



## Declining Net Oil Exports Versus “Near Record High” Crude Oil Inventories: What is going on?

Posted by [Prof. Goose](#) on September 14, 2007 - 10:18am

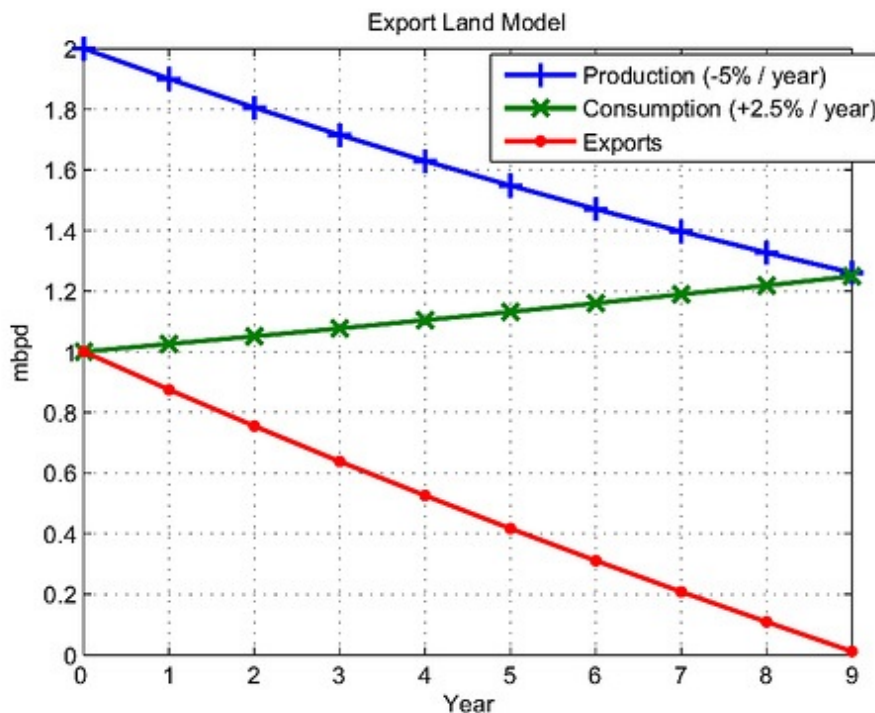
Topic: [Supply/Production](#)

Tags: [export land model](#), [indonesia](#), [inventories](#), [just-in-time](#), [minimum operating level](#), [original](#), [saudi arabia](#), [united kingdom](#) [list all tags]

*This is a guest post by Friend of TOD Jeffrey J. Brown, an independent petroleum geologist in the Dallas, Texas area. His e-mail address is [westexas@aol.com](mailto:westexas@aol.com).*

You can also check out Jason Bradford's recent interview with Jeff for The Reality Report over at Global Public Media [here](#).

Building on prior work by Matt Simmons and Kenneth Deffeyes, I have written a number of articles on Net Oil Exports, often with my frequent co-author, “Khebab,” most recently, “[Net Oil Exports and the Iron Triangle](#).” We are going to present a quantitative assessment of future net exports by the top net exporters at the ASPO-USA (Association for the Study of Peak Oil & Gas) conference in October, in Houston, Texas, and we will be doing a preview of the paper in late September.



Above the fold was a graph of the Export Land Model (ELM), for a hypothetical net exporter,

showed peak exports to net importer status in nine years. (For a better explanation of the meaning of that chart, check out [this post](#).)

It's interesting that the UK and Indonesia showed even sharper net export declines, going from peak recent net exports to net importer status in seven years and eight years respectively. The ELM and the UK and Indonesia case histories showed that net export declines tend to accelerate with time.

Note that the early data for Saudi Arabia are showing a similar pattern. The 2005 to 2006 numbers for Saudi Arabia are as follows (exponential increase/decrease per year, EIA, Total Liquids):

Production: -3.7%/year  
Consumption: +5.7%/year  
Net Exports: -5.5%/year

Extrapolating from year to date numbers, my estimates for 2006 to 2007 Saudi numbers are as follows (I am adding in some increased liquids consumption, because of their ongoing natural gas shortfall):

Production: -5.6%/year  
Consumption: +10%/year  
Net Exports: -9.5%/year

In addition, EIA data show an overall decline in net world exports from 2005 to 2006 that appears to be continuing into 2007.

Given this decline in net exports, It's interesting that we have "near record high" crude oil inventories in the US, based on the five year range of crude oil inventories. In my opinion, the five year range for US crude oil inventories, as an indication of what is going on in oil markets, is highly misleading.

First, the industry has clearly gone to a Just In Time inventory system. In the Eighties, the industry maintained much higher crude oil inventories, especially in terms of Days of Supply, which have fallen to about 21 Days of Supply currently, from about 29 Days of Supply in September, 1982.

Second, we need to evaluate crude oil inventories based on Days of Supply in excess of Minimum Operating Level (MOL). In the US, the MOL for crude oil is probably about 270 million barrels (mb). At about 322 mb, US crude oil inventories are probably best characterized by Hours of Supply in excess of MOL (about 80 hours). In my opinion, recent fluctuations in US crude oil inventories merely reflect minor changes in a thin margin of supply in excess of MOL.

Refiners are unlikely to let their inventories drop below certain critical levels, and given the expectation of declining world oil exports, refiners will have two choices: (1) Bid the price up enough to keep their inventories up and/or (2) Reduce their crude oil input, thus reducing product output.

My contention is that instead of focusing on crude oil inventories, we need to focus on world net exports, crude oil prices, refinery utilization, product prices and product inventories.

I expect to see crude oil exports trending down, crude oil prices trending up, refinery utilization trending down, product prices trending up, and product inventories trending down.



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