Box 3 The macroeconomic impact of oil prices

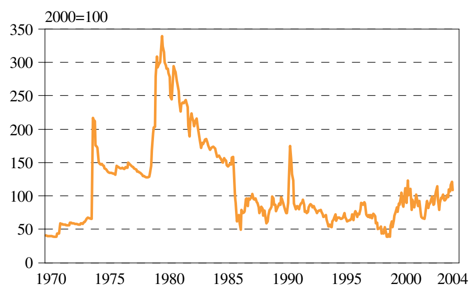
Oil prices soar, but have often been higher in real terms

Over the past twelve months, the price of crude oil has risen by half in global markets, and petrol by broadly the same amount. Despite talk of "record oil prices", this is hardly the case except for nominal US dollar prices. Crude oil prices in autumn 1990, deflated by the OECD CPI (excluding high-inflation countries), were one-fifth higher on average than today. They were two-thirds higher on average over the period 1979-1985 than today, and also higher in the second half of the 1970s and first half of the 1980s. Furthermore, since 2001 the US dollar has slid sharply against the euro and other major world currencies. Oil prices have therefore generally risen by much less in other currencies than in US dollars, which dampens the impact on business profitability and economic growth in those countries – including Iceland.

Chart 1

Crude oil prices 1970-2004

In real terms[1], January 1970 - August 2004



1. Deflated by consumer prices in OECD-countries (excluding high inflation countries until May 2004). *Sources*: EcoWin, Central Bank of Iceland.

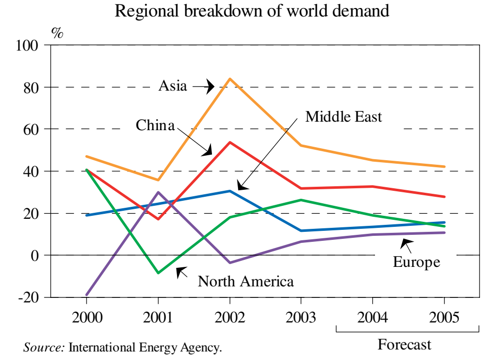
Strong role of demand in driving prices

To some extent the recent price rises have different causes from those in the past. Sharp hikes over the past few decades have generally been caused by decreased supply. Oil producers have cut production to force up prices. In the present case, however, the explanation is thought to lie on the demand side. Demand for oil has been growing so fast in the recent past that supply has hardly been able to keep pace with it. The shortage of excess production capacity has left prices highly susceptible to the impact of regional conflicts in major oil-producing countries, the situation in Iraq and global economic expansion.

Chart 2

Oil demand developments 2000-2005

Regional breakdown of world demand



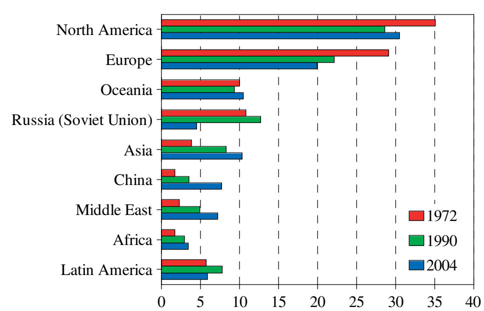
Source: International Energy Agency.

Increased share in demand from Asia, especially China

Regional shares in demand for oil have changed greatly over the past three decades. North America's share has declined from 35% in 1974 to less than 30% this year, and Europe's from 29% to 20%. In the space of 30 years, the share of Asia excluding Japan has grown from 6% to 18%, and China's share from 2% to 8%. The change has been sharpest in recent years. Thus demand growth over the past few years has mostly been driven by China, other Asian countries and the US. Almost half the increase in demand this year can

Chart 3

Crude oil demand by regions of the world 1972-2004



Source: International Energy Agency.

be traced to Asia, thereof one-third to China, while demand growth from the US has slowed down. A similar trend is forecast for next year.

Less impact on output growth in Iceland than in most other countries

The macroeconomic impact of higher oil prices takes two main forms. One is an increase in the price of imported goods, which has the direct effect of driving up inflation as measured by the CPI. The other is to cause a deterioration in the terms of trade, which curbs output growth. Studies using the Central Bank of Iceland macroeconomic model suggest that the rise in oil prices so far this year and the change implied by futures prices until the end of 2005, which together are equivalent to an increase of one-quarter in foreign currency terms between 2003 and 2004 and 6% between 2004 and 2005, will leave output growth over the next two years 0.1-0.2 percentage points lower than otherwise. This impact is somewhat softer than the estimates for other countries, e.g. the US. The probable explanation is the more widespread use of oil for heating and electricity production there than in Iceland.

Short-term rise in inflation

The impact on domestic inflation is more complex. In the short run, the direct impact of higher oil prices on inflation can be expected to weigh heavily, possibly driving it as much as 0.3 percentage points higher than otherwise this year, measured in terms of the increase between annual averages. However, the deterioration in the terms of trade would start to outweigh this impact roughly two years ahead, by which time oil prices are expected to be back on a downward path as well. Accordingly, inflation could then be roughly 0.2 percentage points lower than otherwise, ignoring the effect on the exchange rate of the króna.

Higher oil prices have a considerable effect on fisheries profitability, especially for blue whiting and shrimp vessels

Oil consumption is currently equivalent to 12% of fishing vessels' operating revenues on average, and accounts for 15% of their operating costs. This proportion has been rising over the past two years, due to higher prices of oil products. In Statistics Iceland's highlights of fishing operations for 2002, oil consumption was equivalent to 8% of revenues and accounted for 11% of operating costs. Operating profit (EBITDA) of fishing companies during the current year can therefore be expected to deteriorate by as much as 4 percentage points as a result of oil price rises in recent months. Higher oil prices hit individual fisheries segments in different ways. The impact is heaviest on trawlers, for which oil costs are equivalent to 13%-16% of revenues or 18%-20% of operating costs. The oil price hikes in recent months could cause serious difficulties for blue whiting and shrimp vessels and even bring these fisheries to a standstill, since they are energy-intensive and yield relatively low catch value.

Crude oil supply will increase in the years to come, contributing to lower prices

Supply of crude oil is expected to increase this year. In August, the IEA (International Energy Agency) forecast that supply will increase during the present year and 2005 by almost 7%, considerably in excess of demand. OPEC countries are currently producing more than their quotas. Inventories are thought to be above average and the position is in fact much better than could have been expected given the recent wave of price increases. Prices and inventories generally move in opposite directions, but this has not been the case in recent months. Inventories in the US are now at their highest for three years. Refineries have boosted their production capacity and are considered fully capable of meeting demand for oil products in the near future. Crude oil production capacity has mostly grown outside OPEC. In addition, IEA has strategic oil reserves corresponding to 2% of annual demand. For all these reasons, it is widely considered that the present high oil prices will not be sustained.