

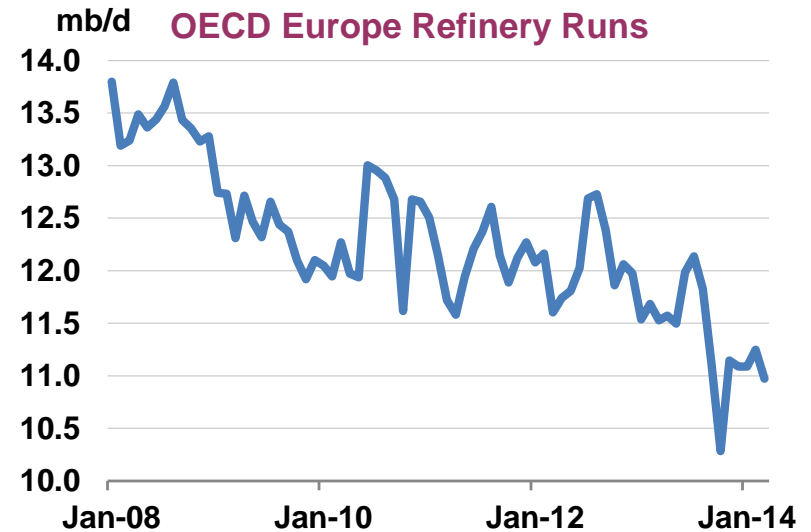
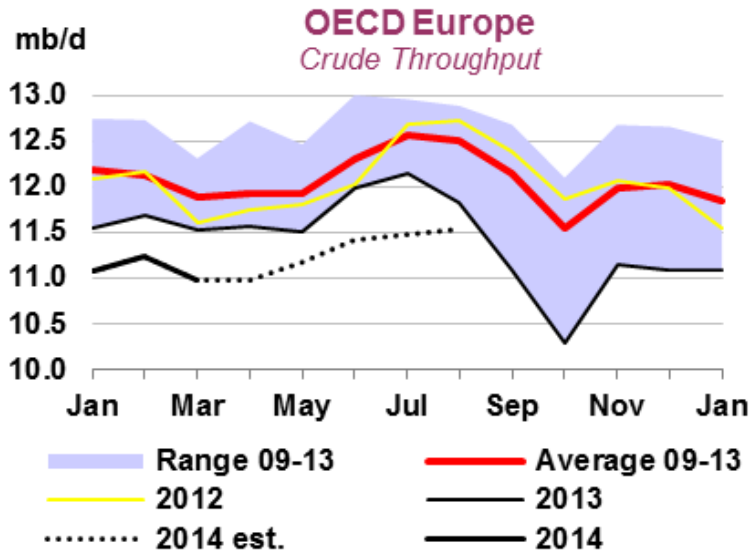
Recent Developments in EU Refining and in the Supply and Trade of Petroleum Products



Third Meeting of the EU Refining Forum
Brussels, 22 May 2014
Toril Bosoni, International Energy Agency

European Refinery Activity Recovers from 25-year Lows

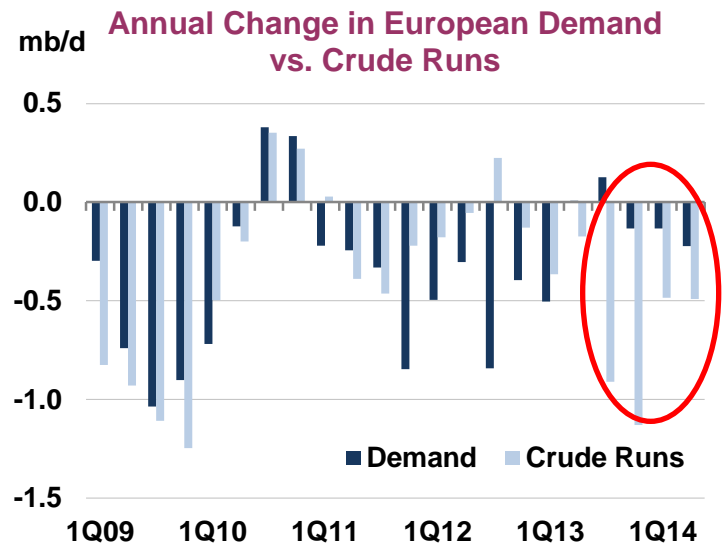
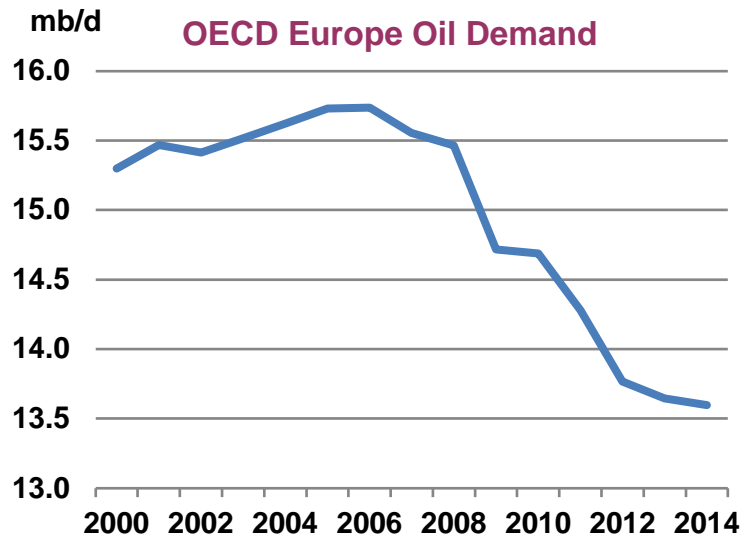
But throughputs continue to contract year-on-year



- After hitting its lowest level since 1989 in October, regional refinery runs bounce back above 11 mb/d
- European throughputs nevertheless continue to contract annually, by 0.5 mb/d in 1Q14, compared with 1 mb/d in 2H13 (and 650 kb/d for full-year 2013)

Regional Demand Slide Halted – For Now?

