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OPINION

The outlook for the oil price

Bust and boom

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The precipitous fall in oil prices over the past year may just be paving the way for another spike

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RISING oil prices, believes Ali al-Naimi, Saudi Arabia's oil minister, may soon "take the wheels off an already derailed world economy". His Iranian counterpart agrees: "When the global economic crisis comes to an end, and the demand for oil picks up, the oil market could experience another price shock," he says. The boss of Chevron, America's second-biggest oil firm, also worries that "another period of tight supply" is at hand. Britain's energy minister is fearful too. Indeed, at a recent summit of oil grandees convened by the Organisation of the Petroleum Exporting Countries (OPEC) it was hard to find anyone who did not expect a price rise to rival the giddy leap to \$147 a barrel last year.

On the face of things, this concern is absurd. The plunge of \$115 in the price of oil from its peak last July to its nadir in December was the most precipitous the world has ever seen. Demand for oil is still falling, as the world economy atrophies. The International Energy Agency (IEA), an intergovernmental body which advises rich countries, thinks that global oil consumption will fall by 2.6m barrels a day (b/d) this year, or about 3%. That follows a fall of 200,000 b/d last year. World demand has not shrunk for two years running since the early 1980s.

In recent weeks America's oil inventories have been higher than ever at this time of year, and higher than at any point save September 1990, in the run-up to the first Gulf war. There is little room left to store any more crude, says Jeff Currie of Goldman Sachs. Rumours abound of traders hiring tankers to store their excess oil. Rich countries' stocks cover 62 days' consumption, the most since 1993 (see chart 1). The average over the past five years has been 52 days' worth.

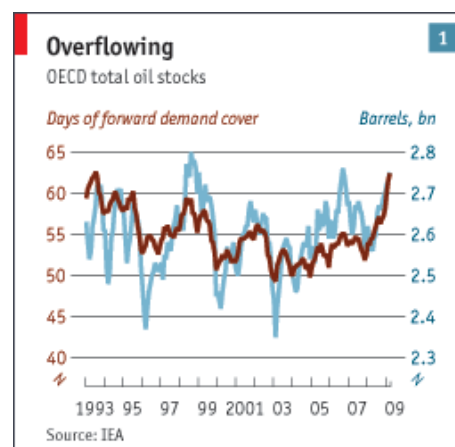
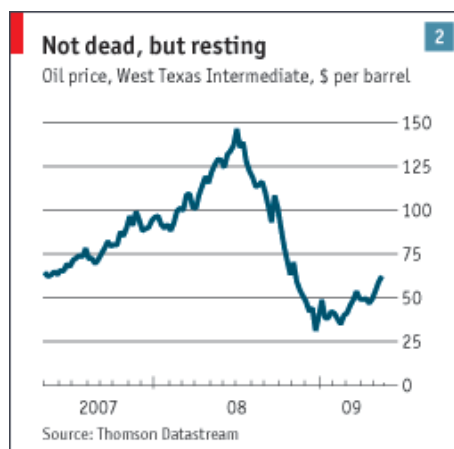
Slack in the system

Meanwhile, oil firms are not pumping nearly as much as they could. OPEC has announced three separate rounds of production cuts since

September in a bid to steady prices. In all, it has vowed to trim its output by 4.2m b/d. Analysts reckon its normally ill-disciplined members are indeed pumping some 3.3m b/d less. That leaves them with as much as 6m b/d of spare capacity to bring back into use should demand pick up. Saudi Arabia alone says it could pump 4.5m b/d more than it is now.

Despite this growing glut, however, the price of oil has been rising steadily in recent weeks (see chart 2). On May 20th it closed above \$60 a barrel for the first time in more than six months. That marks an increase of more than 75% since February 12th, when it sank below \$34—the fourth-biggest three-month rise on record, according to Mr Currie. The price of futures contracts suggests that energy traders see the price rising higher still in the coming months and years.

The explanation is simple. Oilmen are worried because they believe that many of the factors behind the record-breaking ascent last year remain in place. Much of the world's "easy" oil has already been extracted, or is in the hands of nationalist governments that will not allow foreigners to exploit it. That leaves firms to hunt for new reserves in ever more inhospitable and inaccessible places, such as the deep waters off Africa or the frozen oceans of the Arctic. Such fields take a long time and a lot of expensive technology to develop. Worse, new discoveries tend to be smaller than in the past and to run dry faster.



So oil firms must work doubly hard to replace declining fields and to increase output. As Francisco Blanch of Merrill Lynch puts it, they must find another Saudi Arabia's worth of oil every two years just to maintain their production at today's levels. Yet the oil industry is short of equipment and manpower, thanks to decades of underinvestment in the 1980s and 1990s, when prices were low. That left it struggling to expand despite the strong price signal of recent years, and thus poorly positioned to cater to vast new markets in the developing world, including China and India, where oil consumption has been growing fast. At the height of the boom, with the price repeatedly setting records, production outside OPEC even fell.

