

TÁMOP-4.1.1.C-12/1/KONV-2012-0017

"Green Energy" – Cooperation of the higher education sector for the development of green economy in the area of energetics

MACRO AND ENERGY MARKETS

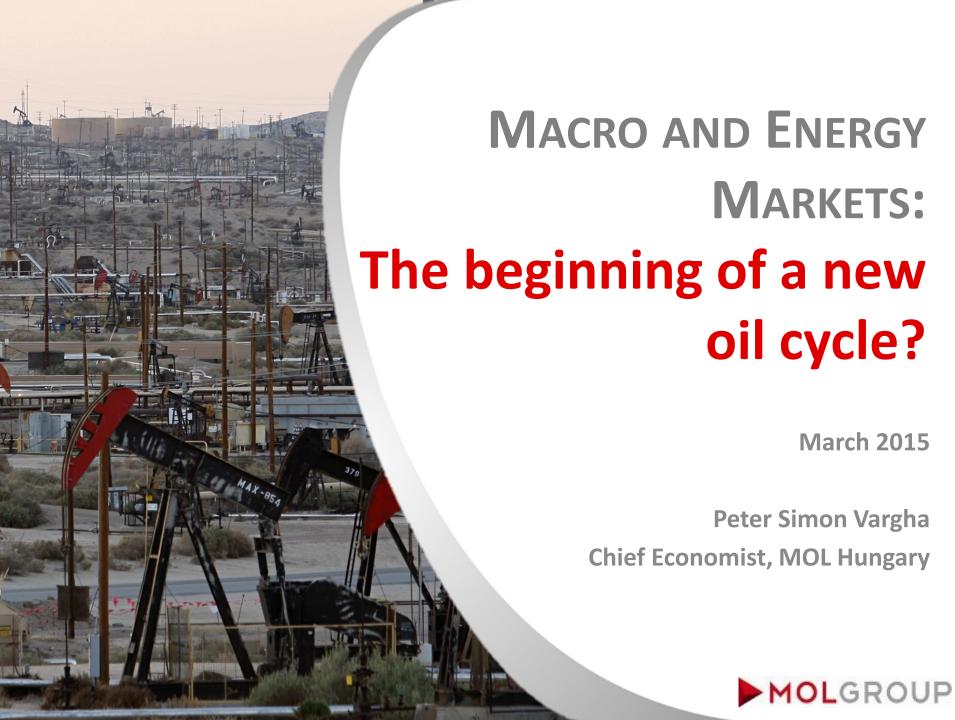
PÉTER SIMON VARGHA











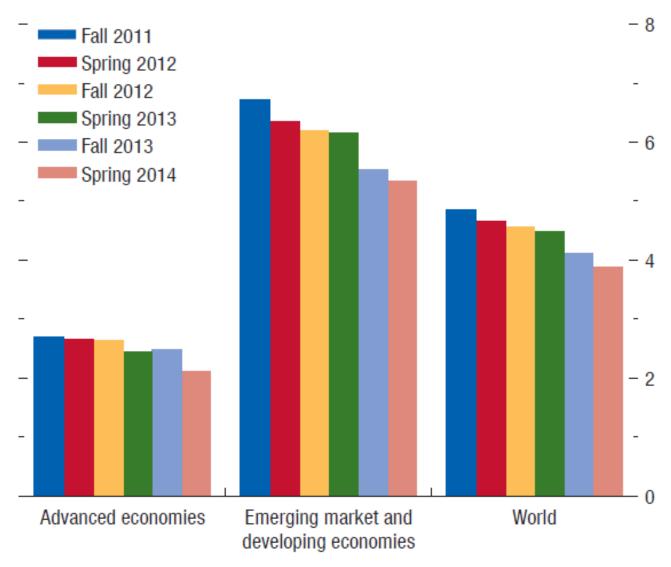
Global macro and industry trends

China slowing



Even the IMF admits it's a New Normal for growth

5-year IMF growth projections





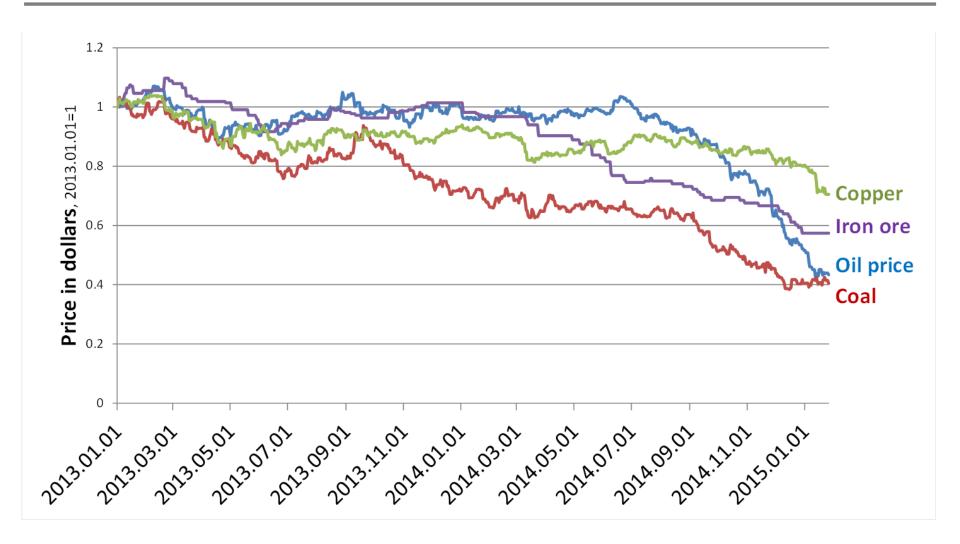
China: fear of an even harder slowdown