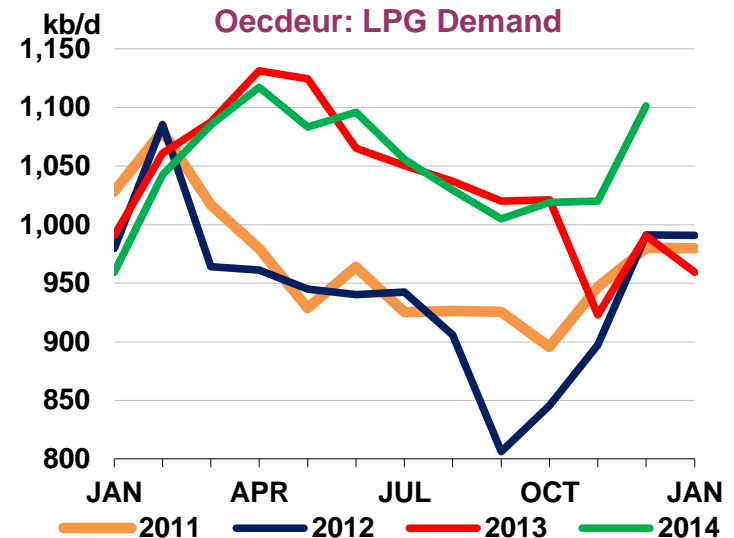
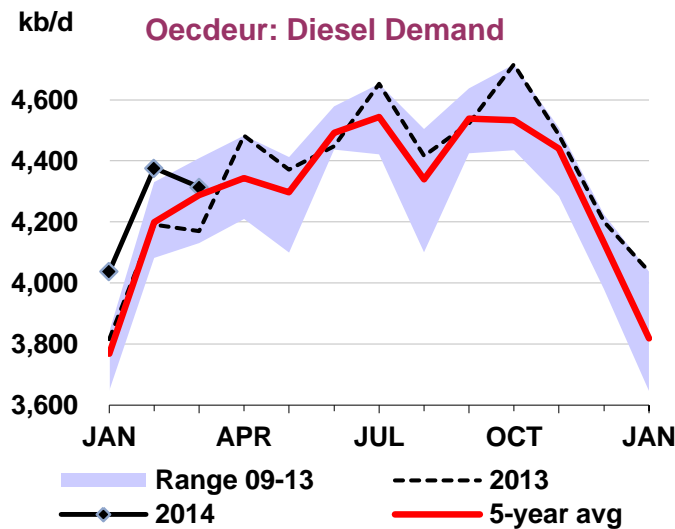
Yet, Refineries Curb Runs Sharply



- After plummeting 1.7 mb/d in from 2008 to 2012, regional demand declines by a more modest 120 kb/d in 2013 and 50 kb/d forecast for 2014.
- Since mid-2013, regional throughputs are 850 kb/d lower on average

Industrial Demand Sees Sign of Life

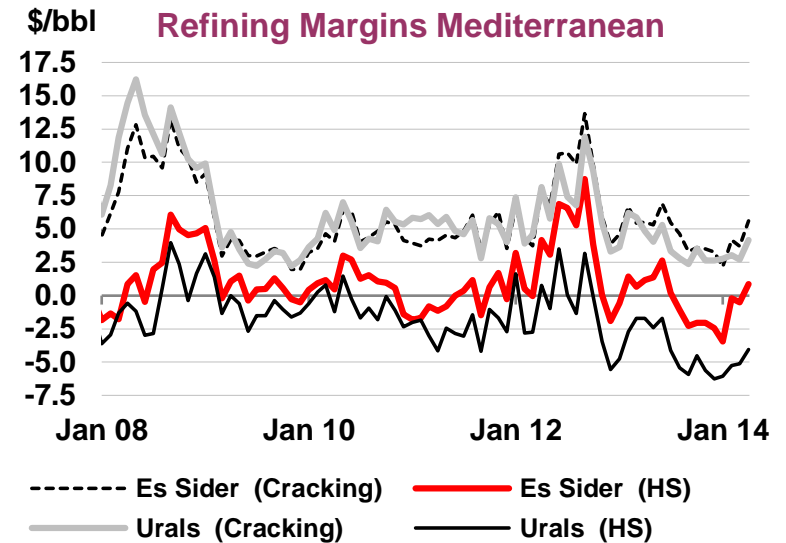
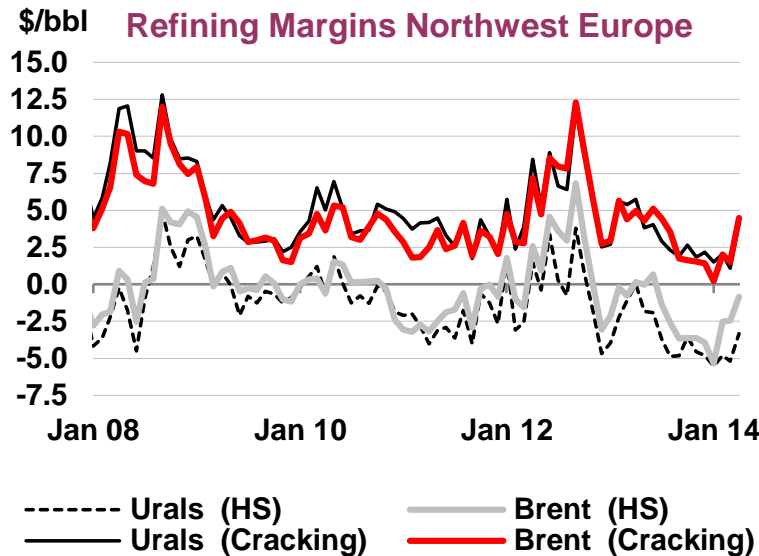
LPG imports from Russia and US on the rise



- After years of decline, LPG and Diesel demand looks healthy
- Diesel is projected to expand by 2.8% in 2014 (after having posted 4.5% gains in 1Q14)
- LPG demand is expected to grow slightly in 2014 (+0.9%), after an 11% surge in 2013.

