Box 5

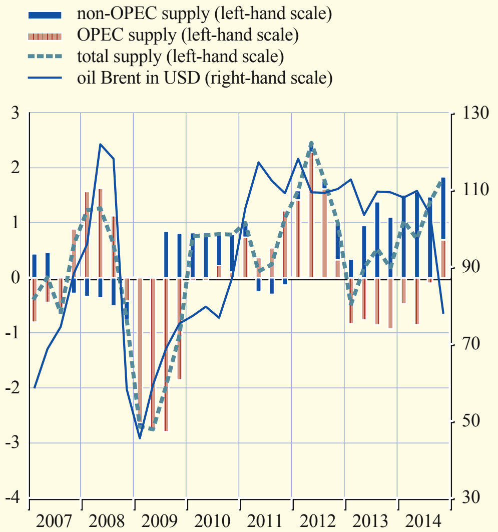
THE RECENT OIL PRICE DECLINE AND THE EURO AREA ECONOMIC OUTLOOK

The recent large decline in oil prices seems to be mainly driven by supply-related factors. Global oil supply has been supported by growth in US shale oil production and steady production from Russia, Iraq and Libya, while OPEC decided in November not to lower its production target (see Chart A). In addition, global demand for oil has been softening and oil demand forecasts for 2014 and 2015 have been repeatedly revised downwards.[1] However, the role of demand factors in the decline of oil prices appears to have been limited. This is underlined by developments in prices of other commodities, which typically correlate strongly with economic activity and demand, and which have declined to a much lesser extent compared with oil prices (see Chart B). This suggests that oil-specific supply shocks played a dominant role.

The recent fall in oil prices should therefore be expected to support global economic activity. Lower oil prices imply a transfer of income from net oil exporters to net oil importers. Given world production of oil of about 90 million barrels per day, a USD 60 (per barrel) oil price decline, as observed since July 2014, leads to an overall net income redistribution of approximately 2% of world GDP. As oil importers have, on average, a higher propensity to consume, global demand increases. Besides the euro area, most euro area trading partners are expected to gain from a fall in oil prices.

Chart A Global oil supply

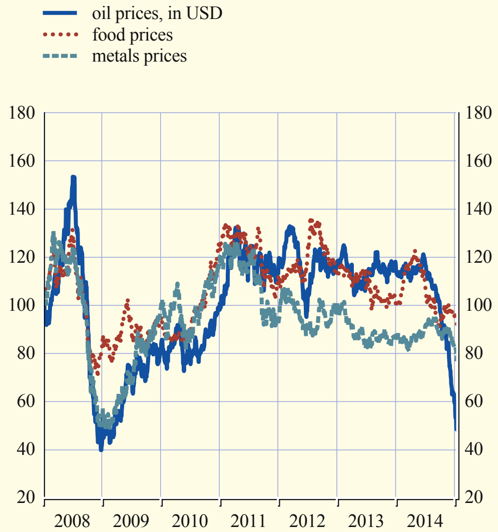
(annual changes in million barrels per day; quarterly data)



Source: International Energy Agency (IEA).

Chart B Co-movement of oil, food and metals prices

(index: 1 January 2008:100)



Source: ECB.
Note: The index for metals is composed of aluminium, lead, copper, nickel, zinc and tin.

1 The International Energy Agency (IEA) repeatedly revised downwards projected oil demand, with 2015 global oil demand expected to decline by 0.8%.

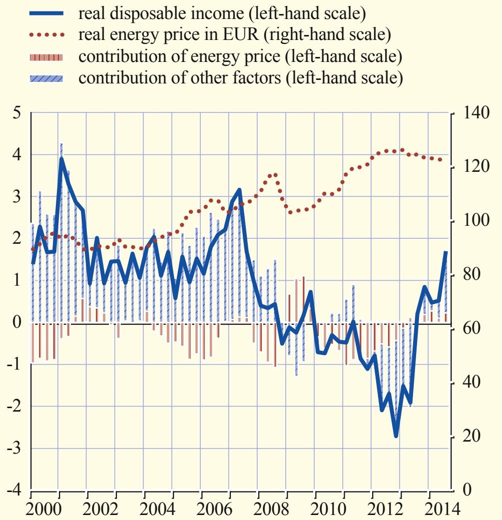
For oil importing economies such as the euro area, the recent decline in oil prices exerts significant downward pressure on HICP inflation in the near term. Direct effects are visible in consumer energy prices with a short lag as movements in upstream oil prices are generally fully passed through to pre-tax consumer prices with a lag of only around three to five weeks. Lower energy prices may also influence other prices through indirect effects, probably feeding through later.[2] In addition, they may trigger second-round effects in the behaviour of price and wage-setters.

