BANK OF ENGLAND

Speech

Monetary Policy, Demand and Inflation

Speech given by

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Summary

1. To understand inflation prospects, first consider where demand is relative to potential supply. Second, analyse growth prospects relative to trend. Then combine these to gain some idea of underlying inflationary pressures going forward. In addition, consider whether recent relative price changes, notably the rise in oil prices and the rise in import price inflation, are generating second round effects via wage bargaining. So what is the situation?

2. After 18 months of below trend growth, there is a modest degree of spare capacity in the UK economy.

3. Looking forward, it seems probable that the growth of demand will approach trend levels in early 2006. However, it is less probable that demand growth further out will move above trend, which it must do if the spare capacity is to be eliminated. In summary, there is unlikely to be enough excess demand in the economy going forward to generate any serious underlying inflationary pressure.

4. What of the oil price effect? Because oil prices stopped trending upwards in August 2005 and are not expected to trend up next year, the impact of the recent doubling of oil prices on CPI inflation is now fading. And in the absence of second round effects, which have not appeared so far, the oil price effect will continue to fade.

5. The combination of the fading oil price effect and the absence of underlying inflationary pressure leads to CPI inflation undershooting the

target further out if rates had been left on hold. Hence my votes for a rate cut in December and January.

6. There are some upside risks to inflation. Oil prices may continue to trend up in 2006, perhaps because of some supply disturbance interacting with the inexorable demand increase. Second round wage effects may appear in the 2006 wage round. Finally, a continuing increase in wholesale gas prices may have a big enough impact further out to prevent the inflation undershoot. These risks were not, in my view, important enough to postpone a rate cut.

1. Introduction

In the December and January meetings of the Monetary Policy Committee I voted for a 25 bps reduction in the interest rate. In what follows are my views on inflation prospects. Before getting down to the details, it is worth remarking on the relationship between inflation and prospects for demand in the economy.

After an interview I gave to the Financial Times (23 September), I was ticked off on the letters page for focussing on growth when the MPC is supposed to be targeting inflation. Then, at a meeting of the House of Lords Select Committee on Economic Affairs (25 October 2005), Lord Lawson of Blaby remarked that he was very glad to hear the Governor reaffirm once again that the MPC was emphatically targeting inflation and not targeting activity (House of Lords, 2005, Question 15). Lord Lawson went on to add "…, few things could do more harm to inflationary expectations than a feeling that you did not have your eye very firmly on one ball and that maybe your attention had wandered equally between activity and inflation" (House of Lords, 2005, Question 16).

The factor driving changes in inflation over the longer term is the level of demand in the economy relative to the potential supply. If the former exceeds the latter, then we may expect inflation to be rising, and vice versa. In the light of this fact, what is one to make of the previous remarks? It is plain that if you are trying to hit an inflation target, you have to form a judgment about the level of demand in the economy relative to potential supply and how it is likely to move. This must, among other things, involve making judgments about growth prospects, not for their own sake but because they are vital when it comes to understanding the prospects for inflation. It is absolutely necessary to keep your eye on all the factors which affect future inflation, including growth prospects, if you wish to hit the inflation target. And, of course, keeping your eye on something is not the same as targeting it.

The level of demand relative to potential output is not the only factor determining inflation. Over the short run, measured inflation is strongly influenced by relative price shocks. And these may be substantial, like the recent doubling of the price of oil, or the fall in the prices of imported goods following the huge appreciation of sterling in 1996/7, or the significant rise in the prices of goods subject to VAT after the 1979 Budget. To hit the inflation target, the MPC has to take these things on board as well as the underlying inflationary forces generated by the position of demand relative to potential supply.

The extent to which the MPC will take account of these relative price effects when setting interest rates will depend on how long their impact on consumer price inflation is expected to last. If the impact of a particular relative price change fades rapidly it will be ignored, because any change in monetary policy would not have any significant effect on inflation before the impact of the relative price change disappears. So what sort of factors will make relative price effects last? A first point which is sometimes important is that a relative price effect will have an impact over a number of years if people are uncertain about whether the relative price change will be permanent. For example, sterling appreciated by around 25% in 1996/7. For foreign producers selling in the UK market, this was like a 25% reduction in the sterling costs of production. The decision they had to make was how much to cut prices as a consequence and over what period. Because they were uncertain how long this shift in sterling was going to be sustained, they only cut prices gradually and import price inflation was still negative in 1999, continuing to push down on consumer price inflation well after the shift in the exchange rate.

The second mechanism which is important in prolonging the impact of relative price changes is when wage settlements respond rapidly to changes in consumer price inflation. So if a rise in the relative price of a set of goods raises consumer price inflation and this feeds through rapidly in wage inflation, then the resulting rise in cost inflation will feed back into further price inflation ultimately generating a wage-price spiral. These second round effects of a rise in relative prices will thus generate further increases in price inflation which will ultimately necessitate a monetary policy response.

So when are these second round effects likely to occur? The answer is in situations where the monetary policy regime has no credibility and inflation expectations are not well anchored. A classic example happened after the large rise in VAT in the Budget of June 1979. Partly as a consequence of this, RPI inflation to rise from around 10% to over 15% by September with the consequences illustrated in Figure 1. Wage inflation responded almost immediately, fed back into price inflation and by June 1980, RPI inflation had reached 21.5%. A dramatic tightening of monetary policy and a huge rise in unemployment was required to get inflation down again and even so it did not fall below 10% until June 1982. By contrast, if inflation expectations are anchored on an inflation target, a rise in consumer price inflation generated by some relative price increase is less likely to feed through into pay settlements because of the general belief that inflation will return to target. I argue in what follows that, so far, wage inflation has not responded significantly to the recent rise in oil prices so there have been no second round effects and, consequently, the implications for monetary policy of the oil price increase are few.

