

The Return of Boom-Bust Oil Prices

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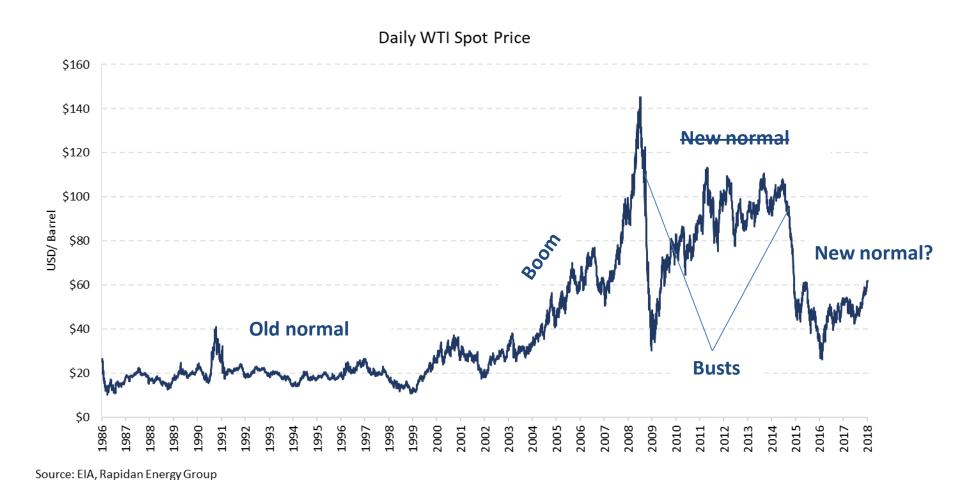
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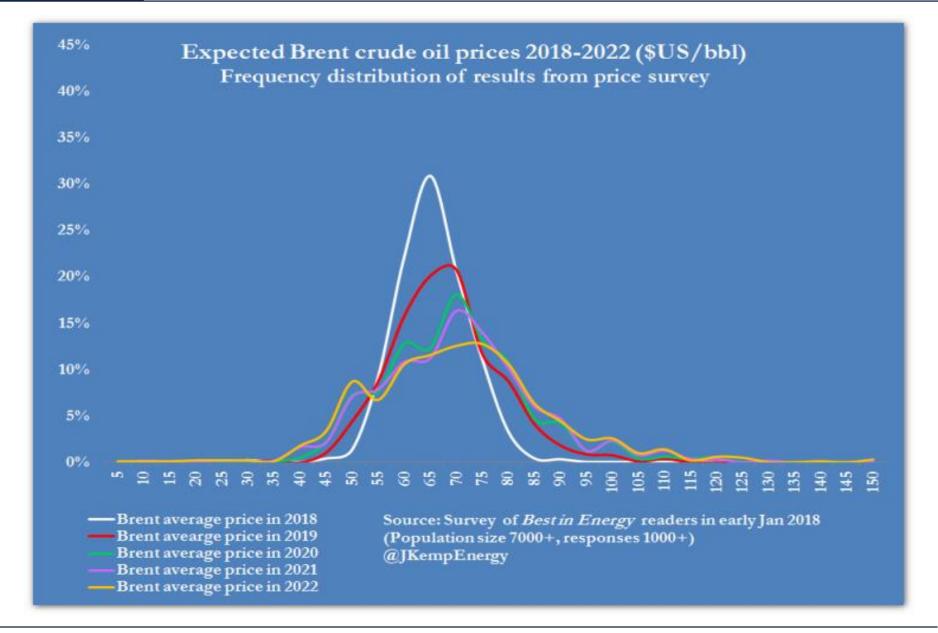
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Last 10+ Years: Not Your Usual Oil Price Volatility

