

## Box 4

## RECENT OIL AND PETROL PRICE DEVELOPMENTS

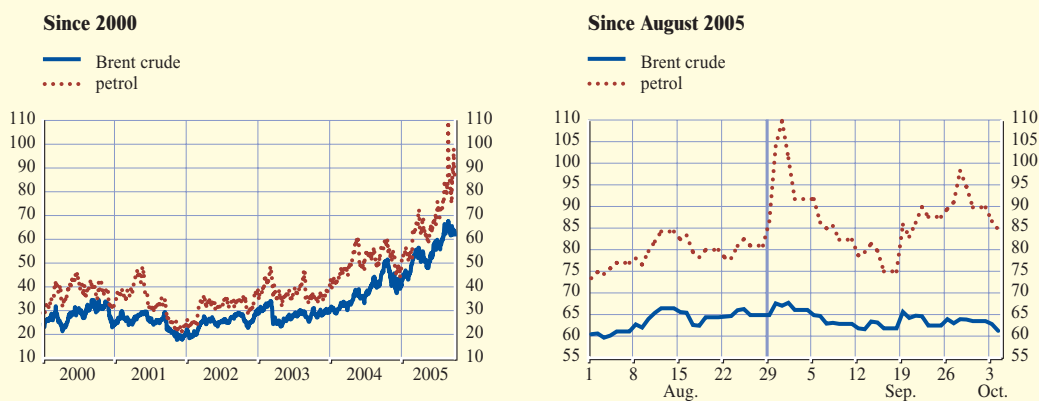
This box briefly presents recent developments in oil and petrol prices, focusing particularly on petrol price movements in the aftermath of hurricane Katrina and their impact on consumer prices.

## Global developments in oil and petrol prices

After fluctuating between USD 20 and USD 35 in the period 2000-03, crude oil prices have soared, with the price of Brent crude oil more than doubling from around USD 30 at the

## Chart A Oil prices

(USD/barrel; one-month forward; daily data)

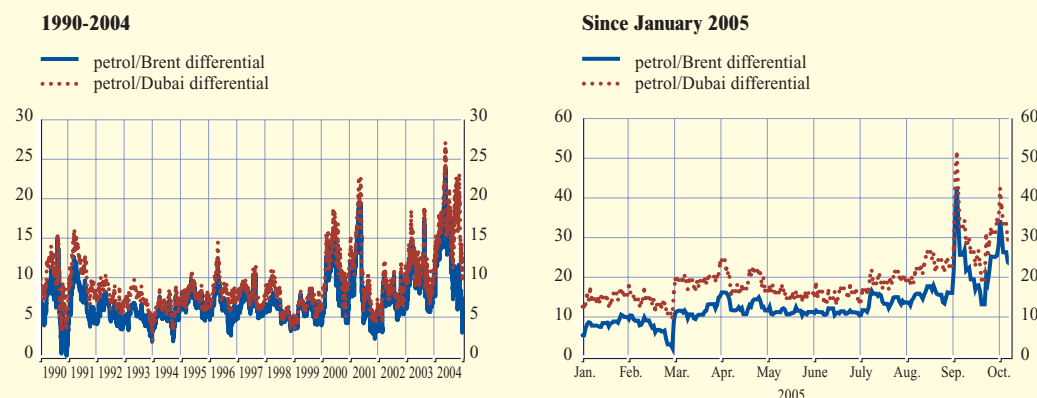


Source: Bloomberg.

Note: The figures show the price of Brent crude oil traded at the International Petroleum Exchange and unleaded petrol traded at the New York Mercantile Exchange, delivered free on board in New York Harbor. The latest value refers to 4 October 2005.

## Chart B Price differentials between petrol and crude oil

(USD/barrel; daily data)



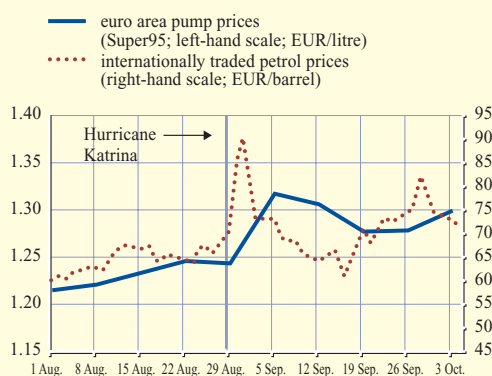
Source: Bloomberg.