Refinery Margins Remain Weak

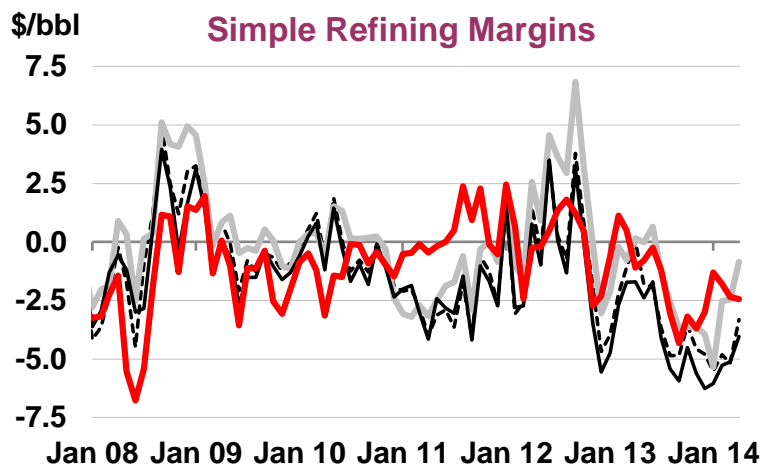
April recovery proves short-lived



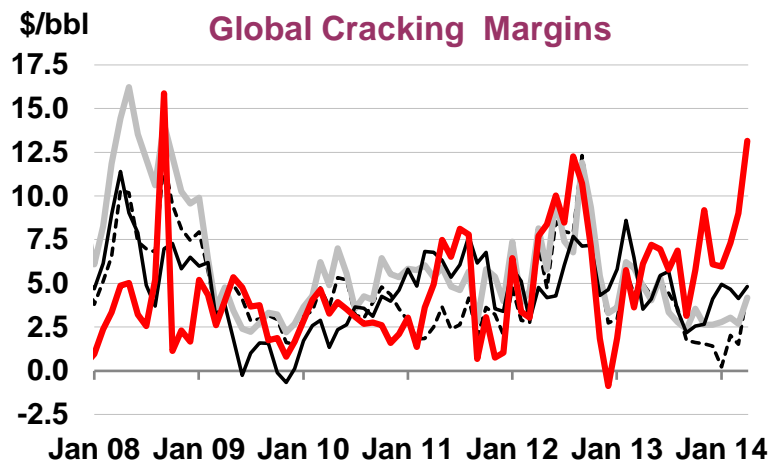
- Simple margins remain negative through most of 2013, keeping throughput rates low
- Cracking margins also fall through December, before posting a slight recovery in early 2014
- By mid-May, however, rates fall again as plants complete maintenance amid weak demand and high product imports

Weak Margins not Restricted to European Plants

Simple refineries at worst level since 2008



----- NW Europe Urals — NW Europe Brent
 — MED Urals — Singapore Dubai

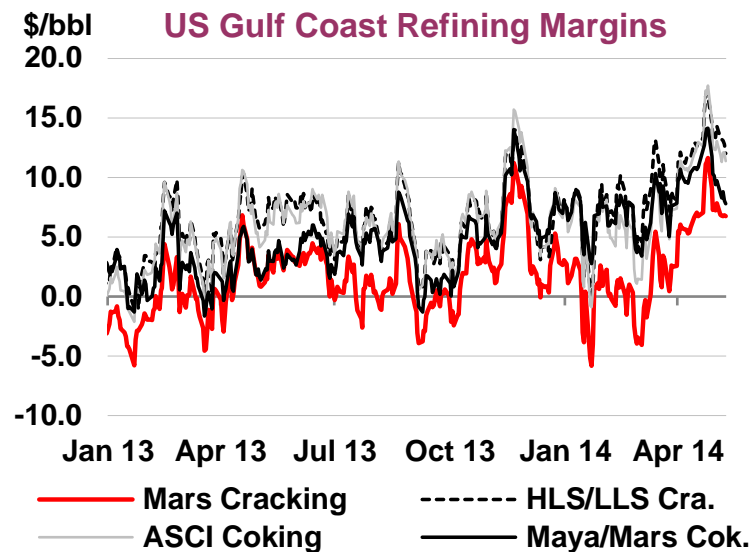
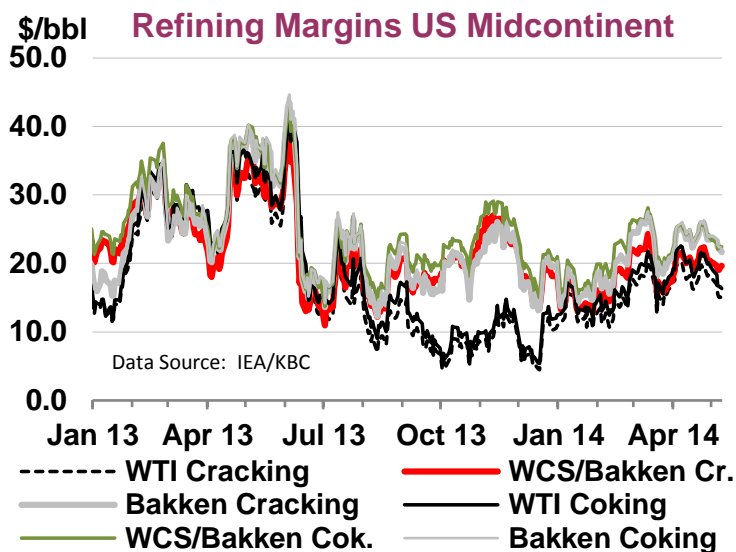


