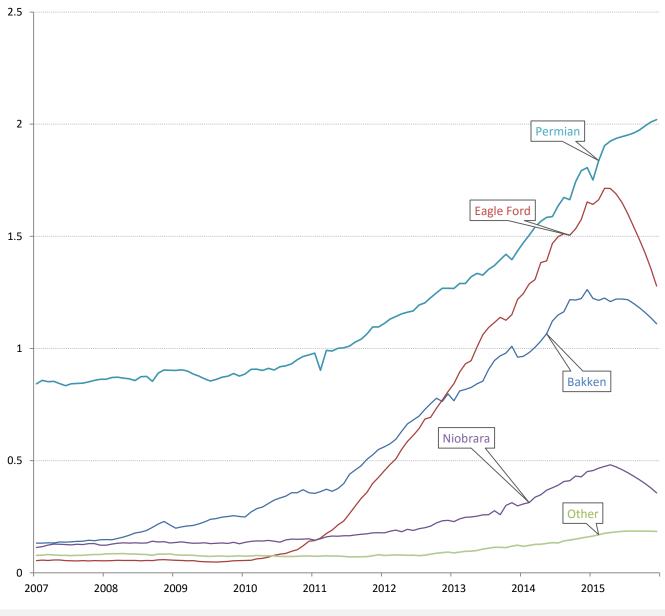


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Oil

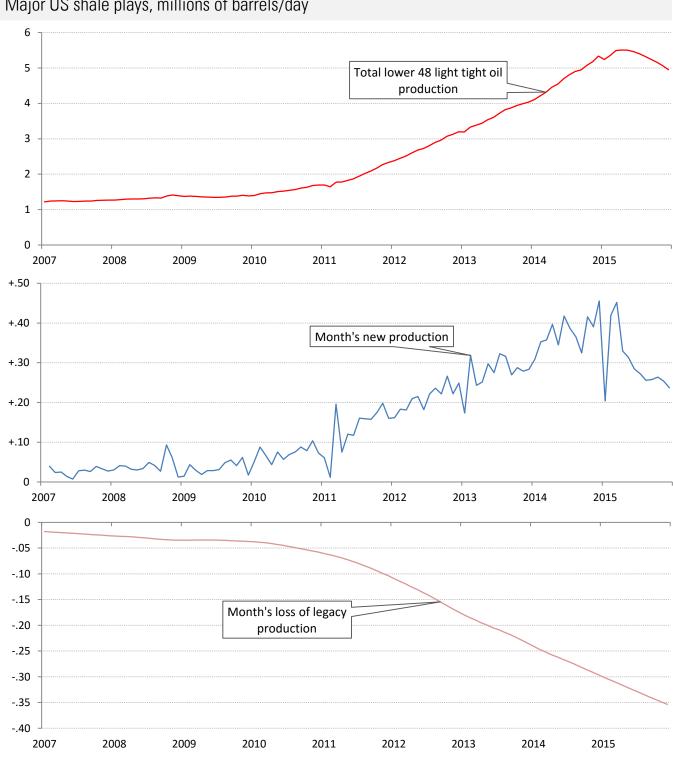
Tuesday, November 10, 2015

The light tight oil revolution -- and the rollover Major US shale plays, millions of barrels/day



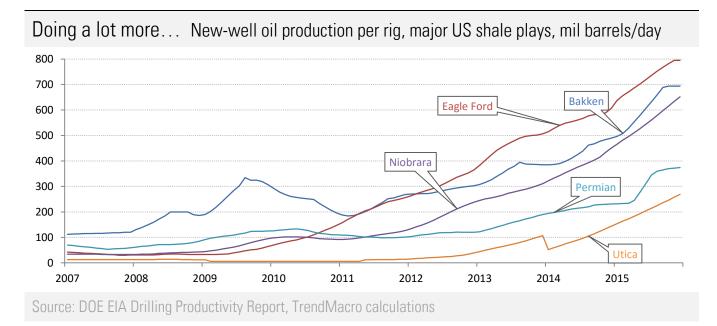
Source:DOE EIA Drilling Productivity Report, TrendMacro calculations