Note: The figures show the price of Brent crude oil traded at the International Petroleum Exchange and unleaded petrol traded at the New York Mercantile Exchange, delivered free on board in New York Harbor. The latest value refers to 4 October 2005.

beginning of 2004 to a new all-time high of USD 67.5 on 2 September 2005. Petrol prices followed a very similar pattern until the week before hurricane Katrina struck the US Gulf Coast on 29 August. From the start of 2005 to August, crude oil prices increased by almost 60%, while petrol prices increased by around 70% (see Chart A, left panel). Subsequently, price decoupling was observed, with considerably stronger rises in the price of petrol in the aftermath of the hurricane (see Chart A, right panel).

Under normal circumstances, there is generally a strong link between crude oil and petrol prices, as they are coupled by relatively stable refining costs. During the 1990s, petrol prices stood, on average, around USD 6 per barrel above the price of light sweet crudes, such as Brent, and around USD 8 above the price of heavier and sour crudes, such as Dubai. From the beginning of 2004 until September 2005, the average price differential has more than doubled compared with the levels of the 1990s, to around USD 12 for Brent and USD 18 for Dubai (see Chart B). This widening differential reflects the longer-term erosion of global spare refining capacity following strong global demand for oil and insufficient investment to adequately expand refining capacity. In principle, widening price differentials should act as a signal to invest in additional refining capacity. However, even though margins have already risen considerably in recent years, after a period of low margins in the 1990s, this has not led to sufficient investment to expand refining capacity. One reason for this is that long-term investments require a sustained high margin to be profitable. In the 1970s, lower demand following the oil price shocks led to capacity overhang which depressed refining margins. Therefore, uncertainty regarding future demand may be a reason why the industry's reaction to the price signals of the last two years has been limited.

The damage to the energy infrastructure in the US Gulf of Mexico following hurricane Katrina placed further pressure on the oil supply chain. Crude oil prices rose to a new all-time high in its immediate aftermath, but returned to pre-hurricane levels the following week, partly in response to the release of strategic oil reserves by the US government and those coordinated by the International Energy Agency. By contrast, the hurricane's effects were considerably more

**Chart C Internationally traded and euro area petrol prices in August and September 2005**

Sources: Bloomberg, European Commission and DG-Energy (Weekly Oil Bulletin).

Note: Daily data for internationally traded petrol prices (i.e. unleaded petrol traded at the NYMEX); weekly data for euro area pump prices.

the second half of September, as hurricane Rita, although generally less devastating than initially feared, led to a further temporary reduction in US refining capacity.

### The impact on pump prices in the euro area

As internationally traded petrol prices soared in the days following hurricane Katrina, petrol prices paid at the pump by euro area consumers also increased dramatically and receded with some delay (see Chart C).

A delay in the adjustment of pump prices is not unusual. A simple correlation analysis shows that an increase (decrease) in the price of internationally traded petrol is generally followed by an increase (decrease) in euro area pump prices within one to two weeks. This is a result of the transmission mechanism between the international price of petrol and the pump price, which is determined by euro area distributors on the basis of various factors, including transportation and the degree of competition in the euro area market.

All in all, the increase in petrol prices in the aftermath of hurricane Katrina has had significant implications for the September euro area HICP inflation. Indeed, around 46% of the HICP energy component (i.e. 4% of the total HICP basket) is accounted for by car fuel prices. The rise in pump prices has thus impacted strongly on the energy component and largely explains the increase in the September HICP inflation to 2.5% according to the flash estimate published by Eurostat. In this regard, the subsequent rise in internationally traded petrol prices in the second half of September, associated with hurricane Rita, is expected to exert additional upward pressure on consumer prices.

Soaring petrol prices in the aftermath of the hurricanes in the United States have exacerbated the uncertainty about the global oil market which has seen the erosion of global spare refining capacity. The associated oil and petrol price developments have also caused a substantial increase in euro area headline HICP inflation. As regards economic activity, uncertainties relating to oil price developments persist, even though the specific effect of the hurricanes is likely to be limited and temporary.

pronounced on the prices of refined oil products, and in particular petrol prices. Petrol futures prices traded in New York (one-month forward prices) increased by 30% between the week preceding hurricane Katrina and its immediate aftermath. Even though the damage was local, the hurricane had global repercussions and pushed up petrol prices around the world. For example, it gave rise to higher “netback margins” (spreads between refined and crude oil, minus processing costs) in the United States which opened up arbitrage opportunities and attracted cargoes of petrol from other regions of the world, pushing up prices there. Subsequently, petrol prices also retreated from their hurricane-induced peaks to the level preceding it, although not as fast as crude oil prices. Petrol prices surged again in