are different measures.

So one important implication of the switch to HICP is that for given nominal wage growth, real wage growth will be measured to be 0.8 percentage points per annum higher after the switch. True real wage growth will, however, be unchanged. If people understand this, they will understand that the measured increase in real wage growth of 0.8 percentage points per annum, after the switch, is a mirage. So, for example, if negotiations for pay increases are currently based on long-run RPIX inflation plus $x\%$ (for productivity growth etc.), then after the switch they will have to be based on long-run HICP inflation plus 0.8 plus $x\%$, if they are to be unaffected by the switch. The thing to remember is that the RPIX inflation rate and the HICP inflation rate plus 0.8 represent the same rate of cost of living increase over the long term.

Suppose that this does not happen. For example, suppose instead that after the switch, unions and firms negotiate on the basis of long-run HICP inflation plus $x\%$, where x is the same productivity etc. effect as above. Then nominal wage growth and true real

wage growth will tend to be lower and this will tend to exert downward pressure on inflation in the long run (on either measure).

Exactly as with real wage growth, the switch has the same implications for measured real interest rates. For given nominal interest rates, after the switch to HICP, measured (ex post) real interest rates will be, on average, 0.8 percentage points higher. However, the true real interest rate will be unaffected. Agents in the economy will need to get used to the fact that measured real interest rates will be higher by roughly 0.8 percentage points, ceteris paribus. So what are the implications of all this for monetary policy?

The Implications of the Switch to HICP for Monetary Policy

The most important point to recognise is that the long-run stance of monetary policy should not be gauged by the nominal interest rate but by the real interest rate. And the switch from an RPIX target to an HICP target, whatever the level of either target, should have no long-run real impact on the economy, including on the real interest rate. So the long-run stance of monetary policy will be unaffected. So we have,

Implication 1. *The long-run stance of monetary policy will be unaffected by the switch to an HICP target.*

In order to go further, we have to make some assumption about the new target. For the purposes of this exposition, suppose that the HICP inflation target is 2%. This is equivalent to a long-run RPIX target of 2.8%, so it represents a genuine change to the inflation target facing the MPC. As we have already noted, the long-run stance of monetary policy and the true long-run real interest rate are unaffected. Since, when measured in terms of RPIX inflation, the real interest rate will switch from $(r-2.5)$ to $(r-2.8)$, where r is the nominal rate, it is obvious that to keep the real rate unchanged, the long-run nominal rate must be 0.3 percentage points higher⁴. This leads to,

Implication 2. *If the HICP target is set at 2.0%, this is equivalent, in the long run, to a switch from an RPIX target of 2.5% to an RPIX target of 2.8%. Since the long-run real interest rate is unaffected by the switch (see Implication 1), the long-run nominal interest rate will be 0.3 percentage points higher after the switch.*

What about the consequences for monetary policy in the short run? Since the switch involves a de facto rise in the inflation target from 2.5 to 2.8 in RPIX terms or from 1.7 to 2.0 in HICP terms, it is the job of the MPC to ensure that long-term inflation is 0.3 percentage points higher than it otherwise would have been. This involves slightly looser monetary policy than would otherwise have been the case, for a limited period, in order to generate the small rise in the longer-term inflation rate. However, it would be a mistake to make too much of this. Given the large variations in the gap between HICP inflation and RPIX inflation (see Figure 1) and the frequent shocks to which the economy is subject, such a slight loosening of monetary policy (relative to the counterfactual of no switch in target) would be small relative to its normal variation. So we have,

Implication 3. *If the HICP target is set at 2.0%, this implies that the short-term monetary policy stance has to be such as to raise the longer-term inflation rate by 0.3 percentage points. This involves slightly looser monetary policy for a limited period than would otherwise be the case. However, given the large variations in the gap between HICP and RPIX inflation and the frequent shocks to which the economy is subject, this temporary loosening would be barely noticeable in practice.*

So far, it appears that if there were a switch to HICP with a target of 2%, this would not make much odds. Until now, however, we have only looked at the implications of the switch when the RPIX/HICP differential is at its long-run average level of 0.8 pp. But today it is at around twice its long run level at 1.6 pp. What, then, would be the consequences of the switch taking place when the gap is at a very high level? The key point is that monetary policy decisions are based not on where inflation is today but on where inflation is expected to be a year or two hence. Looking at the RPIX inflation projection for August 2003, (see Figure 2), the large “bump” which may be observed stretching from the last part of 2002 to the end of 2003 is generated, in the main, by the impact of the house price boom on RPIX inflation via the housing depreciation component. The path of HICP inflation would not exhibit such a “bump” and that is the main reason why the current gap is so wide as we have already noted. But as the housing boom fades in our forecast, the bump disappears and the RPIX/HICP gap narrows. Indeed, because the rate of house price inflation is projected to fall below the average rate of earnings growth, the gap may well fall below its average level of 0.8 pp. Because of this, the level of HICP inflation

corresponding to the RPIX projection in 2005 is not going to be very different from 2%. This implies that monetary policy decisions taken today were we using an HICP target of 2% would probably be much the same as those we are actually taking. This leads to,

Implication 4. *A switch to an HICP target of 2% today should have little or no impact on the current stance of monetary policy despite the large gap between RPIX and HICP inflation. This is because this large gap is only temporary, generated by the recent surge in house price inflation which impacts on RPIX via the housing depreciation element but not on HICP. As this surge fades away, the gap will close to more normal levels and given the structure of the August RPIX projection, the corresponding HICP projection would not be very different from 2% towards the end of the forecast horizon.*

Two further implications of a switch to an HICP target are worth commenting on. First, suppose wage setters do not follow the rules set out earlier in this section. For example, suppose they base negotiations on long-run HICP inflation plus x . This will tend to lead to lower nominal wage growth than we have now, lower real income growth and ultimately downward pressure on inflation. This would then impact on monetary policy.

The second, and perhaps more interesting, implication of the switch to an HICP target arises from the fact that the housing depreciation element is excluded from the HICP. We have already noted the history of this element (see Footnote 2), so what would be the implications of its absence? The housing depreciation element in RPIX has a weight of around 4.4% and is based on a distributed lag of the ODPM measure of house prices. What this means is that a significant surge in house price inflation, such as we saw in 2002, leads to a subsequent surge in RPIX inflation, such as we saw from mid-2002. No such surge would be seen in HICP inflation. At first sight, it might be thought that this would have a significant impact on monetary policy. In practice, however, this would only be true if the MPC were capable of forecasting the surge in house prices well in advance, for recall that monetary policy tends to be influenced not by current inflation but movements in inflation which are forecast some one to two years ahead.