Changes in oil prices affect economic activity predominantly via real disposable income and corporate profits. A decline in oil prices has typically favourable effects for economic activity, as it leads to direct increases in real disposable income and profits. At the same time, the extent to which real disposable income and profits react to declining oil prices may vary considerably, depending on the factors underlying the decline in oil prices. If oil prices fall primarily as a result of ample supply, real disposable income and profits will clearly increase. However, if weak global demand drives oil prices down, at least part of the increase in purchasing power and profitability through lower energy prices will be eroded by lower foreign demand.

Historical data confirm that real disposable income and profits react significantly to changes in oil prices. Chart C shows the development of energy prices and real disposable income. Real disposable income growth is broken down further into the gains and losses that are attributable to fluctuations in energy prices and to all other factors.[3] Chart D shows the development of oil prices

Chart C Real disposable income growth and contributions

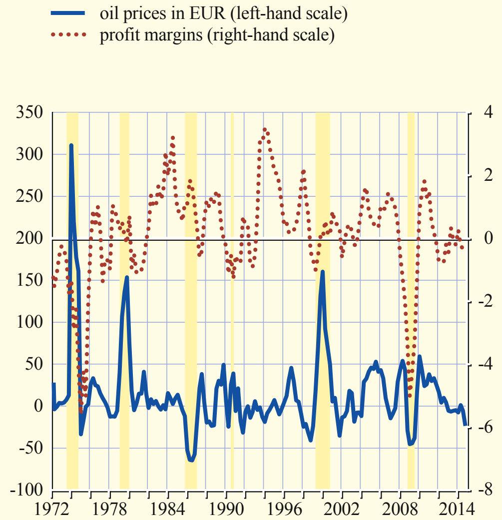
(annual percentage changes; quarterly data)



Sources: Eurostat and ECB staff calculations.
Note: The real energy price in euro is constructed using the US dollar price of Brent oil, the euro/USD exchange rate and the HICP for the euro area.

Chart D Profit margins and oil prices

(annual percentage changes; quarterly data)



Sources: Eurostat, area-wide model (AWM) database and ECB staff calculations.
Note: Yellow bars correspond to periods in which an oil price shock took place.

2 See also the box entitled "Indirect effects of oil price developments on euro area inflation", *Monthly Bulletin*, ECB, December 2014.
3 The contribution of energy price changes to the change in real disposable income equals the product of the nominal energy expenditure share and the percentage rate of change in real energy prices.

and profit margins growth, the latter approximated by GDP deflator growth minus unit labour cost growth. In the wake of the oil price hikes of 1999 and 2000, as well as those in the second half of the 2000s, real disposable income and profit margins declined. At the time of the sharp drop in oil prices in 1986, which, as with the current drop, reflected primarily ample supply, profit margins (for which data are available for a longer period) improved significantly as a consequence. By contrast, the fall in oil prices at the end of 2008 and the beginning of 2009 coincided with very weak global demand, and both real disposable income and profits declined sharply. As the recent decline in oil prices appears persistent and follows primarily from supply factors, it should support real disposable income and profits.

Overall, while the recent oil price decline is expected to significantly decrease HICP inflation in 2015, it should support euro area economic activity in 2015 and 2016. In general, the effects of oil price changes on HICP inflation should be temporary as, at present, futures markets predict a gradual increase in oil prices. If these were to materialise, the downward impact of oil prices on HICP inflation will eventually wear off and oil prices will start contributing positively to HICP inflation in 2016. Since the fall in oil prices seems to be mainly due to supply-related factors, the overall impact on euro area economic activity should be predominantly positive. This effect extends into 2016, as economic activity can generally be expected to react with a lag to lower oil prices.