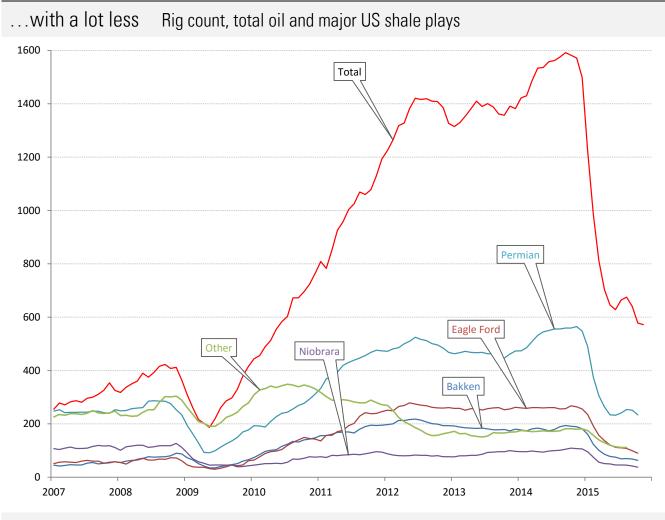
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Inside the rollover: depleting legacy, diminishing new production Major US shale plays, millions of barrels/day

Source: DOE EIA Drilling Productivity Report, TrendMacro calculations



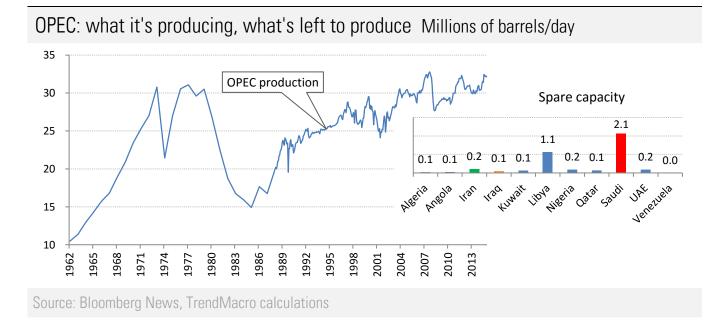


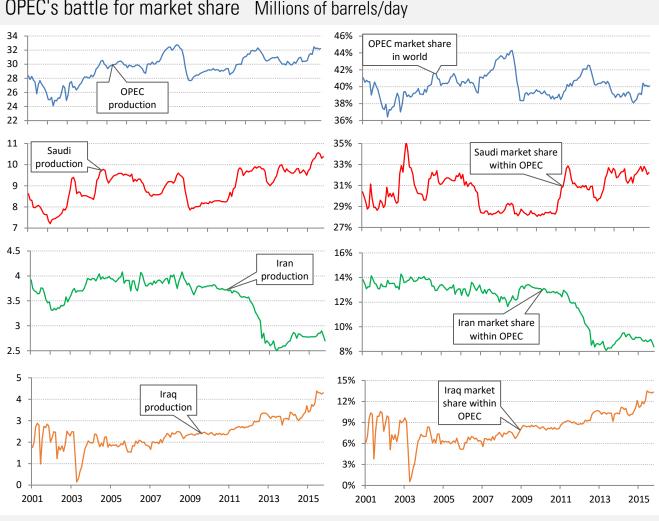
Source: DOE EIA Drilling Productivity Report, Baker Hughes, TrendMacro calculations

Millions of barrels/day Recession 10 8 Mont Total US production 6 4 2 Differentiated source data available Jan 1981 0 2950 2960 2976 ~96° 1374 1378 1337 1336 1340 1344 1348 1357 1964 2972 where we want the set we want the set and the ~9²⁰ 10 Total 8 Lower 48 light tight 6 Lower 48 4 Gulf of Mexico conventional Alaska 2 10 0 2013 2014 2015 9 8 Lower 48 light tight Lower 48 conventional 7 6 5 4 Gulf of Mexico Alaska Separate light tight data available Jan 2007 3 2 1 0 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015

US crude oil production -- deep history, and the modern transformation of sources

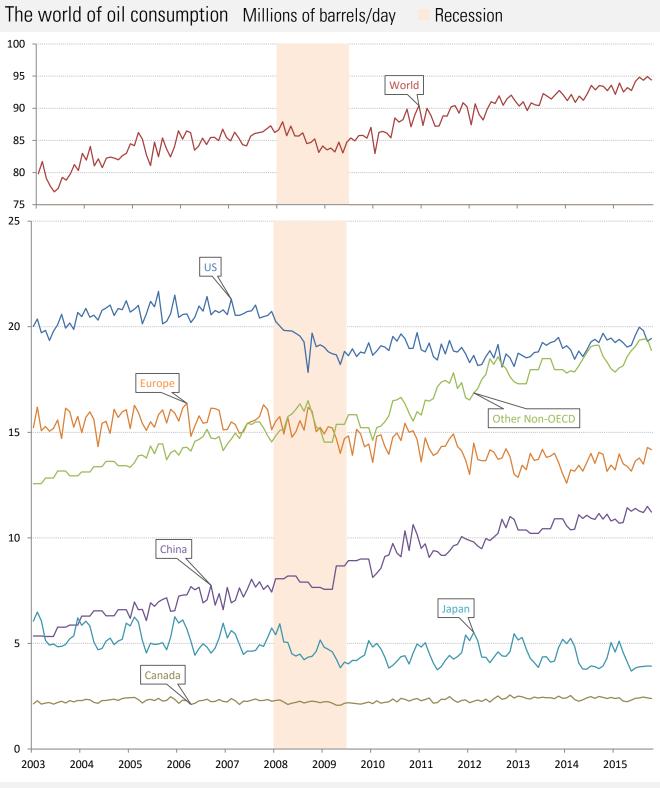
Source: DOE EIA Short Term Energy Outlook, Drilling Productivity Report, TrendMacro calculations