China freight-ton km, annual change



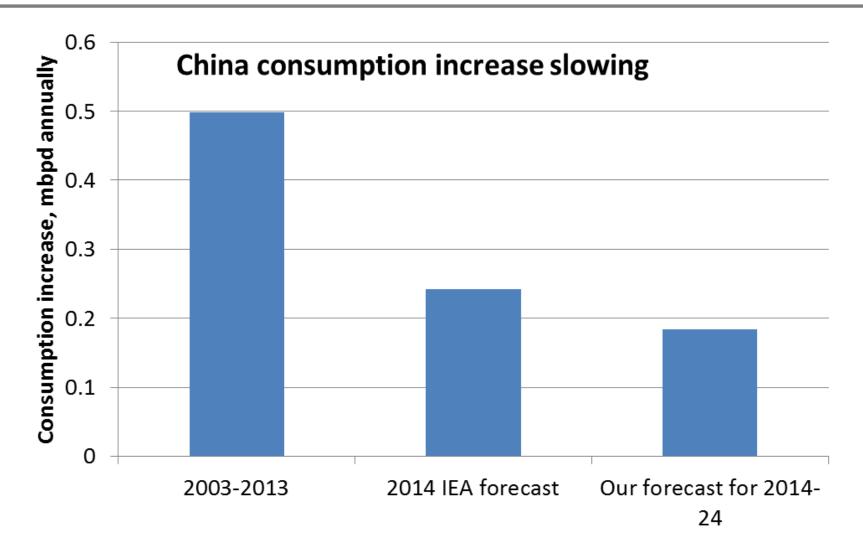


Broad commodity price decline





China oil demand growth is not what it used to be





Oil and energy markets overview

The birth of a new cycle?

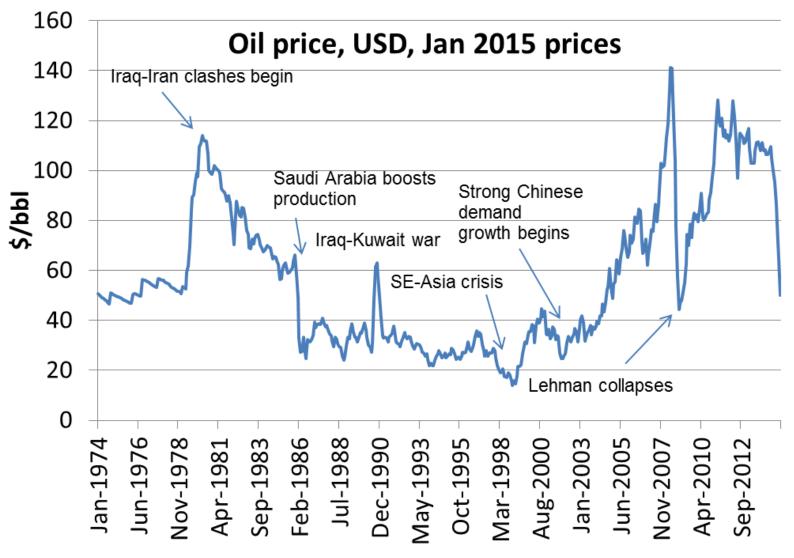
Energy markets: You will not get bored...

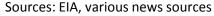


Sources: The Economist, Rolling Barrel blog



Oil history points to wide range of possible prices







What caused the oil price collapse?

