

DR ANDREW MCLAUGHLIN EXPLAINS WHY THE FUNDAMENTAL RULES OF ECONOMICS WILL STILL APPLY TO A COMMODITY PRICE THAT HAS RECENTLY BEEN DRIVEN BY PANIC.

The case for cheaper oil

t the start of 2005, the consensus forecast for UK economic growth this year was 2.6%. The eventual outturn is likely to be 1.6%. Forecasters have not covered themselves in glory, not least the Treasury, which had hoped for growth of 3%-3.5%. For once, everyone has sought refuge in the same excuse: high oil prices. These were expected to fall back into the \$40-\$45 range but instead climbed to a post-Hurricane Katrina peak of \$70 and have averaged \$56 for the year to date (through October). That has curtailed consumer spending, inhibited business investment and dragged growth below expectations. As if this were not enough, the Goldman Sachs commodities team caused many a finance director's heart to miss a beat with the strident claim that oil prices could top \$100 a barrel under a 'super-spike' scenario, which would be a serious setback for the UK and global economy.

Meanwhile, the futures market implies that prices will retreat to \$55 a barrel in the medium term (see Chart 1), although even this looks on the high side. In this article I will make the case for cheaper oil. The Royal Bank of Scotland's base case forecast is for prices to stage a gradual descent from \$60 back towards the \$40-\$45 range.

While I accept that risk in the oil market is firmly on the upside, the claims that prices will be above \$70 on average require us to believe that the traditional commodity cycle has broken down and that the price signal is not working – in other words, that higher prices do not lead to higher investment and lower consumption (via more use of substitutes and outright moderation). In my view it is too early to abandon these fundamental rules of economics.

THE RECENT PATH OF OIL PRICES Oil prices have posted strong gains throughout 2004-5 fuelled by rapid demand growth, particularly from the large emerging markets in Asia (and in the US where demand for transportation fuel increased sharply). The strength of demand caught suppliers by surprise initially and justified sharply higher prices. But there is more to the high oil price than economics.

Geopolitical concerns have been prominent, leading investors to demand a risk premium to offset fears of supply disruptions from

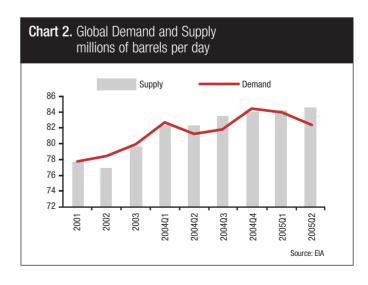
Executive summary

- Oil prices have peaked and will gradually slip back from \$60 a barrel to \$40-\$45.
- Oil production costs are falling, not rising; technological advances are overcoming reserve depletion; and energy producers are cranking up supply.
- A retreating oil price should bring down general inflation and help push UK GDP growth back towards its trend rate of 2.5%.

terrorist activity and political turmoil in oil-producing states. Speculative activity on the part of hedge funds and other yield-chasing investors has been a more recent influence on prices. The true impact is impossible to assess accurately but, historically, low interest rates have allowed extensive leverage to support speculative buying. Oil speculation is one of several big 'carry trades' to emerge in financial markets during the recent period of low interest rates.

The consequence has been a run-up in oil prices and a wafer-thin balance between supply and demand, which has left the market vulnerable to any short-run shock, the largest of which has been Hurricane Katrina in the Gulf of Mexico. Faced with this uncertain and worrying environment, many companies and countries have been forced to increase precautionary inventories, thus adding to the price pressures.

THE CASE FOR HIGHER OIL PRICES The super-spike scenarios reported in the market this year rest partly on the assumption that the under-investment of the past will continue to result in sub-optimal capacity in the future. Such spikes can happen in any market in the short run – especially one with long lead times to production – but it is not clear why it should prevail in the long run. I would attribute much of the under-investment to the fact that oil prices were very low



for much of the 1990s and did not justify higher capital expenditure. In fact, the figures (see Chart 2) suggest that when it became apparent in 2003-4 that demand was outstripping supply, there was an adequate supply-side response with higher production levels.

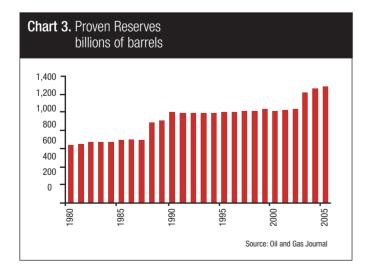
However, this kind of 'deferred investment' could be a problem in future. The International Energy Agency (IEA) estimates that the major oil-producing countries need to invest \$56bn annually to meet extra demand. Some of these economies are not open to foreign direct investment and participate in the Opec cartel, which may further reduce incentives to invest. An investment shortfall in these countries could hamper supply in years to come and, other things remaining equal, lead to higher prices. That is not, however, the IEA base case. Like us, IEA anticipates oil prices falling back towards \$40 a barrel.