To summarise, in order to understand inflation prospects today, I must consider first, where demand is today relative to potential supply. Then I see what can be said about growth prospects relative to trend. These two combined will give some idea of underlying inflationary pressures. On top of this, I must consider the extent to which the recent rise in oil prices and, more generally, recent increases in import price inflation, having fed through into consumer price inflation are generating second round effects via wage bargaining. This more or less describes the remainder of this paper. I conclude with my overall judgment on the prospects for inflation and its implications for monetary policy.

2. The UK Economy, Where are we Today?

As I have already noted, prospects for inflation will depend crucially on demand in the economy relative to potential supply (the output gap), both today and going forward. So where are we today? In Figure 2, various measures of the output gap are presented and the overall impression is that there is some spare capacity available in the economy at present. Looking a little more deeply at this notion of spare capacity, there are two important aspects. First, there is spare capacity within companies, which basically refers to the ability of the company to supply more output without having to buy more machines in the case of a manufacturer or purchase more selling space in the case of a retailer or hire more professionals in the case of business services provider. Second, there is spare capacity in the labour market which implies that there are individuals not currently employed who are willing and able to assist in the expansion of existing capacity by, for example, manning an extra shift or increasing the number of professionals in a business services company.

To capture the first of these two aspects, in Figure 3, it appears that capacity utilisation rates, in both manufacturing and services, have fallen away since 2004 and now stand close to their average levels over the last decade. So companies have a degree of spare capacity at least relative to 2004. In the labour market, the claimant count measure of unemployment has risen steadily over the last year and the LFS measure has turned up rather sharply in recent months (see Figure 4). So there is also some spare capacity in the labour market.

Overall, therefore, the picture is fairly clear. There is a degree of spare capacity available in the UK economy as of today. So what does this imply for inflation prospects? First, the existence of some spare capacity ensures that underlying inflationary pressures are modest. Second, some period of above trend growth, which will reduce the extent of spare capacity, is consistent with hitting the inflation target in the longer term. Third, the precise outcome for inflation will also depend on the various relative price factors mentioned in the previous section as well as the presence or absence of second round effects. So in what follows, I shall first consider current and future demand prospects, to see where demand is expected to go relative to trend. Then I shall look at the other factors which have to be added to the basic supply/demand effects to derive the overall prospects for inflation.

3. Prospects for Demand Relative to Potential Supply

If I am going to pursue the question of demand prospects relative to potential supply, it is worth starting by considering how rapidly potential supply is expanding. The general view is that the trend growth of GDP in the UK is currently around 2.7%. There are some uncertainties here relating to the extent of immigration of potential employees, the prospects for productivity growth in the light of the recent decline in productivity growth rates and the implications for supply potential of recent rises in fuel prices. Overall, however, treating the trend growth of potential output as 2.7% per annum is a reasonable assumption so long as we recognise the uncertainty here. Turning now to demand prospects, I start with the world economy.

The World Economy

Because the UK exports over one quarter of what it produces, it is important to have some idea of world demand. In Figure 5, it appears that economic growth in the world economy is relatively buoyant, although somewhat less so if the countries are weighted by their importance to UK exporters. The problem here, as can be seen in Figure 6, is that the Euro area, which takes a disproportionate share of UK exports (over 50%), has been performing less well than the other major economies. However, the Euro area is on the road to recovery and so world demand prospects look reasonably strong. Equity markets certainly think so (see Figure 7) and oil prices have flattened off in the last few months (see Figure 8). Of course, there are risks to this relatively benign outcome. Will the excess of savings over investment in Asia and the Middle East continue to finance the US current account deficit, as well as helping to sustain long-term real interest rates at historically low levels? Will oil and other commodity prices continue to remain relatively stable despite strong growth in the world economy? Despite these risks, my best guess would be that the world demand for UK products will probably grow reasonably strongly over the next few years. Certainly more strongly than the average of the last few years.

The UK Economy

In Figure 9, the path of UK GDP is presented. Even were the recent data to be revised up, the broad overall picture is unlikely to change dramatically. Since the middle of 2004, UK GDP growth has been somewhat below trend. This is consistent with the finding in the previous section that the extent of spare capacity in the UK was rising over exactly the same period. So what happened in the middle of 2004? Let us look first at household consumption, which makes up more than 60% of GDP.

Consumption

Not surprisingly, in the light of what has just been discussed, household consumption growth started to fall in the middle of 2004 (see Figure 10) although there is some evidence of a recovery later in 2005, confirmed by the retail sales data (Figure 11). So why was there a significant shift in mid-2004? Perhaps the most important factor was the significant slowdown in real post-tax labour income growth over the same period. As can be seen in Figure 12, since 2000, household consumption growth has tended to track post-tax labour income growth with a bit of delay. So why did real post-tax labour income growth slow down, particularly as there was no significant slowdown in either earnings growth or employment growth? The answer is first, the sharp rise in consumer price inflation driven by oil prices and second, the fact that the effective tax on personal incomes rose particularly rapidly over this period (see Figure 13) mostly without any increases in official tax rates (other than Council Tax). The factors underlying this rise in effective tax rates were composition effects (eg. incomes among those in the high tax band rose faster than average) and the fact that the tax bands in the income tax system are indexed to price inflation, not wage inflation.

Other factors associated with the slowdown of household consumption growth since the middle of 2004 have been the sharp decline in house price inflation (see Figure 14) and the rise in short-term interest rates from late 2003 to August 2004. The latter effect was probably bigger than in the past because of the historically high levels of household debt in the UK[1].

So what are the prospects for consumption going forward? So long as employment and earnings growth continue at existing rates, then real post-tax labour income growth will revert to normal levels because average tax rates are not expected to rise in the future as rapidly as in the immediate past (see Figure 13). In the light of this and barring serious adverse shocks, consumption growth should increase towards more normal levels. Indeed, the latest data on retail sales and from the British Retail Consortium suggest this is starting to happen.