Looking at recent history as evidenced by the recent Inflation Report projections presented in Figure 2, the MPC completely failed to forecast the house price surge of 2002 either two years or even one year before it happened (as, incidentally, did everyone else). The house price surge generates the “bump” in the RPIX inflation projection in 2002/03 faintly visible in Figure 2 only from May 2002 and clearly visible from November 2002 onwards. Consequently, by the time the surge in RPIX inflation generated by the house price explosion was expected to come about, it was too late to do anything about its implications for inflation. Thus, in November 2002, the MPC expected the surge would disappear within a year and, since monetary policy typically takes 18 months to two years to impact fully on inflation, the house price surge had little impact on policy via its direct impact on the depreciation element of RPIX. Of course, the house price explosion impacted strongly on monetary policy because of its impact on debt, consumption and aggregate demand further out. But this would have been the case even had HICP inflation been targeted. The argument here is that the direct inclusion of house prices in the RPIX via the housing depreciation element only impacts on monetary policy if the MPC can forecast surges in house price inflation well in advance. Recent history indicates this is unlikely. So excluding this element from the cost of living index will probably have little consequence for monetary policy in practice.

2. Household Debt: Causes and Consequences

In recent months, there has been much discussion of the inexorable rise in household debt with many dire warnings. In a relatively mild example, Philip Thornton in The Independent (30 July, 2003) notes that,

“Britons piled on an all-time record amount of debt last month (June 2003), triggering fears that consumers have embarked on an unsustainable borrowing binge that will end in a crash reminiscent of the early 1990s”.

Here we look more closely at the rise in household debt, first to try and understand why it has happened and second to look at the dangers inherent in the current position.

Why is Household Debt Rising so Rapidly?

In order to analyse household debt, it is important to distinguish between secured debt (mortgages secured on property) and unsecured debt (credit card debt, overdrafts,

personal loans, hire purchase, student loans, DSS social fund loans, and others). Around four-fifths of all household debt is secured on dwellings and so, in the macroeconomic context, the level of secured debt is more significant. However, in terms of personal and social problems, unsecured debt is a very important issue. Let us consider each in turn.

Unsecured debt. As we can see from Figure 3, unsecured debt has been rising steadily as a proportion of total post-tax household income since the mid-1990s. By and large, this reflects increasing debt levels per unsecured debtor, not rising numbers of unsecured debtors⁵. Part of this rise may be due to the increasing ease with which unsecured credit may be obtained, but a key factor is likely to have been the dramatic trend fall in unsecured borrowing rates in recent years (see Figure 4). Given the stability of inflation during this period, this represents a significant fall in real rates. Much of this decline is unrelated to monetary policy changes, with unsecured rates falling by far more than the repo rate in the last few years. This may have been the consequence of increasing competition in the unsecured lending market.

Secured debt. As we can see in Figure 5, the household secured debt to disposable income ratio was flat in the 1970s, then rose rapidly throughout the 1980s and started rising again in the later 1990s. So what are the driving forces behind this long-term increase. Probably the most important factor has been the trend increase in the number of owner-occupied dwellings per person of working age (see Figure 6). This is partly due to the rise in the total number of occupied dwellings, reflecting smaller households, and partly to the increasing owner occupation rate, broadly offsetting the decline in the local authority renting sector due to council house sales. So from 1970, the number of owner occupied dwellings per person of working age has increased by around 75 per cent. Each new owner occupied dwelling is a potential new mortgage, so, over the longer term, we would expect the secured debt to income ratio to rise in the same proportion. This is because of the way the secured debt to income ratio is measured. The numerator refers to the sum of the secured debts of all the households with secured debt and the denominator is the sum of the disposable incomes of all households, not just those with secured debt.

Interestingly, despite the fact that the number of owner occupied dwellings was rising steadily from 1970, the debt to income ratio did not start rising until 1980. This was because the very high rates of inflation in the 1970s were eroding real debt very rapidly. Thus the debt to income ratios of individual mortgage holders were declining fast enough to offset the increase in their numbers, so the aggregate debt to income ratio remained flat. When overall inflation rates declined in the 1980s, the increase in the number of mortgage holders began to dominate, so the aggregate secured debt to income ratio started to rise. And, apart from a break in the early 1990s, it has been doing so ever since. Furthermore, given that the demographic trends in Figure 6 may be expected to continue, the rise in the secured debt to income ratio may also be expected to continue. Indeed, even if the number of owner-occupied dwellings per person of working age suddenly stopped increasing, because of the lags built into the process we would expect the secured debt to income ratio to continue to rise to new record levels for some years to come (see Hamilton, 2003 for a full analysis of all these issues).

While these demographic factors are the key to understanding long-term trends in the secured debt to income ratio, they are not the only ones. In a world of low inflation, nominal interest rates are low. This means that mortgage interest and repayments are no longer heavily “front end loaded” and so even with unchanged real interest rates, lenders and borrowers are happy with higher initial debt to income ratios when starting new mortgages⁶. So since the 1970s, we have seen a significant rise in the income multiples allowed by mortgage lenders and a consequent rise in the average loan to income ratios of first-time buyers. This has been reinforced by the rise over the same period in the proportion of two-earner households. A second factor, which is important in determining short-run fluctuations in the secured debt to income ratio, is mortgage equity withdrawal. This always tends to rise when there is a surge in house prices such as we have recently experienced, because, for some households, such a surge opens up the option of further borrowing at the secured real interest rate which still tends to be 6 percentage points or more below the unsecured rate. This response to a lower effective real rate is entirely consistent with prudent behaviour and does not, of itself, reflect irresponsibility on the part of either borrowers or lenders. So having set out the forces underlying increases in household debt, we must now look at the dangers inherent in the current situation.

Consumer Borrowing, Debt and Consumption

The general impression given by much of the discussion on household borrowing is that rapidly rising debt to income ratios are inextricably linked to high rates of household consumption growth. This is obviously wrong because households may simply spend their borrowings on assets, not on consumption. Indeed, even when they appear (in the data) to be spending their borrowings on consumption, they may in fact be spending them on assets if, for example, their “consumption” consists of buying new kitchen units. In the light of this, it is also obvious that we could observe high levels of borrowing even when consumption growth is very depressed. So let us look at what has been happening in recent years. Since 1997 Q4, real household consumption growth has averaged 4.1% per annum whereas the real growth of GDP has been 2.6% per annum. So consumption has been growing much faster than GDP over this period. This suggests that the build-up of household debt over the same period has been spent on consumption. Yet amazingly enough, the proportion of nominal GDP spent on household consumption was 62.7% in 1996 Q4 and 63.2% in 2003 Q1, almost exactly the same! This despite the fact that consumption has been growing much faster than GDP throughout the period. So how can this be?

The trick is in the prices. The price of consumption goods and services has been rising more slowly than the price of GDP over this period. Now GDP can be thought of as the net output of goods and services produced by the UK economy whereas consumption is what UK households consume. Some of the output produced by the UK economy is exported and some of the output consumed by UK households is imported. And it so happens that throughout this period goods imported by the UK have become increasingly cheaper relative to goods exported. This continuing improvement in the terms of trade since the mid-1990s (see Figure 7) has therefore been of continuing benefit to UK households and explains why the price of consumption goods has grown more slowly than the price of GDP. This, in its turn, explains how real consumption growth can be much higher than real GDP growth for many years with barely any change in the proportion of nominal GDP being spent on household consumption.