The case for continued high prices also rests on the assumption that the cost of oil exploration, new field development and production will increase sharply in the years ahead, especially in areas like the North Sea, where existing oilfields offer diminishing returns. Higher costs would, of course, result in a significant drop in supply.

This argument is flawed in two important ways. First, the historical evidence points to lower and not higher production costs over time. Advances in technology such as directional drilling and 3D seismic imaging have more than offset the depletion of existing fields and have driven costs lower. This is most visible in the growth of proven reserves (see Chart 3) despite increasing production rates and cumulative oil production. So as economists might expect, advancing technology has allowed producers to replace depleted reserves, leading to a rise in supply potential.

There is little evidence that these long time trends will reverse, particularly given added incentives to explore marginal fields in the light of recent high oil prices. For example, as Canadian oil sands have become economically viable, Canada has surpassed Saudi Arabia as the country with the most proven reserves. The conversion of Alberta's heavy tar sands into crude oil is capital-intensive and requires scarce skills, but production could reach some 3.5 million barrels a day within a decade at a cost of less than \$20 a barrel. Once the capital equipment is in place, reserves are plentiful.

In many respects the case for higher oil prices rests on the assumption that the supply side of the industry is unresponsive to normal price signals and will not respond to high projected demand in the decades ahead. In fact, the evidence is that the opposite is the case. It appears the market has now reached a turning point. As global growth retreats gradually from its 30-year high last year, so oil demand growth is also moderating.



The supply-side response has been vigorous and perhaps underestimated as traders have become fixated on demand. Opec has all but suspended its production quotas, China is cranking up coal production, the Bureau of Economic Analysis in the US tells us that spending on exploration is sharply higher, and the count of active oil and gas rigs has reached its highest level since the mid-1980s boom.

Meanwhile central banks in the US and Asia are tightening monetary conditions in an effort to bring growth in those economies back toward trend levels. The withdrawal of monetary stimulus should also curtail speculative activity. Higher interest rates increase the appeal of other asset classes, while leverage becomes more expensive.

OIL PRICE FORECAST In the light of my faith in the normal interaction of supply and demand, and belief that global demand growth has peaked, The Royal Bank of Scotland's baseline forecast calls for crude oil prices to fall back to a \$50-\$55 range in 2006, \$45-\$50 in 2007 and \$40-\$45 in 2008. The risk to this forecast lies firmly on the upside. The lack of geographic dispersion and ongoing demographic, fiscal and security issues facing the world's largest producers are ever-present dangers.

For those readers looking further out on the horizon, perhaps as part of a project finance vehicle or long-term investment project, the issue is that much trickier. In normal market conditions the price should equate to the marginal cost of the last barrel of oil supplied to the market. The industry estimates that level to be around \$20-\$25 a barrel. This represents a conservative planning assumption which many still use.

But this is not a normal market, given the existence of an Opec cartel that restricts low-cost output to the market in favour of higher cost output (such as that from the North Sea) and often delivers a price level above the marginal cost. In fact, the last and very successful Opec quota regime kept prices in the \$22-\$28 range for several years up to 2003. There is therefore a price premium for the existence of the cartel which could range from anywhere between \$2 and \$20 a barrel depending on prevailing circumstances. An additional premium, say \$2-\$5, may also be merited for the geopolitical risks associated with the market over the long run. The marginal cost component is not contentious; the second two are entirely subjective. For this reason, production companies and debt investors have tended to assume a long-run price not far above marginal cost.

WHY CHEAPER OIL MATTERS Cheaper oil is of obvious and direct benefit to those companies with high energy-intensity ratios, such as manufacturers and transport companies. Many businesses have lacked the pricing power in end-markets to recoup the full cost of high oil prices recently. Lower oil prices also bring wider benefits to the economy. Consumers' disposable income has been crimped by double-digit increases in fuel bills. If this pressure abates it will leave more cash in the economy and bring some upside to retailers this winter.

At a broader level still, a retreating oil price should feed through into lower general inflation and open the prospect of one more rate cut in 2006. That may be needed to help push UK GDP growth back towards its trend rate of 2.5% from its current anaemic rate of 1.5%. It is also an increasingly relevant factor for the UK trade position now that we are a net importer of oil.

Dr Andrew McLaughlin is Chief Economist of The Royal Bank of Scotland. andrew.mclaughlin@rbs.co.uk

www.rbs.com/economics

RBS reports are available at www.rbs.com/economics