# Monthly Economic Review

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# Is rising inflation the big macro trend of 2005?

### Further dollar weakness implies higher US interest rates

Unanimity of	What will be the big macroeconomic trend in 2005? Almost everyone agrees that the
forecasts of fall in	deficit on the current account of the USA's balance of payments is unsustainably
dollar argues that it	large and that the dollar must fall further. But - whenever market commentators are
won't happen	unanimous on something - they will probably be wrong, for the simple reason that every trader and investor is already positioned to take advantage of it. In fact, two good arguments can be made for expecting the dollar to behave quite well over the next twelve months. The first is that recent American inflation news has been disappointing. Factory-gate inflation - as measured by the increase in the finished- good item in the producer price index over the previous year - was $5.0\%$ in November, while the rise in the consumer price index in the year to October was 3.2%. (Don't forget that changes to the CPI after the Boskin report caused the annual increase to be $1\%$ higher than it would have been before. A $3.2\%$ number should be read as on a par with a $4\% - 4 1/2\%$ number before 1998.) The poor inflation figures can be blamed, at least partly, on the dollar's depreciation so far. If dollar weakness aggravates inflation again, that would have to be countered by higher US interest rates. Mr. Greenspan and the Bush administration may not care about the fall in the dollar by itself, but they must worry about higher inflation.
Low US money growth inconsistent with further dollar weakness	Secondly, inflation is ultimately the result of excessive monetary growth. On this front recent developments in the USA are curious. Fed funds rate was exceptionally low, at under 2%, from late 2001 until quite recently. If business had been as normal, the growth rates of credit and money in the three years 2002, 2003 and 2004 ought to have been explosively rapid. But that was not what happened. On the contrary, the stock of bank credit to industry ("commercial and industrial loans at all commercial banks") slumped from a peak of \$1,096.4b. in January 2000 to a trough of \$873.8b. in May 2004, and money supply growth in 2003 and 2004 was sluggish. In the year to November M3 went up by only 5.0% and in the six months to November it increased at an annualised rate of a mere 3.4%. Given the robustness of the medium-term relationships between money, the price level and the exchange rate, it would be surprising if 2005 were to see marked dollar weakness and a serious further upturn in inflation.
High UK money growth deviates from benign global pattern	In fact, the monetary background to the world economy is stable at present. In the Eurozone the annual growth rate of M3 has been between 5% and 6% in the last few quarters, bang in line with the requirement to keep nominal GDP advancing at, say $4\% - 5\%$ a year. Japan continues to struggle with the monetary consequences of a crippled banking system, but the annual growth rate of M2 plus CDs is at least in positive territory at about 2%. One outlier from the mostly benign pattern is the UK, where the annual growth rate of M4 has been in the 9% - 10% vicinity in recent months. If the buoyant money growth persists, the UK will in due course suffer higher inflation than the rest of the industrial world.

**Professor Tim Congdon** 

30th December, 2004

# Summary of paper on

#### The return of inflation

# Purpose of the paper

Consensus opinion is that inflation in the UK is not a problem. CPI inflation is expected to remain beneath target in 2005 and 2006. But evidence is mounting of a return to inflationary pressures. Inflation outcomes will disappoint during the course of 2005. The 2% target could be breached by the end of next year.

#### Main points

- The output gap (the level of output relative to trend) in the UK is close to zero. Output may even be a touch above trend. The labour market is tight and underlying wage growth has risen. With no spare capacity in the economy, strong growth in the first half of 2005 will push output above trend and lead to rising inflation. (See pp. 4-7.)
- Price pressures are already clearly visible in the pipeline. UK producer price inflation, on both the headline measure and the underlying index (which excludes volatile items such as food and energy), reached eight-year highs in November. Surveys indicate that this trend is set to continue. (See p. 8.)
- The global boom in 2004 (world growth could reach 5%, the highest for 30 years) has led to an early resumption of higher inflation. Oil and other commodity prices have soared this year, pushing up industry costs and leading to rising factory-gate inflation. The extra demands being placed on global resources by China and other emerging nations has contributed significantly to price pressures. (See p. 9.)
- Over the long run producer prices and consumer prices tend to move together. "Core" producer price inflation has been rising gently since 2000, but has accelerated sharply in 2004, arguing for higher retail goods price inflation next year. The strong pound has been a powerful deflationary force since 1996, but cannot insulate the UK from inflation indefinitely. (See p. 10.)
- The emergence of China and others as low-cost, high-volume manufacturing centres has helped keep a lid on global goods price inflation. Import prices fell steadily from the end of 2001, but are now rising slowly. If past patterns are repeated, goods price inflation will return to the UK. Goods prices have been generally falling since 2000, helping to keep overall inflation low. (See p. 11.)
- In the end, inflation is the consequence of excessive money growth. Current monetary trends in the UK are therefore worrying. M4 growth in the 8% to 9% range is not consistent with the 2% inflation target over the medium term. If it is allowed to continue, inflation could eventually reach 4% or more. (See p. 12.)