So where does the rise in household debt come into this story? In Figure 8, we see that, by and large, the increased borrowing corresponds closely to the acquisition of financial assets⁷. In Table 1, we see precisely what these assets are. Basically they include cash and deposits as well as savings vehicles of various kinds (mainly pension funds and life insurance). Equity flows have generally been negative. So over recent years, the rapid increase in loans has been almost exactly balanced by a rapid increase in the purchase of financial assets, a fact which is rarely mentioned when household debt is discussed⁸. Of course, the people purchasing the assets may not be the same people as those accumulating the liabilities. So will it all end in tears?

Is Household Debt Too High?

To answer this question, the best place to start is the overall household balance sheet position. This is summarised in Figure 9. What we observe is that the ratio of total household debt to total household assets (financial assets plus housing wealth) is just below 17 per cent and is very close to its average value over the last fifteen years. So while this ratio has risen over the last few years, mainly because of the fall in the stock market since 2000, it is hardly at dangerous levels. Similarly, looking at the ratio of unsecured debt to financial wealth, we see that while the number is higher than the fifteen-year average, it is not very high by historical standards.

So while there appears to be nothing very dangerous in these overall numbers, have the high rates of mortgage equity withdrawal produced excessive secured debt levels relative to housing wealth? In fact, as Figure 10 makes clear, mortgage equity withdrawal has not kept up with rising house prices, so that undrawn housing equity is now in excess of three quarters of total housing wealth. And finally, the cost of servicing all this household debt, even if we include regular repayments of mortgage principal, is currently at an historically low level relative to household income (see Figure 11). Of course, this is due to very low interest rates. But these would have to rise to around 10 per cent to push household income gearing up to its average level in the early 1990s.

So the overall average picture remains benign despite the rapid accumulation of debt. And it will remain benign even if further debt is accumulated, as we expect it to be for the reasons already discussed. But the aggregate picture may be misleading. Maybe

those with high debts are not the same households as those with high assets. In fact, broadly speaking, this is not true. Almost inevitably, those with high debts tend to have big mortgages and those with big mortgages tend to have expensive properties. But this does not mean that debt does not cause serious problems to many households. There are many low-income households in severe difficulty with unsecured debt. The evidence on whether there has been an increase in these difficulties is mixed (see Cox et al. 2002 and the Financial Stability Review, 2003, Section 2.3). But whether or not the situation is getting worse, unsecured debt problems there are, and these are bad for the individuals concerned and form an important issue for social policy. Nevertheless, because the volume of unsecured debt is relatively small, this is unlikely to be a particularly significant macroeconomic issue, so this leaves us with the question of secured debt.

More on the secured debt picture

Any case being made for the dangers of household debt usually starts from the rising debt to income ratio. And it is clear from Figure 5 that the secured debt to income ratio is higher than it has ever been and, as we have seen, it is expected to go still higher. But, as a measure of danger, or sustainability, the debt to income ratio is almost worthless since the debt refers to the sum of the debts of debtors and the income refers to the income of everybody. What we need in this context is the total debt of secured debt holders (or mortgage holders) normalised on the total income of secured debt holders. Unfortunately, it is hard to get up-to-date numbers but as we can see from Table 2, there has been no upward trend in this ratio from the mid-1990s to 2001. This was a period when the aggregate secured debt to income ratio rose by around 8 percentage points. This, of course, simply reflects the fact that much of the overall increase in debt arises from the increasing number of people with mortgages because more and more people own their own home. It is also consistent with the fact that in 2001 only 5 per cent of mortgage holders reported any form of distress, well down on the levels in the early 1990s. Of course, since 2001, it is possible that mortgage holders have seen a significant increase in debt relative to their income and that an increased proportion of them have been imprudent. We don't know. But such evidence as we have, for example, historically low levels of arrears, suggests that there is no sign that mortgage holders, who hold the vast bulk of household debt, are facing increasing problems – indeed, lenders typically argue the reverse. More

sophisticated credit scoring has generated a reduction in problems. One thing we do know, however, is that the mere existence of more mortgage debt in total does not necessarily mean any increase in danger to the macroeconomy. And given the historically low levels of mortgage arrears, evidence of such an increase in danger is hard to find.

Will High Levels of Debt Cause Problems in the Future?

As we have seen, total household debt is at a record level and is highly likely to reach even higher levels over the coming years. Despite this, household balance sheets are not seriously stretched. Nevertheless, could these record levels of debt cause serious macroeconomic problems in the future?

There are three distinct arguments here. The first is based on the possibility that households have underestimated the true real interest rate which they face. So it is sometimes argued that debtors will collectively “wake-up” to the fact that their debts have not been eroded, and will then take fright and cut their consumption dramatically causing severe macroeconomic problems. In the light of our previous discussion, why households, particularly mortgage holders who have the bulk of the debt, should do this is not at all clear. It is true that in the era of high inflation, which ended in 1992, debts were rapidly eroded. But the mortgage holders with the highest debts relative to income, namely the young, have no adult experience of the high inflation era. Furthermore, they are the group with the fastest real earnings growth. So while they might behave in the irrational fashion described above, there seems no obvious reason why they should.

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. That is because more people will be in a position where they are unable to extend their borrowing. 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”. As we have seen, secured debt is only around one quarter of gross housing wealth, a substantially lower level than throughout the 1990s (see Figure 10). 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 on new mortgages are modest by historical standards and are falling (see Financial Stability Review, June 2003, Chart 119). 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. Back in the early 1990s, of course, this option was unavailable because of the ERM constraint. However, the excessive debt may still induce greater precautionary saving and a larger drop in consumption. Overall, it is hard to tell whether higher debt levels will generate a significant additional cut back in consumption which cannot be modified by easier monetary policy.

The third argument is very simple. More people with mortgages means more trouble if there is a really serious collapse in the housing market. If house prices fall by 30 or 40 per cent, more people with mortgages means more people in negative equity. Of course, the consequences of this depend to some extent on the behaviour of lenders. If the mortgage debt continues to be treated as secured, even though some is not, then debt service costs remain unchanged. So a lot will then depend on the collateral damage associated with the collapse in the housing market and what caused it in the first place. For example, the house price correction in the late 1980s and early 1990s was basically a consequence of the 15 per cent interest rates required to control inflation. The tight monetary policy also generated a big rise in unemployment and all this together had a big macroeconomic impact. This particular scenario seems unlikely today. But what causes the collapse in house prices is not the main question. The issue is, if some disaster happens in the housing market, does the fact that more

people have mortgages make the consequences very much worse? So much worse, indeed, that monetary policy should be used today to discourage individuals from taking out mortgages. In my view, this should not be a target of monetary policy.

This leads to the final question, namely, should we keep interest rates higher than would be required to hit the inflation target in the medium term in order not to encourage further debt accumulation, because this will add to the risk of sharper falls in consumption generating an even bigger undershoot of the inflation target further out? In the light of all the previous discussion, my judgment, at present, would be no.