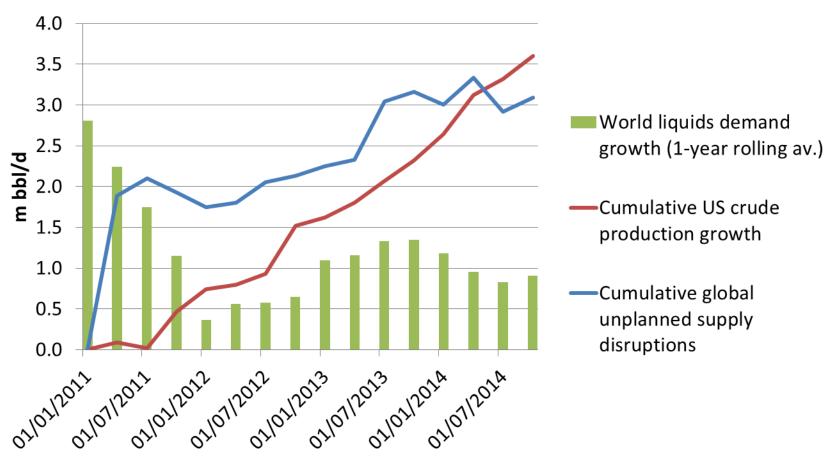
- Demand slowdown
- Shale supply boom
- Less disruptions

+OPEC does not cut



Hidden in plain sight

This is why oil prices fell: demand slowed, US shale grew, global disruptions moved lower



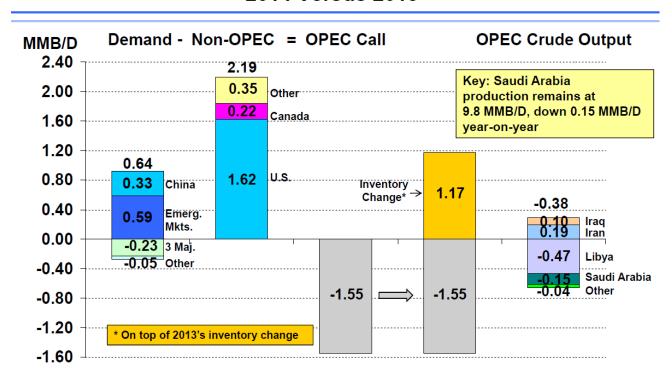
Source: EIA



"Excess" oil is ~1.5 mbpd, 1-2 years of demand growth

World Oil Supply and Demand 2014 Versus 2013





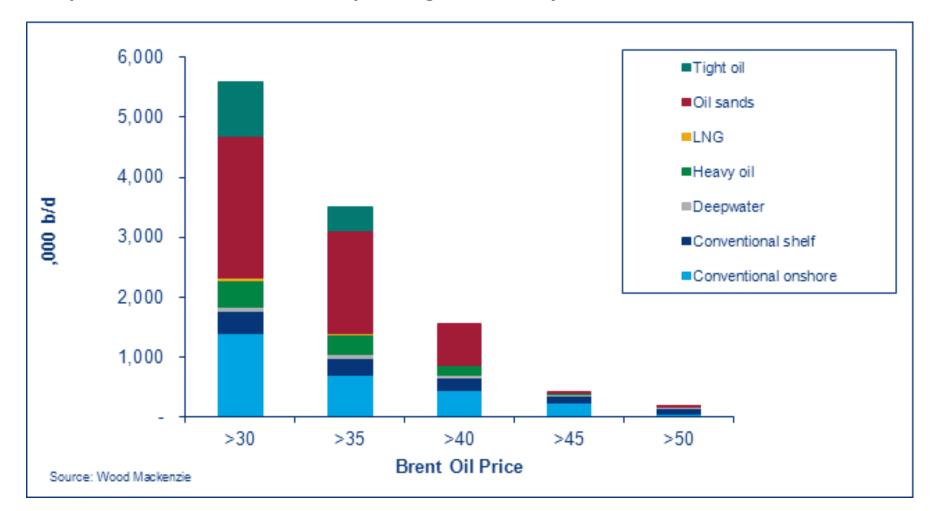
Note: Other OPEC: Ecuador +0.03, UAE +0.06, Nigeria +0.11 Algeria -0.03, Venezuela -0.04, Kuwait -0.08, Angola -0.09

