More questions than answers

Posted by Heading Out on April 25, 2005 - 11:14am

In following up the comment that Prof G made on the WSJ article, and a comment left anonymously I suspect I have left myself a little homework to do over the next couple of days.

Following Prof G's link I was reading the comments on Kos by tunesmith and the bit that I want to comment on is what may be considered the economist's view of the current oil situation.

> Right now there is a lot of oil that SA can extract, for, say, $30/barrel. That's in their reserves. Maybe they're getting all that.
>
> There's also a lot of oil in harder to reach places that SA can extract for, say, $60/barrel. That's not in their reserves right now, because they'd lose money extracting it when prices right now are between $50 and $55 / barrel.

The thing is that this misunderstands the production of oil from the Middle East. In relative terms it does not cost the Saudi Government that much to produce their oil (I don't remember the number tonight but it is somewhere around $1 a barrel or something of that order). Production costs have not been an issue, rather, until recently, it has been controlling supply to match the needs of the market and not flooding the market with oil that would drop the price too much.

However as demand has continued to grow, and supplies elsewhere have peaked and started to decline, so the OPEC nations have been able to produce more and more oil to meet the demand at an increasing price.

The current situation now has several features that are of concern. The first is the rate of increase in demand relative to world supply. And to give you a reference to how that is playing out I acknowledge our Anonymous commenter and draw your attention to the EIA table for this. Now that shows that, pretty much, the two will stay in balance over the next couple of years. (No one produces more than they can sell to keep the balance).

The worrying issues however lie in such items as the increasing Chinese demand - my earlier comment on the possible shortfall of 700 kbd was based on their published intent to add 650 kbd to a strategic stockpile this summer, over and above current demand as much as the table balance.

But more critically the table does not address the potentially more significant problems of declines in production. It shows, for example, Mexico holding production steady over the next two years, while they, themselves, have noted that their largest field will start declining this year and will accelerate to a rate of about 14% p.a. And their hope for help from the deeper waters of the Gulf has so far not been as successful as hoped.

When one considers these factors the only likely source for increasing production is from the OPEC nations, and as the OPEC Production (EIA) table we reference in the Blogroll shows, the only nation with significant spare capacity is Saudi Arabia. But they don't have a whole lot of wells sitting neatly capped waiting for someone to come along and buy their oil. Because they have some reserve, they do have some wells not producing (some of which have oil that currently cannot be refined), and some fields that are available to be drilled, but it takes a finite amount of time to get rigs set up to increase that production. And their plans until recently required using the drilling rigs that they have and are buying, to meet those goals. Now that demand is getting higher, to increase production further they have to get more rigs to drill the additional wells, and that takes time.

There is also another little concern. Back in 1998 when they were mainly drilling in the largest fields they had, Matt Simmons pointed out in his report on giant oil fields, that they could get over 5,000 barrels of oil a day from one of the wells in their giant fields. He has more recently, in his presentation on the Saudi Oil Miracle given a figure for production for new wells that is down to 2,000 barrels a day, as they move from the old giants to other fields. What that means is that you need to have more oil rigs drilling to get the same amount of overall increase in production. (His papers can be downloaded from the reference in the Blogroll). If, at the same time, more wells have to be drilled just to sustain production as the old giants decline, then the issue is not how much it costs, it is rather how many rigs can they get, how fast can they drill the wells, and how fast can they connect them up. The answer, unfortunately, is given in years, rather than months.

edited to add:
It appears that potential results from Crown Prince Abdullah's visit to Texas, at least as far as increased oil supplies are concerned, are not going to be encouraging, and thus their relative importance is being downplayed.

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