This paper was written by Stewart Robertson and Martin McMahon

# The return of inflation

### CPI inflation could exceed the 2% target by the end of 2005

Rapid global growth in 2004 has led to an early return of inflationary pres- sures	2004 will have been the strongest year for the global economy since the mid- 1970s. World GDP should rise by around 5%, with a considerable part of the momentum being provided by rapidly-growing emerging nations such as China, India, other Asian "tigers" and Eastern Europe. But, as a result, pressures on global supply-side capacity have grown and inflation has risen. The consensus view is that there is no need to worry unduly about these trends and that inflation will not be a significant problem in the years ahead. As far as the UK is concerned, most commentators expect CPI inflation to rise gently next year but to stay below the 2% target in 2005 and 2006. This research paper argues instead that inflation could reach target next year and then rise above it.
Inflation determined by the level of the output gap	At one level of causation the change in inflation is determined by the output gap, or the level of GDP (output) relative to trend. Inflation will tend to rise when there is a positive output gap and to fall when output is below its trend level. This simple theory explains inflation trends in the UK over the last forty years. (See p. 7.) While there are many technical issues regarding the estimation of a country's output gap, almost all commentators (a notable exception is the Treasury) believe that there is little or no spare capacity in the UK economy at present. In other words, the output gap is roughly zero. It is not implausible that output in Britain is currently a little above its trend level. That would be consistent with the recent rise in producer price inflation and in underlying wage growth. Above-trend growth in Q4 and in early 2005, which looks likely at present interest rates, will push output further above trend and add to inflationary pressures.
Rapid money growth in the UK argues for inflation problems in 2005 and 2006	Over the long run the growth rates of money and of nominal GDP are related. In recent years broad money in the UK (M4) has tended to rise by around 2% more each year than GDP. But, even if that trend were to continue, the current pace of monetary growth is still excessive and not consistent with the 2% inflation target over the medium term. (See p. 12.) With the trend growth rate of real output in the UK generally accepted to be 2½% a year (2¾% at the outside) and an inflation target of 2% or 2½% (depending on which measure is used) nominal GDP can rise by perhaps 5% over the long run. That implies a maximum acceptable rate of broad money growth of 7%. At present money is growing significantly faster than that - the underlying pace of expansion is around 8% or 9%. With credit growth even faster, and likely to remain strong with interest rates under 5%, money growth is unlikely to slow soon. If current trends were to continue indefinitely, inflation does start to rise, then the Bank of England will be forced to react by raising interest rates again. They seem in no hurry to do so at present, but disappointing inflation outcomes in 2005 will force them to change their view.

### Labour cost developments

#### Wage inflation drifting up gently

Chart shows the percentage deviation of GDP from its potential level and the twelve-month change in average earnings for the whole economy.



UK labour market developments have been remarkably benign in recent years. Employment has risen and unemployment has fallen, yet wage inflation has stayed subdued. Headline average earnings growth was 4.1% in October, up a fraction from the 3.6% recorded a year earlier, but below the MPC's 4.5% "safe benchmark" rate. However, there is some tentative evidence that tightening capacity constraints are feeding through to modest upward pressure on wages. Underlying average earnings growth (i.e., excluding bonuses) has drifted up by a full percentage point since the summer of 2003 to reach 4.4% in October. While not in itself a problem, the 4.4% rate of increase was the fastest recorded for over two-and-a-half years. Moreover, the trend is clearly upwards, albeit only gently. The risk for policy-makers is that the ever-tightening labour market feeds through into more upward pressure on earnings. Business surveys suggest that recruitment intentions remain firm. The latest Manpower *Employment Outlook Survey* reported a seasonally-adjusted balance of +18% of respondents intending to increase staffing levels in Q1 2005, a two-year high.

### Two measures of labour market slack

#### Tight labour market getting tighter

Upper chart shows the percentage deviation of GDP from its potential level. The lower chart shows the balance of manufacturing companies reporting skilled labour shortages to be a constraint on output over the next four months and vacancies as a percentage of the workforce. The latter is based on the discontinued Jobcentre vacancy series until 2001. Since then the series has been extended using new ONS Vacancy Survey data.



