



BANK OF ENGLAND

# Speech

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## **Global Inflation: How Big A Threat?**

Speech given by

Andrew Sentance, Member of the Monetary Policy Committee, Bank of England

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I would like to thank Andrew Holder and Abigail Hughes for research assistance and invaluable advice. I am also grateful for helpful comments from other colleagues. The views expressed are my own and do not necessarily reflect those of the Bank of England or other members of the Monetary Policy Committee.

Good morning, ladies and gentlemen. I am delighted to have this opportunity to address this 38<sup>th</sup> International Pensions Conference, which is being hosted here in Windsor by British Airways (BA). Pension funds play a key role in generating long-term savings to fund investment and economic growth. During my time working for BA, I gained a valuable insight into the challenging world of pension fund management and investment through the four years I spent as a fund trustee and investment committee chairman.

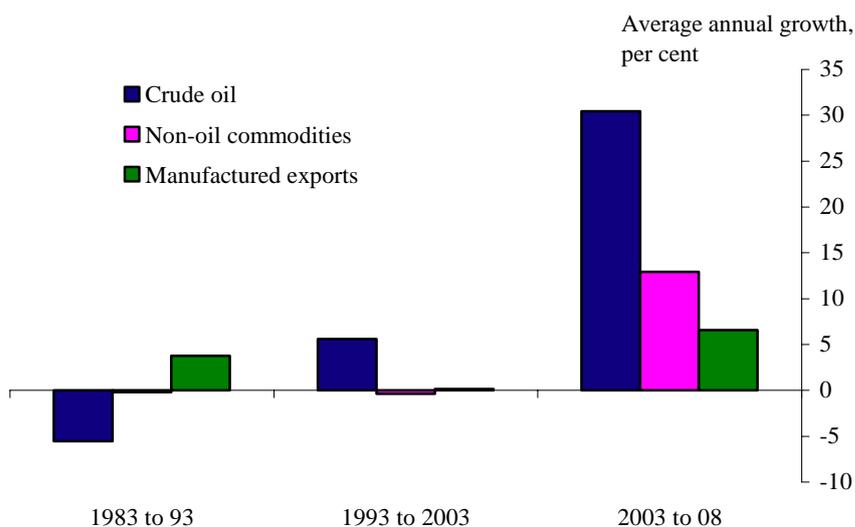
Successful pension fund investment and management requires a long-term perspective, reflecting the nature of pension liabilities. But any view of the longer-term needs to be continually reviewed and updated in the light of changing evidence about the economic fundamentals which drive longer-term trends. Whether it is for the short term or the longer term, forecasting the future is inevitably a hazardous business! Pension funds and other long-term investors need to be continually aware of the possibility that the assumptions on which they have based their projections and investment strategies need to be reviewed and updated.

This morning I want to talk about one of the areas where we have recently seen a significant shift in economic performance – the global inflation climate. In the 1990s and the early 2000s it was customary to assume that the influence of China and other low-cost economies would exert a sustained disinflationary impact on the prices of manufactures and other internationally-traded goods. However, since the middle years of this decade, we have seen a much stronger inflationary impetus from goods which are traded on global markets, particularly oil and commodity prices.

This upward pressure has been particularly noticeable over the last year – with the oil price now trading at over \$140, about double its level a year ago. Over the same period, food commodity prices have risen by over 50%.<sup>1</sup> Alongside this, we have also seen a broader change affecting the rate of inflation in traded goods more generally, including manufactured goods – as Chart 1 shows.

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<sup>1</sup> The annual increase in *The Economist* commodity price index for June 2008 averaged 56.7% in dollar terms.

**Chart 1: Global price trends**

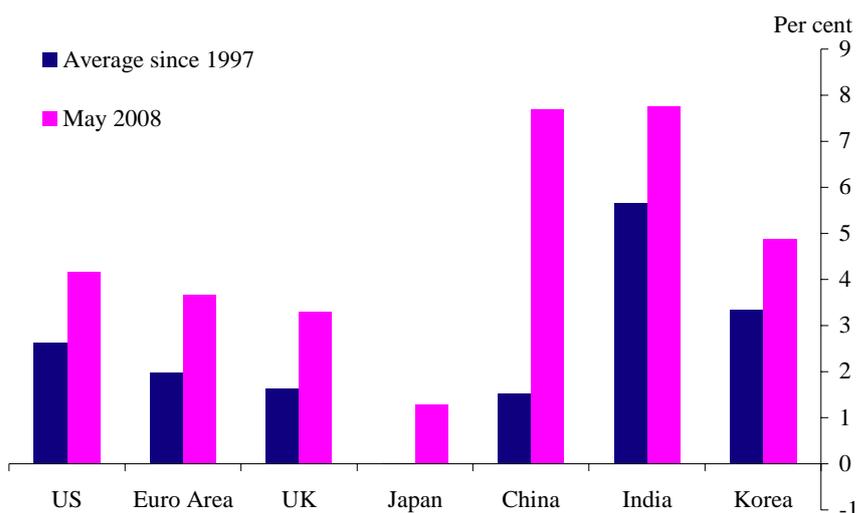
Source: IMF World Economic Outlook, April 2008 and Thomson Datastream

Note: Prices measured in US \$. Crude oil price in 2008 is average for June (at \$132 p/b); other 2008 prices are IMF forecasts.