----- NWE Brent — MED Urals
 — Singapore Dubai — USGC LLS/HLS

- Global margins follow suit. Singapore simple margins firmly negative and US rates come off earlier highs
- Refiners with access to discounted crude and cheap refinery fuel (natural gas) fare better
- US Gulf Coast margins surge in 2014

US Crude Advantage moves South

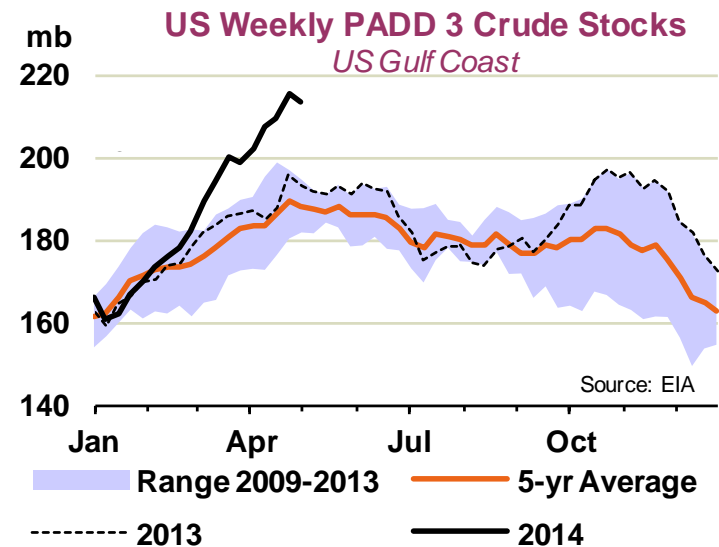
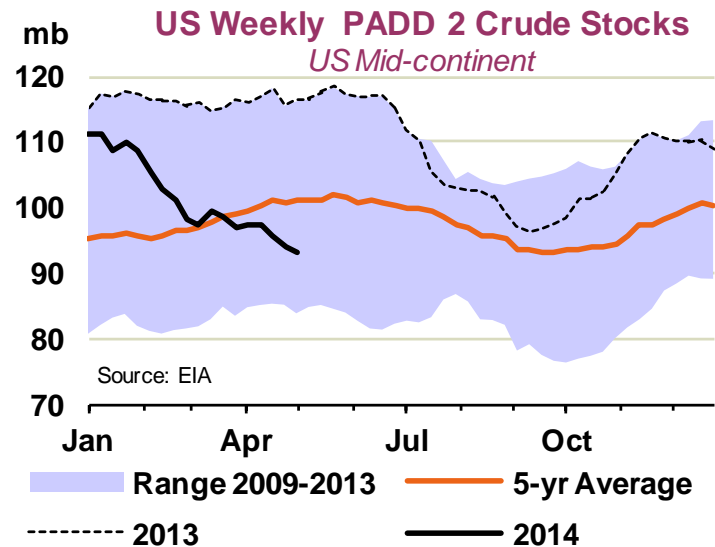
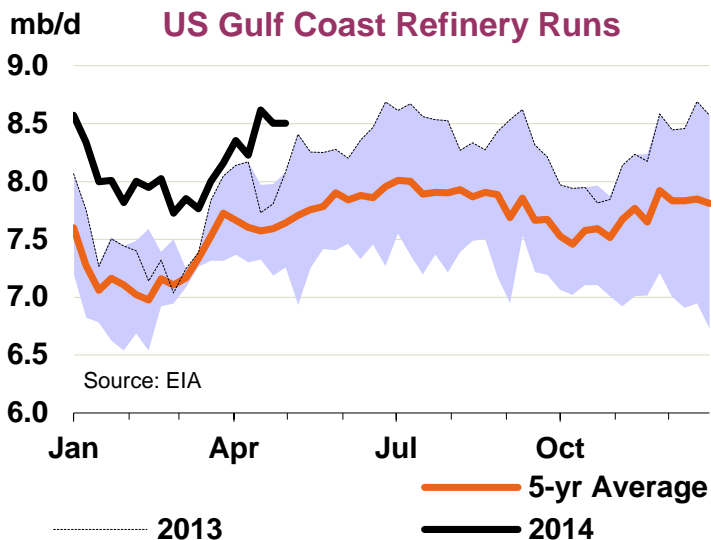
Gulf Coast Refinery margins surge in 2014 on crude glut



- Midcontinent refiners still enjoy the highest returns – at around \$22/bbl on average in April 2014 (down from \$28/bbl a year earlier)
- Gulf Coast refinery margins averaged \$11/bbl in April 2013 in comparison, up from \$4.40/bbl the previous year

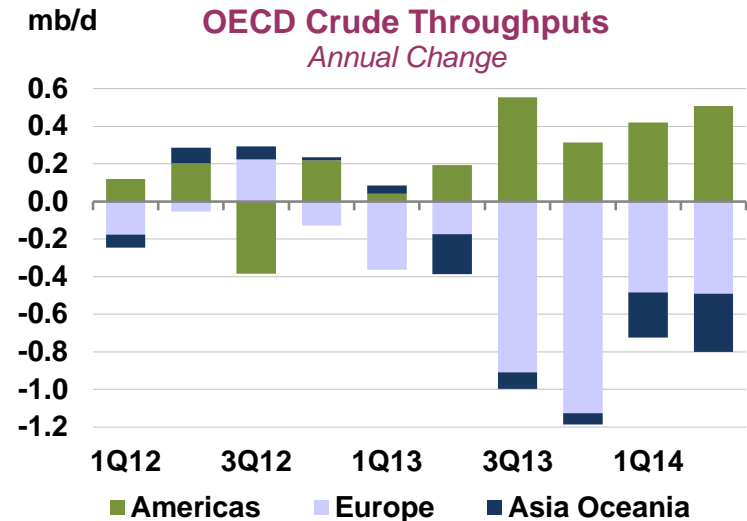
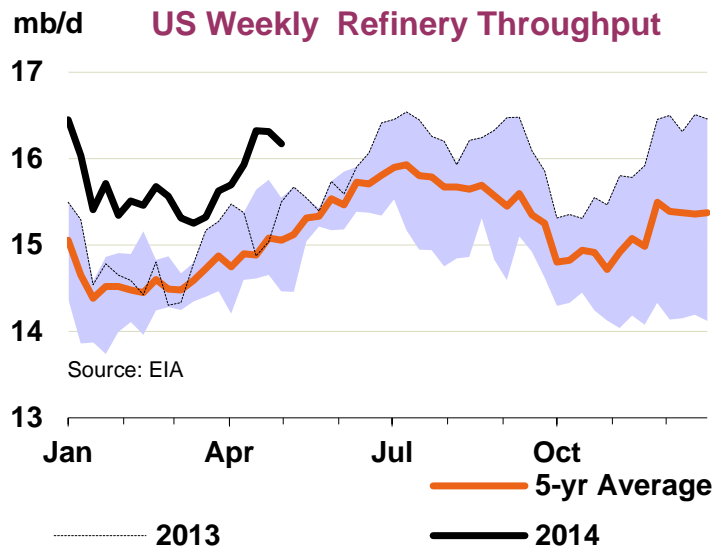
Pipeline Expansions Draw Crude out of Midcontinent

