

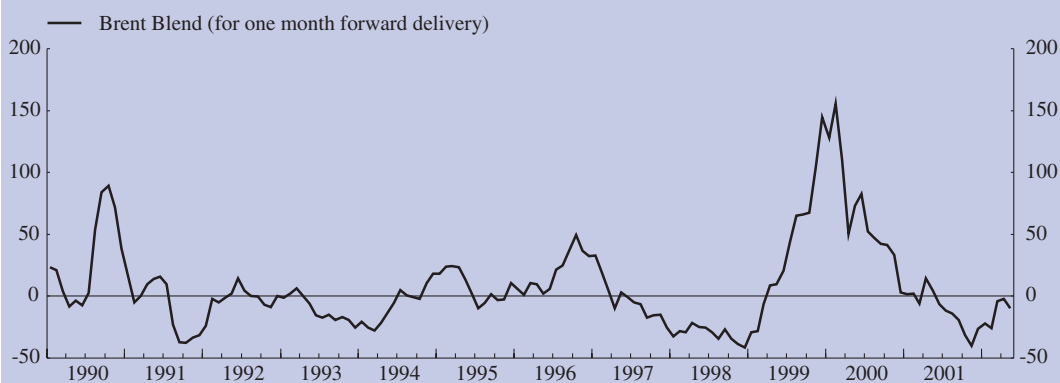
Box 4

The clustering of shocks to HICP inflation since the start of Stage Three of EMU

Although consumer price inflation is in the long run a monetary phenomenon, in the short run there may be shocks which are outside the control of monetary policy but which may have a considerable and protracted effect on inflation. In the period from the start of Stage Three of EMU (i.e. January 1999) to April 2002, the average year-on-year inflation rate in the euro area was 2.0%; equal to the upper limit specified in the ECB's definition of price stability. This record on inflation should be viewed in light of the fact that price developments in the euro area have been subject to a sequence of adverse temporary shocks that have exerted considerable upward pressure on inflation. However, it is hard to assess the extent to which this sequence of shocks constitutes an exceptional development. This box therefore reviews the main shocks that have affected HICP inflation since January 1999 and places them in context by reviewing price and cost developments for the entire period from the beginning of 1990 to early 2002.

Chart A: Oil prices

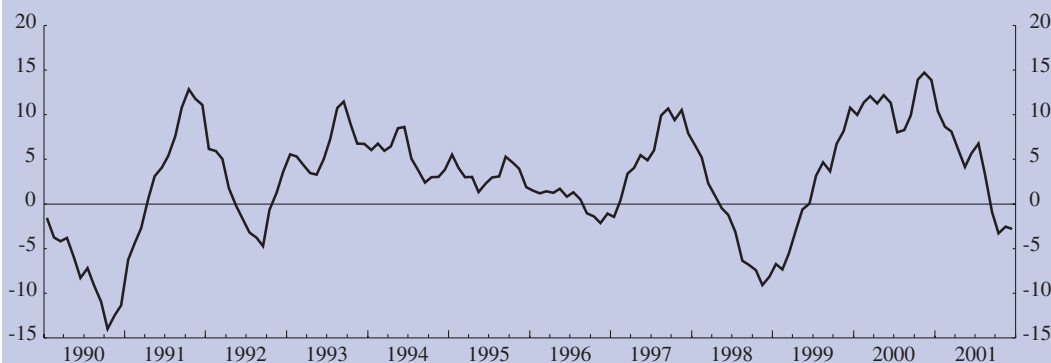
(US dollar, annual percentage change)



Source: Thomson Financial Datastream.

Chart B: Non-energy import unit value index

(annual percentage change)



Source: ECB calculation.

The factors that have had the strongest impact on inflation rates since January 1999 are movements in oil prices and changes in import prices (which reflect changes both in the euro exchange rate and in external price developments). Furthermore, two additional factors, namely weather fluctuations and, more prominently, animal diseases, have exerted considerable upward pressure on prices in recent times. Charts A and B show the year-on-year percentage rate of change of oil prices (in USD) and of the non-energy import unit value index respectively.¹

Charts A and B point to two quite exceptional developments characterising the period from mid-1999 to the end of 2000. First, during this period, oil prices and non-energy import unit value indices reached their highest year-on-year rate of growth for the entire length of time under consideration. In particular, the year-on-year increase in oil prices in the period from December 1999 to February 2000 was close to 150%, considerably higher than in any other month since 1990. Second, the increase in oil prices and the non-energy import unit value index that began in late 1999 was relatively protracted. For instance, the year-on-year rate of increase in oil prices remained above 20% for the entire period from June 1999 to November 2000, i.e. for 18 consecutive months. Meanwhile, the same rate of increase in the non-energy import value index remained close to 10% in the period from January 2000 to January 2001. Such a protracted spell of high rates of increase in these cost indicators is unprecedented for the entire sample period, particularly so in the case of oil prices.

