Spencer Dale: MPC in the dock

Speech by Mr Spencer Dale, Executive Director, Monetary Policy, and Chief Economist of the Bank of England, at the National Asset-Liability Management Global Conference, London, 24 March 2011.

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The remit of the Monetary Policy Committee is clear: to hit the 2% inflation target. But inflation in February was 4.4% – well above the target. It has been above target for much of the past 5 years. And it is likely to remain so for the next year or so.

At the same time, monetary policy remains at extraordinary loose levels. This month marks the second anniversary of Bank Rate being reduced to 0.5%; it's lowest ever level. And the stock of asset purchases financed by central bank reserves – QE – remains at £200 billion.

There is an onus on the Committee to explain how its actions are consistent with its remit. There is a good case for the defence. But we need to continue to make it.

It needs to be made if international investors, such as many of you here this morning, are going to continue to have the confidence to invest in the UK.

More generally, it needs to be made to preserve the accountability and credibility of the Committee.

The MPC is accountable for hitting the inflation target. Developments in the rest of the world certainly affect us. And inflation will not always be close to target. But ultimately UK inflation is our responsibility: it is made and controlled in Threadneedle Street.

The credibility of monetary policy relies on companies and households having confidence that the Committee will keep inflation close to target. After a series of failed monetary frameworks in the 1970s and 80s, the gains in credibility associated with the introduction of inflation targeting and the creation of an independent policy committee greatly improved the functioning of our economy. The task of maintaining low and stable inflation was made substantially easier, and we enjoyed a sustained period of economic stability. We lose those hard-fought gains at our peril.

The MPC stands charged on four counts. Why is inflation so high? Why has inflation been so much higher than we expected? Could inflation remain high? And how is the current stance of policy consistent with the inflation outlook?

My task today is to make the case for the defence.

Why is inflation so high?

On the first count – why is inflation so high – the case for the defence has been advanced by a number of my colleagues in recent months and so hopefully will be familiar to many of you.[1] Over the past few years, our economy has been hit by a series of large price level shocks – to oil and other commodity prices, to VAT, and to the sterling exchange rate – which have raised companies' costs and put upward pressure on prices. Together these factors can more than account for the strength of inflation.

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1 See for example the speeches by Bean (2011), King (2011), Miles (2011), and Posen (2011).

Indeed, recent analysis in the Bank's *Inflation Report* suggests that these factors can account for a rise in the level of consumer prices since the beginning of 2007 of between 8–12%.[2] This dwarfs the extent to which inflation has exceeded the 2% inflation target over the same period.

Now, if we really were in a Court of Law, I fear the Judge may be looking down on me at this point with a degree of disdain, suggesting that this sounds like a series of excuses. "Inflation is inflation", he or she may say, "whatever its cause. Your job is to keep inflation close to target".

I've considerable sympathy for this argument: the high and variable rates of inflation seen in recent years have affected the ability of both households and companies to plan their spending and investment decisions with any degree of certainty.

But the remit of the MPC recognises that trying to keep inflation at target in the face of large shocks and disturbances "may cause undesirable volatility in output."[3] I fear that to some this might sound like I'm resorting to technical loop-holes to bolster my defence. But that is not the case. This element of the remit has been central to the operation of monetary policy in recent years.

The foremost task of monetary policy over the past few years has been to ensure that the financial crisis did not lead to a prolonged depression. To have offset these price level shocks would have meant presiding over an even deeper recession. I'm not saying that if I had had perfect foresight, I wouldn't have changed my policy stance at all. But the hurdle for wanting to have had materially tighter policy in the face of the most severe downturn in the post-war period is pretty high.

But this argument is hypothetical. As many of you may know, the MPC did not have perfect foresight. Indeed, far from it! Which leads to the second charge against the MPC: why has inflation been so much higher than we expected?

Why has inflation been so much higher than we expected?

On the Committee, we always stress that the uncertainty associated with forecasting inflation means that the forecasts – and outturns relative to those forecasts – should be judged in terms of the entire forecast distribution rather than a single point forecast. But even viewed in this way, inflation in recent years has turned out significantly higher than we thought at all likely. Consider, for example, the forecast the Committee made two years ago in February 2009. At that time, the probability the Committee attached to inflation being above 3% in 2010 was less than 5% in each quarter. In the event, CPI inflation was above 3% in every quarter of 2010 and averaged 3.3% (Chart 1). However viewed, there is a prolonged period of unexpectedly high inflation that needs to be explained.