Underpinning better Gulf Coast Margins and high runs



- US crude stock surplus now sits on the Gulf Coast, rather than in the Midcontinent
- Reflected in US crude differentials

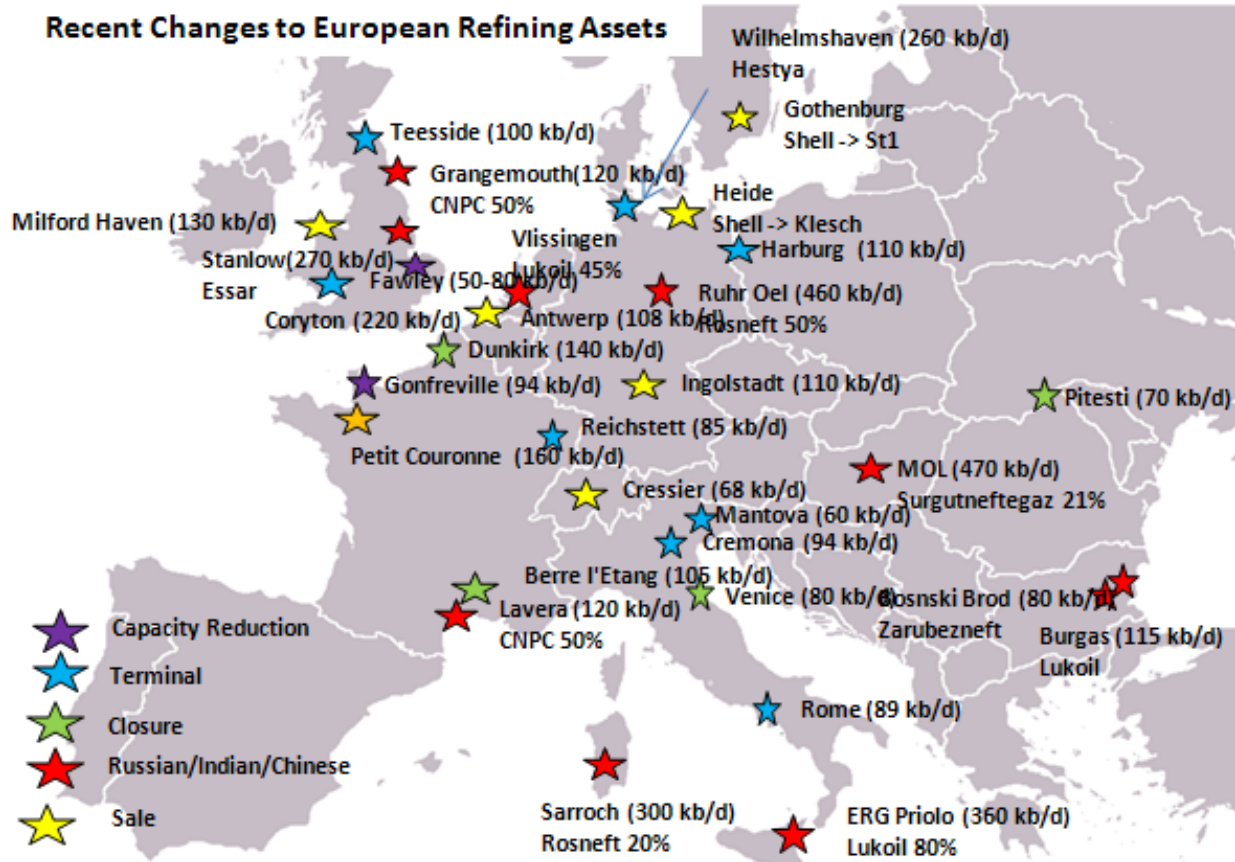
US Refinery Renaissance Support the OECD



- US refiners increased refinery runs by 750 kb/d year-on-year in first four months of 2014
- 2013 yearly gains of 315 kb/d
- Surging domestic liquids supply and better refinery profitability lead to increased downstream investment – 500 kb/d of new capacity likely by 2018