The sustained and prolonged impact of this shift in the global inflation climate is now showing up in higher rates of consumer price inflation in most countries around the globe. Some countries – especially in Europe – managed to weather the first round of energy and commodity price inflation – from 2004 to 2006 – quite well, partly because of the cushioning impact of an appreciating currency. But the latest surge in oil and food prices is now resulting in a widely-based rise in inflation affecting most countries in the global economy, as Chart 2 shows. This rise in consumer price inflation is particularly noticeable in Asia but in the UK and some other European countries, inflation has recently reached levels not seen since the early 1990s.<sup>2</sup>

<sup>2</sup> UK CPI inflation reached 3.3% in May 2008, its highest level since July 1992. German CPI inflation hit 3.3% in June and French CPI inflation reached the same level in May 2008. These were also both the highest levels reached in these economies since 1991 or 1992. US CPI inflation peaked in September 2005 at 4.7%, the highest level since May 1991, though it has been close to that level again recently – 4.3% in January 2008 and 4.2% in May 2008.

## Chart 2: CPI inflation



Source: Thomson Datastream

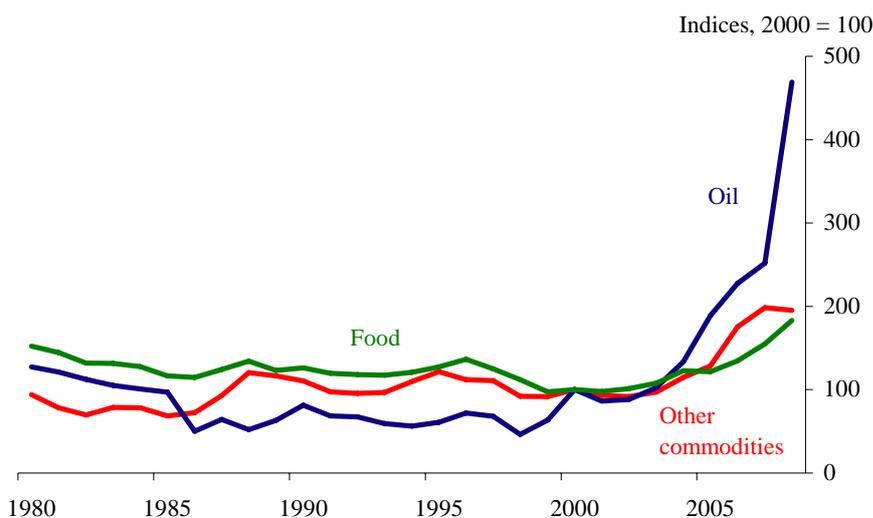
Note: Average annual inflation shown is from 1997 to May 2008.

So what is going on? And does this mark the start of a new inflationary phase in the global economy? In the first half of the 1970s, a surge in commodity prices and a sharp rise in the price of oil ushered in a prolonged period of high inflation across the global economy. Is that what we should now expect? Or will the lessons from that era prevent a repeat performance?

These are the issues which I want to discuss this morning – and they are clearly highly relevant to me in my current role as a monetary policymaker as well as to you in the world of pension fund management and investment. I will address three questions in turn. First, what are the origins of this change in inflationary trend across the global economy? Second, will it continue and be sustained? And third, how should monetary policy respond to global inflationary pressures? I will leave it for you to work out how pension fund managers and investors should respond in the light of my analysis!

### Recent global inflationary pressures

The most striking feature of the recent change in the global inflation climate has been the upward pressure on oil, food and other commodity prices. Chart 3 shows that compared to 2000 levels, oil prices have increased by five-fold and food and other commodity prices have doubled. The rise in the oil price we have seen since 2003 is on a par with 1974, though then the change in oil prices was more abrupt, allowing much less time to adapt to its implications.

**Chart 3: Oil, food and other commodity prices**

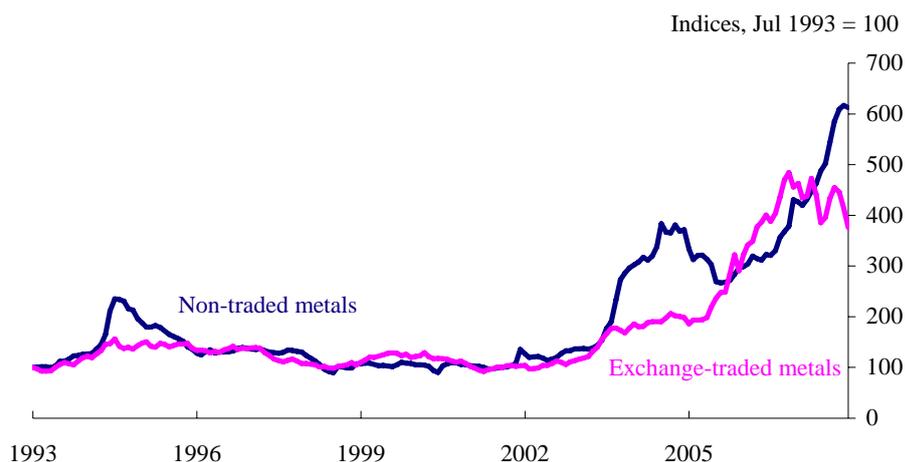
Source: IMF World Economic Outlook, April 2008 and Thomson Datastream

Note: Prices measured in US \$. Crude oil price in 2008 is average for June (at \$132 p/b); other 2008 prices are IMF forecasts. Other commodities includes agricultural raw materials and metals.