Source: PIRA



Around \$40/bbl, serious shut-ins would likely occur

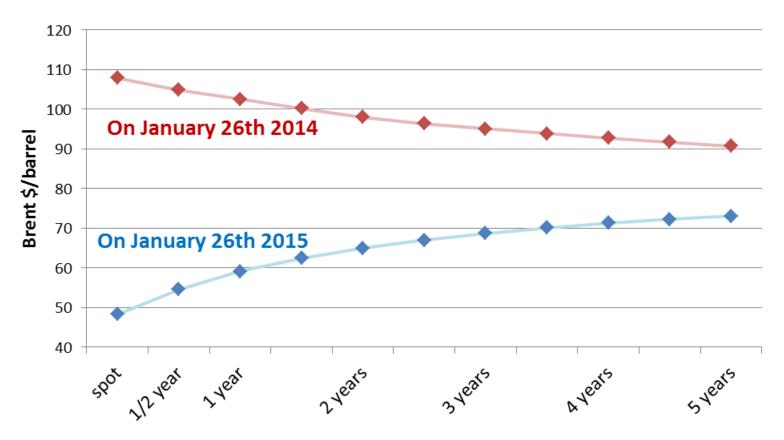
Oil production volumes below operating cash cost by resource theme





Futures market predicts a recovery, and we think it is right

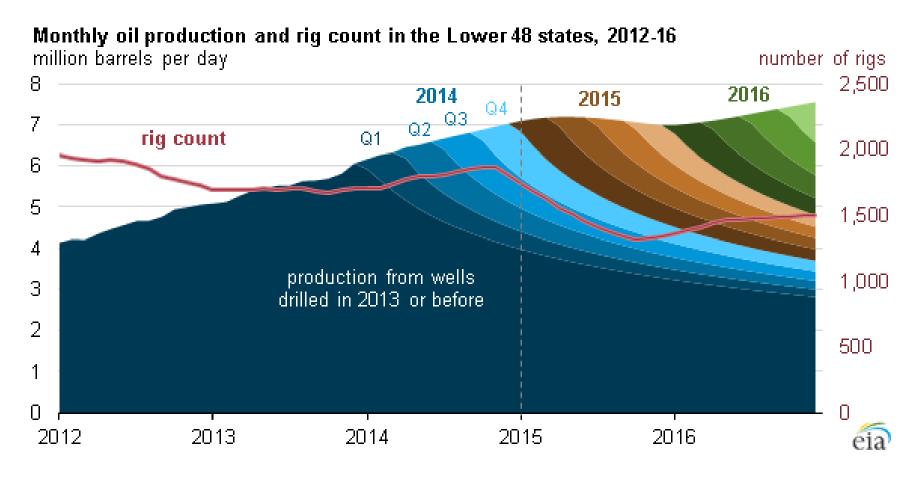
Futures curve in 2014 and 2015



Source: Bloomberg



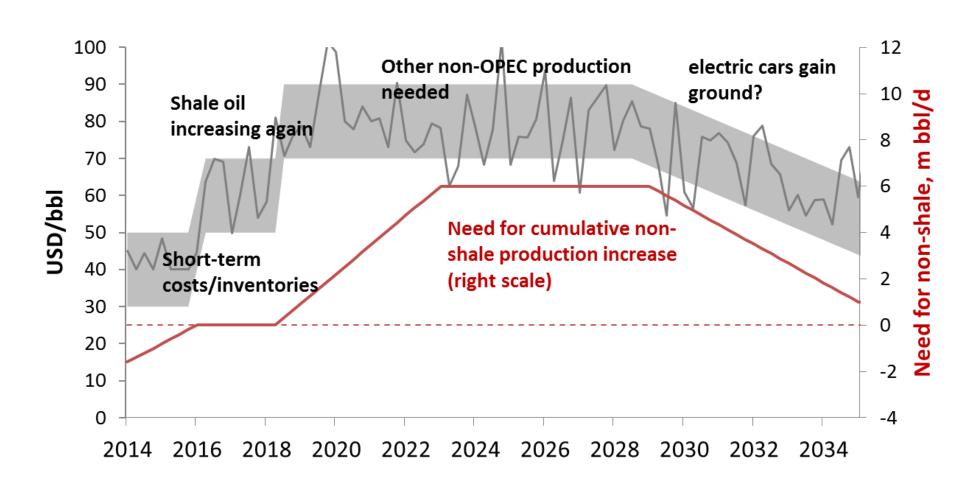
US tight oil production growth halts



• The projection assumes \$75/bbl oil price for 2016



A sketch of a new cycle: oil prices to rise in medium term



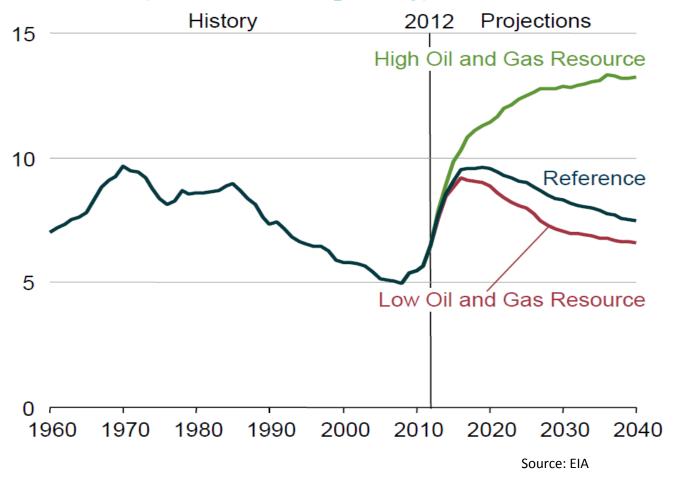


Oil supply and demand

Demand eating up excess production

US shale oil was not meant to grow forever...