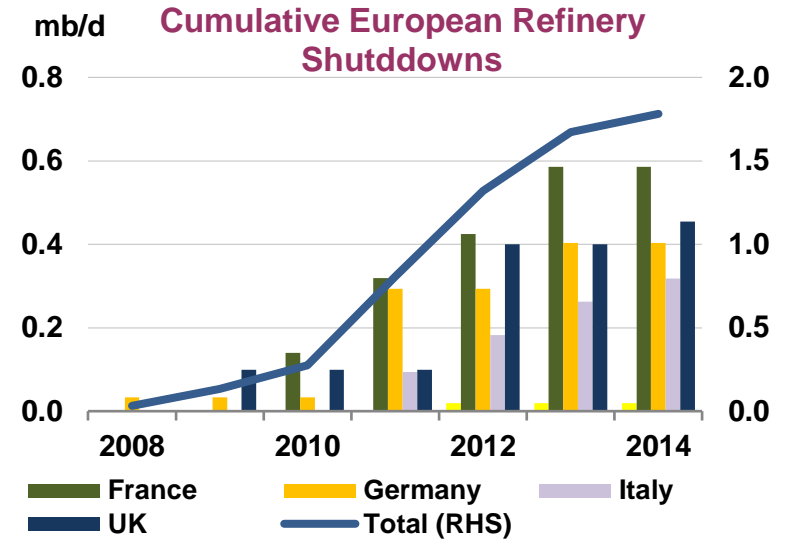
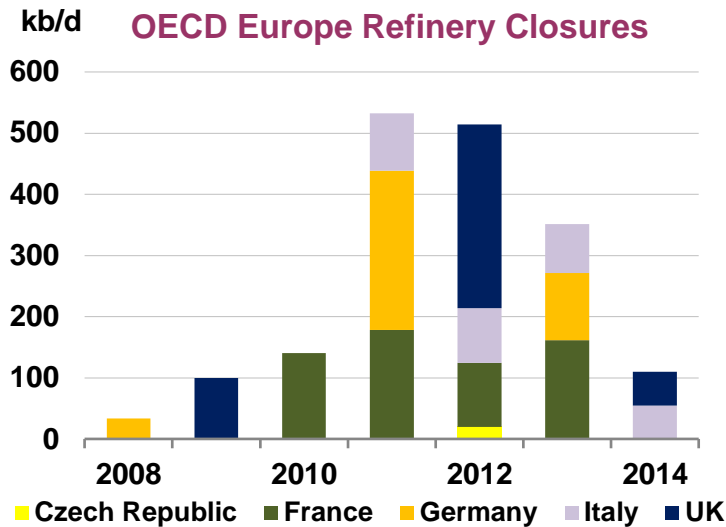
European Industry Restructuring Continues

Another 110 kb/d shut in 2014, taking total to 1.8 mb/d since 2008



- MOL shuts Mantova in 2014, Essar cuts capacity at Stanlow
- In addition, lot of ownership changes, with Russian, Chinese, Indian players entering the market, as well as trading companies (Vitol, Gunvor)

Plant Closures in France, Germany, Italy and UK

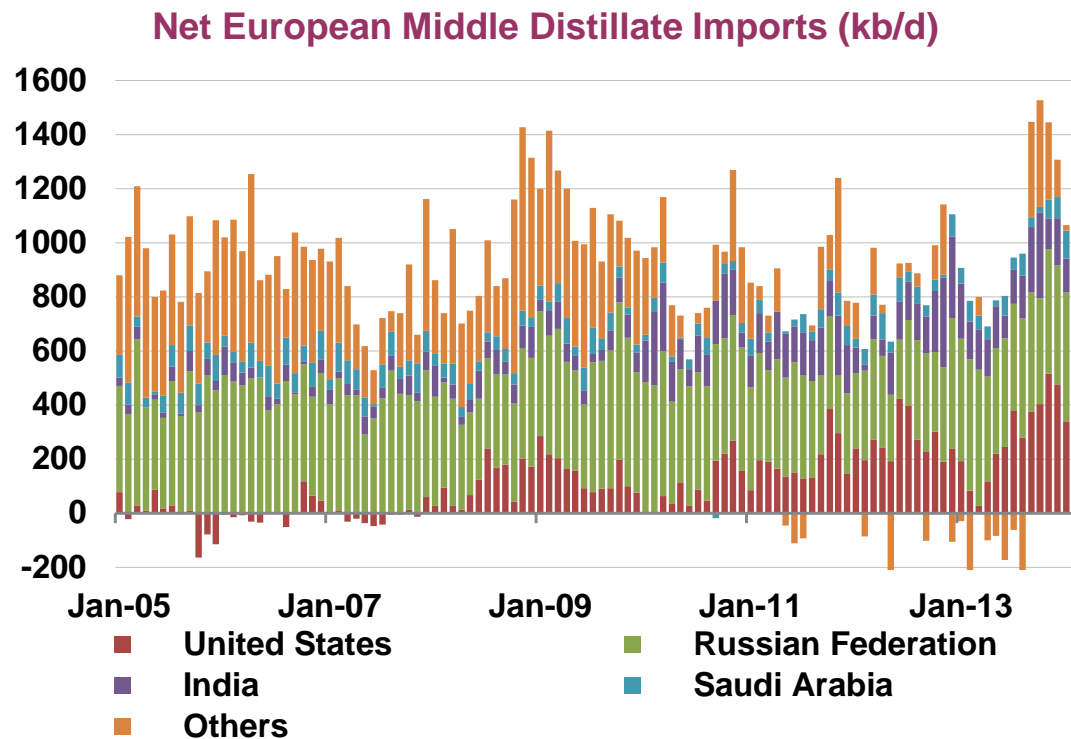


Refinery Closures to Date:

- France 585 kb/d
 - Germany 400 kb/d
 - UK 455 kb/d
 - Italy 320 kb/d
- From 2007 to 2013, a total of 1.7 mb/d of capacity shut in total. Comparatively, demand fell by 1.9 mb/d