Oil and many other commodities are traded on global exchanges, where there is a lot of investment activity. One suggestion has been that this surge in oil and commodity prices is the product of speculative activity on these exchanges, driven by financial flows which have been diverted away from other assets affected by the turmoil on financial markets since last summer. But while it is true that investor activity in the commodity markets has increased – including pension funds becoming more involved in this form of investment – speculation does not appear to have been the primary driver of recent price movements. Detailed studies by the IMF, BIS and others have suggested that financial flows follow commodity price movements rather than driving them.<sup>3</sup> In addition, there is no obvious link between the tradeability of commodities and their price movements. As Chart 4 shows, the prices of metals which are not traded on global exchanges have moved little differently from the more widely traded metals. Similarly, if we look at the recent wave of food price inflation, it has affected commodities with well-established futures markets as well as commodities which are not so readily traded.

<sup>3</sup> See Domanski and Heath (2008) and IMF (2006). HM Treasury (2008) also contains an analysis of recent commodity price movements which points to supply and demand as the main forces at work, rather than speculation.

#### Chart 4: Prices of exchange-traded and non-traded metals

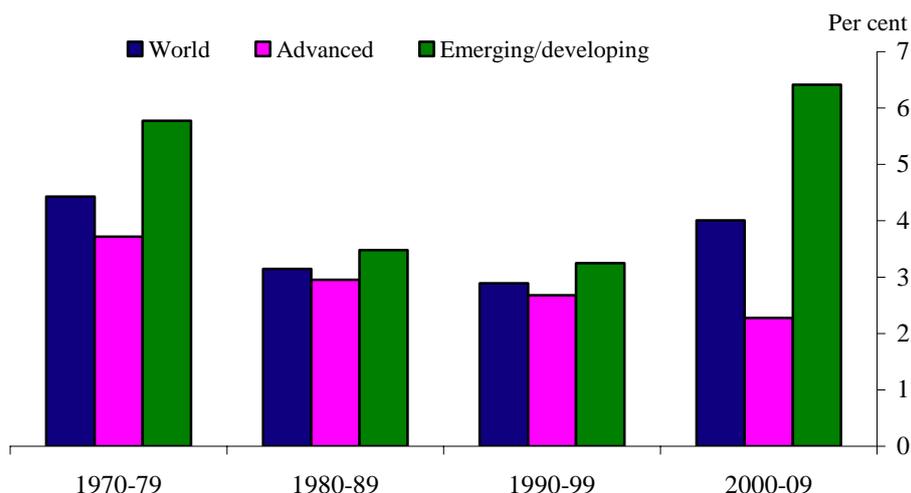


Source: Thomson Datastream and Bank calculations

Note: Non-traded metals include cobalt, magnesium, molybdenum, ferrochrome, steel and ferromanganese. Exchange-traded metals include aluminium, copper, nickel, lead, tin and zinc. Both series are calculated as equally weighted price averages, measured in US \$.

We cannot rule out the possibility that speculation may have exaggerated price movements in particular markets. But it appears more likely that the fundamental reason for the recent burst of oil and commodity price inflation is the strength of global demand for these commodities relative to supply. The fact that the upward pressure across a range of commodities is reasonably broad-based suggests that negative supply shocks affecting specific markets are not the main culprit – though supply conditions have clearly influenced the extent of price rises in specific markets.

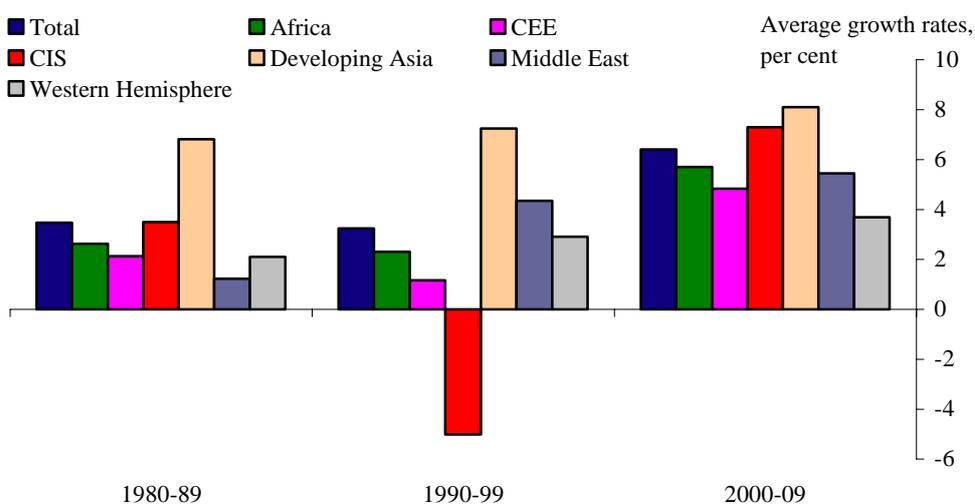
The performance of the global economy over the period since 2003 bears out this picture of strong demand, particularly driven by growth in developing economies and emerging markets. Over the past five years, the global economy has experienced its strongest and most sustained period of growth since the late 1960s and early 1970s. And, as Chart 5 shows, the latest IMF projections suggest that the present decade will see developing economy and emerging market growth at about double the rate of the preceding two decades. We need to go back to the 1960s – or possibly even further – to find a stronger decade of growth outside the mature economies of the Western world.

**Chart 5: Average GDP growth rates since 1970s**

Source: IMF World Economic Outlook, April 2008

Note: 2008 and 2009 are IMF forecasts.

This is not simply a China phenomenon, or even just down to the Asian economies. Growth in the Asian economies in the 2000s has been slightly stronger than in previous decades. But developing and emerging market growth is also now much more broadly-based than in previous decades. As Chart 6 shows, growth in the 2000s has outpaced the 1980s and 1990s in all regions. The market transition of Russia and the former Soviet economies has played an important part in the pick-up in growth from the 1990s, as well as improved economic performance in Africa – partly reflecting strong demand for commodities.

