Welcome Back to Boom-Bust Oil Prices

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Last 10+ Years: Not Your Usual Oil Price Volatility

Daily WTI Sport Price

Source: EIA, Rapidan Energy Group
Sticky Supply & Demand, Limited Storage Make Oil Prone to Big Price Swings

Standard Oil, TRC, Seven Sisters and OPEC resorted to supply management to stabilize prices

Crude Oil Prices
Nominal, Source: The Derrick, API, St. Louis Fed, EIA

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Texas Resorted to Armed Force and 40 Years of Central Planning to Tame Oil Price Cycles

FIGURE 4.2

Martial law. Militia are deployed to shut wells in East Texas oil fields. The postcard reads “HOOF BEATS DROWN DRILLING DIN AS CAVALRYMEN PATROL EAST TEXAS OIL FIELDS.”

Source: From the postcard collection of Jeff Spencer; original postcard photo by Jack Nolan.
No Spare Capacity, No Peace

Oil Disruptions, Spare Capacity, and Crude Prices

- Threatened Oil Supply
- Disrupted Oil Supply
- Global Spare Capacity
- US Spare Capacity
- Crude Oil Price (RHS)

Data: Rapidan Energy Group, EIA, BP, St. Louis Fed, US Senate

VZ '02-03, Iraq '03, Nigeria '03 ->, Libya '10->, Iran '12-> and others
10 Years Ago Oil Entered History’s Third Boom-Bust Era

Last prolonged boom and bust era ended over 80 years ago

Annual Ranges of Monthly US Crude Oil Prices, 1859-2016

- Boom Bust I: 53.3%
- Boom Bust II: 35.9%
- Rockefeller Era: 24.9%
- Texas Era: 3.6%
- OPEC Era: 24.1%
- Boom Bust III: 38.7%

Data Sources: Rapidan Energy Group, based on The Derrick, API, St. Louis Fed, EIA, and Bloomberg
Let’s Look Forward
EIA forecasts 2018 rise in OECD stocks and widening gap with 5-year average

- EIA is the only agency that forecasts OECD inventories and it sees 42 mb build in inventories between Sep 2017 and Dec 2018 and a 25 mb widening between the actual level and 5-year average.
- Note: EIA’s historical OECD data differ slightly from IEA’s but the difference is not material to this analysis.

Source: EIA, Rapidan Energy Group
Disappearing Deficits, Rising Surpluses Suggest We’re Not out of the Woods

- Below we assume steady Vienna Group production and show that IEA revisions have trended bearish since January. Latest revisions show a supply surplus in every quarter of 2018.
- Crucially, IEA implied 0.5-1.0 mb/d deficits until August, when major revisions swept these stock draws away. (1)

* First 2018 forecast is published in June
Source: IEA, Rapidan Energy Group

Report vintage:  • Jan  • Feb  • Mar  • Apr  • May  • Jun  • Jul  • Aug  • Sep  • Oct
World petroleum and other liquid fuels consumption grows by 18% between 2015 and 2040 in the Reference case—

Petroleum and other liquids consumption
million barrels per day
Trend: Forecasters Upwardly Revising Non-OECD Demand
Peak Demand’s First Test

Gasoline Consumption in the U.S. Transportation Sector 1950-2040

Source: EIA

- Motor Gasoline
- Motor Gasoline Forecast
A Policy Peak for US Gasoline Demand?

Impact of Policy on US Gasoline Forecasts and Peak Demand Projections

Source: EIA AEO
Consumers Prefer Thirstier Cars When Pump Prices Fall – Will Elected Officials Stop Them?

Source: University of Michigan, EIA, Rapidan Energy Group
Let’s Hope (But Maybe Not Wager) We Won’t Need A Swing Producer

Source: Statoil Energy Perspectives 2017