European Net Distillate Imports Surge

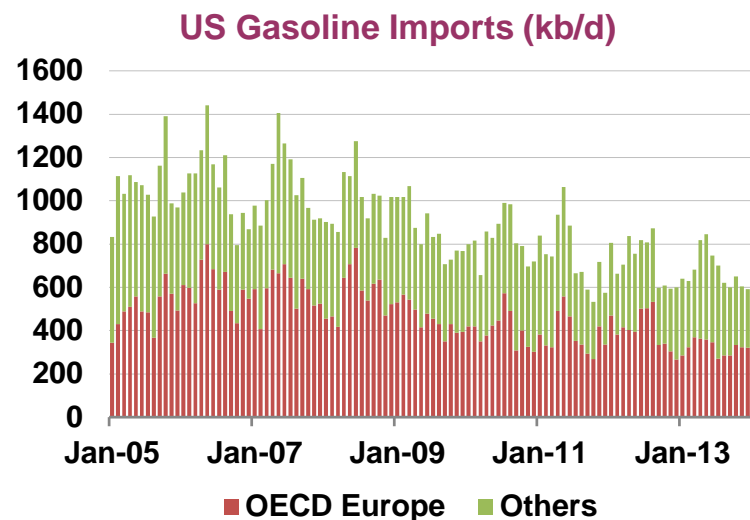
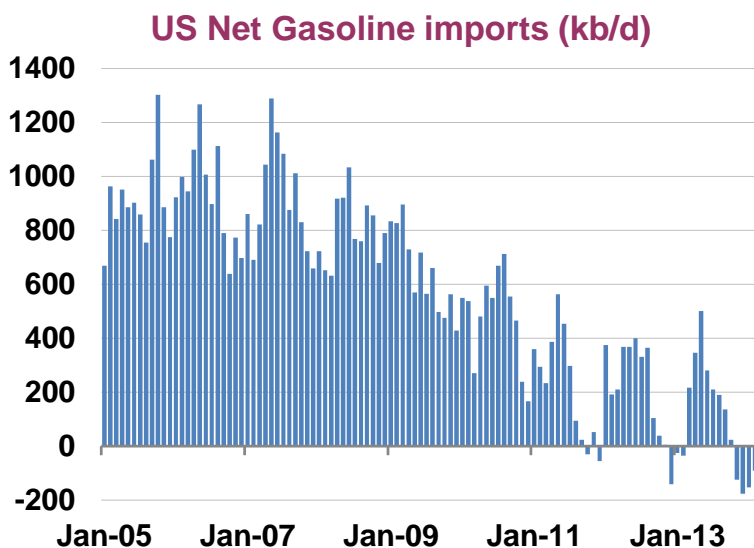
Increasing volumes coming from US, Russia, India, and Saudi?



- Since September 2013, European Net Middle Distillate imports have averaged 1.3 mb/d, compared with 830 kb/d in 2012 and 1.1 mb/d in 2009.
- US overtakes Russia as main supplier in 4Q13, providing 4650 kb/d (compared with 430 kb/d from Russia)
- Russia takes back key European supplier spot in 2014

US Turns Gasoline Net-Exporter

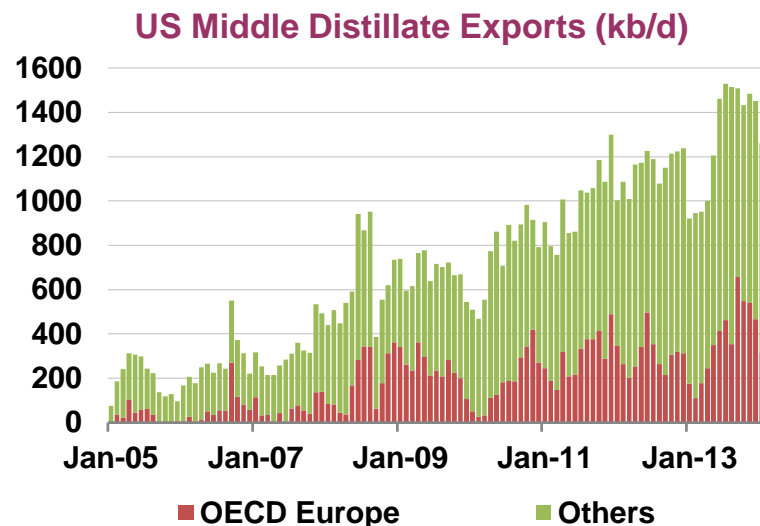
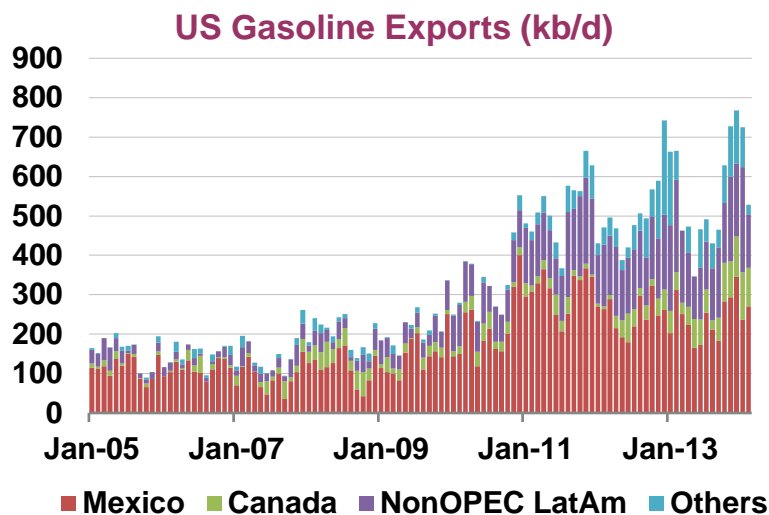
But Jones Act provides market for Europe on East Coast



- For the last four months (Nov13 – Feb14), US is net exporter of Gasoline
- The Jones Act, which prevents non US-flagged ships to sail within US waters, creates market for European gasoline on East Coast