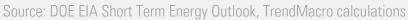


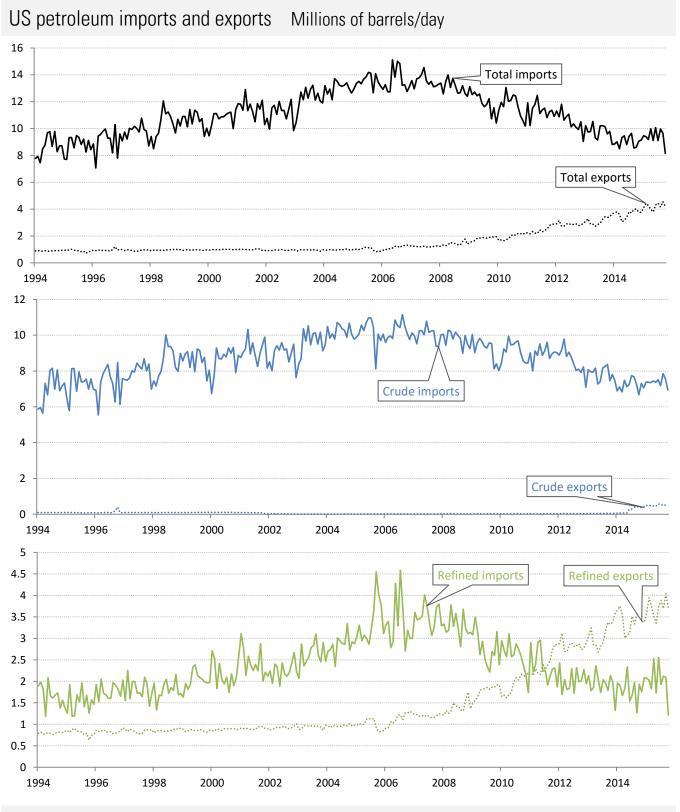


OPEC's battle for market share Millions of barrels/day

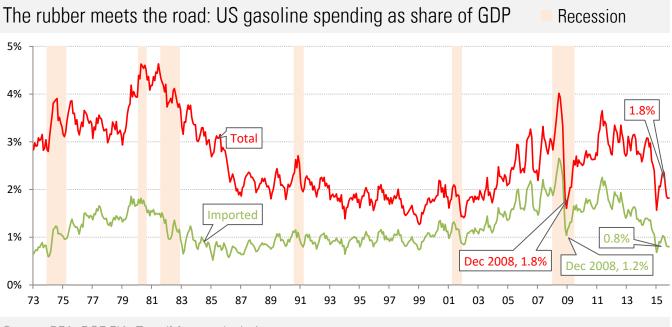
Source: DOE IEA International Petroleum Monthly Report, TrendMacro calculations



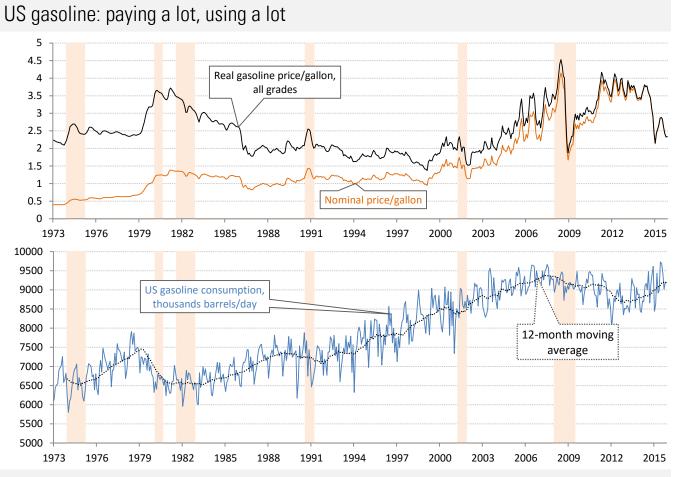




Source: DOE Weekly Petroleum Status Report, TrendMacro calculations



Source: BEA, DOE EIA, TrendMacro calculations



Source: DOE EIA Weekly Petroleum Status Report, Weekly Retail Gasoline Survey, TrendMacro calculations