

## Executive Summary

- The 'NICE decade' has given way to a period of weak activity and high inflation and, though the sustainability of the recovery is now in question once more, CPI inflation has now moved up to a record high of 5.2%. However, there are some powerful mitigating factors which explain at least some of the recent overshoots, namely two VAT rises and surging global commodity prices, in particular for food and oil.
- In our view the MPC is correct to argue that the high inflation rates of the past couple of years have been mostly down these temporary factors and that they will soon fade away. We expect inflation to slip back below the 2% target towards the end of 2012, once the VAT increase has fallen out of the year-on-year calculation and the pressures from surging global food and fuel prices have faded.
- However, once the recovery has taken hold, there is a strong chance that inflation will pick up again, causing modest, but persistent, overshoots of the 2% inflation target. Firms will seek to restore profit margins and workers will try to restore real wages. Our analysis suggests the rise in margins will hold back the recovery in real wages. On this view, the pressure on the workforce could last much longer than conventional models of the economy suggest. Either way, these competing demands will put upward pressure on core, or domestically-generated, inflation. With growth in commodity prices likely to remain firm, as the effects of globalisation continue to feed through, and increasing labour costs likely to limit the degree to which we can continue to benefit from cheaper imported goods from emerging markets, the inflation environment is likely to change over the medium term. Increasing globalisation is also likely to create greater volatility in inflation rates, given the increased potential for instability in commodity markets.
- Such a shift in the inflation outlook would present a dilemma for the authorities. Under the current regime this would imply the need for higher interest rates, with the MPC being forced to try to suppress domestically-generated inflation to offset pressures from higher import costs. However, this would further depress growth prospects in what is already a low-growth environment. As such, there could be an argument for a modest relaxation in the inflation target and greater emphasis given to the requirement to support growth and employment.
- There are substantial risks to the forecast in both directions. Lower rates of inflation are possible, particularly in the short-term, if the global outlook continues to deteriorate and suppresses both global commodity prices and domestically-generated inflation. However, there are also substantial risks to the upside, with the possibility of further supply disruptions to commodity markets and the risk that emerging economies will overheat – particularly if the anticipated slowdown in world trade does not come to pass – which could cause commodity prices to surge once more.

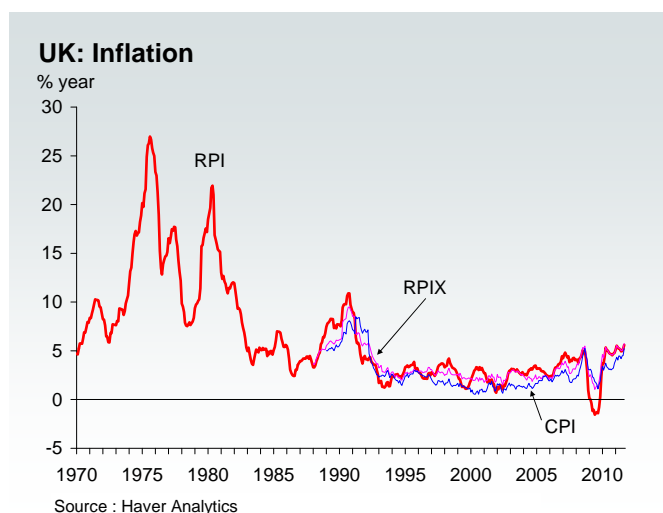
## Introduction

The first decade of the Monetary Policy Committee (MPC) was a remarkable success, with unprecedented stability in inflation and a long period of unbroken economic growth. However, the period since 2008 has been an uncomfortable one for the MPC, with the 'NICE'<sup>1</sup> decade giving way to a prolonged period of above-target inflation and a deep recession. Though the sustainability of the recovery is now in question once more, inflation reached a record high of 5.2% on the CPI measure in September. Against this backdrop this special report investigates why inflation has been so high in recent years and assesses the prospects for the next few years. In the context of repeated overshoots of the target, we also assess whether 2% is the appropriate target for UK inflation, or whether structural changes mean that it would only be achievable in the future with higher interest rates than we've become accustomed to.

## Central Bank independence has coincided with lower and more stable inflation...

The past forty years has seen a marked change in the inflation environment. The 1970s saw inflation average 12.6% on the Retail Prices Index (RPI) measure, as firstly a surge in oil prices and then a wage-price spiral took inflation above 25% at one point. It took until the mid-1980s before inflation came below double digit rates on a sustained basis, but even then inflation remained well above the norms of recent years. It was the introduction of inflation targeting in 1992, with monetary policy initially set by the Chancellor in consultation with the Governor of the Bank of England and then, after 1997, by the Monetary Policy Committee, which saw inflation brought under firm control.

At the same time that inflation rates have slowed, there has been a progressively greater degree of price stability. This is demonstrated in no better way than the fact that after the introduction of the MPC in May 1997, the first time that inflation deviated by more than 1% from its target<sup>2</sup> in either direction was in April 2007. Such stability in prices, and the greater degree of certainty that it created, has undoubtedly provided support to UK economic growth.



RPI inflation (%)		
	Mean	Standard deviation
1970s	12.6	5.7
1980s	7.5	4.5
1990s	3.7	2.4
2000s	2.6	1.4

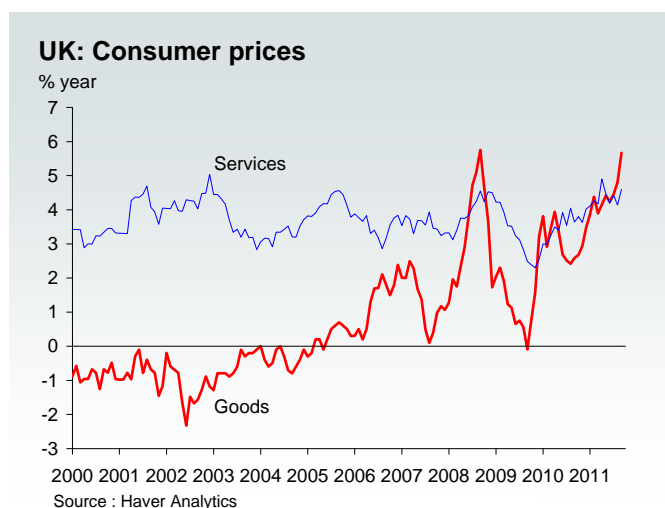
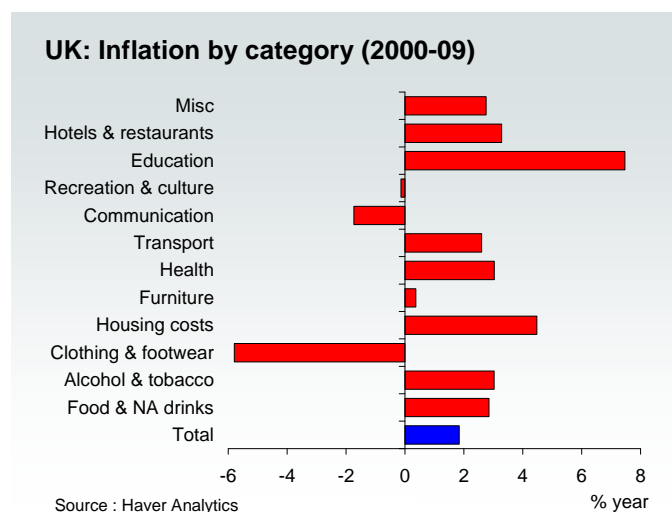
CPI inflation (%)		
	Mean	Standard deviation
1990s	3.3	2.2
2000s	1.8	0.9