Investment

Aside from government investment, fixed capital investment growth in the UK has been weak over the last year, consistent with the overall slowdown in domestic demand (see Figure 15). So what are the prospects for investment growth going forward? Since both business optimism and investment intentions have been declining since 2004 (see Figure 16), the prognosis for investment growth is relatively modest.

Government Consumption

Luckily for the MPC, the Treasury reveals its plans for nominal government spending for some years to come. The numbers suggest that nominal spending on goods and services as well as on government employees will grow steadily at around 6% per annum until April 2008 after which it will slow down. Public sector employment growth has, however, been slowing over the last two years and is expected to settle at a lower level going forward.

Imports and Exports

The general picture over the last 18 months has been a slowdown in the growth of imports and a slight increase in the growth of exports (see Figure 17). Given a relatively stable exchange rate, the force underlying the slowdown of import growth is probably the recent weakness of domestic demand, particularly the demand for consumer durables and investment goods which have a very high import content (in excess of 60 per cent). Export growth has probably been assisted by the rise in UK weighted world GDP growth since 2003 (see Figure 5). Looking forward, we may expect export growth to remain relatively strong as UK weighted world GDP growth will probably remain buoyant. On the other hand, import growth can be expected to recover as consumption growth moves towards more normal levels. Indeed, in 2005 Q3, there is already some sign of this happening as both import growth and the growth of expenditure on consumer durables increased significantly.

Future prospects for net trade are highly uncertain. In so far as the recovery in net trade in the last year has depended on the weakness of expenditure on consumer durables and capital goods, this recovery may be expected partially to reverse as consumption growth goes back to normal. However, since growth in the UK weighted world will probably remain strong, stronger than over the last three years, on average, the prognosis for net trade is perhaps a little stronger than it has been over the last few years. But given a stable exchange rate, it will probably still act as a drag on overall GDP growth. Perhaps a bit less of a drag than has been the case in the last few years.

Overall Demand

The overall picture is one where demand in the UK will move back towards trend rates driven by some recovery in household consumption growth and strong government expenditure growth. Weaker investment growth may hold things back a little but given the strength of UK weighted world growth prospects, net trade may be a little less of a drag on GDP growth than it has been in recent years. The key issue for underlying UK inflation is whether or not growth prospects are strong enough relative to trend to reduce the existing level of spare capacity and generate rising inflationary pressure. Given the relatively weak prospects for investment and the fact that consumption growth is unlikely to move significantly above normal levels, it seems unlikely that government spending and net trade will make a strong enough contribution to get UK demand growth significantly above trend. Overall, therefore, the probability that the balance of supply and demand will generate significant additional inflationary pressure over the next three years seems relatively low.

4. Pipeline Pressures, Relative Price Effects and the Overall Inflationary Picture

The most important recent change in relative prices has been the rise in the price of oil (see Figure 8). After increasing continuously from early 2004, the oil price has flattened off since August 2005 and is expected to remain relatively stable over the next couple of years according to the forward curve. There is, however, a lot of uncertainty about this. The oil price feeds more or less directly into consumer prices via the price of petrol and indirectly via the prices of goods which require oil in their production. Taking lags into account, the impact of these shifts in the oil price was to generate upward pressure on CPI inflation from late 2004 until late 2005. Subsequently, because oil prices were no longer trending upwards after August 2004, the upward pressure on inflation switched to downward pressure after September 2005. This kind of switch happens because if, for example, the price of petrol was rising this time last year but is stable or falling today, this will exert downward pressure on the current annual inflation rate. This downward pressure on inflation will probably continue for some time and explains why the MPC's inflation forecast in the November Inflation Report has inflation tending to fall in 2006.

The fact that a significant and permanent rise in the price of oil only leads to a temporary jump in measured inflation is a consequence of the absence of second round effects. As noted in the first section, second round effects arise typically when wage settlements and earnings respond rapidly to movements in consumer price inflation[2]. If this happens, a rise in consumer price inflation will raise wage inflation. This will impact on cost inflation, generating a second round rise in price inflation. A wage-price spiral then gets underway and consumer price inflation moves steadily upwards despite the fact that the oil price is no longer rising.

So far, we have not seen second round effects in response to the rises in consumer price inflation from mid 2004, as we can see from the relative stability of earnings growth and settlements in response to fluctuations in price inflation[3], or indeed in response to the recent sharp rise in effective tax rates (see Figure 18).

Given that the other main source of relative price movements, the sterling exchange rate, has remained pretty stable in recent years, are there are any inflationary pressures in the pipeline? Domestic goods price inflation, excluding petroleum products, has been moving steadily down since 2004 (see Figure 19). Import price inflation, excluding fuel products, has been relatively stable (see Figure 20). CIPS service price balance has risen a little recently, although it is still down on its level in the first half of 2004 (see Figure 21). Overall, there does not seem to be any strong inflationary pressure in the supply pipeline.

5. The Overall Picture on Inflation Prospects

After about 18 months of below trend growth, there is some modest degree of spare capacity in the UK economy. Looking forward, it seems probable that the growth of demand will approach trend levels early in 2006. However, it is less probable that demand growth further out will move above trend, which it must do if the spare capacity is to be eliminated. In the light of this, there is unlikely to be enough excess demand in the economy going forward to generate any serious upward move in underlying inflation. The other major contribution to inflation prospects is provided by the recent doubling of the price of oil. Because oil prices stopped trending upwards in August 2005 and are not expected to trend upwards next year, the impact of this event on CPI inflation is now fading. And, in the absence of second round effects, which have not appeared so far, the oil price effect will continue to fade. The combination of this with the low probability that excess demand in the economy going forward will generate any serious upward move in underlying inflation, implies that inflation is more likely than not to come in below target for some time, once the oil price effect washes out. In order to get inflation up towards target further out, a cut in interest rates was required.

One final point is worth noting. A further significant prospective relative price change has appeared on the horizon, namely the rise in UK wholesale gas prices from 2005 to 2006 which is implicit in the forward market. This shift would raise CPI inflation in 2006. However, again if there are no second round effects, CPI inflation would then tend to fall back further out, once gas prices stop rising.