4. Summary and Conclusions

We have looked at two issues, first the impending switch to targeting the HICP inflation rate and second the implications of the steady rise in household debt. The following is a summary of the discussion, starting with the switch to HICP targeting.

1. In the longer run, thanks to differences in computational methods and the absence of the housing depreciation and council tax elements, the HICP inflation rate is likely, on average, to be around 0.8 pp lower than the RPI(X) inflation rate. In the short run, the gap between the two rates is highly volatile.
2. The long-run stance of monetary policy should be gauged by the real interest rate. Since the switch from an RPIX target to an HICP target should have no long-run real impact on the economy, the long-run stance of monetary policy will be unaffected.
3. If the HICP target is set at 2.0%, this is equivalent, in the long run, to a switch from an RPIX target of 2.5% to an RPIX target of 2.8%, because the long-run gap is 0.8 pp. Since the long-run real interest rate is unaffected by the switch, the long-run nominal interest rate will be 0.3 pp higher after the switch.
4. If the HICP target is set at 2.0%, this is equivalent to a rise of 0.3 pp in the longer term inflation rate (ie. a switch from an RPIX target of 2.5% to an RPIX target of 2.8% or a switch from an HICP target of 1.7% to an HICP target of 2%, making use of the 0.8 pp long run gap between HICP and RPIX). This will involve slightly looser monetary policy for a limited period than would otherwise be the case. However, given the volatility in the gap between HICP and RPIX inflation and the frequent shocks to which the economy is subject, the temporary loosening would be barely noticeable in practice.
5. A switch to an HICP target of 2% today would have little or no impact on the current stance of monetary policy despite the large gap between RPIX and HICP inflation at present. This is because this large gap is only temporary, having been generated by the recent surge in house price inflation which impacts on RPIX, via

the housing depreciation element, but not on HICP. As this surge fades, the gap will close to normal levels and given the structure of the August RPIX inflation projection, the corresponding HICP projection would not be far from 2% towards the end of the forecast horizon.

6. The direct inclusion of house prices in RPIX, via the housing depreciation element, only impacted on monetary policy to the extent that the MPC was able to forecast surges in house price inflation well in advance. History indicates that it was not able to do this. So excluding this element from the cost of living index will probably have little consequence for monetary policy in practice. (Of course house price booms will continue to impact on monetary policy via their impact on debt, consumption and aggregate demand further out. This is equally true whether we have an RPIX or an HICP target.)
Turning next to the issue of household debt, we consider both the causes and consequences of its dramatic increase.
7. Household secured debt (mortgages) is around 80 per cent of total household debt and is thus more significant than unsecured debt in the macroeconomic context. The secured debt to income ratio rose rapidly throughout the 1980s and from the middle of the 1990s, so it is now more than double its level in 1980. The most important factor underlying this change has been the trend increase in the number of owner-occupied dwellings per person of working age. This trend has been generated by the shrinking average size of households and the increasing owner-occupation rate (strongly boosted by Council House sales). Other factors include the somewhat higher loan-to-income ratios offered to first-time buyers in the period of low inflation since 1992, as mortgages are no longer heavily “front end loaded”, and the short-term burst of mortgage equity withdrawal following the recent housing boom as homeowners have greater access to the lower real interest rate borrowing available on secured debt.
8. Household unsecured debt has also risen rapidly relative to income in recent years. By and large, this has reflected increasing debt levels per unsecured debtor, not rising numbers of unsecured debtors. A key factor explaining this is likely to have been the rapid trend fall in unsecured borrowing rates since the late 1990s, a vastly greater fall than in the Bank of England repo rate, probably due to increasing competition in the unsecured lending market.
9. The connection between household borrowing and consumption is a tenuous one. The proportion of nominal GDP spent on household consumption was almost the same in 2003 Q1 (63.2%) as in 1996 Q4 (62.7%) despite the vastly greater rate of new household borrowing in the more recent period. What has happened is that the rapid increase in new borrowing in recent years has been almost exactly balanced by a rapid increase in net purchases of financial assets, a fact which is rarely mentioned when household debt is discussed.
10. Looking at household balance sheets, we find that today the ratio of total household debt to total household assets (financial assets plus housing wealth) is just below 17%, very close to its average value over the last fifteen years. Furthermore, despite the recent burst of mortgage equity withdrawal, undrawn

housing equity is rising and is now in excess of three quarters of total housing wealth. So overall, household balance sheets are relatively healthy.

11. Despite the health of average household balance sheets, there are many households, particularly with low incomes, which are in severe difficulties with unsecured debt. The evidence on whether this situation is getting worse is mixed, but, in any event, unsecured debt is such a small proportion of the total that the macroeconomic impact of such problems is not large.
12. While the published secured debt to income ratio has been rising rapidly since 1997, this is not a very helpful piece of information when it comes to analysing issues of sustainability. The problem is that the numerator of the ratio refers to the sum total of mortgage debt whereas the denominator refers to the total disposable income of all households. To be informative, the denominator should be the total disposable income of households with mortgages. Up-to-date data using this measure is unavailable but we know that the ratio of total secured debt to total income of secured debt holders exhibited no upward trend from 1997 to 2001.
13. Despite the above, could record levels of household debt cause serious macroeconomic problems in the future? There are three frequently used arguments. The first is based on the possibility that households have underestimated true real interest rates. 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 judgments on this score. Indeed, overall, there are no strong reasons why households, or indeed lenders, should be behaving particularly imprudently. Nor is there any persuasive evidence that they are doing so.
14. 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.
15. The third argument is very simple. If more people have big mortgages, a collapse in the housing market has more serious macroeconomic consequences. Of course, if this were thought to be a serious issue, one solution is a policy to reduce the size of the owner-occupied sector. More council houses, perhaps. But, in the present situation, does this mean we should use policy to discourage people from taking out mortgages? In my view, this should not be the target of monetary policy.
16. This leads to the final question, should we keep interest rates higher than would be required to hit the inflation target in the medium term in order not to encourage further debt accumulation? In the light of all the previous points, my answer, at present, would be no.

