Box 2

The effect of oil prices on the Harmonised Index of Consumer Prices (HICP)

Over the course of 1998 and in the early part of 1999 the rate of increase in euro area headline HICP was reduced by falls in the energy price component of the HICP basket. In 1998 headline HICP increased by 1.1%, while the HICP excluding energy prices rose by 1.4%. This pattern was repeated in the first quarter of 1999, when the HICP excluding energy prices rose by 1.1% year-on-year, whereas headline HICP increased by only 0.8%. The negative contributions from the energy price component reflect, to a large extent, the fall in the international price of oil in 1997 and 1998. However, since February 1999 the decline in oil prices has halted and reversed. Consequently, all other things being equal, the headline measure of HICP inflation will be subject to upward pressure as the effects of higher oil prices feed through into the index.

Compared with the low average level of USD 10.55 per barrel reached in February 1999 (see the chart below), the price of crude oil (Brent Blend) has risen, reaching a level of USD 22.20 on 8 September 1999. This compares with a level of USD 19.40 in 1997 and of USD 18.15 on average over the 1990s. In euro terms, the price movements during 1999 have been somewhat stronger as a result of the appreciation of the US dollar against the euro since February.

Crude oil prices 1)
(monthly data)

The international price of oil has been strongly affected by the decisions taken by the Organization of the Petroleum Exporting Countries (OPEC). OPEC’s decision to limit oil production constituted an important explanation for the dramatic oil price rises in 1973 and 1979 respectively. Moreover, the recovery of oil prices during 1999 is associated with a new OPEC production agreement that entered into force at the start of April 1999.

When oil prices change, consumer prices are affected via different channels and with different lags. First, there is a quasi-immediate impact on the overall HICP which is largely proportional to the weight of energy prices in the HICP basket (8.8%). Second, oil price increases will also affect costs and prices in earlier stages of production (i.e. industrial producer prices), which are likely to feed through to higher consumer prices with a lag of several quarters. With regard to the first of these two channels, there has already been a marked increase in the year-on-year rate of change in energy prices in the HICP (from -4.3% in February to 3.2% in July 1999). By contrast, the recent increase in industrial producer prices (mainly as a result of the rise in oil prices) has not yet had a noticeable impact on consumer prices. This is reflected in a stable year-on-year rate of increase in the non-energy industrial goods component of the HICP (see Table 3 in the main text).

Finally, on a few occasions over the past 30 years oil price rises have seriously compromised price stability, especially by triggering “second round effects” in the form of vicious inflationary wage-price spirals and fiscal

Sources: International Petroleum Exchange and ECB calculations.
1) Brent Blend (monthly averages, for one-month forward delivery). Saudi Arabian Light (month-end) up to April 1985.
2) ECU up to December 1998. No ECU quotations are available before December 1978.
indiscipline. On occasion these effects were accommodated by lax monetary policy in some countries. Owing to labour and product market inflexibility, these episodes also proved costly in terms of employment and output.

However, the current situation is different from that in the past in a number of respects. First, the recent rise in oil prices is smaller than the quadrupling of oil prices (in US dollars) in 1973 or the near tripling in 1979-80. In addition, as the most recent oil price increase has reversed the significant fall in 1997-98 (see the chart above), in August 1999 OPEC expressed a desire to stabilise oil prices around current levels. Second, in both 1973 and 1979 signs of overheating in the western economies existed prior to the oil price shock. At the time oil prices started to rise, inflation was already rising. Estimates of the output gap pointed towards excess domestic demand. By contrast, although the outlook for real activity has improved in the euro area as a whole, at present most estimates continue to suggest the existence of some “slack” in the economy. Given the current cyclical situation, the risk of second round effects stemming from the oil price rise that are channelled through inflationary wage agreements is not expected to be as great as in previous periods. Indeed, following an adverse terms-of-trade shock such as an oil price rise, unduly high wage developments would not only endanger price stability but would also risk causing increases in structural unemployment. Third, in the euro area the institutional framework for fiscal policy, in the form of the Stability and Growth Pact, requires fiscal discipline and the maintenance of a budgetary position close to balance or in surplus over the medium term. This institutional framework should make it less likely that second round effects similar to those experienced in the 1970s will arise. Nevertheless, the Eurosystem will remain vigilant with regard to the inflationary implications of potential second round effects.