Footnotes

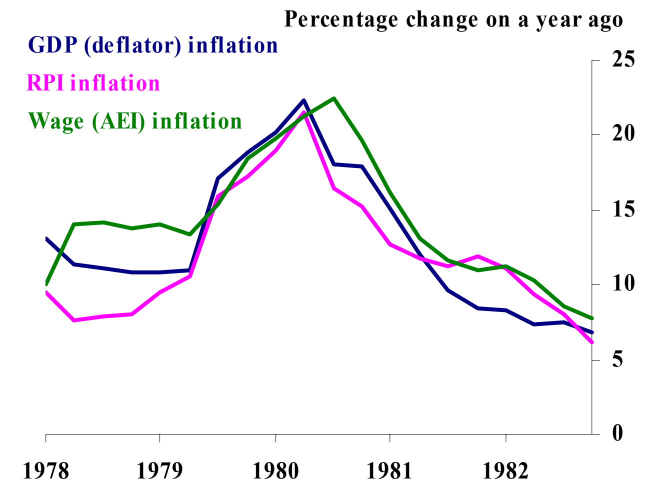
1. Of course, when interest rates go up, while debtors must pay more, creditors have higher incomes so they can spend more. The net effect of higher rates on UK consumption is negative because debtors typically have a higher propensity to spend than creditors and not all creditors live in the UK.
2. This is a special case of what is generally termed "real wage resistance". This happens when employees resist falls in real wages by raising wage demands in response to any changes that tend to cut real pay. These changes include not only rises in consumer price inflation but rises in effective income tax rates.
3. We use the retail price index (RPI) in this context because surveys of wage bargaining indicate that wage bargainers overwhelmingly use RPI as their measure of rises in the cost of living rather than CPI.

References

House of Lords (2005), Monetary Policy: Report with Evidence, Select Committee on Economic Affairs, 4th Report of Session 2005-06 (London: The Stationery Office Limited).