Footnotes

1. If there are two numbers, a_1, a_2 , the arithmetic mean (AM) is $\frac{1}{2}(a_1 + a_2)$ and the geometric mean (GM) is $(a_1 a_2)^{1/2}$. If there are n numbers a_1, a_2, \dots, a_n , the AM is $\frac{1}{n}(a_1 + a_2 + \dots + a_n)$ and the GM is $(a_1 a_2 a_3 \dots a_n)^{1/n}$. So long as the numbers are all positive and not all the same, a famous theorem in mathematics states that the GM is less than the AM. For example if $a_1 = 1, a_2 = 4$, the AM is $\frac{1}{2}(1 + 4) = 2 \frac{1}{2}$ and the GM is $(1 \times 4)^{1/2} = 2$.
2. This is based on a long-run rate of house price inflation of 4.5% (in line with trend average earnings growth) and council tax rises of 6.5% a year (the average gap between council tax rises and RPIX inflation over the last seven years is around 4 percentage points).
3. The housing depreciation element of RPIX is supposed to capture the contribution to the cost of living of the costs associated with maintaining homes in response to their natural tendency to depreciate over time – eg. replacing the roof when necessary. This element was only introduced into the RPI in 1995 as a consequence of the majority recommendation of the RPI Advisory Committee (see CSO, 1994). This majority recommendation suggested that the costs associated with putting right the deprecations of ageing in homes was best measured by a distributed lag on house prices. As the closely argued minority view expressed by Michael Fleming, Rita Maurice and Ralph Turvey noted, there was a serious problem here, namely that a substantial proportion of the rise in the price of housing reflects a rise in the price of land. Since land does not depreciate, the price of housing does not accurately reflect housing depreciation costs, indeed it typically overstates them (although not always; it probably understates them when house prices are falling). Arguably, some index of building costs would probably have been a better indicator of housing depreciation costs.
4. In terms of HICP inflation, we currently have a target which is 1.7 (2.5 less 0.8). This is moved up to 2.0 after the switch. So if r is the nominal rate, the real rate shifts from $(r-1.7)$ to $(r-2.0)$. If the real rate is to remain unchanged, the nominal rate must be 0.3 pp higher after the switch.
5. See Cox et al. (2002) for data up to 2000. A recent survey by NMG research suggests that this has remained more or less true up to 2003.
6. See Nickell (2002) for a detailed analysis.
7. Simply to clarify, household savings are equal to their net acquisition of financial assets shown in Figure 8 plus their net acquisition of real assets, basically housing.
8. This is not a new point. Robert Barrie, UK economist at CSFB is quoted in Philip Thornton's 30 July Independent article as saying precisely this. As he notes,

“those who focussed on debt liabilities often forgot to mention the fact that households had also bought piles of assets”.

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Table 1: Household Borrowing, Acquisition of Financial Asset and the Net Sectoral Balance

	% of post-tax income					
Household Financial Balance	1998	1999	2000	2001	2002	2003 Q1
Acquisition of financial assets	8.1	10.2	10.6	11.0	13.0	15.8
of which *:						
Currency & deposits	5.5	5.1	5.5	6.9	7.6	8.3
Shares & equity	-4.1	-2.4	-2.4	-2.1	-0.3	0.5
Total insurance technical services**	7.0	6.0	6.6	4.8	5.9	5.1
Acquisition of financial liabilities	7.9	10.5	10.3	11.2	14.8	14.6
of which*:						
Total loans	7.3	10.3	10.5	10.9	14.4	13.3
Net acquisition of financial assets	0.2	-0.3	0.3	-0.2	-1.9	1.2

* Totals do not add up due to the exclusion of minor items.

** Mainly net equity of households in pension funds and life insurance.

Source: ONS

Table 2**Secured Debt to Income Ratio Among Mortgage Holders**

1994	1995	1996	1997	1998	1999	2000	2001
1.26	1.24	1.28	1.29	1.30	1.25	1.24	1.25

Source: British Household Panel Study.

Note: These data are 3-year centred moving averages to smooth out the sampling variation. The 2001 number is an average of 2000 and 2001.

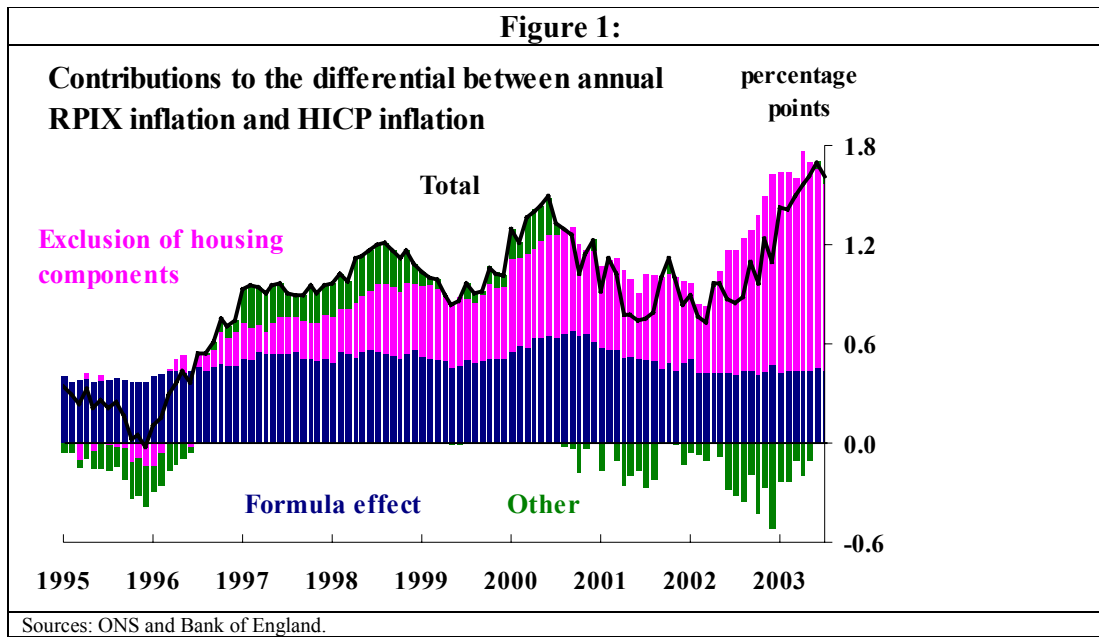
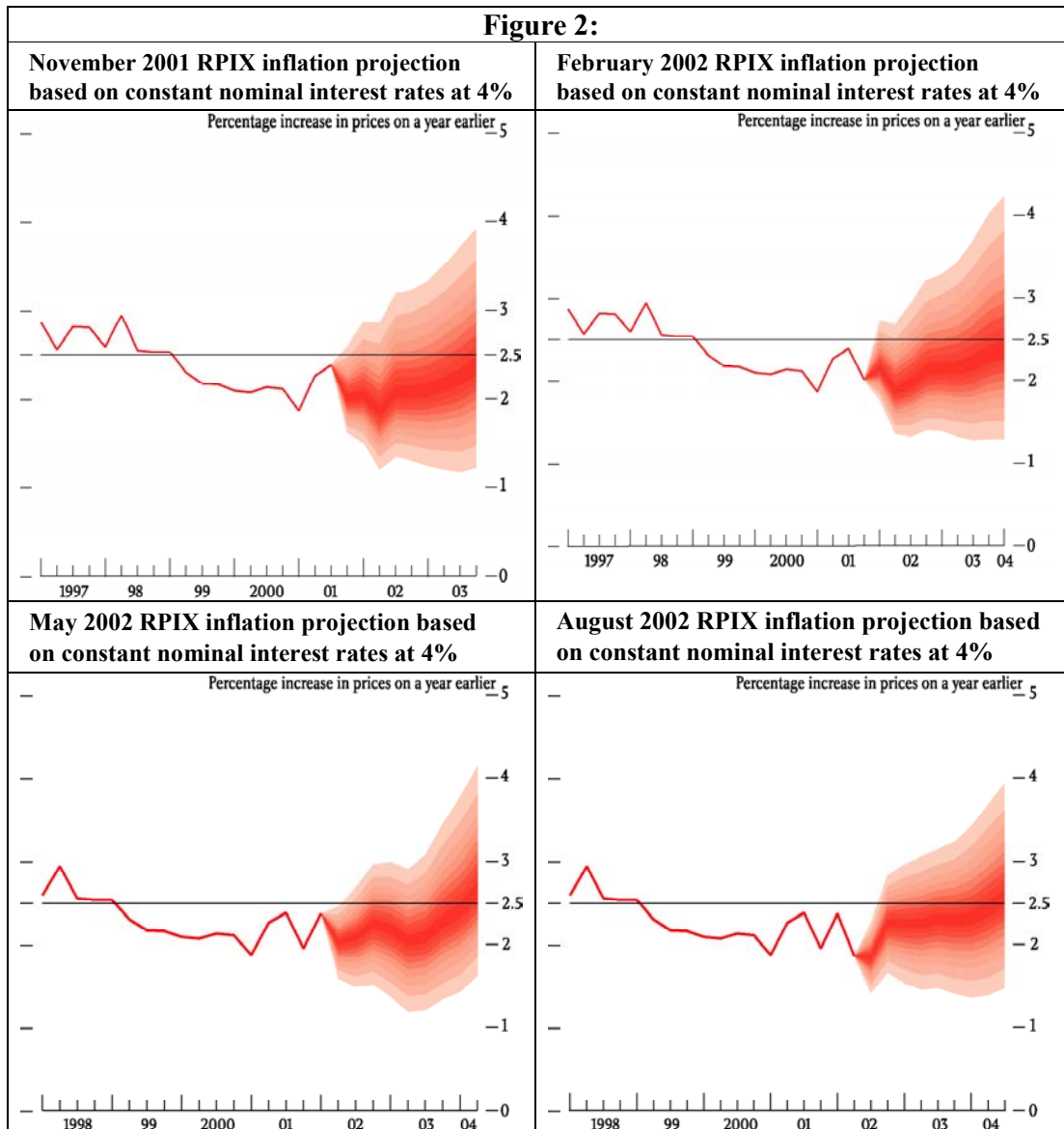