That explanation comes in two halves, with the source of the inflation surprise in 2009 different from that in 2010.

In 2009, our surprise largely stemmed from the extent to which the increase in import prices associated with sterling's depreciation was passed through into higher consumer prices. The

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[2] See the box on page 34–35 of the February *Inflation Report*. The box explains how a range of estimates suggest that these factors might have added between 6% – 10.5% to the level of prices between 2007 and the end of 2010. My numbers update this analysis for the recent impact of the January 2011 VAT rise and additional increases in energy and import prices.

[3] The relevant clause of the remit states "The framework is based on the recognition that the actual inflation rate will on occasions depart from its target as a result of shocks and disturbances. Attempts to keep inflation at the inflation target in these circumstances may cause undesirable volatility in output." See http://www.hm-treasury.gov.uk/d/open_letter_from_chx_to_boe_22032011.pdf

MPC's initial judgement was that over the next few years less than half of the increase in import prices would feed into higher UK consumer prices, with the remainder being absorbed in margins or lower nominal wages. This judgement was based in part on a number of influential studies made in the years prior to sterling's depreciation which suggested that the degree of exchange rate pass-through in many countries, including the UK, had fallen significantly during the period of Great Moderation. Indeed, a general view had emerged amongst many academics and commentators that pass-through in many major economies had fallen close to zero.[4]

The MPC's initial judgement that around 40% or so of the increase in import prices would pass through into consumer prices was at the top end of this emerging view. However, that judgement now looks woefully optimistic compared to the degree of pass-through we think has occurred, which is closer to 100%.[5] This error of judgement can more than account for the surprising strength of inflation through 2009 (Chart 2).

However, it accounts for much less of the surprise in 2010, since the extent of additional pass-through has lessened as time has gone on.[6] Instead, the 2010 surprise largely stems from the sharp pickup in import price inflation seen through much of last year, driven by the surge in commodity prices. At the time we made the February 2009 forecast, we expected import prices to increase only slightly in 2010. In the event, the prices of oil, food and metals increased by between 20 and 40% during 2010, leading to a further bout of import price inflation.

These higher commodity prices directly affect the prices of the food and energy we consume. But the effects go wider than that. Higher metal prices raise the cost of imported cars. Likewise, cotton prices and the cost of clothes. All told, the unexpected increase in commodity and world trade prices can account for the lion's share of the surprising strength in inflation in 2010 (Chart 3).

So there are two significant factors accounting for the recent extended period of higher than expected inflation.[7] In 2009, the surprising strength largely reflects greater than expected pass-through from sterling's depreciation into consumer prices. There were good reasons for

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4 Taylor (2008) argued that the global economy had experienced a reduction in the degree of exchange rate pass-through in recent years. Microeconomic studies attributed this decline to increased globalisation, which increased competition between domestic and foreign firms (Campa and Goldberg (2006)). Macroeconomic studies argued that this was due to monetary policy's focus on price stability which caused prices to adjust more slowly (Devereux and Engel (2001), Taylor (2000, 2007), Devereux, Engel and Storgaard (2004)). Empirical studies such as Ihrig et al (2006), found that the exchange rate pass-through to consumer prices in the U.K. had fallen from 0.20 before the 1990s to almost zero thereafter; similar effects were found in other G7 countries with the exception of Germany.

5 The February 2011 *Inflation Report* (Section 4 and the box on pages 34–35) describe estimates which suggest that import price increases since 2007 have added 4% to 6% to the overall price level. This equates to pass-through of between 66% and 100%. I discussed some reasons for why the degree of pass-through may have been larger or at least faster than predicted by earlier studies in a speech last year (Dale 2010).

6 The analysis presented here is based on the forecast made in February 2009. The extent of the surprise stemming from the degree of exchange rate pass-through in subsequent forecasts reduced more quickly than suggested by this analysis since the MPC learnt from this high pass-through and adjusted subsequent projections accordingly.

7 There are of course many other elements of the MPC's forecasts which have differed from what was projected. For example, previous Bank analysis (see the box on pages 48–49 of the August 2010 *Inflation Report*) has highlighted the smaller than expected impact from the weakness of demand. Acting in the opposite direction, it appears that consumer-facing companies may have squeezed their margins by more than had been anticipated during 2009/10. The various changes to VAT during this period have also complicated the task of forecasting inflation. However, relative to the February 2009 forecast considered here, changes in VAT did not contribute significantly to the surprising strength of inflation in 2009/10, since the effects of the temporary reduction in VAT in December 2008 were included in that forecast, and the main impact of the more recent increase in VAT did not come through until the first quarter of this year.

thinking that the degree of pass through may be relatively limited, but by the start of 2010 that judgement was shown to have been wrong and we have incorporated close to full-pass through in forecasts since then. By contrast, the unexpected strength of inflation through much of 2010 largely stems from the surge in commodity prices.