As soon as the world economy starts growing again, the theory runs, demand for oil will once again outstrip the industry's ability to supply it. The seemingly ample cushion of inventories and spare capacity will quickly be exhausted, sending prices soaring. In other words, the global recession has only interrupted the "supercycle" of which many analysts used to speak, during which the normal boom-and-bust cycle of oil and other commodities would give way to a protracted period of high prices, as ever-growing demand from emerging markets swallowed everything the extractive industries could produce. "The commodity supercycle is not over, just resting," says Mr Blanch.

Clear diagnosis, missing remedy

Oil bosses, OPEC ministers and anxious bankers all agree on what is needed to prevent this scenario becoming reality: lavish investment in the development of new fields and in exploration. Yet the reverse is happening. The oil industry is cutting its spending, bringing fewer new fields into production and exploring less. The IEA reckons that overall investment will drop by 15-20% this year.

The number of drilling rigs in use around the world fell by 32% in the year to April to 2,055, according to Baker Hughes, an oilfield-services firm. In America, where there is a glut of natural gas as well as oil, the

number of rigs in use has fallen by over half since its peak last year. OPEC countries, says Abdalla Salem el-Badri, the organisation's secretary-general, are cancelling or delaying 35 big projects. Cambridge Energy Research Associates, a firm of consultants, reckons that 5.5m b/d of additions to capacity will fall by the wayside around the world in the next few years. That amounts to a third of the projected net increase in output by 2014.

In theory, this should not be happening. Big Western oil firms ("majors" in the industry jargon) claim that they continue to invest steadily throughout the cycle, irrespective of gyrations in price. Big fields, they argue, can take a decade or more to develop, and may then produce oil or gas for several decades more. The price of oil at the time the investment is approved is irrelevant; the important thing is to make sure projects will be profitable across a range of possible future prices. If anything, given that most oilmen expect prices to rise in the medium term, you would expect them to be increasing their investment, to capitalise on the good times to come.

For the most part, the majors are sticking to their strategy. They have all, by and large, continued to invest on a scale similar to that of previous years, despite the huge dent made in their revenues by lower oil prices. Exxon Mobil, the biggest, increased its capital spending by 5% in the first quarter. Royal Dutch Shell and Chevron plan to invest as much this year as they did last: \$31 billion and \$23 billion respectively. BP plans a slight cut, from \$21 billion to less than \$20 billion. But BP, like Shell, is taking on more debt in order to preserve both its dividend and its investment plans.

Nonetheless, the extreme volatility of prices over the past year must have made big oil firms more cautious about future investments. Shell, for example, has delayed its expansion plans in Canada's tar sands, a particularly viscous form of oil that requires lots of processing and is therefore less profitable than the conventional sort. Both it and BP are cutting staff. And shareholders will presumably countenance only a certain amount of borrowing before they get cold feet.

Smaller oil companies, meanwhile, do not have nearly the same financial muscle, and so cannot maintain spending at last year's rate. All America's big "independent" firms, meaning those without refining arms, have cut their investments sharply. One, Devon Energy, plans to reduce its capital budget to \$4 billion or so this year from \$9 billion in 2008. The smaller independents, says Ayman Asfari, the boss of Petrofac, a British-based oilfield-services firm, "have been decimated". On London's Alternative Investment Market, a magnet for speculative ventures in natural resources, oil firms managed to raise just £23.6m (\$37m) in the final quarter of last year, compared with £229m in the previous quarter.

A handful of independents, such as Premier Oil, a British company that recently completed a successful rights issue, have sound enough finances to increase their spending. But Premier's boss, Simon Lockett, says it will focus more on completing existing projects and less on exploration. That certainly seems to be the pattern in the North Sea, at least. In the first quarter oil firms drilled the same number of wells to delineate past discoveries as they had a year before, according to Deloitte, an accounting firm. But the number of exploration wells plunged by 78%.

Then there are the state-owned firms in oil-soaked countries. These companies control the overwhelming majority of the world's oil. The better managed and funded of them plan to continue investing despite the downturn. Saudi Aramco, the world's biggest oil producer, recently completed a five-year scheme to expand its production capacity from 10m b/d to 12.5m b/d, at a cost of \$70 billion. Over the next five years it is setting aside more than \$60 billion for further investments. But it is naturally reluctant to continue to develop new fields when it already has 4.5m b/d of capacity sitting idle.

Petrobras, in which the Brazilian government owns a controlling stake, plans to increase its investment by 55% to \$174 billion over the next five years. Its recent offshore discoveries are thought to be among the biggest oilfields ever found. But they lie far underground, below deep waters and a thick, drill-foiling layer of salt. No one yet knows how expensive it will be to develop them or how long it will take, but the huge scale of the investment programme suggests their oil will not come cheap.

Moreover, most state-owned firms do not have nearly as much money to spend. In Russia, the world's second-biggest oil producer, output is falling largely because private capital has been scared off by a series of expropriations, while the state starves the firms it controls of sufficient cash for investment. By the same token, Venezuela's national oil company is so short of money that it has not been paying the oilfield-services firms it uses as subcontractors. When some of them refused to continue working until they had been paid, the government seized their assets.