Figure 2:

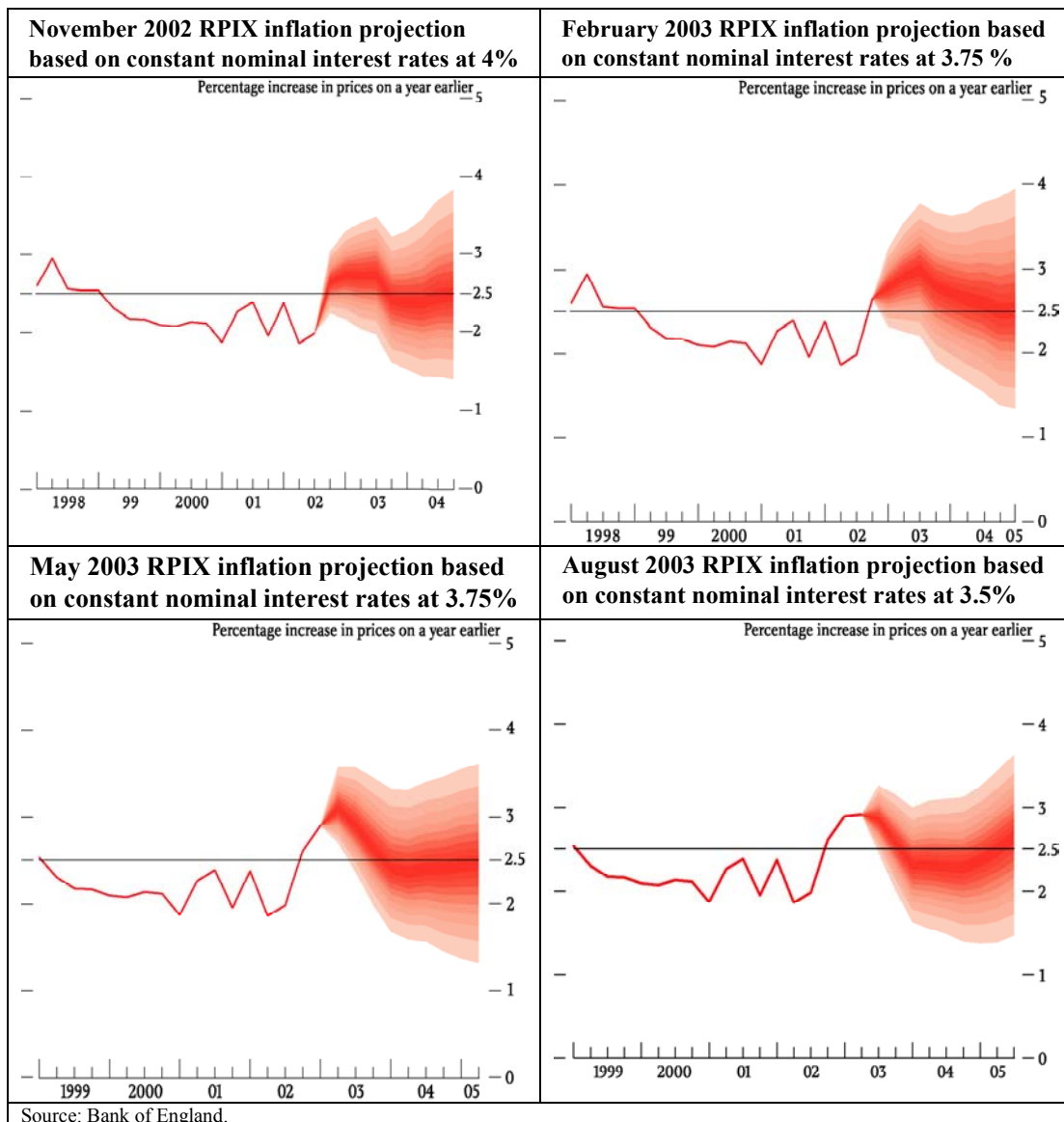
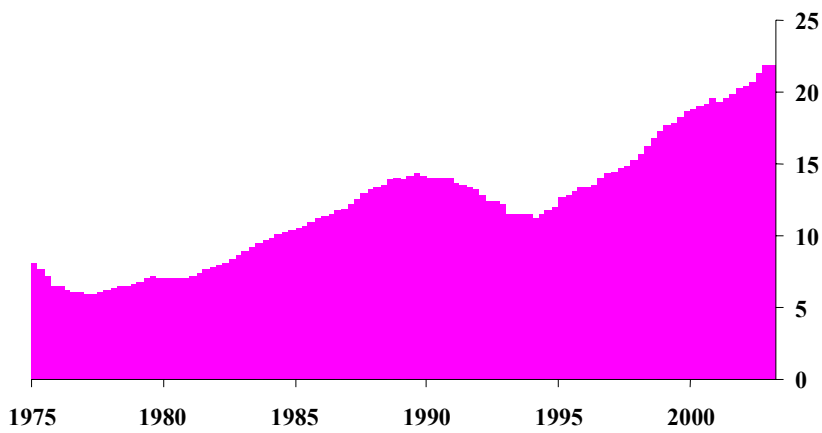