Figure ES-1. U.S. crude oil production in three cases, 1960-2040 (million barrels per day)



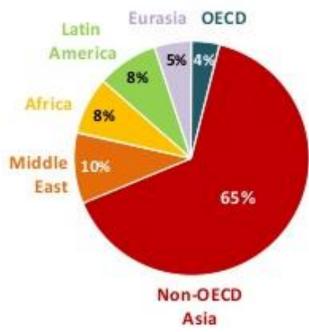


Asia to dominate energy markets

Primary energy demand, 2035 (Mtoe)

Share of global growth, 2012-2035

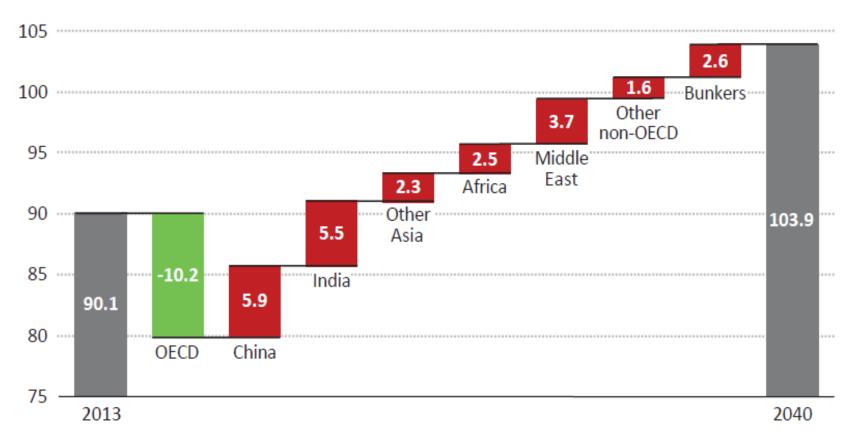






Emerging market demand overcompensates OECD decline

Figure 3.2 ▷ Growth in world oil demand by region in the New Policies Scenario



Source: IEA



Where can we go wrong about the oil price?

Slower recovery/lower price level sustained:

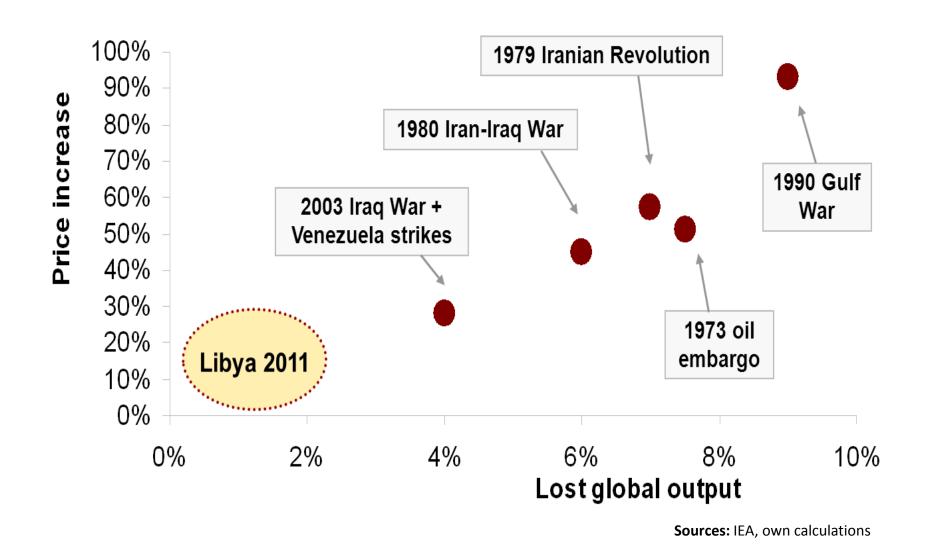
- Large recession in China
- Demand plateaus early (2020)
- core OPEC boosts production
- Shale oil production costs decline further
- Conventional costs/government taxation declines