And most oil-rich states, naturally enough, are happy to see the price rise. Many have become used to bumper revenues in recent years and have struggled to balance their budgets since the price slumped last year. Saudi Arabia's king has indicated that he thinks \$75 a barrel would be fair. Iran and Venezuela are much more hawkish. They are unlikely to invest heavily in order to reduce prices.

Similarly, countries that had raised taxes on oil when prices were high, such as Britain and Russia, are now particularly reluctant to reduce their take yet further by lowering them again. Yet their high marginal tax rates are helping to deter investment in new production capacity.

Slow service

Among the first to suffer the consequences of all this are oilfield-services firms. Their predicament gives a sense of the slowdown in the industry. Schlumberger, the biggest, cut its planned investment by 13% this year to \$2.6 billion after its profits fell by 30% in the first quarter. It has shed 5,000 jobs this year and plans to eliminate more. Baker Hughes, a rival, has got rid of 3,000. Clients, says Petrofac's Mr Asfari, are trying to secure big reductions in prices.

Falling investment does not simply crimp exploration and delay large projects. It can also lead to lower spending on maintenance and thus prompt faster declines in output. The IEA estimates that the output from mature fields outside OPEC would naturally drop by about 11% a year. But through tricks such as injecting water or gas to maintain pressure, oil firms manage to reduce the rate of decline to 7.7%. Lower investment this year, the IEA calculates, is likely to push the rate up to 9.4%. That will reduce world oil output by 110,000 b/d this year, by a further 250,000 b/d next year and, through compounding, by increasing amounts thereafter. Merrill Lynch, meanwhile, thinks the IEA underestimates the likely rate of decline.

Falling costs within the industry will offset the impact of falling investment budgets to some extent. BP argues its slight cut in investment does not really represent a reduction, thanks to deflation. Some prices are plunging: renting a drilling rig in South-East Asia cost \$225,000 a day last year but only \$160,000 a day in April, according to Mr Lockett of Premier Oil.

Yet many constraints on expansion remain. For one thing, the world still does not have as many experienced petroleum engineers and geologists as it needs, says Iain Manson of Korn/Ferry, a recruiting firm. He expects it to take a decade or more to overcome the shortage. Meanwhile, he says, wages in the oil industry are not falling by nearly as much as other costs.

Worse, there is little sign that governments are willing to grant oil companies easier access to the most promising territory for exploration. Iraq's plans to sign big new contracts with foreign firms are years behind schedule, as is its new oil law. American sanctions continue to impede investment in Iran. The Mexican government did recently broaden the scope for Pemex, the state-owned oil monopoly, to hire foreign contractors. But it abandoned more sweeping plans to allow private investment in exploration and production in the face of strong political opposition. The Nigerian government has been unable to quell the insurgency in the Niger delta, making it difficult for oil firms to operate there. Even in America, despite years of debate, most coastal waters and much of Alaska remain off-limits to drilling.

In short, argues Mr Currie of Goldman Sachs, "above ground" problems such as limited access and rising costs have not gone away, and will continue to limit the growth of the world's oil supply. He points out that even when prices were high, these constraints limited the volume of new projects approved by oil firms (see chart 3). Falling investment will simply compound the shortfall. So when demand begins to revive, a sharp rise in prices is inevitable.

That does not mean that a price spike is just around the corner, however. The speed with which it arrives will depend on the strength of the global recovery. If oil firms run out of storage capacity before demand begins to pick up, says Mr Currie, prices could yet swoon again.

For the moment, global consumption of oil continues to fall, despite the

slight brightening of the economic outlook. The latest figures suggest that China's thirst is increasing again. Imports are nearing pre-crisis levels and sales of new cars hit a new record in April. But that will not be enough to reduce global inventories, given that the drop in demand from the rich world is greater than China's total imports.

Ed Morse, of LCM Commodities, a broking firm, points out that after previous price shocks, growth in demand has not usually reverted to previous rates, thanks to efficiency measures taken when prices were high. Moreover, technological advances are allowing oil firms to tap new sorts of resources, including gas trapped in seams of coal and shale, and "sub-salt" oilfields, which are likely to be found off the coast of Angola as well as Brazil.

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Where are we heading this time?

Furthermore, governments could do various things to dampen the impending rise in prices, argues McKinsey, a consultancy which is also predicting an oil-supply crunch in the next few years. One simple measure would be to allow trucks to pull longer trailers, thereby increasing fuel efficiency. Rich countries could also increase fuel supplies by removing tariffs on imported ethanol, the company argues. Persuading developing countries to drop fuel subsidies would make a big difference. In the longer run, ever more stringent restrictions on carbon emissions and ever higher efficiency standards for vehicles around the world will presumably help crimp demand for oil.

At the OPEC powwow Mr al-Naimi, the Saudi oil minister, argued that a low oil price always sowed the seeds of a future price rise, since it led to underinvestment. The only question this time is how quickly the strain will emerge.