Figure 3:**Unsecured debt and**

Per cent of annual post-tax income

**Figure 4:****Loan Rates Since 1975**

Per cent



Figure 5:

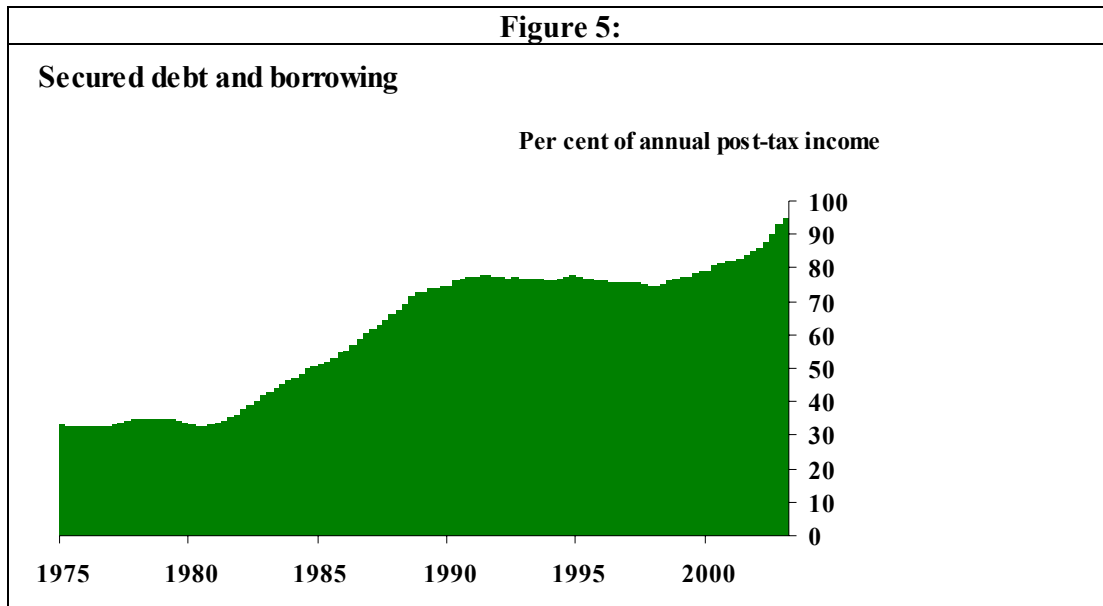
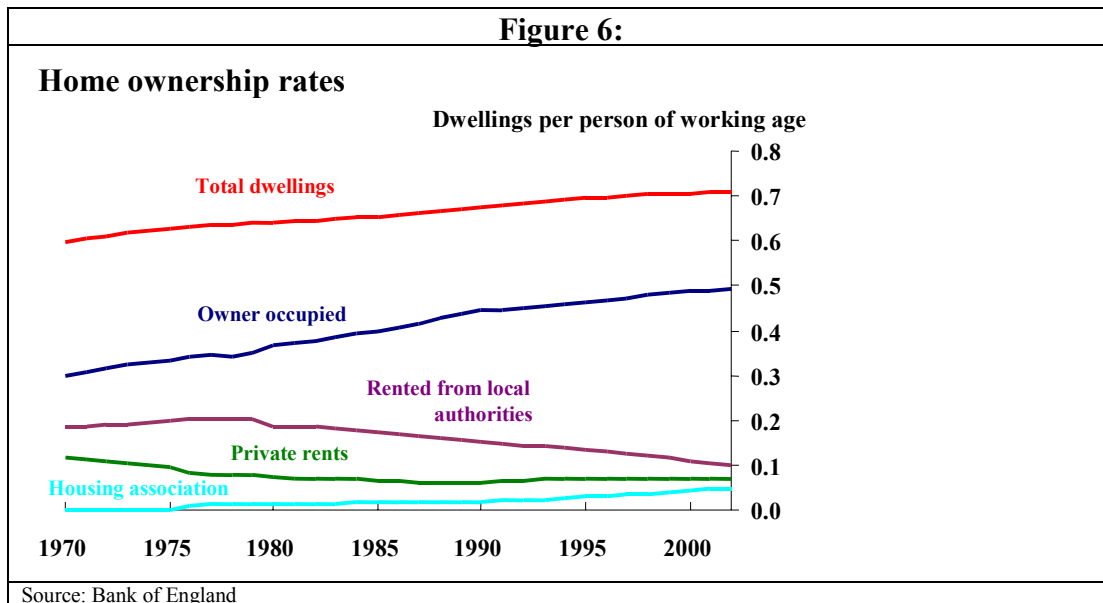
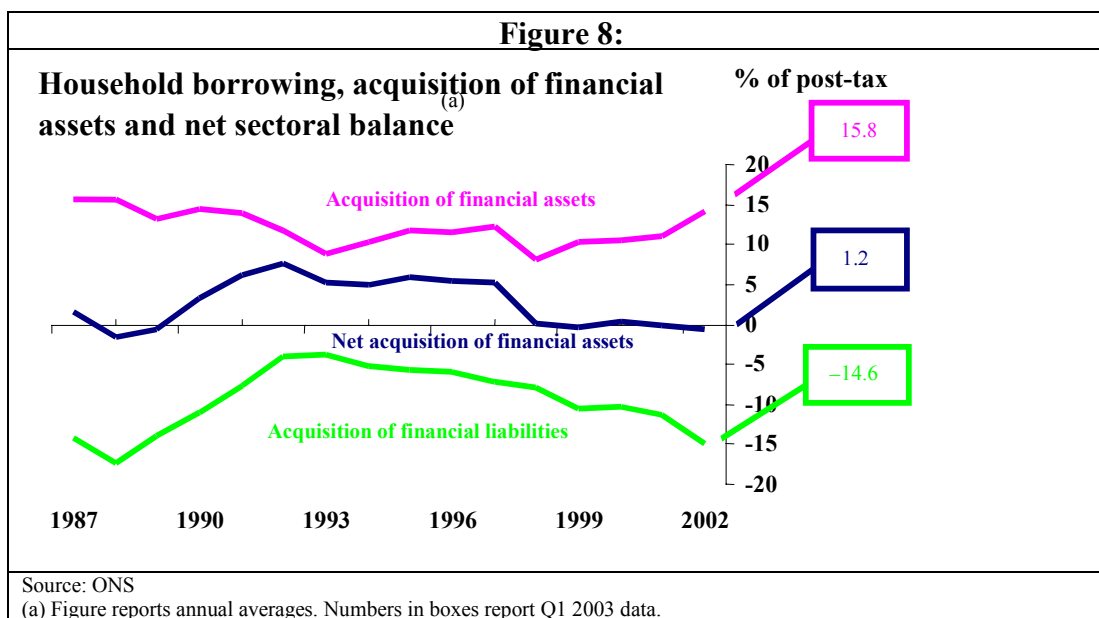
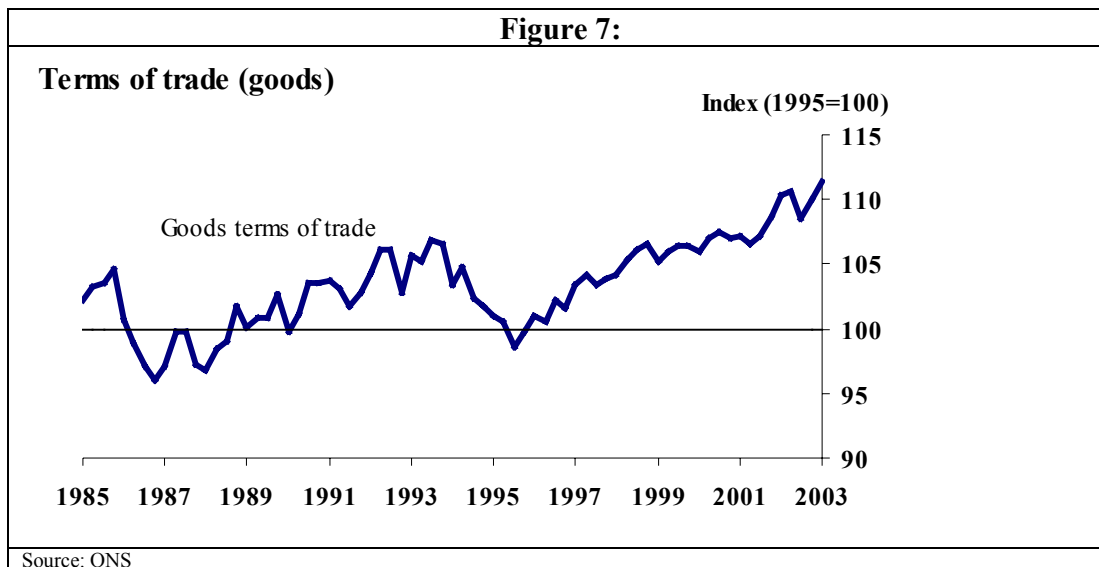