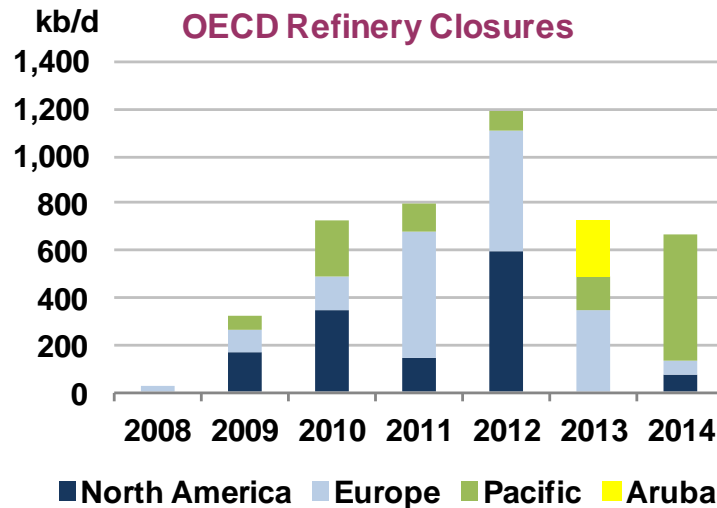
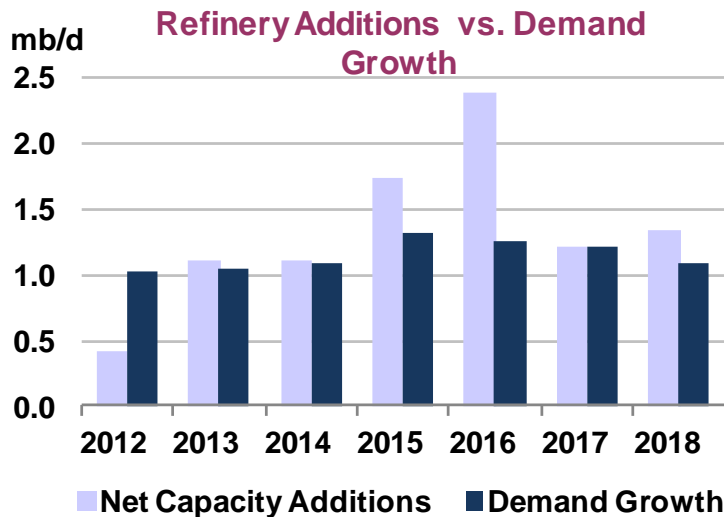
US Gasoline Exports Stay in the Americas

But increasing share of Distillates coming to Europe



- Mexico and Latin America remains the key buyers of US gasoline surplus
- While Latin America is also main market for US middle distillates, increasing share is coming to Europe (over 30% on average in last six months through February)

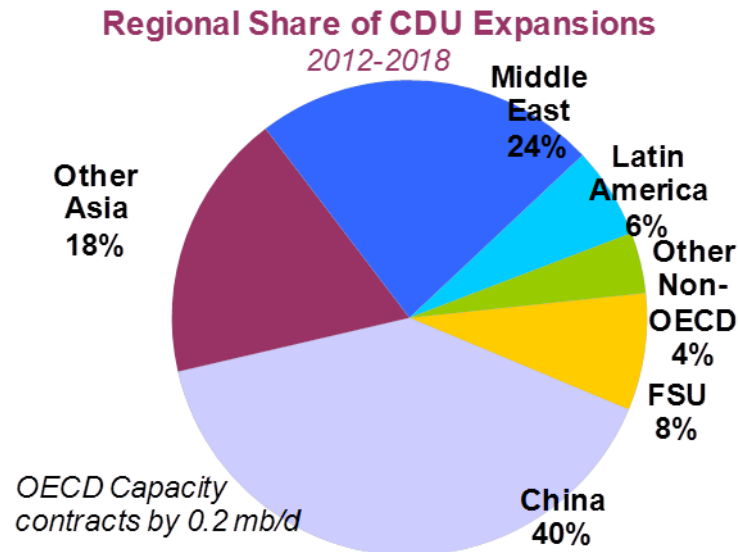
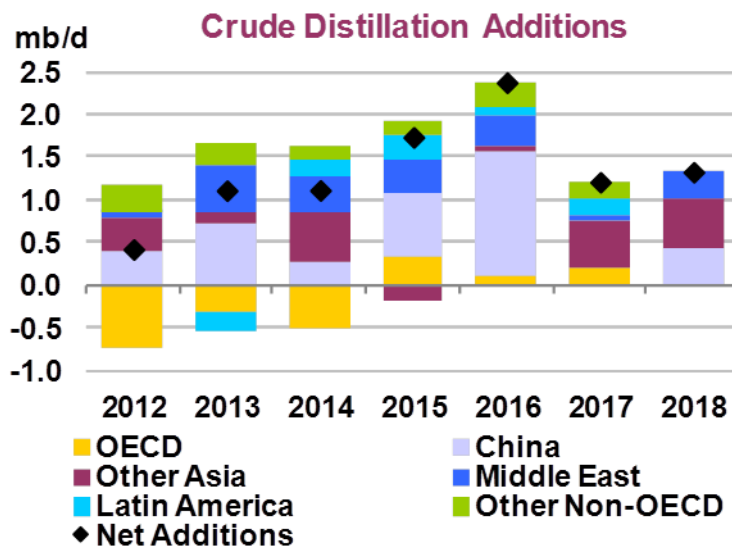
Globally, Surplus Refining Capacity Still Exist



- Despite OECD refinery closures, surplus distillation capacity exist
- 3.8 mb/d of OECD capacity already shut since 2008 (including Valero's 235 kb/d Aruba refinery)
- Another 670 kb/d scheduled for 2014, mostly in Japan
- Additions exceed projected demand growth to 2018
- Furthermore, biofuels, NGLs etc. meet larger share of demand

Good News For Europe

Global Refinery Investments Scaled Back



- Project delays, cancellations reduce new additions from year ago plans
- Chinese projects stalled due to concern over surplus capacity and pollution
- Slow progress in Brazil lead to further project slippage
 - Less capacity reduction requirements for Europe and other mature markets

New Medium Term Outlook to be Released on 17 June 2014



Will include update on global investment outlook and new trade balances – for Europe and the World



Thank you

toril.bosoni@iea.org