Faster recovery:

- OPEC cut (more likely than it may sound)
- Supply disruption



Rule of thumb: 1% shock → 10% oil price increase





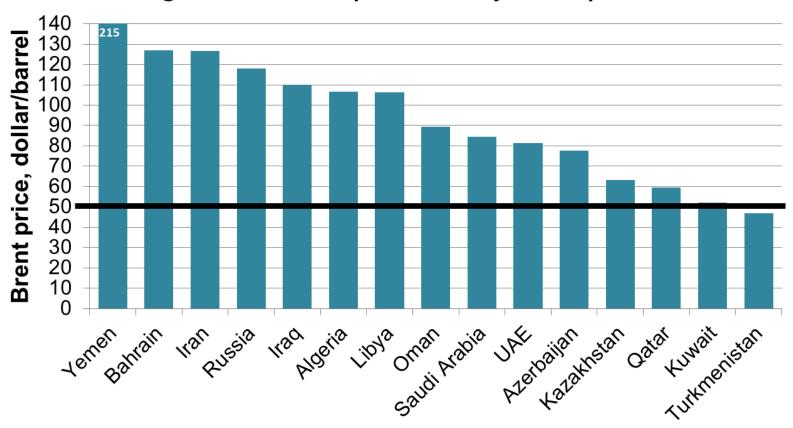
Some consequences of cheaper oil

Lower costs, more political trouble, probably not much less innovation



Budgets under strain almost everywhere...

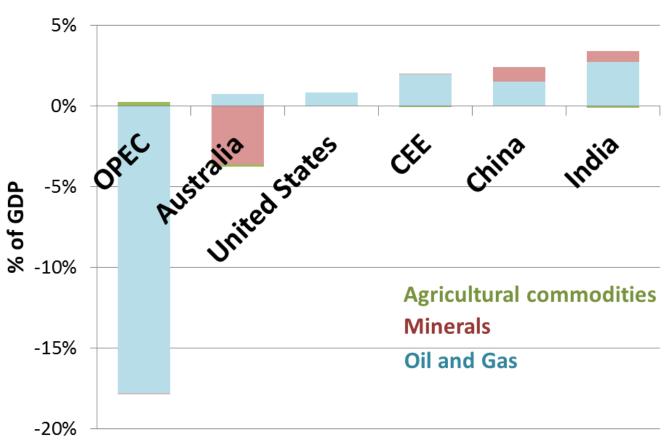
Budget breakeven oil prices for major oil exporters





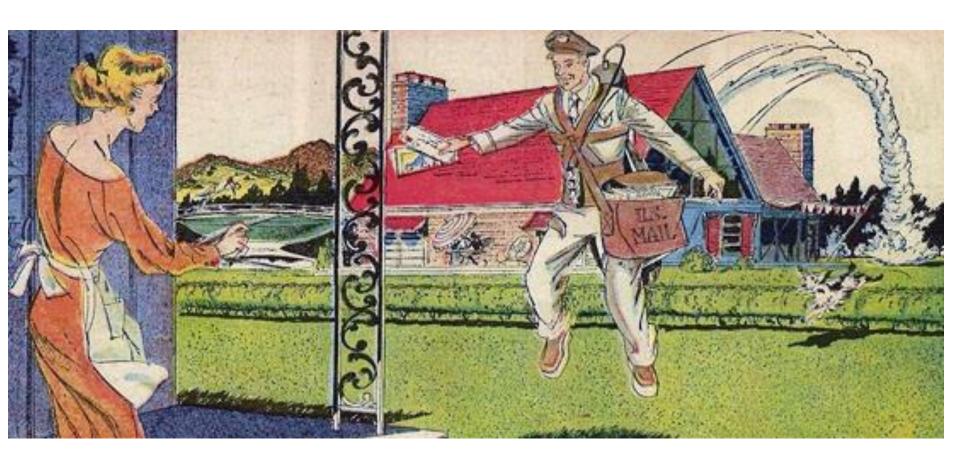
Oil price drop is like a tax cut for consumers