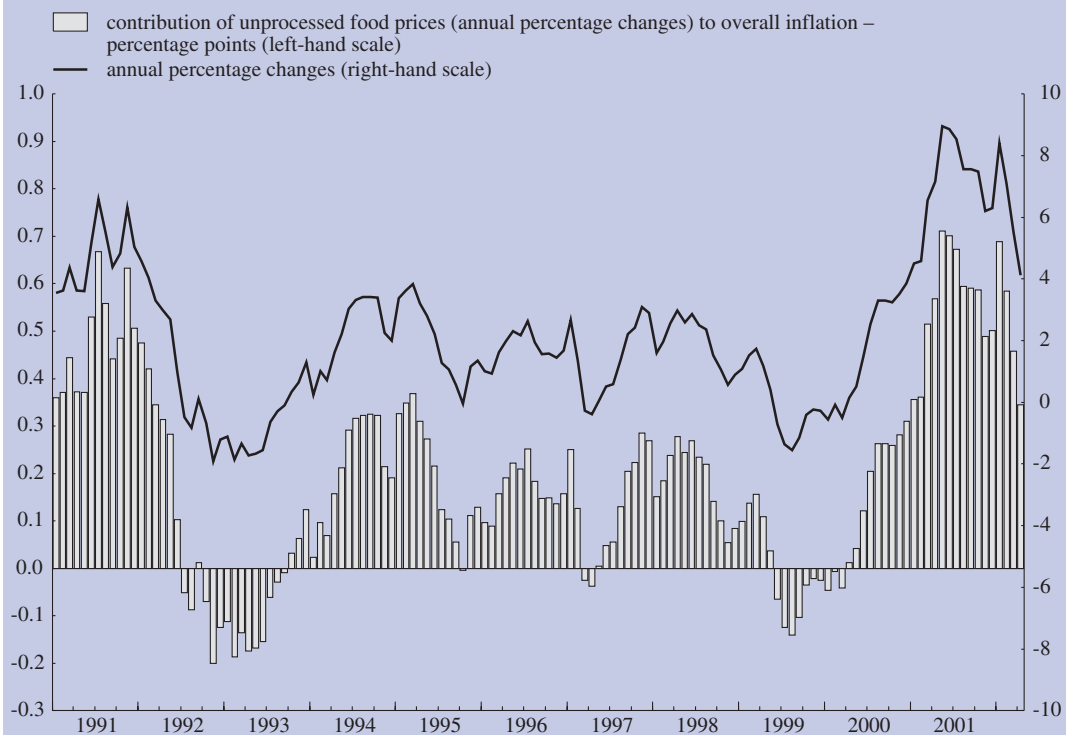
Furthermore, as reflected by recent developments, Charts A and B suggest that since 2001 the impact of oil and non-energy import prices on inflation has declined considerably. However, such moderation in the upward pressure on prices from oil prices and non-energy import unit values has coincided with a considerable impact on unprocessed food prices stemming from concerns over animal diseases in 2001. The importance of the shock to HICP inflation caused by animal diseases (most prominently BSE) in 2001 can be gauged from the observed unprocessed food price² developments, set in a broader perspective. Chart C shows the annual rate of increase in unprocessed food prices and the contribution of the increase in unprocessed food prices to overall HICP inflation. The year-on-year rate of growth in unprocessed food prices was exceptionally high in the months from April to October 2001, remaining close to 8% during this period. Here again, the high rates of growth in unprocessed food prices, the duration of the shock and its contribution to headline inflation in the year 2001 (see Chart C) are unprecedented in the broader context considered.

¹ These data are described in the Article entitled "Price and cost indicators for the euro area: an overview" in the August 2000 issue of the ECB's Monthly Bulletin.

² This covers prices of meat, fish, fresh fruit and vegetables.

Chart C: Unprocessed food prices and contribution to the overall HICP inflation

(annual percentage changes and percentage points)



Sources: Eurostat and ECB calculations.

Note: HICP data for unprocessed food price level are available from 1990.

Taken together, Charts A, B and C confirm that the adverse shocks that have affected HICP inflation in the recent past were both large and unprecedented in terms of their degree of coincidence in a relatively short period of time (i.e. from mid-1999 to late 2001). This highlights the exceptional nature of the period following the start of Stage Three of EMU in terms of the clustering of shocks exerting upward pressure on prices.

Overall, price developments since January 1999 have been shaped by a sequence of adverse but rather specific shocks. These shocks could not have been anticipated by monetary policy and they could not be corrected in the short-term. The effects of these shocks, which should unwind sooner or later, are taken into account by monetary policy with a medium-term orientation. Therefore, in principle, they should not affect the outlook for price stability over the longer term. However, the clustering of shocks all acting in one direction makes the situation rather more difficult to assess than the typical textbook case of a one-off shock. It would be a cause for concern for the ECB if past upward tendencies in prices, even though they resulted from an exceptional combination of specific factors, were to become entrenched. Recently published forecasts on price developments in the euro area, developments in indicators of inflation expectations, and wage settlements neither clearly confirm nor entirely contradict such concerns. It is, at this juncture, therefore particularly important to remain vigilant with regard to the further evolution of these main factors determining the outlook for prices.