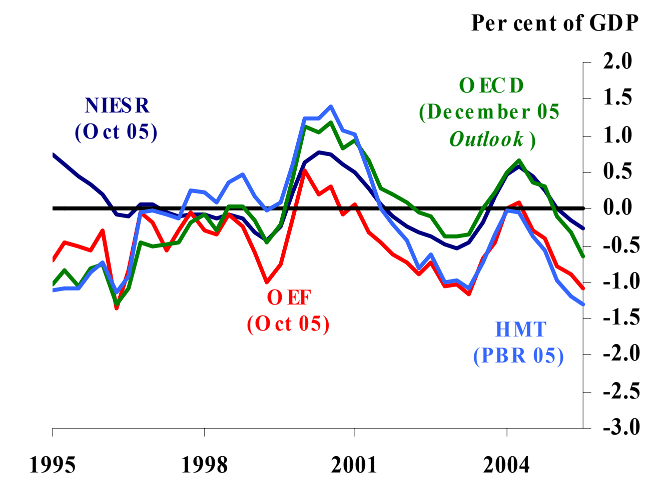
Figures

Figure 1: Inflation from 1978 to 1982



Source: ONS

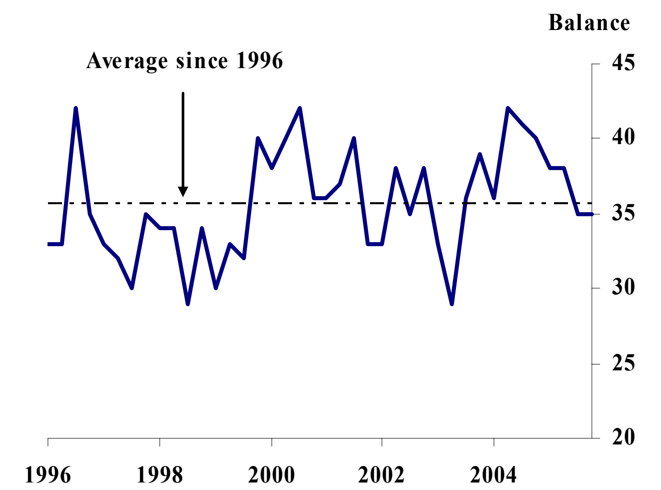
Figure 2: Output gaps



Source: HMT, OECD, OEF, NIESR

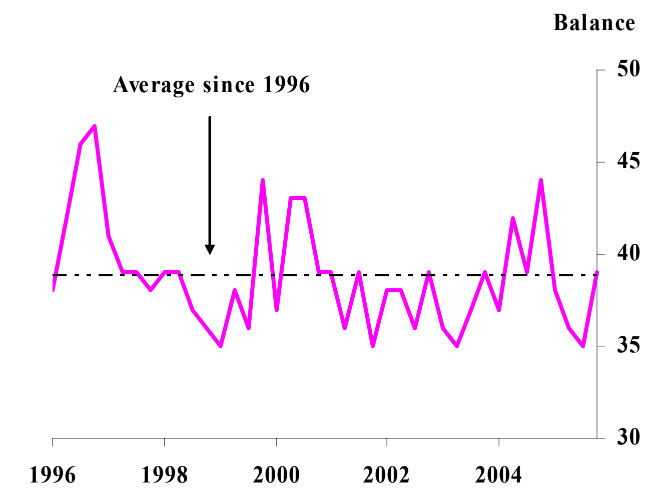
Figure 3: Capacity Utilisation

Figure 3a: Manufacturing



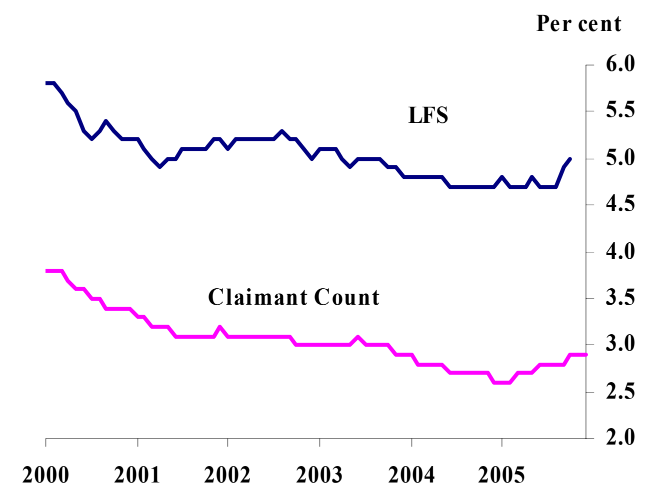
Source: British Chambers of Commerce

Figure 3b: Service sector



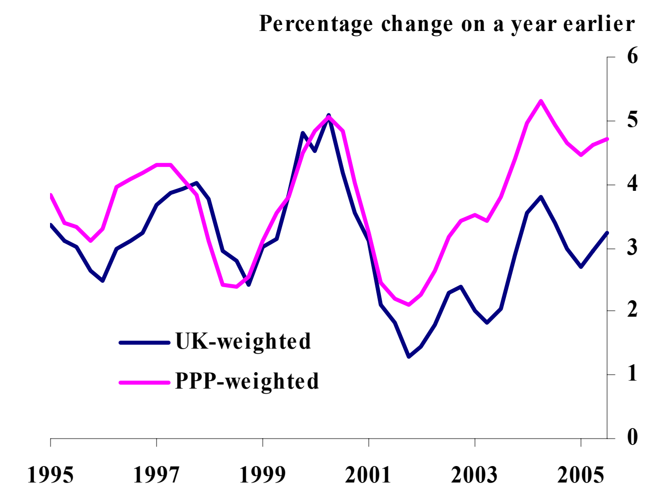
Source: British Chambers of Commerce

Figure 4: Unemployment Rate