Labour availability is one of the key constraints on economic growth and can be a major influence on inflation trends. In terms of the UK labour market, claimant count unemployment fell to a 29-year low of 833,000 or 2.7% in November. Other measures confirm that the labour market is tightening. The CBI balance of manufacturers expecting skilled labour shortages to limit production increases in coming months rose to +14% in October, its highest level for over three years. This was above the measure's 25-year average of +11%, although not yet dramatically so and certainly nowhere near peaks in previous booms. The manufacturing sector now represents a far smaller proportion of the UK economy than 20 years ago. Whole economy vacancy data have also picked up noticeably over the past year. The chart above may be misleading due to a change in the construction of the vacancy series after 2001. New figures are based on the ONS Vacancy Survey instead of the old Jobcentre data. Nevertheless, the new data reveal that the stock of unfilled vacancies rose by over 10% in the year to Q3 2004.

### Two measures of capacity utilisation

#### In line with historical norms but drifting upwards

Upper chart shows the percentage deviation of GDP from its potential level. The lower chart shows the percentage balance of manufacturing companies reporting a lack of plant capacity as a constraint on output over the next four months and 100 minus the percentage of manufacturing companies working below capacity.



Our estimates suggest that the output gap (i.e., deviation of output from its trend level) was small but positive in Q3 2004. This implies that pressures on prices should be starting to build. Measures of capacity utilisation from the manufacturing sector tend to confirm that supply capacity is stretched. The number of manufacturing firms working below capacity fell from +68% in October 2003 to +54% a year later. This was the measure's lowest fourth quarter reading since 1997. Firms reporting plant capacity shortages as one of the most important factors likely to limit output over the next three months also rose noticeably during the course of the year. The balance of manufacturers citing plant capacity as a constraint on output rose to a six-year high of +20% in July, although it then slipped a touch to +16% by October. The beleaguered manufacturing sector finally emerged from recession in 2004, with output up 1.2% in the ten months January-October compared to a year earlier. Manufacturing wage inflation also drifted up a touch between mid-2003 and mid-2004, although it has recently dipped back below the 3 1/2% mark.

# A long-term perspective

#### The output gap and inflation over the past 50 years

Chart shows annual RPI inflation and periods of above-trend and below-trend output. Coloured bars refer to periods when the output gap was positive, white bars to ones when it was negative.



Historical experience confirms the success of the output-gap framework for analysing inflation. The chart above plots RPI inflation over the past 50 years against LSR estimates of above- and below-trend output. Coloured bars correspond to periods when the output gap was positive, white bars to ones when it was negative. The expected relationship holds. Inflation generally rose when the output gap was positive and pressures on capacity were building. Conversely, it tended to fall when output dipped below its trend level. With the output gap now fractionally positive, one would expect to see inflation pick up. Of course, policy-makers are well aware of this relationship, so much so that monetary policy over the past decade has been targeted, at least implicitly anyway, at keeping output as close to trend as possible. The relative stability of our output gap estimates over the past decade is testament to the success of this policy goal. (See charts on previous pages.) The implication looking forward is that above-trend GDP growth will lead to the development of a larger positive output gap and accelerating inflation. GDP growth will need to be slowed by higher interest rates in 2005.

## Price pressures in the pipeline

#### Manufacturers are raising prices at the factory-gate

Chart shows annual factory-gate inflation and the percentage balance of manufacturers intending to increase prices in the next four months.



Price pressures are bubbling along in the supply chain. This may partly reflect the combination of mild upward pressure on wages and falling spare capacity. But the global oil and commodity price booms have been important factors pushing up costs over the past year. (See p.9.) Rising input costs are feeding through to higher prices at the factory-gate where inflation accelerated to a nine-year high of 3.5% in late-2004. Moreover, oil prices are not the only driver of this upward drift. The "core" measure of factory-gate inflation excluding food, beverages, tobacco and petroleum products reached an eight-year high of 3.0% in November. Surveys of manufacturers confirm that price-raising intentions have strengthened markedly over the past year. The CBI balance of manufacturers intending to raise prices in the next four months was +1% in October, down a touch from July's seven-year high of +6%, but still above levels recorded over most of the past seven years. The risk is that part of the increase in factory-gate inflation feeds through to the High Street, pushing goods price inflation back into positive territory.

# Commodity prices have soared

#### Extra demands on world resources from China and others

Chart shows two indices of global commodity prices. Both are dollar-based. The Reuters index includes crude oil, but the Commodities Research Bureau index does not. Reuters (left scale) Commodities Research Bureau

Commodity prices are a classic leading indicator of global economic activity. At the start of an upturn following a recession, the demand for energy, metals, fibres and timber begins to rise and initial supply shortages often lead to volatile price movements. Equally, as a slowdown begins, demand for materials slows sharply, stocks build up and commodity prices can collapse. Metals prices doubled between 1986 and 1989 at the peak of the global boom and then fell by 40% in the early 1990s. Prices fell by a similar amount between 1998 and 2001, but have since rebounded very strongly. The major commodity prices indices show rises of between 40% and 60% from the trough at the end of 2001. The economic recovery in the major industrialised nations has been part of the explanation, but the main reason for recent buoyant commodity prices is the huge extra demands being placed on world resources from the rapidly-growing countries of China, India and others. These trends are unlikely to reverse quickly. Copper prices, for example, are around 40% higher than a year ago, while shipping freight rates have soared in 2004.

### PPI and CPI inflation are related

#### Recent increase in PPI inflation points to higher retail prices

Chart shows annual increase in "core" PPI and "core" RPI inflation. The core indices exclude the highly volatile prices of food, beverages, tobacco and petroleum products.



Over the long run producer prices and consumer or retail prices tend to move together. Since 1960 producer prices have risen, on average, by 5.8% a year. The comparable figure for RPI inflation is only slightly higher at 6.5%. Looking just at the last decade the average differential has widened a little with PPI inflation averaging 1.4% and RPI inflation 2.5%. As the chart shows, it has only really been since 1997 that a significant divergence has emerged. This trend has undoubtedly been related to the steep rise in the pound that took place at that time. Sterling appreciated by around 20% (on a trade-weighted basis) between April 1996 and July 1997 and, with a few ups and down, has remained high since then. The strong currency has been a powerful deflationary force, pushing down the cost of imports (see p. 11) and squeezing domestic prices too. But core producer prices have been on a rising trend since 2000 and annual inflation rates reached eight-year highs last month. If the usual historical pattern is followed, core RPI inflation will rise significantly throughout 2005.

## Import prices are now rising

#### Deflationary impact of cheap imports is diminishing

Chart shows six-month annualised rate of change of UK import prices (excluding oil and erratic items such as aircraft and precious gems) and the year-on-year growth of average goods prices in the CPI index.



While the rapid growth of China (and others) has put upward pressure on raw materials and commodity prices (see p. 9), the country's emergence as an important trading nation on world markets has had the reverse effect on global goods' prices. Cheap imports of manufactured goods including textiles, children's toys and electrical equipment have helped keep goods price inflation exceptionally low, or negative, across the world. The impact has been compounded in the case of the UK by the strong exchange rate with the result that goods' prices have generally been falling over the last five years. But the trend does now appear to be changing. Import prices have provided a reasonable guide to the future path of goods' prices in recent years. Import price inflation has been rising (actually import price deflation declining) now since 2002 and turned positive in October. Goods' price inflation has followed a similar pattern, with a six-month lag. Falling goods prices have been crucial in keeping overall inflation low, but if goods prices rise in 2005, as looks plausible, then the 2% CPI inflation target could be breached later in the year.

## High money growth points to inflation trouble

#### 8% to 9% money growth is not consistent with the 2% inflation target

Chart shows the excess of nominal broad money growth (the annual increase in M4) over nominal GDP growth and the annual increase in the retail prices index over the last two decades.



As Milton Friedman famously said, "inflation is always and everywhere a monetary phenomenon". Every inflationary episode in the UK in the post-war period was preceded by excessive monetary growth. But what exactly is "excessive"? Over the long run the growth rates of money and of nominal GDP are closely related. The Bank of England has data going back to the late-1940s on the M4 measure of broad money in the UK, while the National Statistics Office has GDP data over the same time period. Between 1948 and 2004 Q3, nominal M4 rose, on average by 9.1% a year. GDP over the same 56-year period grew at an average annual rate of 8.7%. In more recent years money has grown, on average, by around 2% a year faster than nominal GDP, but the underlying relationship remains true. An inflation target of 2% (or 2½% on the old RPIX measure) along with trend GDP growth of 2½% implies nominal GDP growth of 5%. If money continues to grow by 2% a year more than GDP, that in turn implies a maximum "safe" rate of M4 growth of 7%. Recent rates of increase of 8% to 10% are therefore worrying, If they continue, they point to a rise in the inflation rate to 4% or more.