

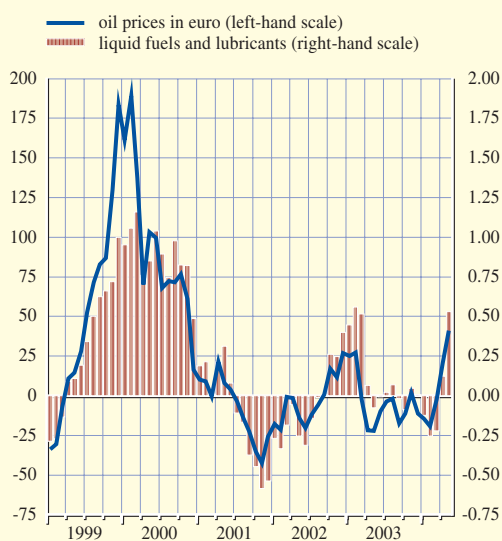
Box 3

RECENT OIL PRICE DEVELOPMENTS AND THEIR IMPACT ON EURO AREA PRICES

Euro-denominated oil prices have increased by almost 16% since the beginning of 2004, reaching €27.5 per barrel on 30 June, as a result of oil price increases in US dollar terms and the moderate depreciation of the euro during this period. This increase in oil prices has already led to some upward pressure on euro area producer and consumer prices. This box briefly reviews the factors behind this rise in oil prices and stresses its impact on euro area prices, distinguishing between direct, indirect and second-round effects.

Chart A Oil prices and contribution of energy components to HICP inflation

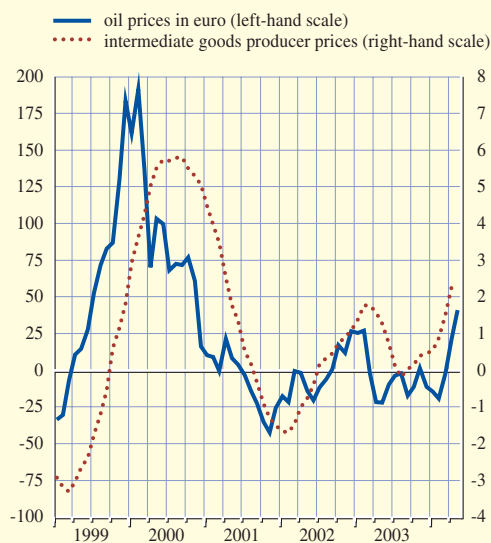
(annual percentage changes, percentage point contribution to HICP inflation)



Sources: Eurostat, Thomson Financial Datastream and ECB calculations.

Chart B Oil prices and intermediate goods producer prices

(annual percentage changes)



Sources: Eurostat, Thomson Financial Datastream and ECB calculations.

Several factors have contributed to the rise in oil prices in 2004. Demand for oil has been buoyant on the back of improving global economic conditions, led by China and the United States. The International Energy Agency now expects demand for oil in 2004 to grow at its fastest pace in 23 years. Statements from the Organisation of Petroleum Exporting Countries (OPEC) during the first three months of 2004 also supported prices, as the organisation announced on several occasions that it would rein in production above its quota and reduce its quota in the second quarter of 2004. Even though these cutbacks in the quota were never followed up with reductions in actual production, it fuelled speculation since market participants thought that production cutbacks were imminent. OPEC has recently announced an increase in its production quota during the summer, but this reversal of previous announcements was a mere realignment of the quota with actual production levels. In addition, the situation in Iraq, as well as threats to Saudi Arabia's oil infrastructure, have heightened concerns about the security of oil supplies and added to the pressure on prices.

Turning to the impact of the oil price increase on euro area prices, it is helpful to distinguish between direct, indirect and second-round effects. First, *direct effects* refer to the impact of an oil price change on the overall HICP through its immediate effect on consumer prices of energy. Chart A shows that oil price movements have an almost immediate effect on oil-related components of energy prices, in particular liquid fuels and lubricants for personal transport equipment. The effect appears, however, to be more muted than that of the much stronger oil price increase in 1999/2000. According to a commonly used rule of thumb, an increase in euro-denominated oil prices by 10% leads to an immediate rise in the annual rate of change in consumer prices of energy by 1 percentage point. As the weight of energy in the total HICP amounts to 8.1%, this translates into an increase in total consumer price inflation of roughly 0.1

percentage point during the quarter of the oil price shock. As a result, the direct effect of the recent increase in oil prices has been to push up energy price inflation by roughly 1.6 percentage points and overall inflation by 0.2 percentage point since January 2004. It should be noted that the increase in the annual rate of change in energy prices since January was larger than the pure direct effect from the oil price increase. This is to a large extent related to base effects, whereby declines in energy prices in the first half of 2003 have pushed up the annual rates of change in the first half of 2004.

Second, *indirect effects* refer to the possibility that, in addition to direct effects, an oil price shock may have an impact on the prices of other goods and services through the effect of higher energy input costs and can give rise to a more generalised change in prices. Since energy is an important input in the production of goods and services, an oil price increase can lead to an increase in producer prices. Chart B shows the co-movement between oil prices and intermediate goods producer prices and illustrates that the impact of oil prices on producer prices seems to materialise with a lag of several months. However, producers might dampen the indirect effect of oil price changes through changes in their profit margins, so that only part of the higher costs are passed on to consumers. As a result, the indirect effect on consumer prices takes time to materialise. The chart also shows that intermediate goods producer prices have already risen considerably in reaction to the oil price increase observed since the beginning of this year, which however also partly reflects increases in non-energy commodity prices.

Finally, *second-round effects* refer to the possibility that, in addition to the direct and indirect effects mentioned above, an oil price shock may have a further impact on inflation because it influences wage and price-setting behaviour. A rise in inflation due to the direct and indirect effects of an oil price increase may lead to stronger wage growth if wage earners try to re-establish their purchasing power at the level prevailing before the shock. This could imply higher unit labour costs and consequently upward pressure on inflation if producers pass on the higher wage costs to consumers. Similarly, even firms not affected by the cost shocks could try to re-establish the real value of their profit margins by increasing their prices. Oil price increases imply a terms-of-trade loss for the euro area economy, and thus reduced real income. This loss cannot be avoided for the economy as a whole. Second-round effects can be contained if wage bargaining and price-setting behaviour are mainly based on inflation expectations over the medium term rather than on currently observed inflation. As a result, in the context of a price stability-oriented monetary policy, this channel should be far less important than the direct and indirect channels. Moreover, the occurrence of second-round effects also depends on whether the economic context, in particular the labour market situation, encourages higher wage claims, which is not the case at the current juncture. However, the ECB remains vigilant against possible second-round effects arising from the recent increase in oil prices.