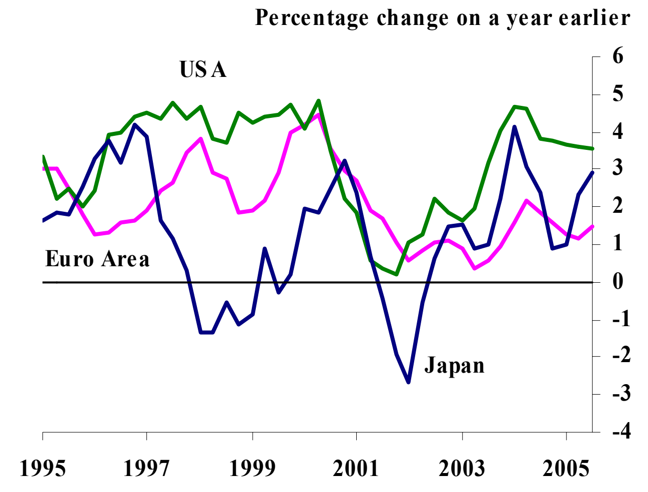
Source: ONS

Figure 5: World GDP Growth



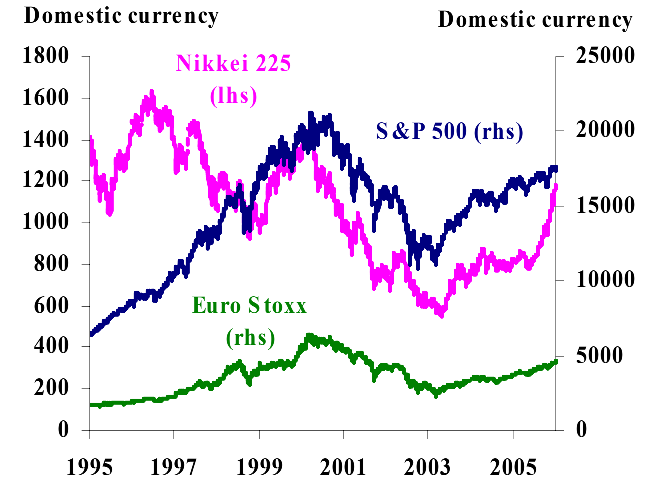
Source: Datastream, ONS

Figure 6: International GDP Growth



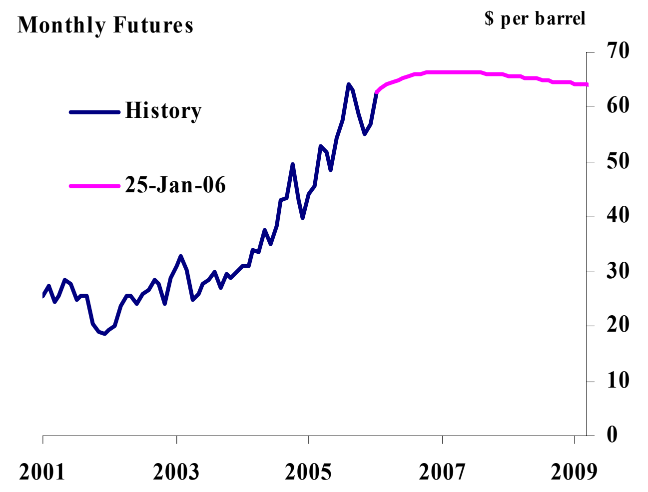
Source: Datastream

Figure 7: World Equity Prices



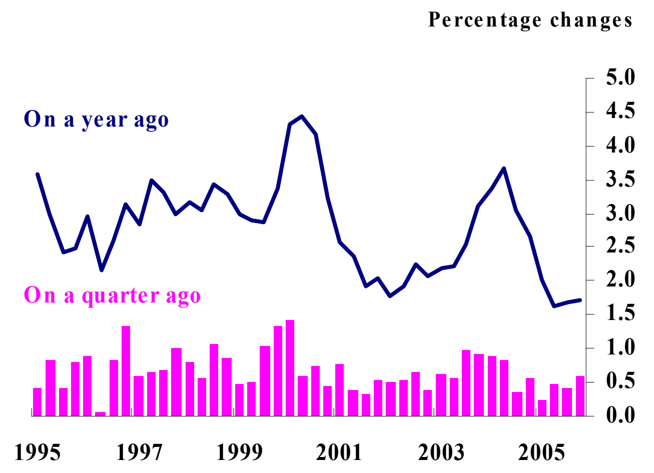
Source: Datastream, www.stoxx.com

Figure 8: Oil Price & Futures Curve



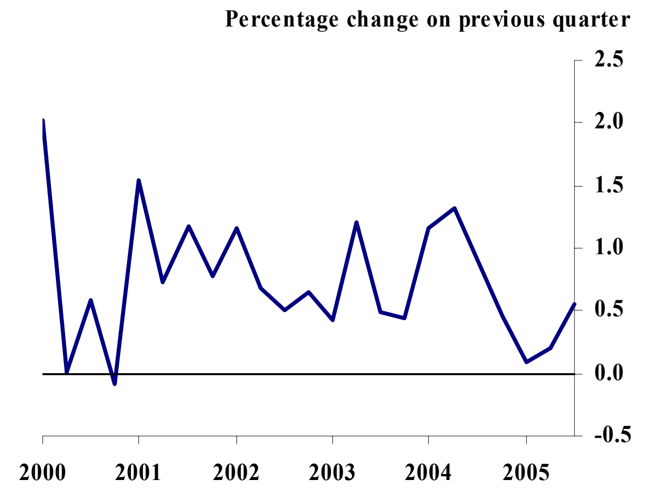
Source: Bloomberg, Datastream, & Bank Calculations

