## Box 4

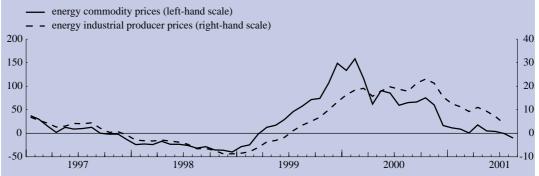
## Recent declines in commodity prices easing upward pressures on producer prices

Euro area HICP inflation is still being affected by the indirect effects associated with past increases in commodity prices – in particular energy – and the depreciation of the euro that took place during most of 1999 and 2000. Meanwhile, upward pressures on producer prices from both energy and non-energy commodity prices have declined. Against this background, this box provides an analysis of the relationship between commodity prices and euro area producer prices.

Developments in commodity prices – expressed in euro – give an indication of price changes at an early stage of the production chain that may subsequently be passed through to prices for final goods and services as measured by the HICP. For analytical reasons the developments in the commodity price index, which is compiled by the Hamburg Institute for Economic Research (HWWA), are split into an energy and a nonenergy component. This breakdown is comparable with the new classification applied by Eurostat which separates energy from other intermediate goods prices (see Box 3, entitled "Release of harmonised statistics for main industrial groupings in short-term statistics", in the August 2001 issue of the Monthly Bulletin). Although there are differences in terms of product coverage and weighting between the commodity price index, on the one hand, and energy and intermediate goods prices as measured in the euro area producer price index (PPI), on the other, there is a strong positive relationship between them. The HWWA commodity price index is published in a very timely manner, so it can provide up-to-date information on recent and likely future developments in producer prices.

Energy prices have a weight of almost 17% in the overall euro area PPI. Developments in a major determinant like energy prices are of great importance when assessing potential short-term cost pressures on prices in the industrial sector. The higher volatility of the energy commodity prices is due to the high share of crude oil (92%), while crude petroleum and its processing account for only about one-third of the energy component of the PPI (in which electricity has the greatest weight). Moreover, the inclusion of taxes (except VAT) and excise duties dampens the movements of energy prices in the PPI. The slowdown in the annual growth rates of energy commodity prices that started at the beginning of 2000 preceded the slowdown in euro area energy producer prices around the turn of 2000/2001 (see Chart A). However, despite this slowdown, the annual growth rate of energy commodity prices was almost 60% on average in the second half of 2000. The decline has continued in the first eight months of 2001, and in July and August negative growth rates were recorded. Recent developments in the HWWA energy price index therefore suggest that there has been further downward pressure on producer prices channelled via its energy component.

## Chart A: Developments in energy commodity prices and energy industrial producer prices (annual percentage changes; monthly data)



Sources: HWWA – Institut für Wirtschaftsforschung (Hamburg) and Eurostat.

Note: The commodity price index was expressed in ECU up to December 1998, whereas the PPI was based on indices in national currencies. From 1999 onwards, both indices are expressed in euro.

In addition to energy prices, a very significant part - almost 32% - of the euro area PPI consists of intermediate goods. Developments in this component show a high degree of co-movement with non-energy commodity prices (see Chart B). Hence, by also taking account of developments in non-energy commodity prices (food, tropical beverages and industrial and agricultural raw materials), a more comprehensive picture emerges as regards the most recent and possible future developments in the euro area PPI. The year-on-year rate of change in non-energy commodity prices was on an upward trend between the fourth quarter of 1998 and the beginning of 2000. This was subsequently followed by a slowdown in the latter half of 2000 and the beginning of 2001. In the second quarter of 2001 the annual rate of change in non-energy commodities was -0.9%, which is 20.8 percentage points lower than the peak in the first quarter of 2000. Hence, recent data for the non-energy component of the HWWA commodity price index indicate that further downward pressure on euro area producer prices is likely after July 2001 (the latest month for which euro area producer price data are available). It should be noted, however, that any effects on intermediate goods prices associated with changes in the prices of non-energy commodities may differ, depending on whether the movement stems from a change in the euro exchange rate or in the price of commodities denominated in US dollars. One reason is that the exchange rate also affects the prices of imported goods that are included in the intermediate goods price index but not in the non-energy commodity price index.

## Chart B: Developments in non-energy commodity prices and intermediate goods prices (annual percentage changes; monthly data)

non-energy commodity prices (left-hand scale) intermediate goods industrial producer prices (right-hand scale) 24 6 4 16 2 8 0 0 -2 -8 -16 -4 -24 -6 1997 1998 2000 2001 1999

Sources: HWWA – Institut für Wirtschaftsforschung (Hamburg) and Eurostat.

Note: The commodity price index was expressed in ECU up to December 1998, whereas the PPI was based on indices in national currencies. From 1999 onwards, both indices are expressed in euro.

Since the prices of commodities traded on the world market are generally denominated in US dolars, the EUR/USD exchange rate has a substantial impact on commodity and euro area producer prices. A significant part of the recent slowdown in the year-on-year rates of change in commodity prices, and hence in euro area energy and intermediate goods producer prices, reflects the fact that, following a period of decline, the EUR/USD exchange rate has fluctuated in a narrow range since the second half of 2000. Another factor that affects commodity prices is world demand. The decline in the year-on-year rates of change in commodity prices in 1998 coincided with the slowdown in economic growth caused by the Asian crisis. More recently, the slowdown observed in both US and world output growth may, to some extent, explain recent developments in commodity and producer prices. Since these lower price pressures are expected to feed through the chain of production, they will also ultimately affect prices at the consumer level in the euro area.