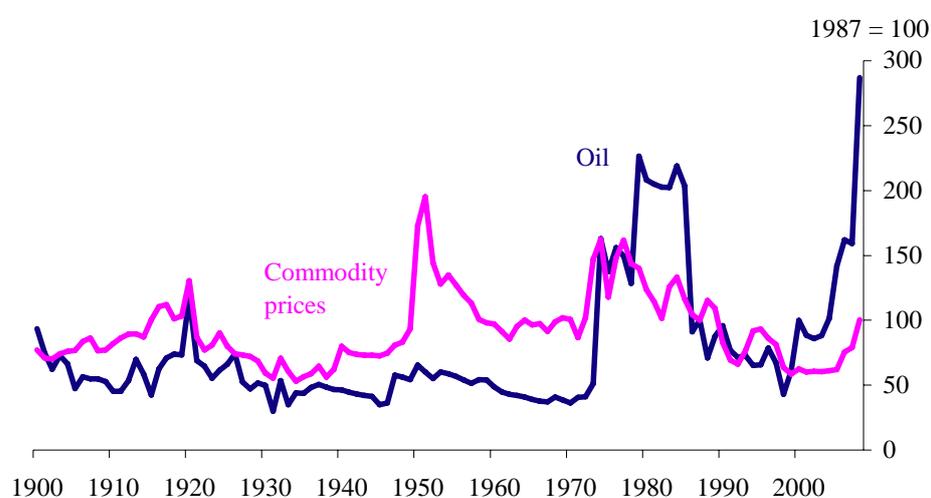
**Chart 6: GDP growth in developing/emerging economies**

Source: IMF World Economic Outlook, April 2008

Note: 2008 and 2009 are IMF forecasts.

There are three particular reasons why this strong and broadly-based demand from developing economies and emerging markets has had such a significant impact on global energy and other commodity prices. First of all, investment has been a strong driver of demand growth in these economies – with Asia and other developing regions accounting for over half of all the increase in global capital spending since 2000.<sup>4</sup> The production of capital goods and new building work requires large amounts of materials and energy – with steel and cement production being particularly energy-intensive industries. Second, consumers in richer countries tend to spend a greater proportion of their income on services whereas rising consumption in developing and emerging economies is more likely to be spent on physical products – including food. Third, in the period between the mid-1980s and early-2000s, energy and other commodity prices were generally low and falling in real terms – as Chart 7 shows. This was not a climate in which producers were inclined to invest strongly in new capacity or to develop alternatives to traditional sources of energy and raw materials. As a result, supply has not been able to respond quickly to rising demand – particularly in the oil industry.

**Chart 7: Real sterling oil and commodity prices since 1900**



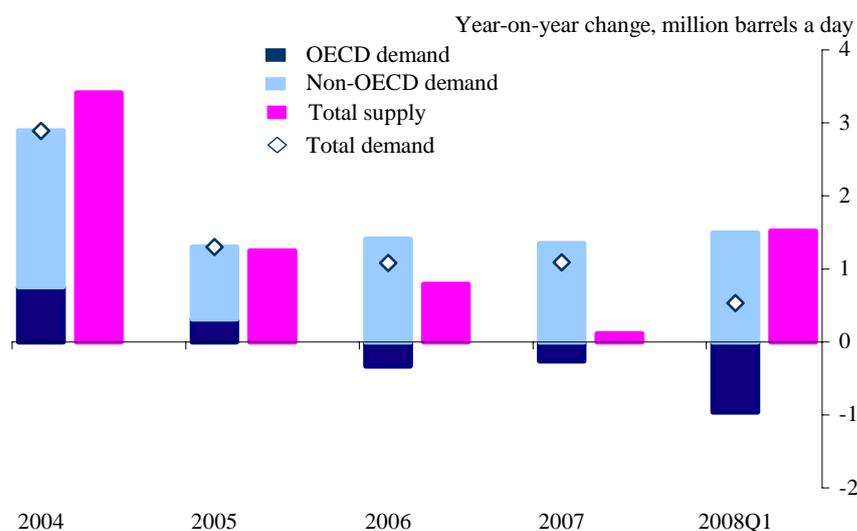
*Source: BP Statistical Review of World Energy, Office for National Statistics, The Economist and Thomson Datastream*

*Note: Prices converted to sterling and deflated by the ONS composite price index. Prices in 2008 are average for June (at \$132 p/b for oil).*

<sup>4</sup> Between 2000 and 2007, IMF estimates suggest that nominal investment grew on average by 8½% for the world as a whole; within that average growth was 5¾% in the advanced countries, 16¼% in the emerging and developing countries as a whole, and 18% in developing Asia. The emerging countries accounted for 51½% of the total investment growth over that period.

In the oil market, we can observe directly the contribution of strong demand outside the OECD economies to recent price pressures. In recent years, incremental oil demand in OECD economies has been declining, as economic growth has slowed in a number of economies and higher prices have affected consumption. But incremental demand outside the OECD has continued to grow strongly relative to available supply – as Chart 8 shows. The positive impact on oil demand from strong economic growth has offset any dampening effect of higher prices, and subsidies have also been used to reduce the extent of price increases in many countries.