Current account balance change due to commodity price drop

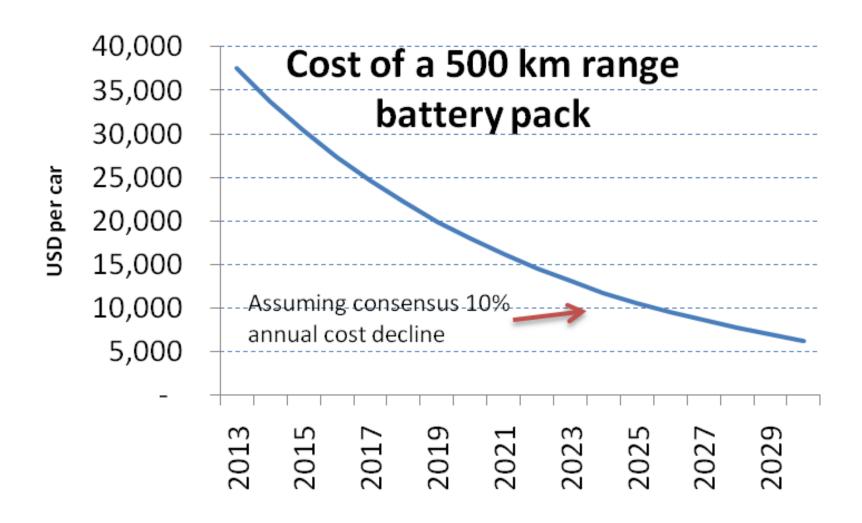




She moves in mysterious ways...



Electric car battery costs need to drop to 1/5th



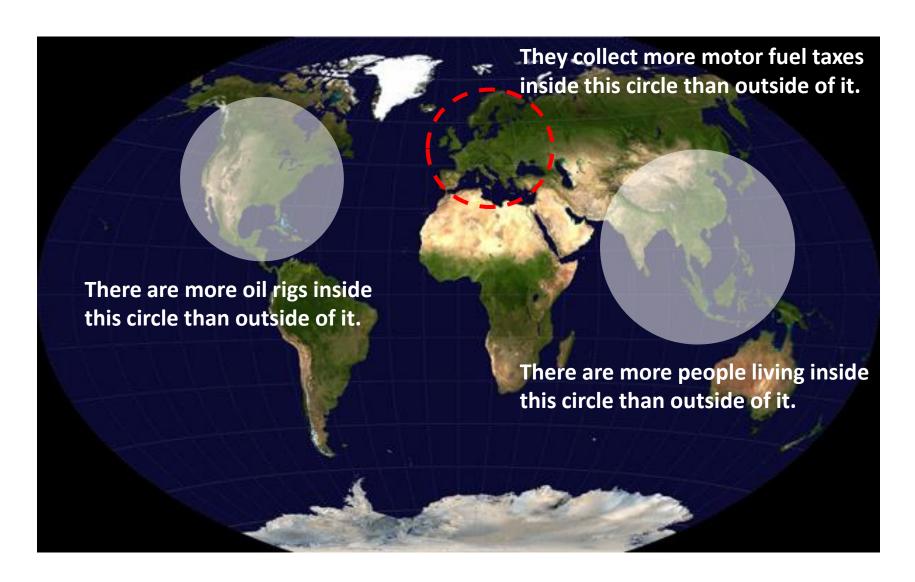


Source: own calculations

What about downstream?

It is not out of the woods yet

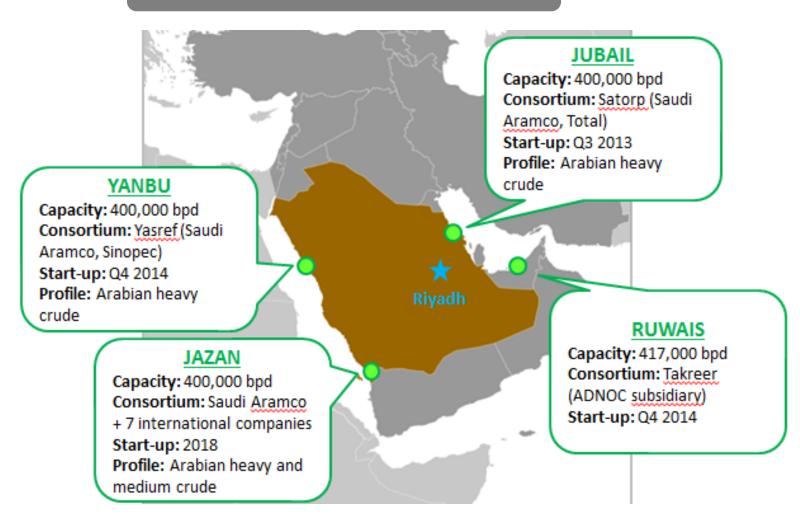
European Downstream: Between a rock and a hard place