Figure 9: UK GDP Growth



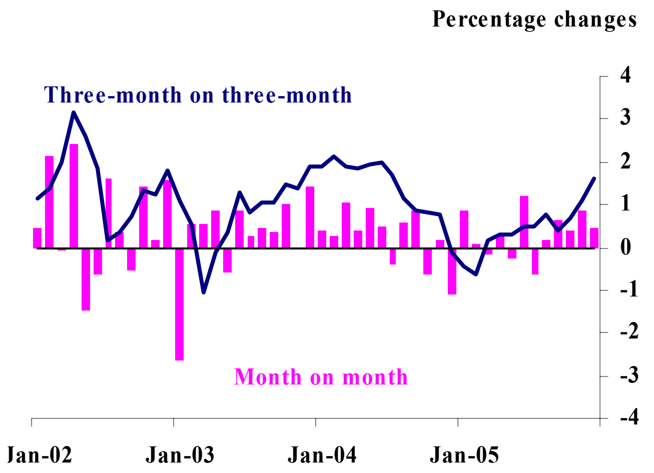
Source: ONS

Figure 10: UK Consumption Growth



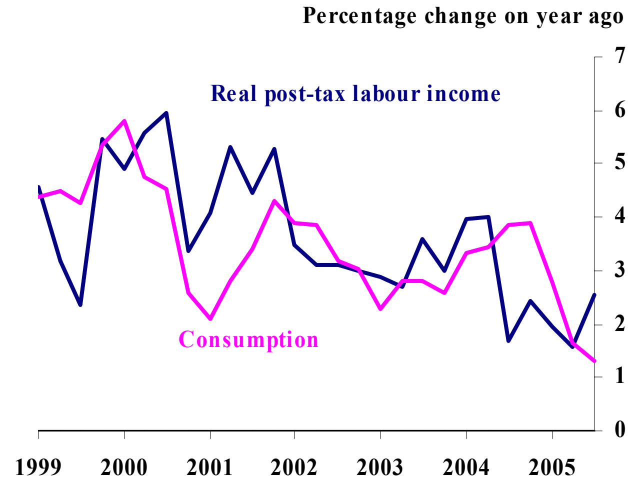
Source: ONS

Figure 11: Retail Sales



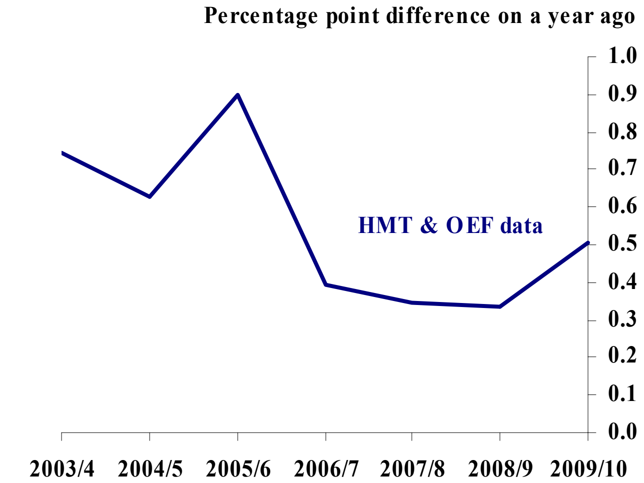
Source: ONS

Figure 12: Income and Consumption



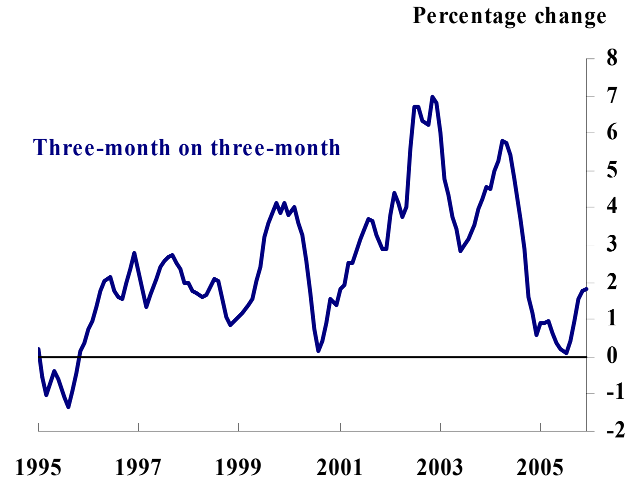
Source: ONS

Figure 13: Change in Effective Tax Rates



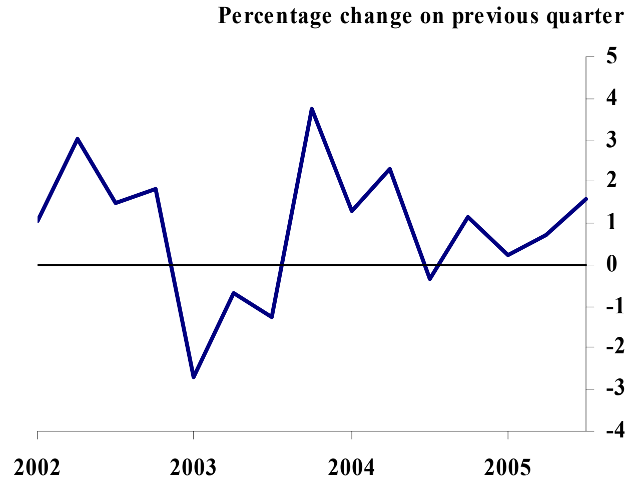
Source: Past and projected revenue from income tax and National Insurance Contributions (HMT) normalised on past and forecast pre-tax labour income (Oxford Economic Forecasting)

Figure 14:House Price Inflation



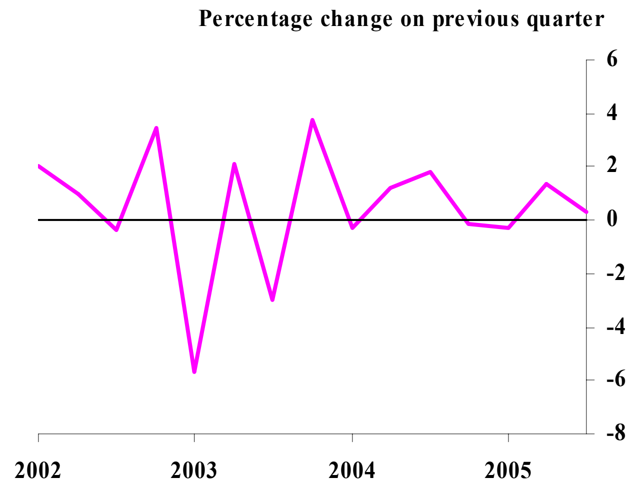
Source: Average of the Halifax and Nationwide indices

Figure 15a: Whole Economy Investment



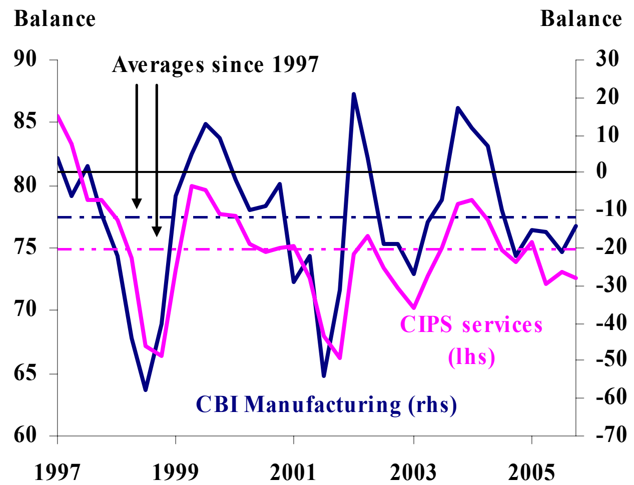
Source: ONS

Figure 15b: Business Investment



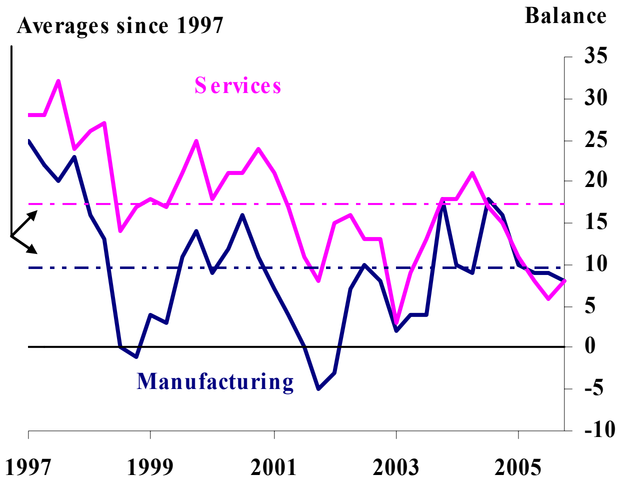
Source: ONS

Figure 16a: Business Optimism



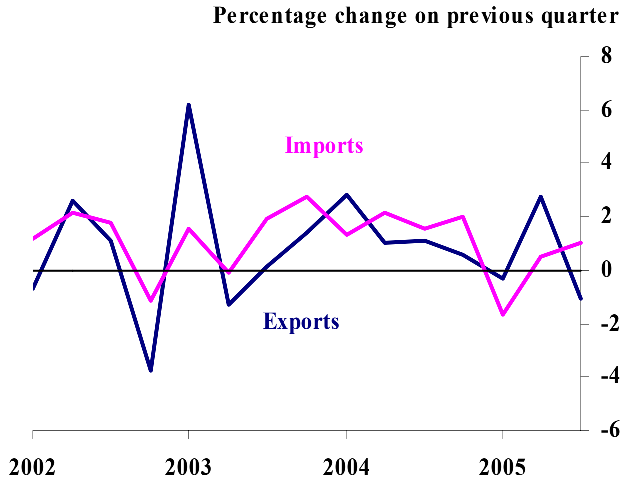
Source: Confederation of British Industry, The Chartered Institute of Purchasing and Supply

