World Oil Exports

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1. Introduction
Why study Oil Exports?

[Bar chart showing oil production and consumption for various European countries.]

Source: Europe.TheOilDrum.com
Concepts

- Oil = Crude + Natural Gas Liquids (NGL)
- Exports = Production – Consumption
- WOE = World Oil Exports
Goals

- Present a picture of the future international Oil market:
  - Which countries will continue exporting Oil?
  - In which volumes?
- Be a guide for policy makers and stakeholders in general.
2. History
Haloc et al. 2004

“Forecasting the limits to the availability and diversity of global conventional oil supply”

Envisioning a peak by 2030, this is probably the earliest worldwide assessment of Oil Exports
Since the beginning of 2006 Jeffrey Brown and Samuel Foucher have been tracking the top Oil exporters with Hubbert Linearisation analysis.

Matthew Simmons' previous work was their motivation.
TheOilDrum.com hosted the first version of WOE in the Fall of 2006:

- 18 regions assessed
- 4 major exporters left out: Angola, Iraq, Libya and Nigeria

World Oil Exports: A Comprehensive Projection

Posted by Prof. Goose on October 10, 2006 - 2:13pm

Tags: algeria, argentina, azerbaijan, canada, colm campbell, colombia, denmark, ecuador, egypt, eu, exports, iran, kazakhstan, kuwait, malaysia, mexico, norway, oil exports, oil prices, peak oil, qatar, russia, united arab emirates, united kingdom, venezuela

[editor’s note, by Prof. Goose] This is a guest post by iads.

This article is a first simplistic (but comprehensive) assessment of World Oil Exports, here defined as the total amount of liquid hydrocarbons that are surpluses in producing countries. This assessment doesn’t include liquids produced as by-products or are required by the domestic market if consumption is positive. The focus is on producing countries that are net exporters of liquid hydrocarbons.
Jeff Rubin on mainstream

CIBC economist Jeff Rubin brought the issue to light on TV last year.

“OPEC's growing call on itself”
3. Dynamics
The world oil market today

Oil Supply has hit a wall. So far demand has complied at the expense of higher prices.

Graph by Kenneth Deffeyes
A vicious circle

With prices increasing a major wealth transfer is taking place from importers to exporters.

This new found wealth stems Consumption in the exporters side.
An Example - Mexico
The Export Land Model

Jeffrey Brown's concept of this dynamics.

Production and Consumption run relentlessly towards each other.
4. Methodology

By example with Libya
Data sources

- ASPO's Newsletters edited by Colin Campbell;
- BP's Statistical Review of World Energy;
- EIA's country by country Energy Profiles;
- Oil Megaprojects database;
- United Nations Population Forecasts.
Libya - History

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Libya - Discovery

Libya
Cumulatives

Colin Campbell
ASPO newsletter 34

Libya oil creaming curve

Jean Laherrere 2005

cumulative number of NFW

cumulative number of fields/10

Libya oil discovery Gb &

Gb


Cum.Discovery

Cum.Discriley

Cum.Production

70

60

50

40

30

20

10

0

Gb

70

60

50

40

30

20

10

0
Libya - Production

**Libya**

![Graph of Libya production](Graph.png)

**Libya annual oil discovery & production**

- IHS O+C
- WM O+C
- U= 40 Gb 16 R
- U= 60 Gb 34 R
- CP crude

*Jean Laherrere 2005*

**Libya - Production**

*Colin Campbell*

*ASFO newsletter 34*

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Libya - Consumption

Libya Population

Libya Oil Consumption per capita

Libya Oil Consumption

Europe.TheOilDrum.com
5. Macroscopic View
Saudi Arabia

[Diagram showing the production and consumption trends in Saudi Arabia from 1965 to 2030. The graph includes data on exports, imports, and consumption.]
Russian Federation

The graph shows the trend of oil production and consumption in Russia from 1965 to 2030. The data is sourced from Europe.TheOilDrum.com. The chart includes actual data from 1965 to 2015 and forecasts for the period 2020 to 2030.

Key indicators include:
- Imports
- Exports
- Consumption

The graph highlights the significant increase in oil exports, followed by a decrease in production and consumption towards the end of the forecast period.
Norway
Now and later

14 regions > 1Mb/d

10 regions > 1Mb/d
Now and later

World Oil Exports 2007
- OPEC 51%
- Rest 39%

World Oil Exports 2020
- OPEC 72%
- Rest 28%

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6. Critique
High oil prices can trigger a recession in importing countries.

Oil demand retracts and the wealth transfer stalls.
Rapid increase in fuel prices

Post Peak Iberia
Posted by Luis de Sousa on June 14, 2008 - 1:55pm in The Oil Drum: Europe [Edit this story]
Topic: Demand/Consumption
Tags: freight, high fuel prices, Portugal, road transport, shortages, spain [list all tags]

Updated 13-06-2008 at 19h00 (GMT+01/00).

It all started in Spain, it quickly spread to Portugal and southern France with drivers protesting against high fuel prices and bringing normal day life to a standstill.

Fuel theft explodes in Portugal
Posted by Luis de Sousa on July 25, 2008 - 1:00am in The Oil Drum: Europe [Edit this story]
Topic: Demand/Consumption
Tags: fuel theft, Portugal, theft [list all tags]

During the last weeks disturbing news have been showing the dark side of human nature in face of these new rough times: all across the state, from north to south, littoral to interior, gasoline and diesel theft is spreading like fire. The black market is thriving with people selling diesel and gasoline for 1 €/litro.

Right: A tank like this can hold up to 1000 litres of diesel, which at today's prices is worth around 1400 €. Photo by Getty Images.
Credit Freeze

No Naked Short Selling => No Short Selling at All

In an amazing (and as yet unconfirmed) development tonight, the SEC has banned short selling. In the 100 or so posts on the Oil Drum in the past 3 years, I usually assume that short selling is an ongoing activity. But tonight, news has me a bit outraged, so forgive me if I ‘temporarily’ diverge from my usual topics. This is a truly banning, whether it be for a week, a month or a year, the capital markets function, which among the other things, will cause subtle but serious danger to the global economy. (Updated at end of post 9/19 06:30 CDT)

The bank panic

The Financial Times is (rightly) worried:

Banks are not to be trusted. This is not just the view of the public and policymakers, but that of the banks themselves.

And indeed, the most notable thing over the past year has been the general mistrust amongst banks, and their reluctance to lend to one another. This graph shows a direct indicator of the level of fear amongst banks:
The 1980s crisis
7. Conclusions
Key observations

- World Oil Exports have already peaked;
- The decline rate will accelerate;
- The number of exporting countries will reduce;
- OPEC will gain a larger share of the market;
- EU: exports from Russia will halve to 2020.
  - 2020 goal by default?
The uncertainty

- Pressure is mounting for importing countries:
  - A doubling of oil prices in 10 months might have been too much to cope with;
- Events in Nigeria and Iraq can have a major impact in the overall picture;
- Monetary policy can have a dramatic impact;

... but these factors will likely reduce the volume of Oil reaching the market: WOE is a “best case” scenario.
Future work

- Finish assessments of Nigeria and Iraq;
- Re-assess FSU countries;
- Re-assess Middle East consumption;
- Unbundle NGL from Crude.
Acknowledgements

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All the involved with TheOilDrum.com

Colin Campbell and Jean Laherrère
For more information

http://www.theoildrum.com/tag/exports

http://www.theoildrum.com/tag/woe