**Chart 8: Incremental demand and supply for oil**



Source: *Oil Market Report, IEA June 2008*

### Outlook for global inflation

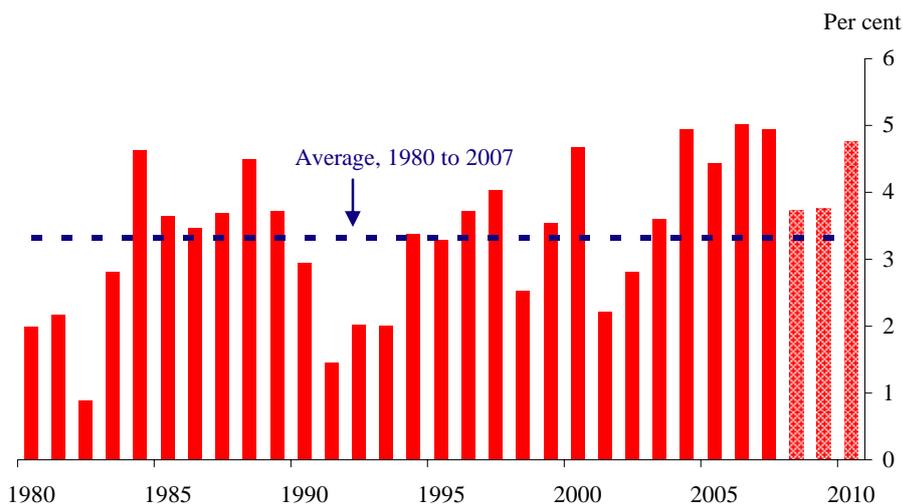
As I mentioned in my introduction, this wave of oil and commodity price inflation has raised the spectre of the 1970s, when a similar surge in the price of energy and other globally-traded commodities was followed by a prolonged period of high inflation in many countries. In the current situation, we can identify other parallels with this earlier episode. Then, as now, the global inflationary surge followed a prolonged period of low global inflation accompanied by falling real energy and commodity prices. And in the early 1970s, as now, strong growth in developing economies played an important role in adding to global demand and pushing up prices on global markets.

In discussing the outlook it is important to distinguish two different aspects of a rise in global inflation. The first is the extent to which economies across the globe will continue to face

upward pressure on inflation from rising oil, commodity and the prices of other imported traded goods. The second is the possibility that high rates of inflation become embedded in a wide range of economies – through rising wages, high rates of growth of money spending and elevated price expectations. It was this second aspect of global inflation which proved so damaging in the 1970s.

As I have already argued, the origins of the current upward pressure on oil and commodity prices lies in the strength of demand across the global economy, and in particular the contribution to demand from resource-hungry developing countries and emerging markets. If global demand continues to grow strongly relative to supply, we should expect continuing high and rising energy and commodity prices, with upward pressure on the prices of traded goods and services in the global economy more generally. That is simply a restatement at the global level that inflation is the product of too much demand chasing supply – “too much money chasing too few goods.”

An easing in the upward pressure on oil and commodity prices therefore appears unlikely unless the world economy slows significantly. There is already a slowdown underway in most advanced economies, in response to the “credit crunch” and the squeeze on disposable income from higher imported energy and raw material prices. Consensus forecasts point to growth of below 2% in the US, the UK, the euro area and Japan in both 2008 and 2009. But for oil and commodity price pressures, the performance of Asia and other emerging market economies will be crucial and here Consensus forecasts currently only point to a very modest slowdown. As a result, across the world economy as a whole, the IMF is still projecting global growth to be above its historical trend over recent decades in 2008 and 2009, followed by a pick-up in growth in 2010 (Chart 9).

**Chart 9: World economic growth, 1980 to 2010**

Source: IMF World Economic Outlook, April 2008

Note: 2008 to 2010 are IMF forecasts.

These projections could turn out to be too optimistic if forecasters are underestimating the negative impact that high inflation and rising energy and commodity prices will eventually have on developing and emerging market economies. So far, many of these countries have sought to cushion the impact of rising global price rises on their consumers and producers through subsidies. But these subsidies are now being withdrawn in a number of economies – and as their impact on government finances accumulates, the pressure to do this will increase.<sup>5</sup> At the same time, emerging market economies experiencing high inflation – which includes India and China – are seeking to slow the growth of their economies to ease inflationary pressures.

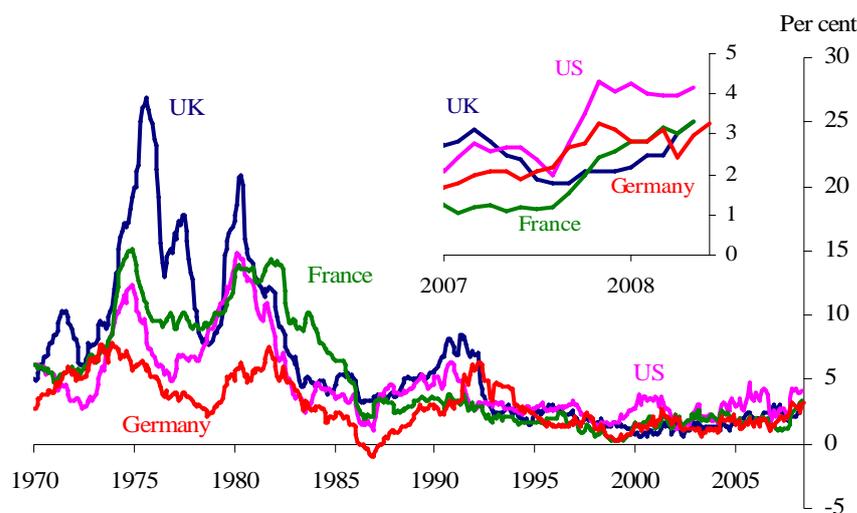
In response to these developments, we should expect demand for energy, food and materials to slow eventually – both in response to higher prices and weaker growth. But there is great uncertainty about the timing of such a change in trend. And even if we might reasonably expect some degree of stabilisation in oil and commodity prices over the next couple of years, it is very difficult to predict the price level at which this might take place. It is therefore quite possible that we will see further upward pressure on inflation from global commodity markets in the short term, before we see some stabilisation or reversal of recent price trends.