Refining: Capacity overhang continues

Planned start-up of ME refineries

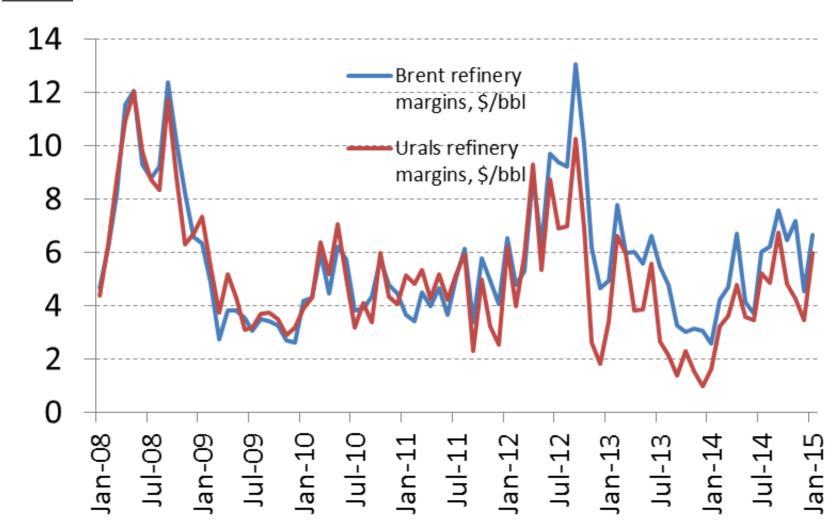




Source: Woodmac, Saudi Aramco, PIRA, Reuters

Refining: doing better, for now

Even if demand boosted by current low oil price, global refining overcapacity to remain

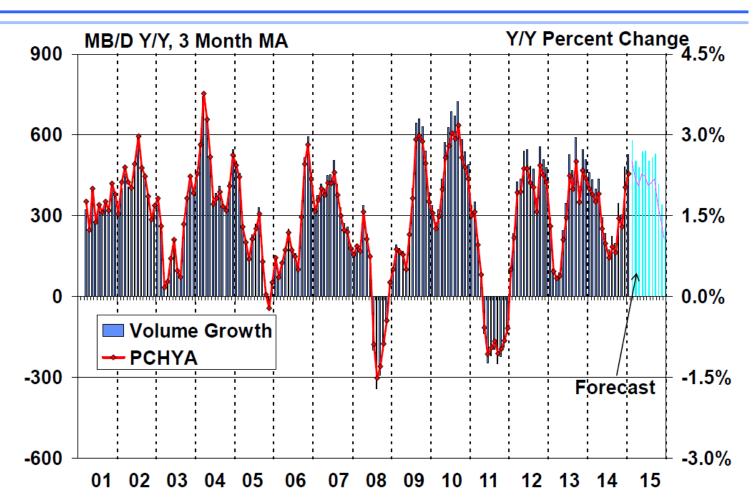




Demand response: gasoline/USA first



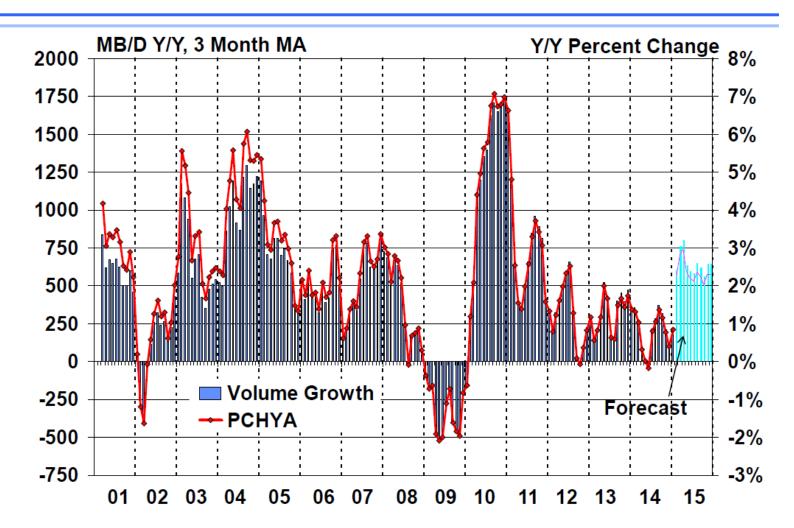
World Gasoline Demand Growth



Diesel demand growth weak in 2014



World Gasoil/Diesel Demand Growth



Thank you for your attention!

...and don't forget to check out our blogs:

gurulohordo.blog.hu, barrelperday.com





TÁMOP-4.1.1.C-12/1/KONV-2012-0017

"Green Energy" – Cooperation of the higher education sector for the development of green economy in the area of energetics

THANK YOU FOR YOUR ATTENTION!





Európai Unió Európai Strukturális és Beruházási Alapok