Could inflation remain high?

To summarise: there's no great puzzle as to why inflation has been above target for much of the past few years. Our economy has been subject to a series of large shocks – to oil and other commodity prices, to VAT, and to the sterling exchange rate – which have raised inflation. The scale of these shocks can more than account for the overshoot of inflation relative to target. Moreover, it is possible, albeit with the benefit of hindsight, to explain why inflation in recent years has been higher than we expected.

But that is all in the past. What matters for monetary policy are the prospects for inflation over the next 2 to 3 years.

My broad view of the inflation outlook is similar to that described in the February *Inflation Report*. Inflation will probably rise further in the near-term as recent commodity price increases pass through the supply chain. But further out, inflation is likely to fall back as the temporary impacts of the price level shocks wane and the slack in the economy associated with the deep recession from which we are only gradually recovering continues to pull down on inflation. But the risks and uncertainties associated with the inflation outlook means it is impossible to know with any certainty by how much and over what period inflation will moderate.

Indeed, it is quite possible that inflation may be considerably higher or lower than the central view taken in the February Report. This leads to the third item on our charge sheet: could inflation remain high? The simple answer to this question is – I'm afraid – yes. I would highlight two risks in particular.

The first is that global price pressures continue to add to domestic inflation. There are a number of potential channels through which this could operate.

At first blush, the most natural suspect might appear to be a continuation of the recent rapid increases in the prices of oil and other commodities. As I said, commodity prices have increased sharply over the past year and the strong demand from emerging economies, especially China, which has underpinned much of that rise, looks set to continue.[8] But this ignores the fact that one of the reasons why commodity prices increased so much through 2010 was exactly because demand was expected to remain strong.

Indeed, looking ahead, futures prices are broadly flat. Now there are many reasons why commodity prices may not be expected to follow exactly the path implied by futures prices. For example, if investors require a positive risk premium for holding commodities, or because some commodities cannot be easily stored. And further sharp movements in commodity prices are certainly possible. But I wouldn't expect to see rapid increases in commodities prices of the like seen over the past year unless global demand turned out to be significantly stronger – or supply weaker – than currently anticipated.

But inflation at home could also be affected by more general inflationary trends. Average inflation in the largest emerging economies increased from 2.8% to 5.3% last year.[9] This in large part reflects rising local and global food prices. But overheating in many emerging

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[8] Events in Japan and the Middle East and North Africa have also had an important influence on commodity prices in recent weeks. Oil prices have increased reflecting fears of supply disruption and heightened risk premium, but some non-oil commodity prices have fallen in response to concerns about weakening demand.

[9] This group covers the BRIC economies plus 22 other emerging and newly industrialised economies.

economies is playing an increasing role. These economies account for a little under 20% of the UK's imports. So if inflation remains elevated in these countries this could have a material impact on domestic inflation.

Under some circumstances, we may expect the impact of high inflation in overseas' economies to be offset by a corresponding depreciation in their exchange rates. But where economies operate pegged exchange rate regimes it is far from clear that this can be relied upon, at least in the near term.

A third external factor which could add to domestic inflation is if there is further pass-through from the past depreciation of sterling. Our central view is that there has been close to 100% pass through in terms of the direct impact of higher import prices on to consumer prices. But it is hard to be precise about the exact degree of pass-through, and the range of estimates included in the February *Inflation Report* suggest that pass through to date may be as low as two-thirds. Moreover, it is quite possible that pass-through may exceed 100% if companies making domestically produced goods and services are able to use the increased competitiveness associated with sterling's depreciation to widen their margins.[10]

So there are a number of potential channels through which developments abroad may affect domestic inflation.

But to repeat a point I made up front: inflation is home made. If we think that global price pressures are likely to push up on CPI inflation for an extended period, UK monetary policy will need to be set in such a way as to reduce domestically-generated inflation, and so leave room for these external price pressures. And to respond to an argument I have seen made by a number of commentators in recent months. No: raising Bank Rate will not directly dampen global inflation. But it can ensure that it does not lead to high and persistent domestic inflation.

The second upside risk to inflation that I would highlight is if the prolonged period of above target inflation erodes the public's confidence that the MPC will keep inflation close to target.