The more important question, however, for global inflation over the medium term is whether what starts out as a temporary rise in inflation becomes more deeply embedded through its

<sup>5</sup> A number of Asian governments have reduced subsidies on both gasoline and diesel prices. Significant price increases have been seen recently in China, Bangladesh, Indonesia, Malaysia, Taiwan, India and Pakistan.

impact on inflation expectations and the rate of growth of money spending in the major economies of the world. That is what happened in the 1970s and early 1980s in most major economies, as Chart 10 shows. In the UK, inflation peaked at over 25% in 1975 and ran at double digit levels for most of the time until 1983. Inflation peaked at around 15% in the United States and France. The most notable exception to this pattern was West Germany – which managed to contain the inflationary shock much more effectively than other advanced economies.

**Chart 10: Inflation in major economies since 1970**



Source: Deutsche Bundesbank, Office for National Statistics, Thomson Datastream and US Bureau of Labour Statistics

Note: UK inflation is RPI until 1975, then RPIX until 1988 then CPI.

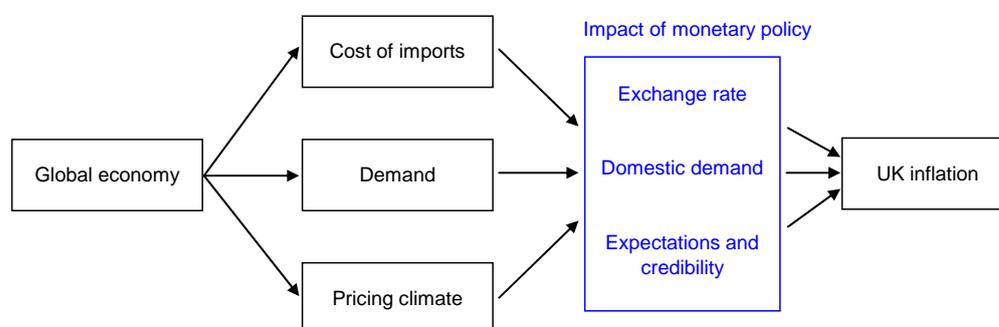
## Monetary policy and global inflation

This highlights a very important point in relation to inflation trends over the medium to longer term. Though global factors can contribute short-term volatility, inflation performance over a longer period of time should reflect domestic monetary policy. In that sense, Milton Friedman was right when he said that “inflation is always and everywhere a monetary phenomenon”.<sup>6</sup> Inflation over the medium to longer term depends on the monetary framework in place and the policies pursued within that framework. It should therefore be possible to restore price stability over a number of years, even in the face of major price shocks from the global economy – as the Bundesbank demonstrated in the 1970s.

<sup>6</sup> Friedman (1970)

How does monetary policy achieve this? The main instrument of monetary policy in modern economies with liberalised financial markets is the short-term interest rate. Changes in the interest rate and beliefs about its future path will affect the whole structure of interest rates across the economy. Expectations about the future conduct of monetary policy are also important in shaping the behaviour of firms and households – particularly in relation to setting wages and prices. As Chart 11 shows, there are three main mechanisms through which interest rates and expectations about future policy can help to anchor inflation in the medium term, even when there is a short-term volatility injected through price movements on global markets.<sup>7</sup>

**Chart 11: Monetary policy, the global economy and inflation**



The first mechanism is through the exchange rate. A rising exchange rate can help dampen the impact of a surge in global inflation. For the UK and continental Europe, the appreciation of the pound and the euro against the dollar since the early 2000s has helped to some extent to dampen or offset the first-round effects of global inflation on import prices. In dollar terms, world manufacturing export prices rose by over 8% per annum between 2002 and 2007. But in euros, they barely rose at all, helping to shield the euro area against some of the imported inflation affecting the US and other countries which link their currency to the US dollar. The UK experienced a similar appreciation against the dollar as the euro until last year. However, since then, the depreciation of the pound against the euro has afforded us less short-term protection against more recent inflationary shocks and import price inflation has picked up considerably.

However, while exchange rate movements can be a helpful factor, they cannot shield economies totally from global inflationary shocks – particularly the sort of price movements

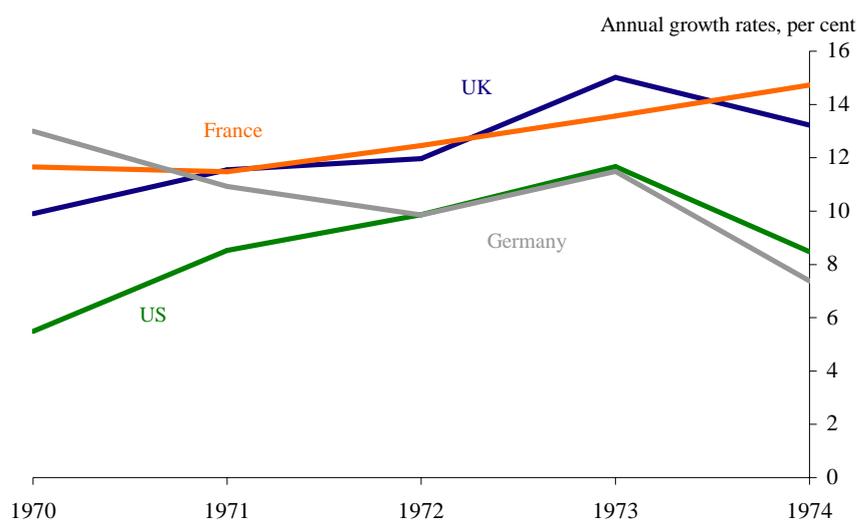
<sup>7</sup> See Sentance (2007) for a more detailed exposition of this framework and broader discussion of the impact of the global economy on UK inflation.