Source: Haver Analytics, ITEM Club

<sup>1</sup> NICE – Non-Inflationary Constant Expansion – phrase coined by Sir Mervyn King to describe the inflation and growth performance for the ten years from 1997

<sup>2</sup> From May 1997 to December 2003 the MPC was required to target RPIX inflation of 2.5%; from December 2003 the target reverted to CPI inflation of 2%

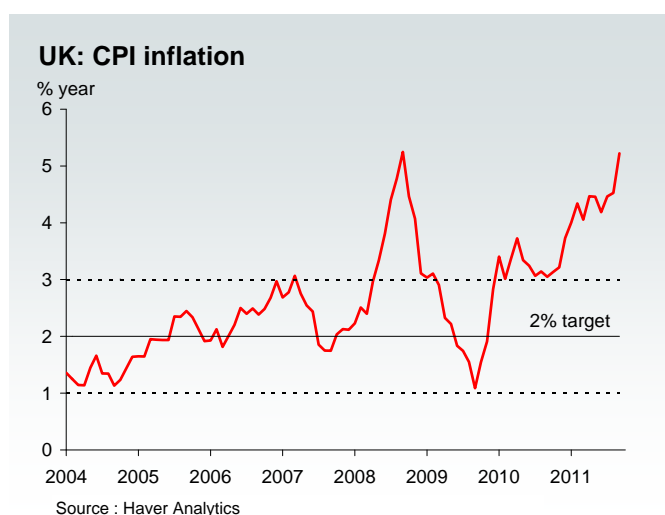
The low inflation environment of the 2000s was largely a result of a constant stream of cheap manufactured goods being imported from emerging markets, with goods price inflation averaging just 0.4% a year, compared with 3.7% a year for services. This was partly a reflection of a very strong pound through the first seven years of the decade, but was also due to countries like China and India being able to produce goods with very low labour costs. Indeed, the influence of manufactured goods prices was so great that inflation remained low and stable throughout the period up to 2007 despite some significant increases in oil – which increased from \$28 per barrel in 2000 to \$65 per barrel by 2006 – and other commodity prices.



...but recently we have seen persistent overshoots of the target

However, the period since mid-2006 has seen inflation persistently overshooting the 2% target. Indeed, having not exceeded 3% in the first ten years of the MPC, CPI inflation has now exceeded 3% on 32 occasions in the past 5 years and in every month since the beginning of 2010. Over that five-year period CPI inflation has averaged 3.1% and has exceeded the 2% target in 51 of the 60 months.

There are a number of mitigating factors which explain at least some of the overshoots. Global commodity prices have surged twice over that period, firstly in early-2008 and then again in 2010, with the effect being compounded



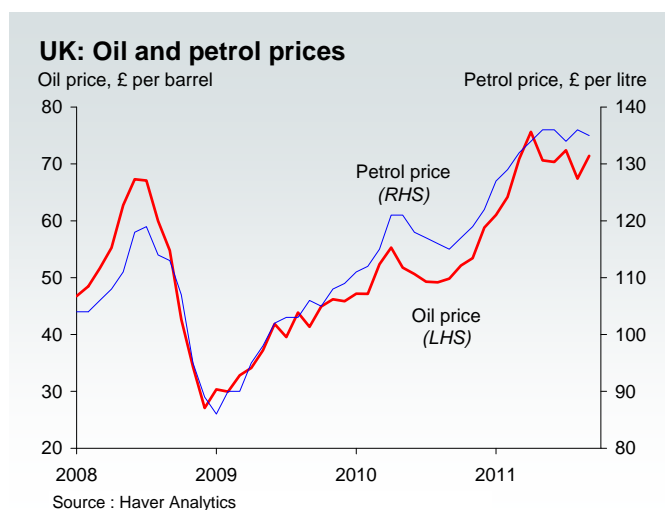
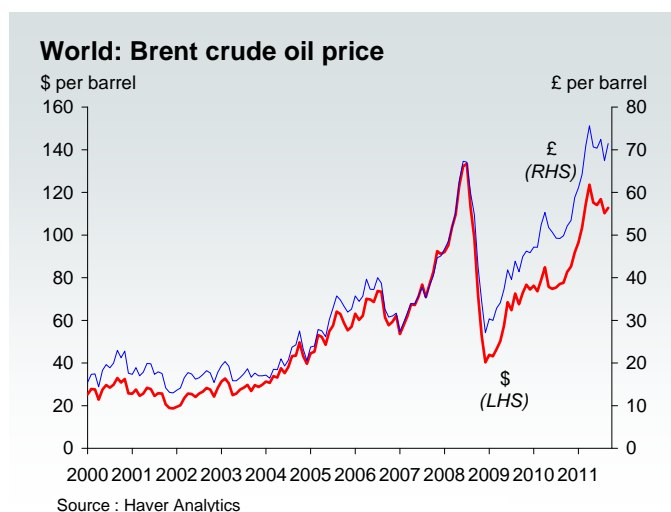
by a significant depreciation in the value of sterling during the financial crisis. There have also been two increases in the standard rate of VAT, one of which reversed a temporary VAT cut. The MPC has treated each of these as being factors which have caused temporary or one-off increases in the inflation rate, arguing consistently that the inflation rate would come back down as they fell out of the year-on-year calculation, because underlying inflation remained weak. This has seemed a reasonable assumption to make, given that the severity of the recession and fragility of the subsequent recovery has hinted at a sizeable amount of spare capacity. However, with inflation having continued to overshoot – and the MPC having had to repeatedly revise up its short-term forecasts for inflation – there is an increasing concern that there has been a structural change in UK inflation which may prevent inflation coming back to target.

## The VAT effect should reduce inflation significantly in early-2012...

Research conducted by the Office of National Statistics suggests that the January 2011 VAT increase from 17.5% to 20% added just under 0.8 percentage points (ppts) to CPI inflation, around twice the impact of the January 2010 increase from 15% to 17.5%. Taking into account the fact that VAT is not levied on a significant minority of the inflation basket – most notably food – this implied that just over half of the increase was passed on by retailers, with the rest absorbed into retailers' margins. Given that VAT is not scheduled to increase again in January 2012, and that inflation is a year-on-year comparison, we can reasonably expect that, all other things being equal, CPI inflation will slow by 0.8 ppts in January 2012.

## ...but the path of commodity prices is much less certain...

Another factor which has made a significant contribution to inflation in 2011 has been commodity prices and, in particular, oil prices. The fuels & lubricants component of the CPI accounted for 0.8 ppts of September's CPI rate of 5.2%, with prices of fuels & lubricants being almost 18% higher than a year earlier. On the face of it, this increase is completely accounted for by the increase in global crude oil prices – over the twelve months to September, crude oil prices rose by 45% and, accounting for the fact that the bulk of the cost of a litre of petrol is tax<sup>3</sup>, this provides a contribution almost identical to the 17% increase in retail petrol prices.



Delving a little deeper, however, it is clear that retail prices have been relatively 'sticky', failing to respond to the decline in crude oil prices since April. Concerns over the strength of the global recovery have caused oil prices to slide from \$124 per barrel in April to \$112 per barrel in September, yet retail petrol prices have remained stable at £1.34 per litre over the same period. This stickiness may reflect the notion that retailers are still selling stocks bought at the earlier higher prices, which would suggest some scope for prices to fall over the coming months.

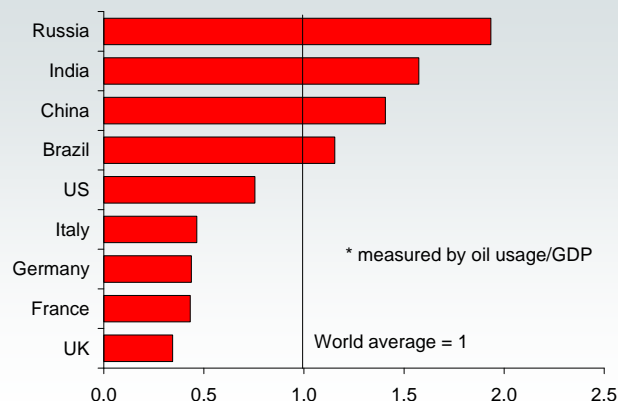
Beyond that the prospects for petrol prices are heavily reliant on global energy markets. Even though financial markets have seen significant turbulence over the past couple of months, with equities falling by 15-20% in response to concerns about the strength of the global recovery, the initial correction in oil prices – which briefly took them below \$100 per barrel – has been reversed and oil has continued to trade in a band of \$100-120 per barrel.

<sup>3</sup> The average retail price of a litre of unleaded petrol was £1.34 in September. Of this, 59 pence was fuel duty and 22 pence was VAT, leaving the retailer with just 53 pence.

Some of this stickiness is likely to have reflected supply-side factors, in particular the on-going uncertainty about supply from Libya and hurricane Irene, which should fade. But even if the global economy were to slow further, we are unlikely to see a significant correction in oil prices due to the strength of demand from emerging markets. While these economies would also be affected by weaker global demand, their domestic economies remain significantly stronger than those of the advanced economies, and the authorities in the emerging markets have much greater room for manoeuvre in terms of providing fiscal and monetary stimulus. Given that the emerging economies are much more energy intensive than the advanced economies, it is apparent that oil demand would not slow significantly were a slowdown in the advanced economies to be accompanied by sustained rapid growth in emerging markets, and against this backdrop it is unlikely that oil prices will see a significant correction. We expect prices to bottom out at around \$93 per barrel in early-2012 – a fairly modest decline from current levels and only a fraction of the fall experienced in 2008/09 – and they are likely to then pick up as the global economy recovers. As always there are significant risks attached to forecasts of commodity prices, given the potential for disruptions to supply, so an even higher oil price is not out of the question, particularly if emerging markets continue to grow strongly.

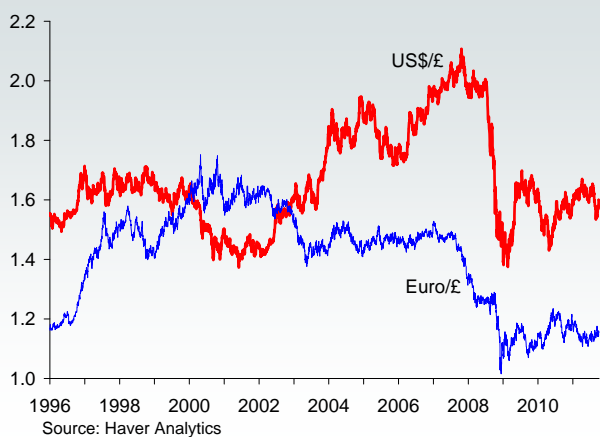
We must also consider the influence of the exchange rate in determining future prices of oil products. The steep depreciation of the pound from mid-2008 dampened the downward effects on UK inflation rates from falling oil prices during the recession and ensured that during early-2011 the sterling oil price surged back above its 2008-peak, despite dollar prices falling some way short of their previous highs. With UK economic prospects relatively subdued, as households and the government battle against high levels of indebtedness, it is unlikely that sterling will regain any of its previous strength and, indeed, our calculations suggest that it is still moderately overvalued against the dollar. As such, we expect to see the pound drift down further, reaching \$1.44 by 2015 from its current level of close to \$1.60, which would mean that there is a more substantial impact from higher oil prices on inflation in the UK than elsewhere.

**World: Relative oil intensity\***

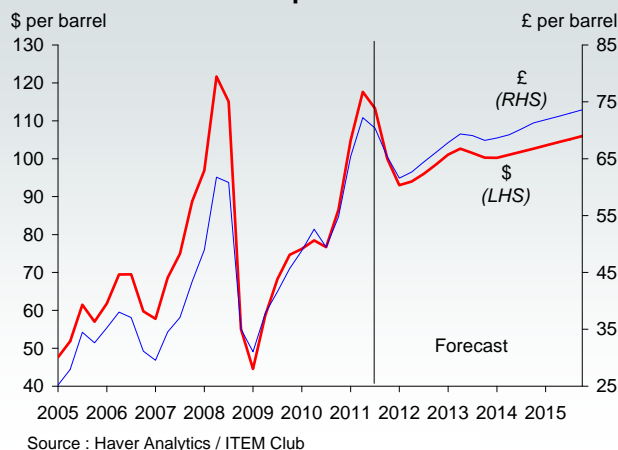


Source : Haver Analytics

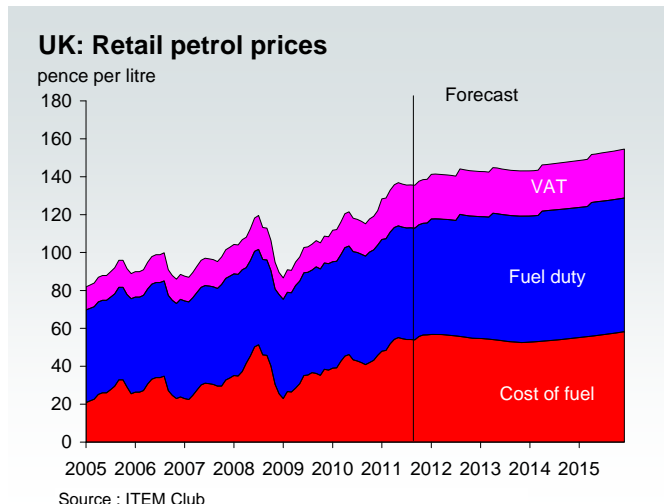
**UK: Sterling**



**World: Brent crude oil price**

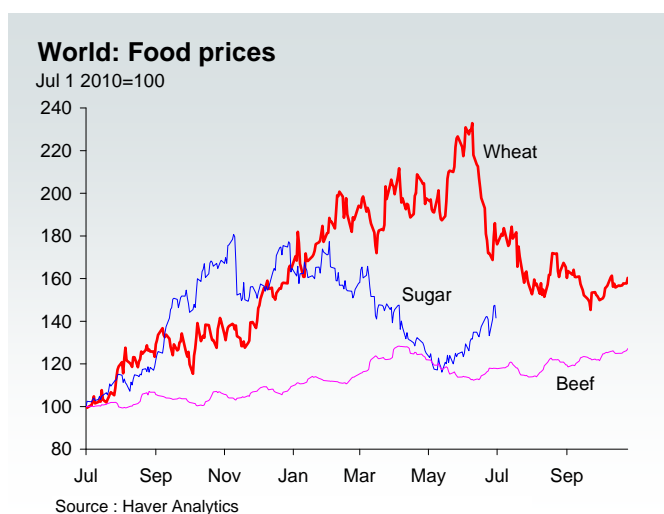
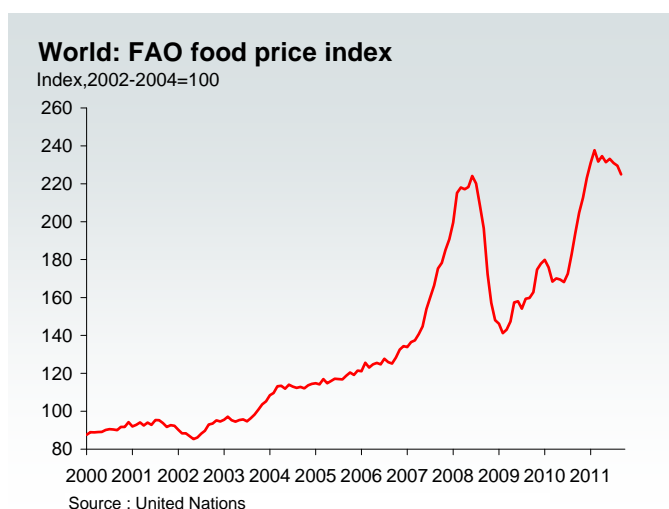


Furthermore, in the short term, in particular, the effects of fuel duty increases are likely to be relatively large. Though the last Budget saw fuel duty cut by 1 pence per litre and the regular annual increase postponed, that increase – of 3 pence per litre – will come into force in January 2012, and it will be swiftly followed by another in August 2012, when the indexation which should have happened in April 2012 is belatedly implemented – this is also likely to be in excess of 3 pence per litre. Normal indexation – by RPI rather than CPI inflation – in future years will keep retail petrol prices rising at a relatively rapid rate. Our calculations suggest that by the end of 2015 the average price for a litre of unleaded petrol could be as high as £1.54 per litre, with 96 pence of this total being accounted for by tax (fuel duty and VAT). We expect the fuels & lubricants component of the CPI to grow by 5.6% a year between 2011 and 2015, only slightly lower than the 6.1% a year average of the past five years.



## ...and food price inflation is likely to remain high

Food is another commodity that has been subject to significant price pressures over the course of the past year and this has also been reflected in UK inflation; food & non-alcoholic drinks contributed 1.2 ppts to the CPI inflation rate in September. The severity of the recent rises in food prices largely reflects a series of failed harvests for key crops in the second half of 2010 and early 2011, in particular wheat, where unpredictable weather ruined the crop in Russia. This caused wheat prices to more than double between July 2010 and July 2011 and the effects also fed into other foodstuffs, such as meats, where wheat products are an essential source of feed. The United Nations Food and Agriculture Organization (FAO) has reported a 30% increase in prices over the past year, although encouragingly their index has nudged downwards in recent months, suggesting that the worst of the price rises might be behind us.



As with oil, forecasts of future price movements are highly vulnerable to unexpected disruptions to supply. Early signs suggest that this year's plantings have gone well, partly encouraged by the higher returns promised by the recent price rises, raising hopes that supply will be strong and that producers will be able to begin to rebuild

inventories depleted by last year's poor harvests. This should encourage crop prices to stabilise, although the extent to which stocks were run down last year suggests there is little scope for prices to actually fall, and this scenario could still be thrown off track by more poor weather in key areas.

The fact that UK retail prices of food products have risen by only 7% over the year to September, in contrast to the 30% increase in commodity prices, implies that producers and retailers have been forced to absorb a significant proportion of the cost increases in their margins. This in turn raises the possibility that stability in crop prices might encourage those along the supply chain to attempt to rebuild their margins, but even so we would expect the pace of food price inflation to slow from 6.4% this year to 3.7% in 2012.

Beyond the short term, there are several reasons to expect further strong growth in food prices. Until global food stocks have been rebuilt, markets will always be vulnerable to unexpected supply shortages, which is likely to mean that prices continue to include sizeable risk premia. Pressure from the demand side will also remain intense, given the likelihood that the global population continues to grow rapidly. We expect UK food price inflation to average 3.8% a year from 2011-15, only slightly lower than the 4.7% over the last five years.

The price volatility of recent years is likely to remain a feature, partly because of the effect of the weather on supply, but also because the "financialisation" of commodity markets has increased the degree of speculation involved in commodity pricing.

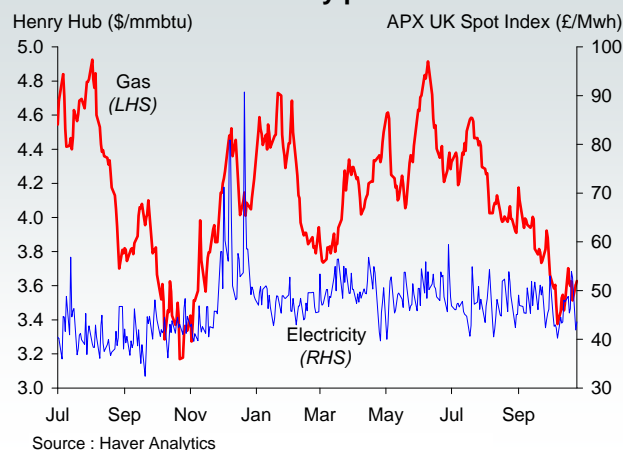
## Utilities prices will keep inflation high in the short-term

With all of the main six suppliers having announced price rises of between 15.4%-19% for gas and 4.5%-16% for electricity, higher domestic utility bills have had a significant impact on inflation rates in recent months. The bulk of the increases came into effect in August and September, but some of the later price increases are yet to enter the inflation index. Our calculations suggest that the contribution of the housing, electricity, gas & other fuels component of the CPI is likely to increase from 1.6 ppts in September to 1.8 ppts by the end of the year.

The nature of the industry means that utility prices tend to change relatively infrequently, but when they do move they tend to move by fairly significant amounts. The recent increases were a belated response to movements in wholesale markets earlier in the year, when gas prices in particular had risen sharply. However, in the past few months wholesale markets appear to have become becalmed, so at present it appears unlikely that any more sizeable price hikes are on the horizon, beyond the current round.

Nevertheless, it is likely that inflation will remain firm in this sector over the medium term. The past decade has been characterised by relatively low levels of investment and there is a need to invest in new power generation capacity to meet future energy needs, in addition to the cost implications of the green agenda and the need to comply with targets for lower carbon emissions. A significant proportion of the funding for investment in both of these areas is likely to come from domestic and commercial utilities bills. However, we think it unlikely that energy prices will spiral upwards because of the relationship between traditional forms of energy and green sources; increases in the price of

**World: Gas and electricity prices**

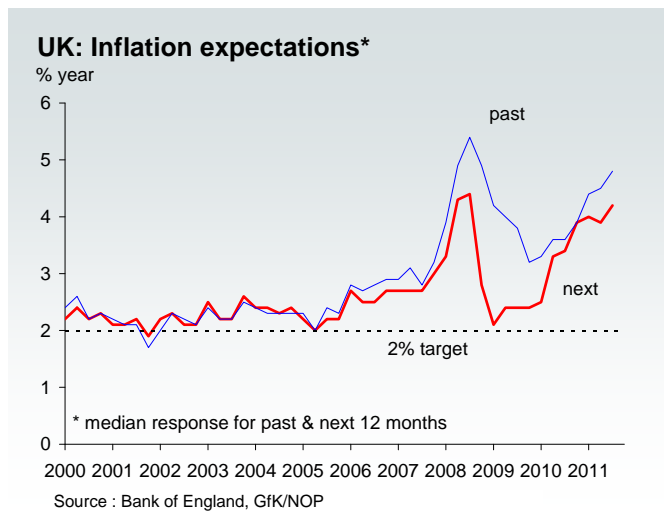


oil will increasingly make a range of green energy sources financially viable, which in turn would place a cap on energy prices as, in principle, prices cannot exceed the cost of the backstop technology over the medium term. At the very least this would make it unlikely that both oil and green energy prices would rise sharply simultaneously.

## Fears about a wage-price spiral are yet to be fulfilled

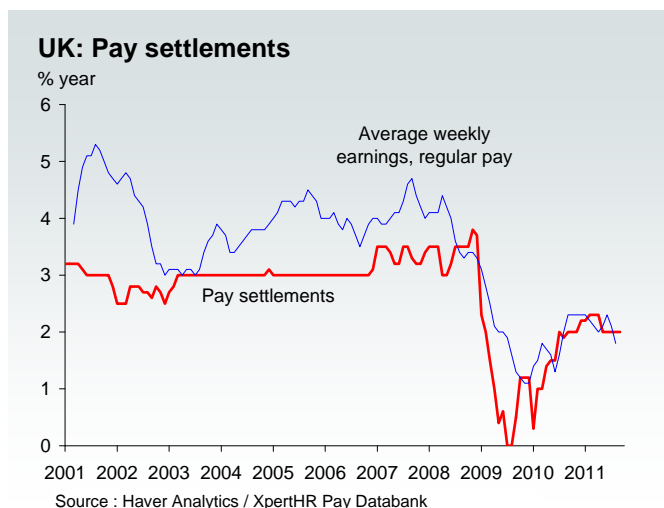
Most members of the MPC have taken a relatively relaxed view about these temporary factors, arguing that inflation will slow rapidly as they fade away. However, this would be reliant on core, or underlying, inflation remaining subdued, which in turn would assume an absence of pressures from either firms or workers. A small minority of the MPC has questioned whether this scenario might be threatened by the impact of the recent high rates of headline inflation on inflation expectations, particularly in terms of the impact on wage settlements.

Surveys certainly point to the fact that inflation expectations have risen over the past couple of years. The Bank of England/GfK NOP Inflation Attitudes Survey for August reported that the median expectation for the inflation rate over the next twelve months had risen to 4.2%, only just short of the record high of August 2008. The YouGov/Citi survey had reported a similar trend through the summer and had also reported a modest pickup in longer-term inflation expectations. However, both short- and longer-term expectations have weakened markedly in the past couple of months, as the global economic outlook has worsened.



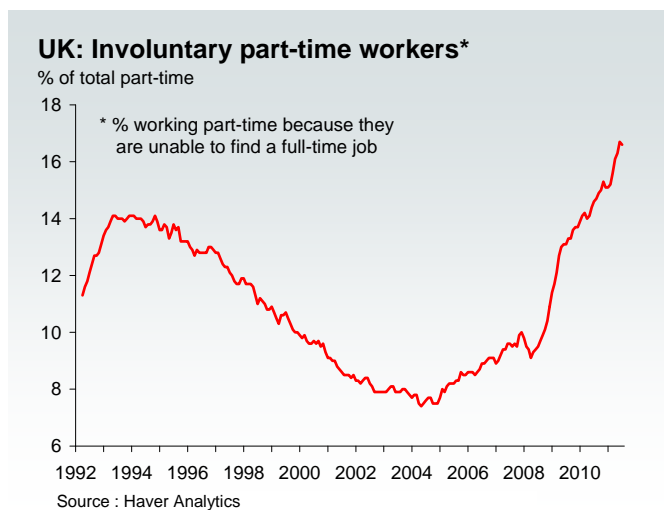
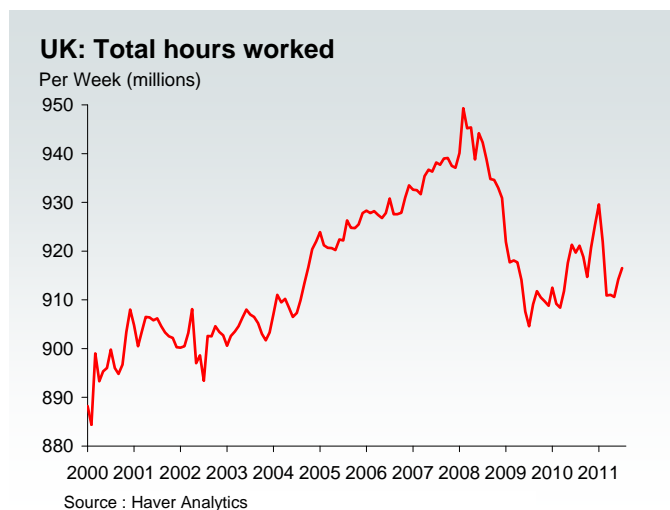
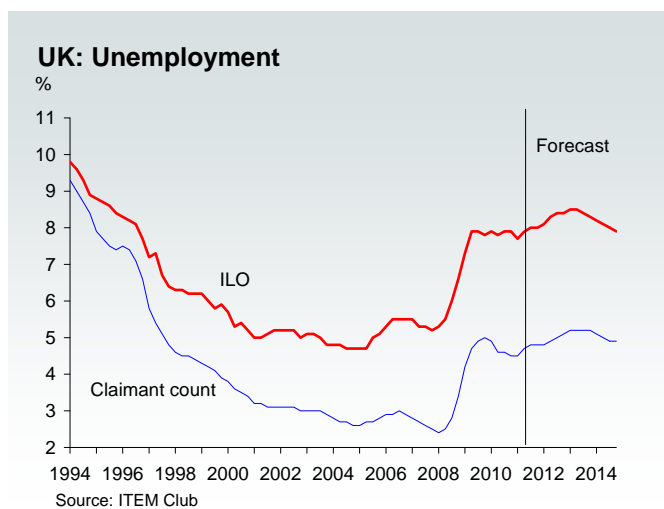
Moreover, the value of such surveys is very much open to question. They tend to show a very strong correlation between respondents' expectations and their perceptions of the current rate of inflation. Furthermore, the Bank of England/GfK NOP survey asks respondents for their perception of changes in 'prices' on a general basis and it is clear that over time the survey generates results which are significantly higher than the CPI measure of inflation – over the period from 2001-2010 CPI inflation averaged 2.1% a year, while the median response to the question on respondents' perception of movements over the previous year suggested that prices had increased by 2.9% a year. Clearly this upward bias, plus the correlation with current rates of inflation, must be factored in when interpreting the results of these surveys.

Even if there is some evidence of higher inflation expectations, as reported in these surveys, there is little evidence that this is having any impact on pay settlements. The regular pay element of the ONS Average Weekly Earnings series grew by just 1.8% in the three months to August, compared with a year earlier, with private sector pay growth similarly weak. Pay surveys tell a similar story, with the XpertHR Pay Databank reporting a median settlement of just 2.0% in September. While these figures are a little higher than those reported in 2009/10, when a number of companies had enforced wage freezes,



they remain well below pre-recession rates of pay growth and a long way short of the 4-4.5% rate which, given typical increases in productivity, is generally acknowledged to be consistent with a 2% inflation target.

Furthermore, the prospect of any significant build-up in wage pressures would appear to be very low. Large parts of the public sector began a two-year wage freeze in April, while even the lower-paid members of the public sector will have to make do with very low, below-inflation, settlements. The outlook for private sector pay is also weak, reflecting the significant amount of under-utilised resources available to firms. Though we are now two years into the recovery, and the Labour Force Survey reports that the economy has created around 300,000 new jobs, strong levels of inward migration have ensured that the level of unemployment remains close to the peaks it reached during the recession. What's more, the weak growth performance of the past year and heavy job losses in the public sector have brought about a renewed increase in jobless levels in recent months, which is likely to continue into next year at least. We expect the unemployment rate to head towards 8.5% by the end of next year, which contrasts with a NAIU<sup>4</sup> generally estimated to be between 5-6%, while levels of inactivity also remain close to recent highs, with a significant proportion of these people still wanting to work if the conditions were right.



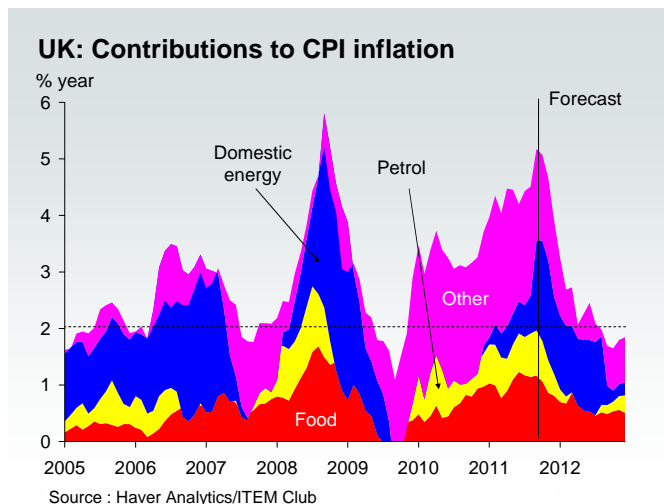
Moreover, despite a firm rebound over the second half of 2010, the total number of hours worked remains 3.5% below the early-2008 peak. In addition to the increase in the level of unemployment, many workers still remain on shortened working weeks or have been forced to switch to part-time employment because of a lack of full-time opportunities. This is demonstrated by responses to the ONS Labour Force Survey, with the proportion of part-time workers who are only working part-time because they cannot find a full-time job having risen from 9% at the beginning of 2007 to 16.6% in the June-August period.

<sup>4</sup> NAIU – Non-Accelerating Inflation Rate of Unemployment. Even when the economy is operating at its long-run potential there will still be some level of frictional unemployment – this is known as the NAIU

This suggests the existence of a significant pool of labour – made up of those without a job and those who would like to work more – which could be deployed to meet any increases in demand for labour. In such circumstances it is difficult to see why pay settlements would take off, apart from in a small collection of roles which require highly-skilled labour where workers might have more pay bargaining power.

## Inflation should slow back towards target next year...

The MPC has long argued that CPI inflation will slow back to – or even below – the 2% target next year and this certainly looks feasible. The impact of the VAT increase falling out of the year-on-year change should reduce inflation by 0.8 ppts on its own, while the strong contributions from food, petrol and energy prices should fade as the year progresses. With the pressures on core inflation from the labour market and corporate behaviour likely to remain subdued in the short term, we expect CPI inflation to be below 2% by the end of 2012. In this context, the Bank's policy of tolerating the recent high rates of inflation would appear to be sensible, particularly given the state of the wider economy.



## ...but longer term the outlook is less certain...

However, longer term the outlook for inflation is much more uncertain. Future prospects for inflation and the economy are critically affected by fluctuations in the shares of output going to wages and profits, with the share of profits having been relatively high in recent years, helping to explain why the consumer is currently indebted and depressed.

It is well known that the shares of wages and profits in GDP vary with the economic cycle. Also, that the share of profits has tended to increase at the expense of wages in recent decades, due to factors like globalisation as well as changes in industrial structure and union membership. Studying the relationship between these factors over time can help us to understand how the situation might evolve over the medium term. We use wages as shorthand here for total labour remuneration plus labour costs like employers' social security contributions, and represent them algebraically as  $W$ . Similarly  $S$  represents operating surplus or the measure of profits in the national income accounts. Adding up  $W$  and  $S$  then gives 'GDP at factor cost': basically output at factory gate prices.

These factor incomes can also be affected by indirect taxes like VAT, depending upon their incidence: whether they are ultimately borne by consumers through lower real wages or producers through lower margins. In the national income accounts taxes and subsidies are represented by the price adjustment that accounts for the difference between 'GDP at factor cost' and 'GDP at market prices'. We represent this net tax adjustment as  $N$  and split GDP at market prices up into  $W + S + N$ .

Import prices can have similar effects on factor incomes. However GDP is a value added concept: imports are subtracted from gross output (total final expenditure in the national income accounts) to get GDP at market prices. We represent the value of imports as  $M$  and gross output by  $Q$  and then split this up into its four components:

$$Q = W + S + N + M$$

All of these items are measured in current prices or money of the day. Finally, dividing across by Q gives the shares of labour, profits, net taxes and imports in gross output which we represent with the respective lower case letters:

$$1 = w + s + n + m$$

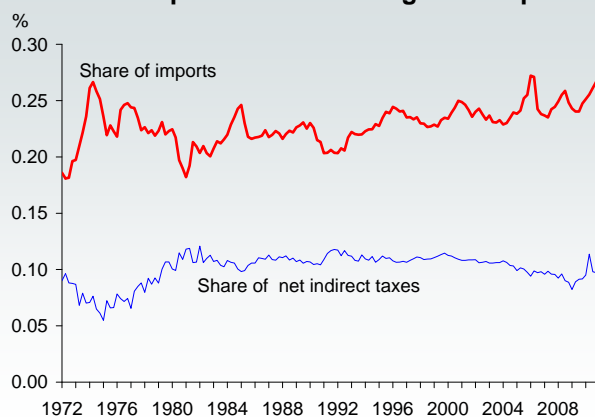
So  $w=W/Q$  and represents labour's share of the national cake while  $s=S/Q$  and represents capital's share. These shares are obviously the outcome of a huge range of economic and financial decisions taken by governments, firms and workers in the UK and elsewhere. In economic parlance they are 'endogenous' rather than 'exogenous'. In particular they depend upon the ability of producers to economise on labour and raw materials when their relative prices increase. A simple benchmark assumption often made by economists is that when the price of a factor goes up by  $x\%$  then the quantity used can be reduced by  $x\%$  (by using other factors instead). This would keep the total cost of the factor (and its share of output) unchanged. Factor shares are constant under this assumption. However, in practice the scope for factor substitution is less than this. So, for example, when the prices of oil and other commodities increase, as they have in recent years, the share of gross output that has to be spent on imports tends to increase too. Obviously if their share goes up some other share must fall. If government keeps (n) fixed then either wages or profits or perhaps both must be squeezed. So what happens?

This outcome depends critically upon the strength of product and labour markets and the bargaining power of labour and capital in the economy at any given moment of time. Economic modellers try to capture this using econometric equations that show how wages respond to changes in prices and unemployment, and how prices in turn respond to wages, other costs and the strength of demand. However it is interesting to cut through these equations and just look at how the shares of wages and profits respond to changes in import and tax shares. It is important to also allow for other influences like the state of the economic cycle when conducting this sort of analysis.

Although these shares are all endogenous, it is reasonable to assume here that the import share (m) is determined independently by the prices of commodities in world markets. We also regard the net tax take (n) as an independent variable. Besides discretionary changes in fiscal policy, this will admittedly depend upon the state of the economic cycle, but we can allow for that by using variables like the output gap (g) as additional drivers.

It is interesting to see how these shares have moved over time before we look at these statistical relationships. The chart to the right shows how the import and net tax shares have moved since the early 1970s, the last time that they exhibited strong upward movement. Indeed the rise in oil and other import costs between 1972 and 1974 was much sharper than the rise seen over the last five years. This share fell back during the recessions of the early 1980s, early 1990s and following the recent recession. Also, the increase in the tax take following the sterling crisis and the IMF package of 1976 had a much bigger impact than the recent moves in VAT and other indirect taxes.

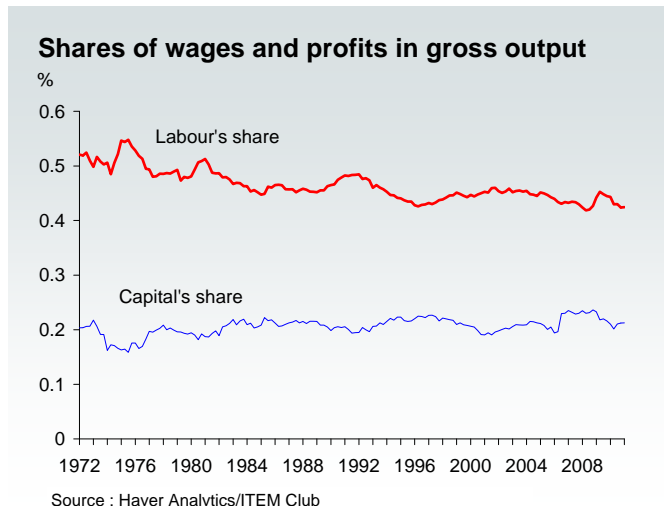
**Shares of imports and taxes in gross output**



Source : Haver Analytics/ITEM Club

The chart to the right shows the behaviour of the wage and profit shares over this period. It is hard to see the effect of changes in import and tax shares, partly because other influences are at work. In particular there is a marked downtrend in labour's share due to factors like globalisation. When  $w$  falls this is obviously not good news for workers and consumers: either wages fall relative to prices (meaning a fall in real wages) or labour input falls per unit of gross output (meaning a deterioration in employment prospects).

In order to disentangle these various influences, we ran some statistical regressions explaining  $w$  and  $s$  in terms of  $m$  and  $n$ . We also added a time trend ( $t$ ) and the OECD's measure of the UK output gap ( $g$ ). This gave the following pair of regression equations for labour's and capital's shares:



## Labour's share:

$$w = 0.7460 - 0.6793 m - 1.0409 n - 0.1146 g - 0.02694 t$$

(30.2)      (8.13)      (10.4)      (3.00)      (7.82)<sup>5</sup>

$$\sigma = 0.0117526 \quad \text{RSS} = 0.020994$$

## Capital's share

$$s = 0.2539 - 0.3206 m + 0.0409 n + 0.1146 g + 0.02694 t$$

(30.2)      (3.84)      (0.40)      (3.00)      (7.82)

$$\sigma = 0.0117526 \quad \text{RSS} = 0.020994$$

These results are clearly dominated by the downward time trend in labour's gross output share evident in the charts. But the other factors are also very significant. An increase in the relative price of imports and an increase in the import shares squeezes wages more than profits in absolute terms, but because the share of wages is larger to start with the percentage effect is smaller than it is for profits. Taxes appear to have an insignificant effect on profits:

<sup>5</sup> The figures in brackets under the coefficients in these equations show  $t$ -statistics. A value over 2 indicates that there is less than a 1 in 20 chance of the associated coefficient taking the opposite sign. Bigger  $t$ -statistics give us a greater degree of confidence in the result. So for example the value of 3 for the effect of ( $g$ ) on ( $s$ ) tells us that there is less than a 1 in 100 chance that an economic recovery reduces capital's share, while the value of 0.4 tells us that the effect of ( $n$ ) on ( $s$ ) is indeterminate: statistically insignificant. Because all these shares add up to one, labour's share reflects capital's share: the positive time trend in labour's share mirrors the opposite trend in capital's share while the effect of a rise in  $m$  or  $n$  is shared between the two factors.

taxes apparently just squeeze labour's share. Finally, as expected the output gap has a positive effect on profits and a negative effect on wages' share.

This analysis is relatively simple and, as usual in economics, various caveats are in order. Firstly the results are clearly dominated by the big fluctuations in import prices and taxes seen in the early 1970s. However, if anything labour's bargaining and market power has weakened since then, so the negative effect of recent changes in these variables on labour's share will if anything have been stronger than the regression results indicate. Second, we have used the total import bill here, which includes not just oil and basic materials but also imports of manufactured and semi-finished goods. The latter are likely to impact labour's share differently from the former, working indirectly through competition in product markets. However the relative prices of manufactures tend to move more slowly than those of commodities, and most of the fluctuations shown in the charts and picked up by the regressions are in fact due to commodity prices.

The inevitable conclusion thus seems to be that as globalisation continues, rising commodity prices and competition in international labour and product markets is likely to squeeze labour's share even further. Moreover, the recovery when it comes will benefit capital more than labour. Although job prospects will surely eventually improve, helping to support wage settlements, the improvement in demand will apparently dominate, allowing firms to restore the profit margins lost during the recession and push up prices at the expense of labour. All in all, this analysis suggests that the pressure on the workforce and hence high street and the housing market could last much longer than conventional models of the economy would suggest.

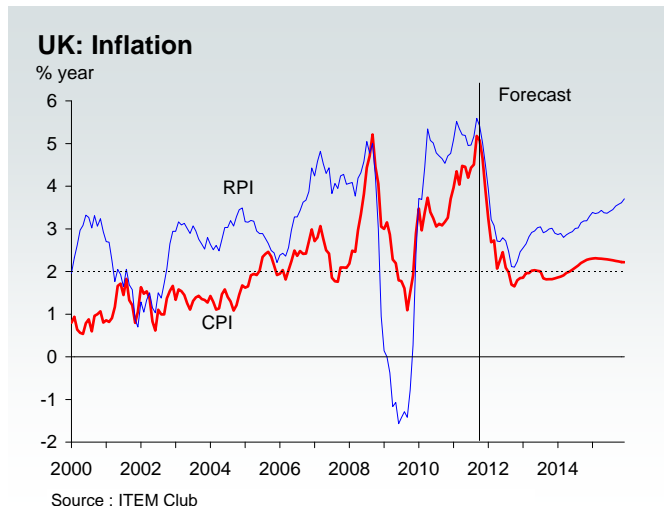
## ...and the current inflation target may be harder to achieve...