Inflation has been above target for 49 out of the past 60 months. Over that 5 year period, inflation has averaged 2.8%. Inflation is likely to remain above target for the next year or so. This suggests that by mid 2012, inflation is likely to have been above target for the best part of six and a half years.

Yes, it is perfectly possible to explain why inflation has been so high for so long. And yes, there are good reasons why monetary policy did not try to keep inflation closer to target during this period. But just like the Judge looking down on me earlier, to some people, at some point, this may just start to sound like a series of excuses. This risk is heightened by the fact that the MPC has consistently under-predicted inflation during this period. It is much easier to be wise after the event. For many people, the one thing about inflation they know with certainty is by how much their cost of living has increased in recent years. And if they take any signal from that about the path of future inflation, this could have significant implications.

Discussions of MPC credibility are often framed in terms of a set of binary arguments. Has the MPC lost its credibility or not? Are inflation expectations anchored or de-anchored?

This approach encourages a focus on measures of medium-term inflation expectations. The rate of inflation expected over the next year or so may consistently move around since the MPC does not attempt to bring inflation back to target over very short time horizons. But this

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[10] In the extreme, the law of one price (LOOP) suggests that, in the absence of transport costs and trade barriers, the price of a given commodity will be the same all over the world. Even though the LOOP is unlikely to hold perfectly, the mechanisms underpinning LOOP might cause a sterling depreciation to lead to an increase in the prices of some domestically produced goods and services.

line of argument suggests that the stability of inflation expected 5 or 10 years ahead provides a good metric for judging the credibility of monetary policy.

The evidence on medium and long-term measures of inflation expectations is somewhat mixed. The most recent survey conducted for the Bank by NOP suggests that 5-year ahead inflation expectations increased by 0.4% points over the past year. The corresponding survey measures collected by Citigroup/YouGov and Barclays have risen by similar amounts. But both the Citigroup/YouGov and Barclays measures remain below the levels they reached in 2008. And measures of medium-term inflation expectations derived from financial markets are little changed compared to a year ago.

But I'm cautious about how much comfort we can take from the relative stability in these measures for two reasons.

First, although some economists may like to think otherwise, most companies and households have far better things to do than spend time formulating detailed expectations of the rate of inflation likely to prevail in 5 or 10 years time. Many may use simple rules of thumb to form views about future inflation, such as "inflation will be equal to the target".[11] Or they may base their expectations on the views they hear expressed by others or they read about in newspapers.[12] Importantly, expectations formed in this way may be relatively sticky.[13] Rules of thumb are only changed when they perform poorly over a period of time. Expectations based on the views of others may be updated only occasionally. As such, it may be some time before we see the full effects of the extended period of above target inflation fully reflected in inflation expectations.

Second, and more fundamentally, I worry that this binary approach to monetary policy credibility – credible or not credible, anchored or de-anchored – misses the key risk to inflation expectations. Despite some of the more lurid newspaper headlines, I don't believe that many people think that the Monetary Policy Committee has adopted a secret aim to keep inflation above the 2% target indefinitely. Given that, I don't find it surprising that when asked, many survey respondents have not significantly raised their expectations of inflation in the medium term.

More likely, however, is that some companies and some households may look back at the prolonged period of above target inflation and infer that the Committee has perhaps become more tolerant of deviations of inflation from target. As such, inflation may be expected to return to target more gradually. Rates of inflation expected to prevail in 5 or 10 years may not increase, but inflation expectations 2, 3 and 4-years ahead may well do. This risk is almost impossible to monitor since information on the term structure of inflation expectations, especially for households and companies, is very sparse. But it could have profound implications for the inflation outlook and the performance of our economy.

If companies and households expect inflation to return to target quickly they will set their prices and pay demands accordingly. And in so doing, monetary policy has less to do – in terms of varying the level of demand in the economy – to ensure that it does. Inflation credibility is self reinforcing. The credibility gains associated with the move to inflation targeting and an independent policymaking committee in our country led to a reduction in the persistence of inflation. Inflation came back to target more quickly and the cost of it doing so in terms of output volatility was reduced.[14] If companies and households begin to expect that

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[11] Brazier, Harrison, King and Yates (2008).

[12] Carroll (2003).

[13] Mankiw and Reis (2002).

[14] There was a reduction in the persistence of UK inflation without an increase in the volatility of output. Benati (2006) found that the inflation targeting period has been the most stable macroeconomic period in UK history. Some have argued that this was due to lower and less volatile shocks hitting the UK economy (Benati and

inflation will be returned to target more slowly that would harm the efficient functioning of our economy. Wage and price setting behaviour could change. The task of keeping inflation close to target would become more costly. Inflation persistence would increase. We need to guard the gains in credibility built up over the past 15 years or so.

How is the current stance of policy consistent with the inflation outlook?

The existence of these upside risks leads to the fourth and final charge levelled against the MPC. Is the current stance of policy consistent with the inflation outlook?

As I've explained, the central view of the Committee – which I share – is that much of the current strength of inflation is driven by a series of price level shocks. Inflation is likely to fall back next year, as the temporary impacts from these factors wane and the persistent slack in our economy continues to pull down on inflation.

That outlook drives the current stance of monetary policy. Policy needs to remain highly accommodative in order to support spending and income and so reduce the risk of inflation significantly undershooting the target in the medium term.

But there is considerable uncertainty about the extent to which inflation is likely to fall and over what time period. That uncertainty maps into differing views as to exactly how accommodative monetary policy needs to be.

On the one hand, there is a risk that the strength and durability of the recovery may disappoint. Our economy still faces considerable headwinds, especially within the household sector, where real incomes have been squeezed and many families may not yet have adjusted fully to the implications of the substantial fiscal consolidation now in train.

On the other hand – as I've discussed – there is a risk that inflation may remain higher for longer than currently expected. Either because global price pressures continue to add to domestic inflation or because the persistent period of above target inflation starts to become ingrained in wage and price setting behaviour.

It is still too early to reach any firm conclusions, but it seems likely that the terrible events in Japan and the political upheaval in the Middle East and North Africa will add to both of these risks. The huge disruption in Japan and the uncertainty associated with events in Libya are likely to dampen global demand, at least in the short run. But the accompanying increases in energy prices are likely to add to domestic inflation.

At the MPC meeting two weeks ago I voted to raise Bank Rate to 0.75%. Even with this increase in rates, the stance of monetary policy would remain highly stimulatory. Bank Rate would still be close to an historic low and the stimulus from our programme of quantitative easing would be unaffected. But I judged that removing some of the monetary stimulus was warranted.

I would like to tell you that this judgement was driven by "nice" reasons. That I was confident that the recovery would continue apace. That the very low level of Bank rate reached at the depth of the recession was no longer needed. That we were in a position in which monetary policy could begin a gradual process of normalisation.

But I'm afraid these nice reasons were not the factors driving my decision. In particular, I'm not at all confident about the strength of the recovery. My central view – similar to that in the February *Inflation Report* – is that growth is likely to be close to its average historical rate over the next few years. But that is a pretty disappointing outlook given the depth of the

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Mumtaz (2007)) while others have argued this was due to better monetary policy (Batini and Nelson (2005), Nelson and Nikolov (2004)).

recession from which we are recovering. And there is considerable scope for growth to surprise to the downside, particularly if households retrench further.

Rather, my vote to raise rates was driven by a concern that – despite a relatively weak outlook for growth – the risks to the inflation target in the medium-term were to the upside. In particular, the risks from continuing global price pressures and the effects of the prolonged period of above target inflation meant that the level of demand consistent with achieving the inflation target had probably fallen.

Nasty reasons rather than nice ones.[15]

I should stress that I'm not at all certain that this will turn out to have been the right policy decision. A key lesson I learnt from the financial crisis is that economists know a lot less about the economy and how the economy works than many would like to believe. Policymakers need to approach their task with humility and pragmatism. If growth turns out to be materially weaker than I anticipate or other medium-term pressures on inflation ease unexpectedly, I will reverse my decision. But with growth expected to be around its average historical rate, inflation likely to remain above 4% for the rest of this year and Bank Rate at record low levels, some withdrawal of policy stimulus seems sensible.

The juxtaposition of high inflation and loose monetary policy means that there is an onus on the MPC to explain its actions. The case for the defence needs to be made. And we have a good story to tell. We can explain why inflation has been above target for much of the past few years. We think we understand – albeit with the benefit of hindsight – why we have been surprised by the strength of inflation. And we have learnt from those episodes. I can't say that monetary policy will perfectly anticipate every twist and turn of the economy. We will continue to be surprised by events and need to adjust policy accordingly. But I can assure you that the MPC remains as committed and as focused as ever in our determination to hit the inflation target.

[15] This distinction between nice and not nice reasons for raising Bank Rate was made in an interview by Charlie Bean with the *Western Mail* on 1 February 2011.