we have seen recently – a doubling in the global oil price and a significant increase in the prices of globally-traded food commodities. As we have seen around the world, measures of inflation will inevitably be affected in the short term by significant price shocks of this sort. Then the challenge for monetary policy is to ensure that both the rate of growth of demand and output and the path of inflation expectations remain consistent with price stability over the medium term, so that once the shock has passed through the system low and stable inflation returns.

Of course, this is easier to state in principle than to achieve in practice. There is a risk that medium-term price expectations are pushed up by a period of higher inflation. And difficult judgements need to be made in the extent to which demand should be dampened to offset an external cost shock – or whether it is sufficient to simply to prevent second-round effects. That judgement depends, in part, on the scale of the shock itself.

However, in two respects, the major developed economies are much better placed to deal with the current round of oil and commodity price shocks than they were in the 1970s. First of all, domestic inflationary pressures were already building up in many economies in the early 1970s before the impact of rising oil and commodity prices was felt. This was reflected in high and accelerating money GDP growth in these economies, as Chart 12 shows.<sup>8</sup>

**Chart 12: Nominal GDP growth in the early 1970s**

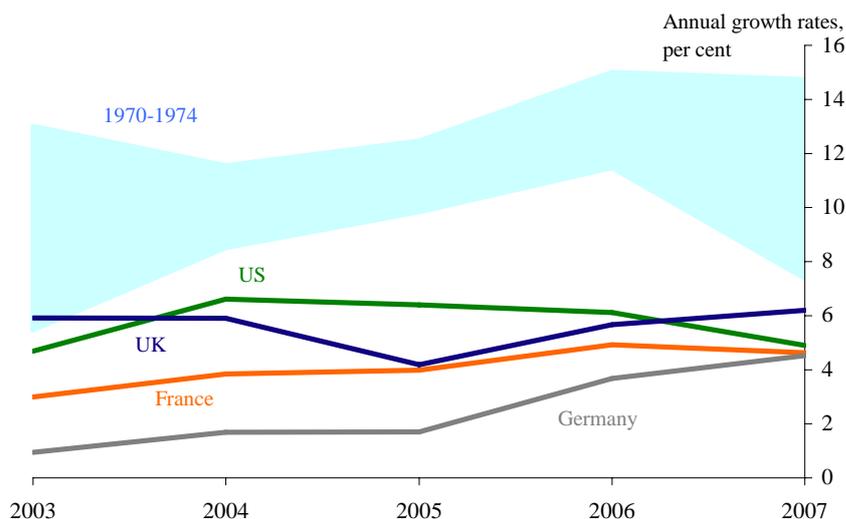


Source: Thomson Datastream

<sup>8</sup> Money GDP growth is a good summary statistic of domestic inflationary pressure, as it represents the growth of money income and is an indicator of the pressure which money spending is placing on domestic supply.

In the UK and France, money GDP was increasing at around 15% per annum even before the oil price shock hit in 1974. This reflected increases in wages and money spending which were clearly already incompatible with low inflation. By contrast, money GDP growth was slowing in West Germany over this period, suggesting that domestic inflationary pressures in that economy were under much better control.

**Chart 13: Nominal GDP growth in the 1970s and 2000s**



*Source: Thomson Datastream*

Chart 13 contrasts this experience with comparable data from the mid-2000s. In the US and the same major European economies, rates of growth of money GDP growth in recent years have been broadly flat and mostly in a range of around 2-6%. Wage growth and other indicators of domestic inflationary pressure have been generally subdued across the major developed economies. This has been less true of emerging market economies, however, where there has been much more evidence of domestic inflationary pressure building up in response to strong economic growth.

The second contrast with the 1970s for the major developed economies is that the frameworks for setting monetary policy are now much better established and anchored on the goal of price stability. In the UK, the framework established in 1997 which gave operational independence for the Bank of England has worked successfully for over a decade, building the credibility of our institutional arrangements and reinforcing confidence in a world of low and stable inflation. The European Central Bank is approaching its tenth anniversary and in the US the Federal Reserve has operated as an independent central bank with a mandate for price stability over many decades.

This contrasts with the situation in the early 1970s when the Bretton Woods system – which had helped to underpin low inflation in many countries in the 1950s and 1960s – broke down in 1971. Only in West Germany, where the Bundesbank played a key role in the policy response – was a coherent and robust system of domestic monetary control established to contain inflation. Many other economies – including the UK – struggled to develop an effective policy response to the oil price shocks and domestic inflationary pressures, with the result that high inflation persisted for a decade – or even longer in some countries.

### **Conclusions and policy challenges**

These contrasts should give us some encouragement that the UK and other developed economies are better placed than they were in the 1970s to weather the current surge in oil and commodity prices. But there are still some very significant challenges. The operation of monetary policy is clearly much more difficult and complex against the current background of global inflationary pressures. And the measures required to restore price stability over the medium term are likely to result in a much less smooth path for the real economy than we have become used to in a more benign global inflation climate.