Applying this to our analysis of the prospects for measures of consumer prices it would suggest that, once the recovery begins to gain momentum, firms will seek to restore profit margins which had been damaged during the recession. The degree to which they are able to do this does depend upon the degree of spare capacity but, given that most surveys of capacity utilisation report similar results to this stage of previous cycles – despite the much steeper decline in output during this recession – we have no reason to believe that firms will increase margins any more slowly than they did in the past. And while our analysis shows that labour may be limited in the extent to which it can defend its share, in terms of growth rates we would still expect wages to pick up to faster rates than we have seen in the recent past. Each of these factors is likely to put upward pressure on core inflation in the recovery phase.

At the same time, import costs are likely to continue to exert significant pressures. This is partly due to the sustained strength of demand for resources from emerging economies, which will force up commodity prices. It is also because unit labour costs are rising rapidly in emerging economies which, in combination with higher raw material costs, will mean that the manufactured goods that we import from emerging economies are unlikely to remain quite as cheap as they have been in the past. The experience of the last decade emphasises the importance of manufactured goods prices in determining UK inflation rates, with inflation remaining low and stable while goods prices were suppressed from 2000-2005 and then moving higher as the forces of globalisation had a greater effect. Indeed, on this basis it could be argued that the prices of manufactured imports are even more important than commodities to UK inflation prospects.

This means that while CPI inflation is likely to dip below target towards the end of next year, further out it is likely to be more difficult to achieve the 2% target on a consistent basis, unless services inflation weakens to offset the greater pressures from the goods side, something which we view as being unlikely. Our forecast shows CPI inflation edging up in later years to average 2.3% in 2015.

RPI inflation is likely to be higher still; on top of the normal spread caused by variations in coverage and the impact of the 'formula effect'<sup>6</sup>, there will be an unusually large contribution to the annual rate from the mortgage interest payments component, once interest rates begin to increase, because of their current exceptionally low level. Given that RPI is still used as the benchmark for many pay settlements, this may provide some buffer against the squeeze on earnings growth.



Inflation forecast (Annual percentage changes unless specified)							
	2000-09	2010	2011	2012	2013	2014	2015
<b>CPI</b>	1.8	3.3	4.4	2.2	1.9	2.1	2.3
<b>Food and non-alcoholic drinks</b>	2.9	4.0	6.4	3.7	3.1	2.8	2.8
<b>Electricity, Gas, etc</b>	7.9	-2.8	9.9	10.2	2.8	2.5	2.6
<b>Transport costs</b>	3.6	16.7	14.6	2.2	6.0	2.3	3.6
<b>Other</b>	1.4	2.9	3.2	1.2	1.3	1.8	2.0
<b>RPI</b>	2.6	4.6	5.2	2.7	2.9	3.0	3.5
<b>Mortgage interest payments</b>	1.7	0.5	3.4	5.3	20.0	12.2	14.3
<b>Housing depreciation</b>	7.6	5.9	-0.9	-2.0	-1.5	2.1	4.5
<b>Assumptions:</b>							
<b>Oil price (\$ per barrel)</b>	49.6	79.5	109.1	95.6	101.3	101.5	104.7
<b>US\$/£ exchange rate</b>	1.70	1.55	1.59	1.50	1.48	1.45	1.44
<b>Bank Rate (%)</b>	4.33	0.50	0.50	0.53	1.27	2.27	3.92

Source: ITEM Club

<sup>6</sup> Though there are many similarities between the CPI and RPI, there are three key differences which mean that, typically, RPI inflation is a little higher than CPI inflation. These are the differences in the variables covered, differences in the population base and the fact that the CPI is aggregated using the geometric mean, while the RPI is aggregated using the arithmetic mean

## ...which has implications for policy and for the wider economy

It must be stressed that while this analysis points to inflation persistently overshooting the 2% target over the medium term, other things being equal, the size of these overshoots is expected to be relatively small. However, were this scenario to play out, it would pose some dilemmas for the authorities. Under the current regime it might be expected that the MPC would be forced to adopt higher interest rates over the next decade than they had prior to the financial crisis, in an attempt to suppress core, or domestically-generated, inflation and offset the impact on the overall inflation rate from the sustained strong growth in import costs. However, in what is already likely to be a lower growth environment, this would further depress UK growth prospects.

An oft-forgotten part of the MPC's remit, is that it should "support the Government's economic objectives including those for growth and employment". Therefore, to balance the need to support growth with the likelihood of greater inflationary pressures resulting from globalisation, one option might be to adjust the inflation target upwards, say back to 2½%, to accommodate the structural change that is taking place. Adjusting the target would cause some to question the credibility of the inflation-targeting regime, and it would be difficult for the government to avoid the accusation that it was reducing the burden of debt via inflationary finance. However, persistent overshoots of the target would run similar risks. The authorities might also have to find a way of accommodating greater volatility in inflation rates, given the potential for greater instability in commodity markets.

Higher rates of inflation could also alter behaviour in a number of sectors, given that inflation rates are a crucial input into measures of performance. Investors, in particular, typically look to secure positive real returns and an asset's performance against inflation is a key input into asset allocation decisions. Research carried out for the Investment Property Forum<sup>7</sup> suggests that investors will determine the balance of assets in their portfolios depending upon their perception of the inflation environment, with the research suggesting that a higher inflation environment would lead investors to favour equities – which history shows tends to offer a better hedge against inflation – over other assets such as property.

## There are many risks to the forecast

As always there are risks around this forecast, both to the upside and the downside. The deteriorating global economic outlook poses the greatest downside risk to the inflation forecast in the short term; a further weakening of the outlook would most likely be accompanied by even steeper declines in commodity prices, thus reducing the strength of imported inflation, while domestically-generated inflation would also be suppressed by weak domestic demand.

Risks to the upside are concentrated around commodity prices. Our baseline forecast assumes that emerging economies are successful in engineering a soft landing, through tighter monetary policy, but there remains a risk that these economies might overheat, particularly if the anticipated slowdown in world trade does not come to pass. Such a scenario could underpin a renewed pickup in commodity prices, similar to that experienced in the early part of this year. Furthermore, there is always the potential for commodity prices to be affected by unexpected disruptions to supply, usually attributable to the weather, which by their nature are virtually impossible to predict.

<sup>7</sup> "Property and inflation", Investment Property Forum, April 2011

## Implications for business

- Assuming that policymakers are successful in navigating a course through the problems currently facing the global economy, the prospect of lower input costs and a strengthening recovery next year should present firms with the opportunity to rebuild profit margins.
- The recent volatility in commodity markets is likely to become an increasingly common feature in the future. Firms will increasingly need to plan for alternative scenarios around different levels of input prices and hedging is likely to become increasingly common.
- The threat of higher inflation over the medium term suggests that interest rates may need to be higher than they have been in the past, if the authorities are unwilling to alter the current target. Firms should be aware of this possibility and plan accordingly.
- Persistently high inflation in the food and energy sectors implies a prolonged squeeze on household resources. Firms supplying goods and services to the consumer sector may find that growth in demand is not as strong as it was prior to the recession, particularly for goods and services which could be deemed to be non-essentials.
- Sectors where inflation is used as an input into performance measurement, such as property investment, should consider the impact that persistently higher rates of inflation would have on behaviour.