Chart 1: CPI inflation and Feb 2009 *Inflation Report* projection based on market interest rate expectations

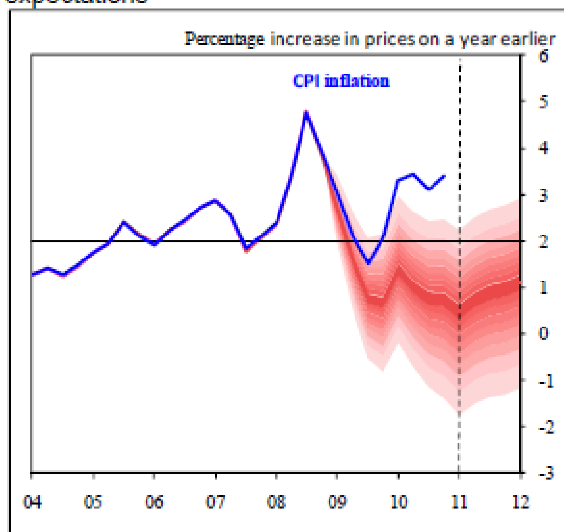


Chart 2: Accounting for news in inflation since the February 2009 *Inflation Report*[a]

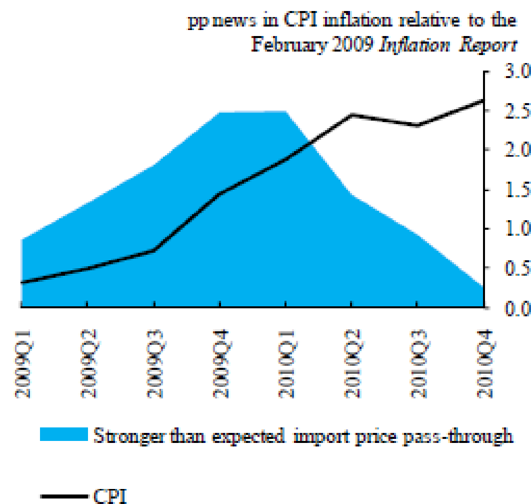
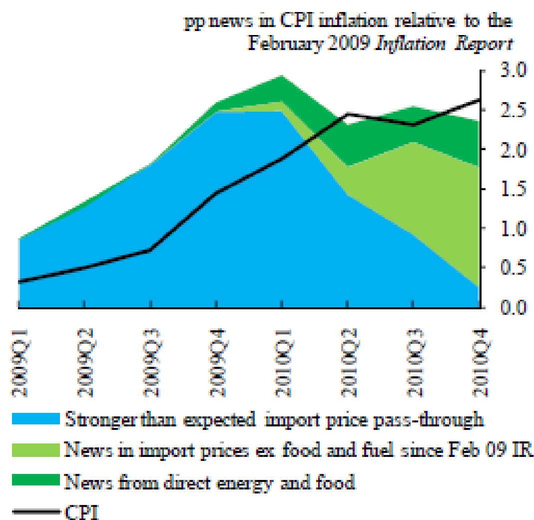


Chart 3: Accounting for news in inflation since the February 2009 *Inflation Report*[a]



(a) The black line in these charts shows CPI inflation in 2009/10 relative to the February 2009 IR modal inflation forecast.

The blue area in these charts is a stylised illustration of the impact that higher than expected import price pass-through (100% pass-through versus 40% pass-through) has had on inflation over the past two years. Changes in import prices (ex food and fuels) are assumed to feed through to consumer price inflation with a lag of one year. Assuming the import intensity of the CPI basket is one third, an assumption of full pass-though implies that a10pp rise in import prices leads to a 3.3pp rise in CPI inflation one year later. Assuming 40% pass-through, a 10pp rise in import prices adds only 1.3pp to inflation a year later.

The light green area in chart 3 illustrates the impact that the recent rises in import prices (ex food and fuels) have had on CPI inflation. It assumes that all of the increases in import prices in 2010 have fed through to CPI inflation quickly with a lag of just one quarter. The short lag reflects the fact that the recent rise in import prices has been driven by commodity prices. If we assume the import intensity of the CPI basket is one third and pass-through is full, then a 1% rise in import prices will lead to a 0.33pp rise in inflation 1 quarter later.

The dark green area in chart 3 shows the contribution from a group of CPI components (listed below) relative to the projections for those components consistent with the judgements in the February 2009 Inflation Report. CPI Components: Direct energy = Fuels & Lubricants + Electricity, Gas & Other Fuels. Food = Food and Non-Alcoholic Beverages.

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