In the UK, our monetary framework is anchored on an inflation target of 2% for CPI inflation.<sup>9</sup> Significant deviations of inflation from that target have been rare since the present framework was established in 1997. Before last month, only one explanatory letter from the Governor of the Bank of England had been triggered by a movement of inflation more than one percentage point away from the target.

Rising oil and food prices have already caused the biggest deviation from target and in last month's letter, the Governor made clear that the MPC expects inflation to go higher as we move through this year. However, his letter also emphasised that the Committee is determined to ensure that this is a temporary rise. The MPC is still aiming to return inflation to target within the normal forecast horizon of two years.

How will the Committee achieve that? In the absence of a significant appreciation in the exchange rate, which seems unlikely at present, our main channels of influence are through the growth of demand and inflation expectations. First, we need to judge how big is the risk

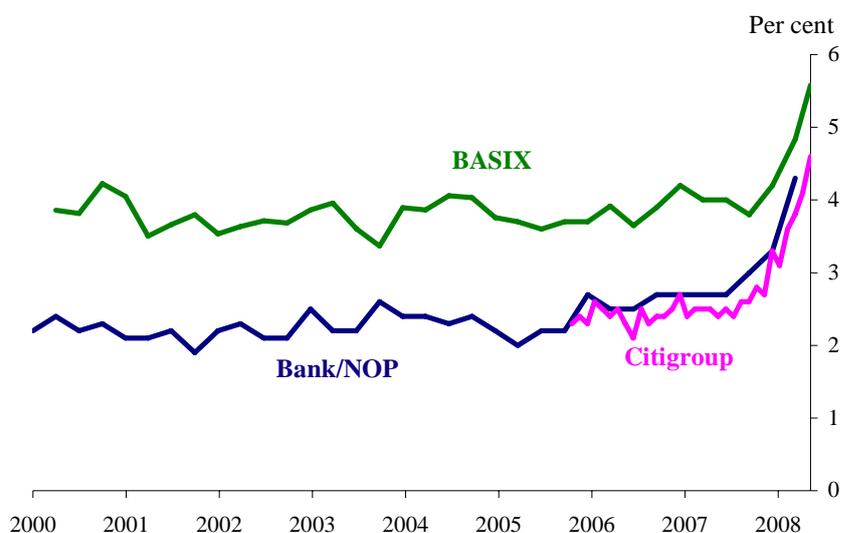
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<sup>9</sup> Before 2004, the target was 2.5% for RPIX inflation

that the rise in inflation becomes more deeply embedded through its impact on inflation expectations and on wage and price setting behaviour. And second, we need to judge the path of demand most likely to keep inflation expectations low, or bring them back onto track if they are pushed up temporarily. The Bank's May Inflation Report made no secret of the fact that we expect a significant slowdown in demand and output growth over the course of this year and into 2009 to be part of the process through which inflation is brought back to target. And we are now just embarking on the forecast round for the August Inflation Report which will update that assessment.

The task of setting monetary policy is complicated further by the impact of the "credit crunch" which is raising the cost of borrowing and restricting its availability across the economy independently of interest rate changes. So our judgements on monetary policy clearly need to take into account how much of a slowdown is in the pipeline already from these financial market and banking developments. And the MPC's actions will also need to reflect the emerging evidence on inflation expectations – including the possibility that short-term inflation pressures could become embedded in the next round of pay settlements. So far, regular pay growth (ie excluding bonuses) has been remarkably stable in the UK at around 4%. But recent evidence has showed a sharp upward move in public expectations of inflation, particularly for the shorter term, as Chart 14 shows. This creates bigger upside risks for medium-term inflation, and increases the possibility that a more pronounced or prolonged slowdown in the real economy will eventually be needed to bring inflation back to target.

**Chart 14: One year ahead inflation expectations**



Source: Bank of England/NOP, Barclays BASIX and YouGov/Citigroup

Note: These surveys ask general questions about expected changes in prices, not related to any one specific price index; Barclays BASIX shows mean observations, others show median observations.

In contrast to the UK and other major developed economies, the emerging markets and the developing world appear less well placed to weather the current wave of oil and commodity price shocks. As I highlighted earlier, they have less well developed monetary frameworks and are more exposed to domestic inflationary pressures as a result of rapid growth. Their economies are more resource-hungry and therefore they are potentially more exposed to a shock from high oil and commodity prices.

We should not therefore be surprised if there is a significant deterioration in macroeconomic performance in a number of these economies as they seek to come to terms with inflationary pressures and much higher oil and commodity prices. We are already seeing much higher inflation in many emerging market economies. And it may be that the optimistic consensus around the growth prospects for Asia and other emerging markets is punctured to some degree by the drag on their economic growth from higher energy and raw material prices over the next few years.

In my title today – I posed the question “How big is the threat” from current global inflationary pressures? In the face of the current oil and commodity price pressures, we cannot expect to sustain the benign world of steady growth and consistently low inflation that has characterised the last decade and a half across many developed economies, including the UK. Inflation is being pushed up in the short term, and it will take time to get it back under control. That will require a squeeze on spending and incomes in the UK and other economies, with consequences for economic growth and employment in the short term.

But the real challenge is to maintain the conditions of price stability which will support growth and employment over the long term. And in that respect the message is much more positive. With the right policies, we can avoid the mistakes of the 1970s, when high inflation became deeply ingrained and embedded in behaviour and expectations. But it will be the actions of national monetary authorities – in the case of the UK, the Monetary Policy Committee – which will determine whether that is the case. While global cost pressures can influence the short-term path of inflation, over the longer term Friedman is right: “Inflation is always and everywhere a monetary phenomenon”.

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