Figure 6:





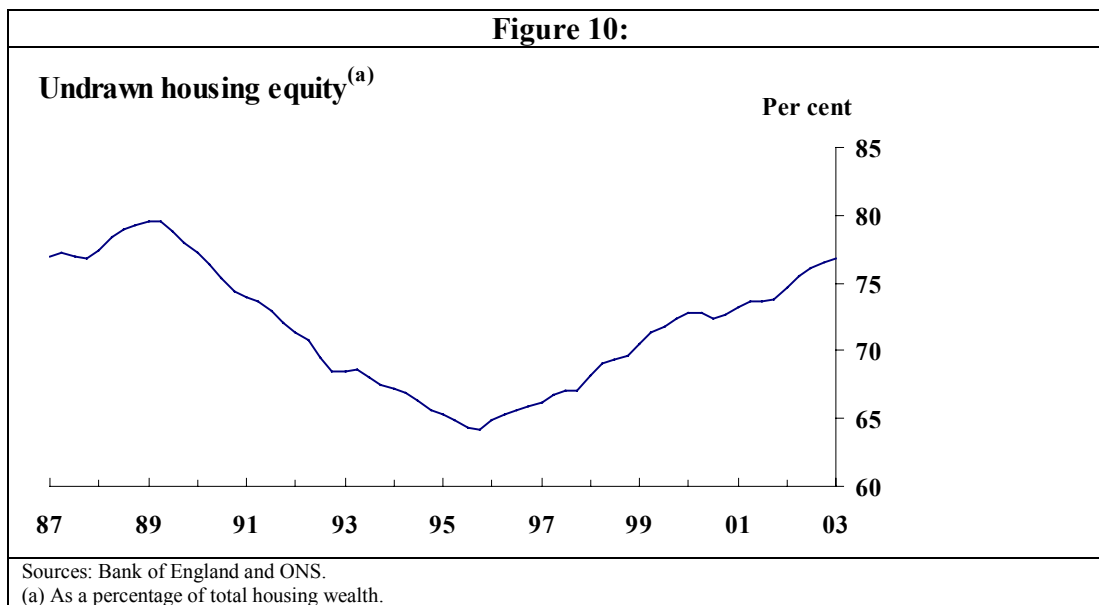
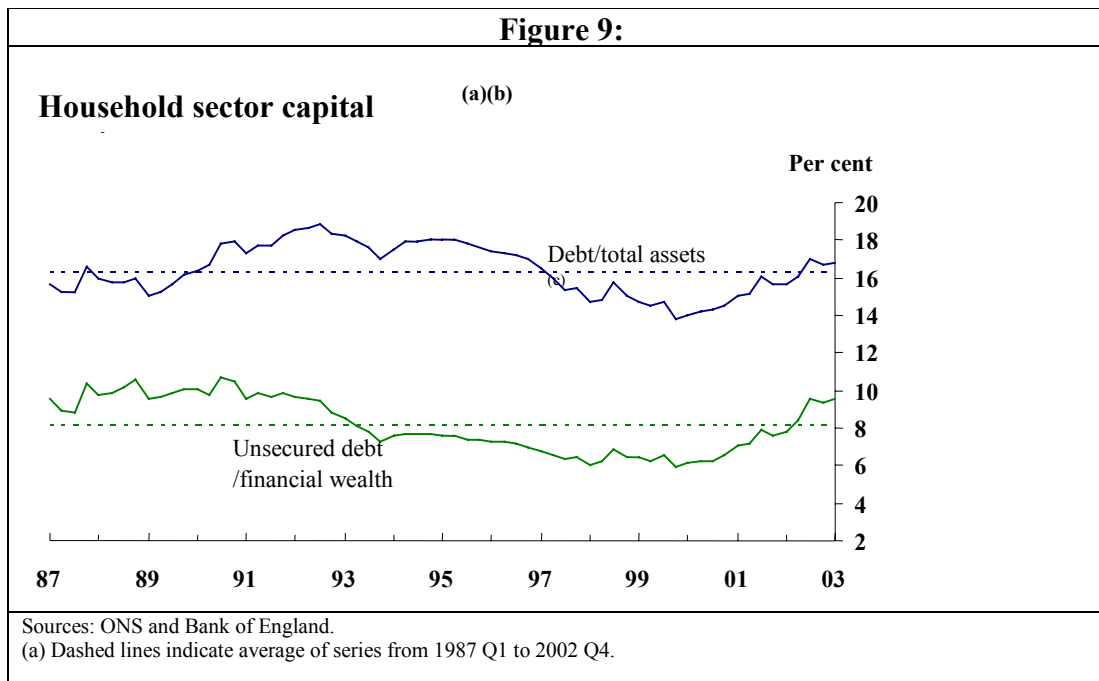


Figure 11: