Economics MASTERCLASS

Inflation

Dr Stephan Pfaffenzeller looks at why inflation is a key concern for the real value of debts and assets.

Inflation is defined as a generalised rise in the prices of goods and services over a number of time periods. This definition matters: it does not refer to relative price changes. Relative price changes occur when the price of one product rises while other product prices remain constant, rise more slowly or even fall.

A measure of inflation should capture the price rise that is common to all products. This is easy in theory, but in practice a number of approximate measures are used. In most countries, inflation is measured by a Consumer Price Index (CPI). This is a bundle of weighted goods prices, deemed to be representative of the cost of living for a typical household. It is the inflation measure the Bank of England uses as a target.

In the UK, another price index – the Retail Price Index (RPI) – is used for some purposes, such as inflation adjustments for pensions and during wage negotiations. This is important, because the RPI frequently yields higher inflation figures than the CPI. During the 12-month period to May 2007 the RPI excluding mortgage interest payments changed by 3.3%, whereas the CPI increased by 2.5% only.

There is some discussion as to which goods should be included in the price index and to what extent the cost of housing should be reflected. At present, the cost of housing is not included in the inflation measure.

Causes of inflation

Among the causes of inflation, cost push factors can be distinguished from excess demand. Economic pressure in either category can have the effect of accelerating price growth.

Wages rising ahead of productivity are one possible reason for inflation. Prolonged wage pressure of this kind can be linked to the structure of the labour market.

Another reason is – paradoxically – a long period of economic success. As the economy operates at full capacity for a prolonged period of time, employers will start competing for labour resources, driving up wages. At least some of the wage increases can feed through to price growth.

Raw material prices can be driven up if there is increased competition for a limited available product supply. Prices for raw materials are notoriously volatile with large booms and slumps. However, non-oil raw material prices have in the past tended to gradually fall in real terms over the long run.

Demand-led price pressure can result from deficit spending or money supply growth. If government expenditure exceeds government revenue, there will be a need to finance the resulting budget deficit.

If this financing need is met through borrowing – usually by issuing government bonds – there will be two effects. On the one hand, the government is now competing with the private sector for funds; this will tend to drive up the rate of interest. Alternatively, excess demand from the public sector will be added to private sector demand for goods and services, thus forcing prices up.

Perhaps the most direct way of accelerating inflation is through expanding the money supply. It has long been recognised that money supply growth in excess of real income growth will be reflected in rising prices, as too much money keeps chasing too few goods.

If there is too much demand for goods and services because of an expansion in the money supply, interest rates should tend to fall. This is known as loose monetary conditions. If the government has direct control over the money supply, additions to it can be used to fund the budget deficit. This will drive up prices, but won't create public debt.

Governments therefore have a temptation to use an expansion in the money supply to finance public spending.

Inflation control

Because of the temptation to money-finance the budget deficit, many countries have granted independence to their central bank. A government that is in charge of public spending as well as in control of the money supply has to balance inflation containment against other objectives. An independent central bank has the institutional objective of controlling inflation and is not tempted to compromise price stability in favour of other policy objectives.

In the UK, the Bank of England is instrument-independent; the inflation target is decided on by the Government, and the Bank can use the instruments at its disposal to achieve this target. The current inflation target is 2% per year. Other central banks, such as the European Central Bank (ECB), are completely independent.

Central banks can attempt to manipulate the money supply directly by altering the amount of reserves that commercial banks are required to place with the central bank. The Bank of England in practice relies on setting the interest rate it charges when lending to commercial banks. UK base rates have recently risen to 5.75%, as inflationary pressure has been building up.

Aside from a government deficit of about 2.7% of GDP, there is renewed inflationary pressure from rising prices of traded goods. Cheap imports from China have contributed to low inflation in a number of Western countries recently, but rising raw material prices and labour costs in China itself are now contributing to upwards pressure on prices worldwide.

Inflation and debt

Inflation lowers the real value of financial assets with a given nominal amount. This is true for the real value of assets as well as the real value of debts. Therefore, inflation should be good news for net debtors since it will tend to erode the real value of their debt.

In practice, interest rates will adjust to take account of higher inflation. The difference between the nominal market interest rate and the rate of inflation is known as the real interest rate. It is assumed that the interest rate net of inflation reflects the cost of borrowing money over time. A higher nominal interest rate merely compensates for inflation, keeping the real value of the debt constant.

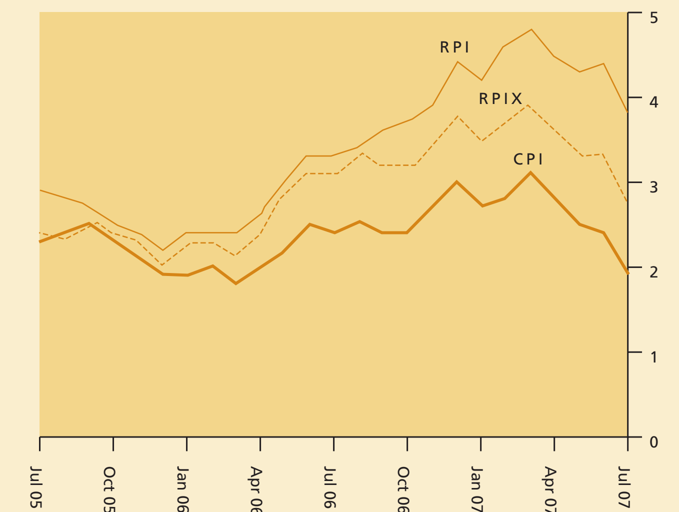
Interest rate changes may affect debt payments in another way. The immediate effect of an interest rate increase will be to drive up the cost of interest payments on outstanding loans. In theory, incomes should rise in line with inflation if a fall in real income is to be avoided. This should in principle compensate for interest rate increases that merely reflect higher inflation.

In practice, however, there could well be an increase in the real cost of the interest burden. One reason for this is that the central bank may well raise interest rates in advance of inflation, on the grounds that higher inflation is expected. If the interest rate increase is successful in containing inflation there would then be no need for nominal incomes to rise to keep real earnings constant. Yet, the cost of interest payments would still have risen, as would the cost of flexible rate mortgages.

Possible rates of 6% have been reported and there are reasons to expect the Bank of England and other central banks – because they are relatively new phenomenon yet to experience a 'real world test' of substantial inflationary pressure – to be unusually cautious in the face of any such increase.

Those confronted with outstanding debt should therefore brace themselves for rising costs of debt service. A more inflationary international environment, low unemployment at home and an institutionally conservative central bank all point towards a coming rise in interest rates.

Yearly changes to the consumer price indices.



In the year to July, the consumer price index (CPI) rose by 1.9%.

The all items retail prices index (RPI) rose by 3.8%

Over the same period, the all items RPI excluding mortgage interest payments index (RPIX) rose by 2.7%.

Housing

RPI percentage changes over 12 months