Figure 16b: Investment Intentions



Source: British Chambers of Commerce

Figure 17: Trade Volumes



Source: ONS

Figure 18: The Response of Earnings and Settlements to Changes in RPI

Figure 18a: Private Sector Regular Pay Growth

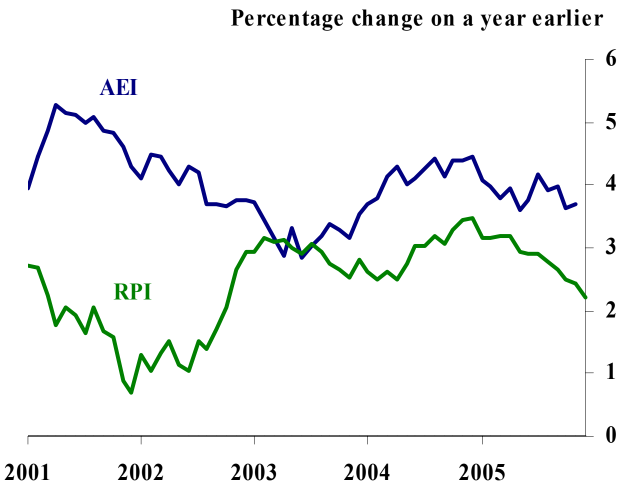
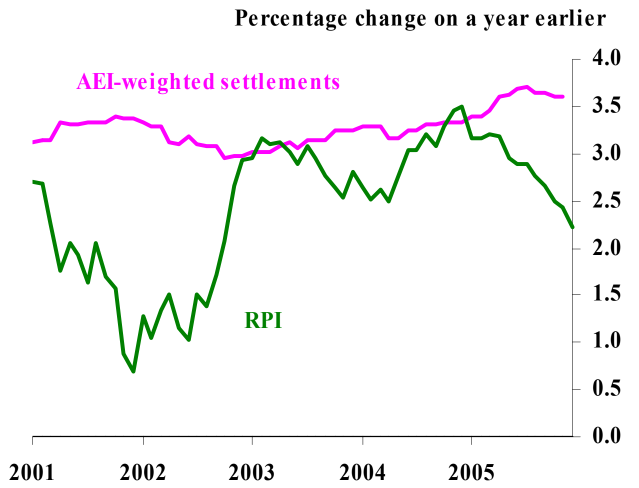
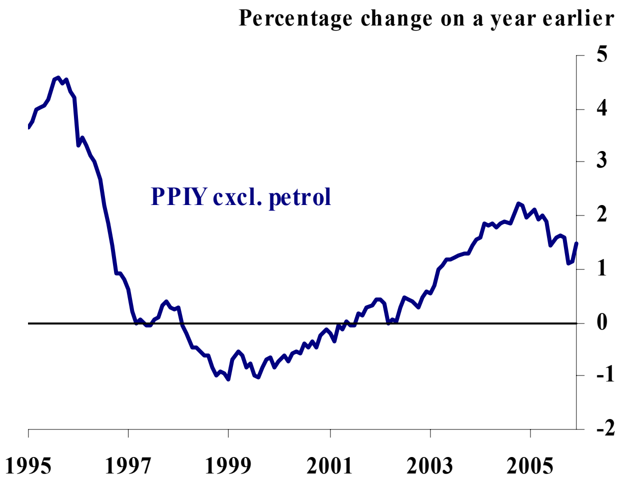


Figure 18b: 12-Month, AEI-Weighted Settlements



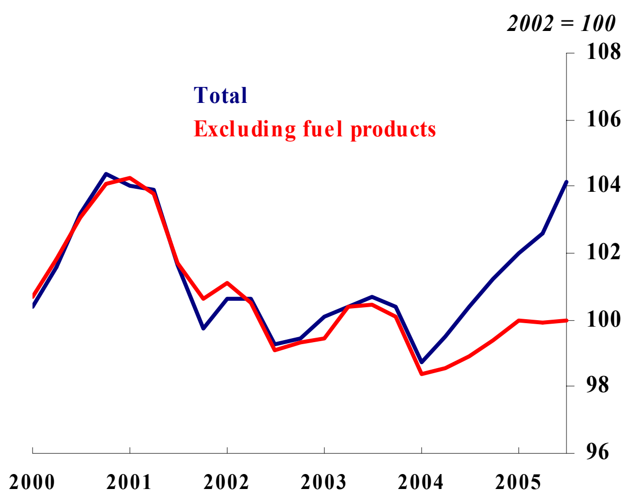
Source: ONS, Bank Agents, Industrial Relations Services & Incomes Data Services

Figure 19: Domestic Goods Price Inflation



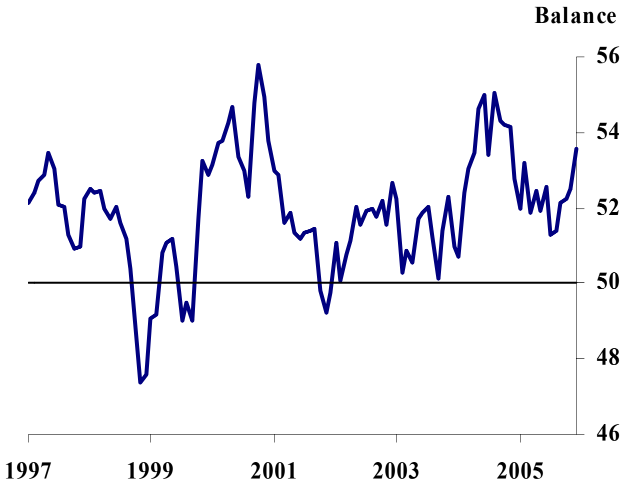
Source: ONS & Bank Calculations

Figure 20: Import Prices



Source: ONS & Bank Calculations

Figure 21: CIPS Services Prices



Source: The Chartered Institute of Purchasing and Supply