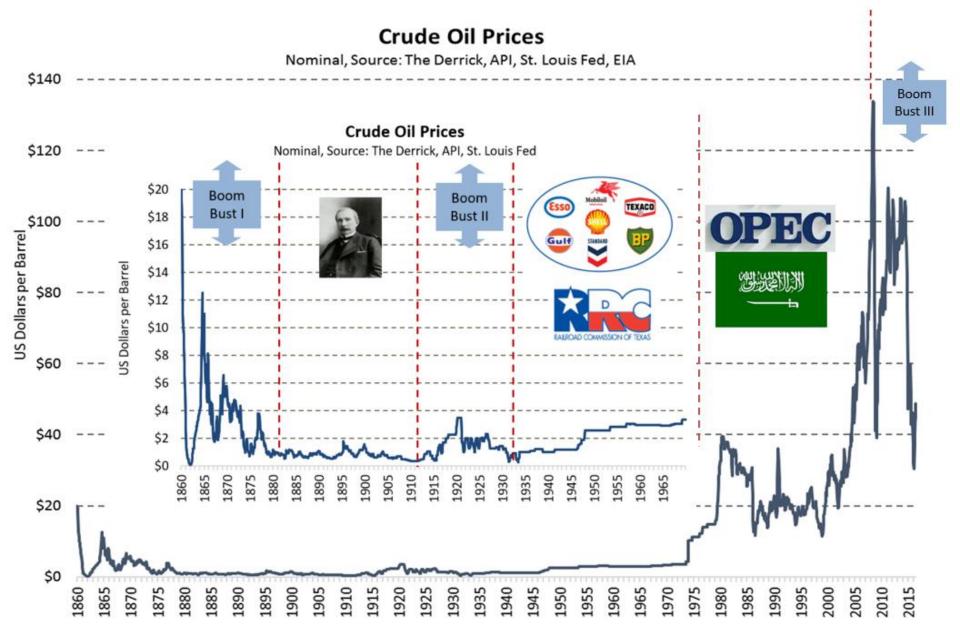








Sticky Supply & Demand, Limited Storage Make Oil Prone to Big Price Swings





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

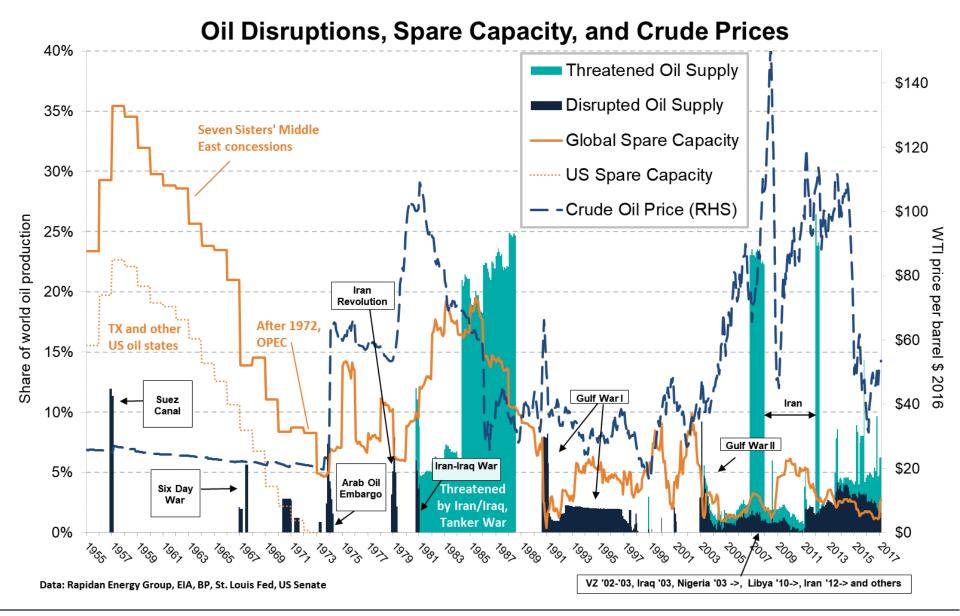


FIGURE 4.2

Martial law. Militia are deployed to shut wells in East Texas oil fields. The postcard reads "Hoof Beats Drown Drilling Din as Cavalry Men Patrol East Texas Oil Fields."

Source: From the postcard collection of Jeff Spencer; original postcard photo by Jack Nolan.



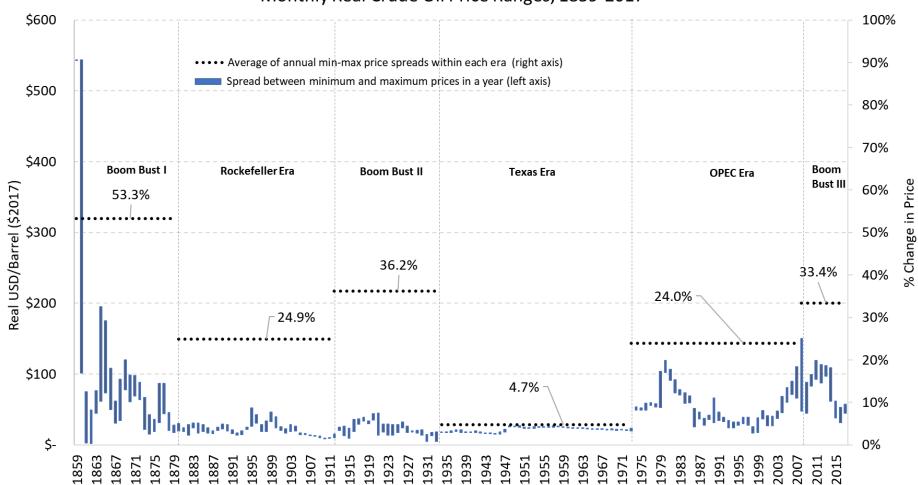




10 Years Ago Oil Entered History's Third Boom-Bust Era

Last prolonged boom and bust era ended over 80 years ago

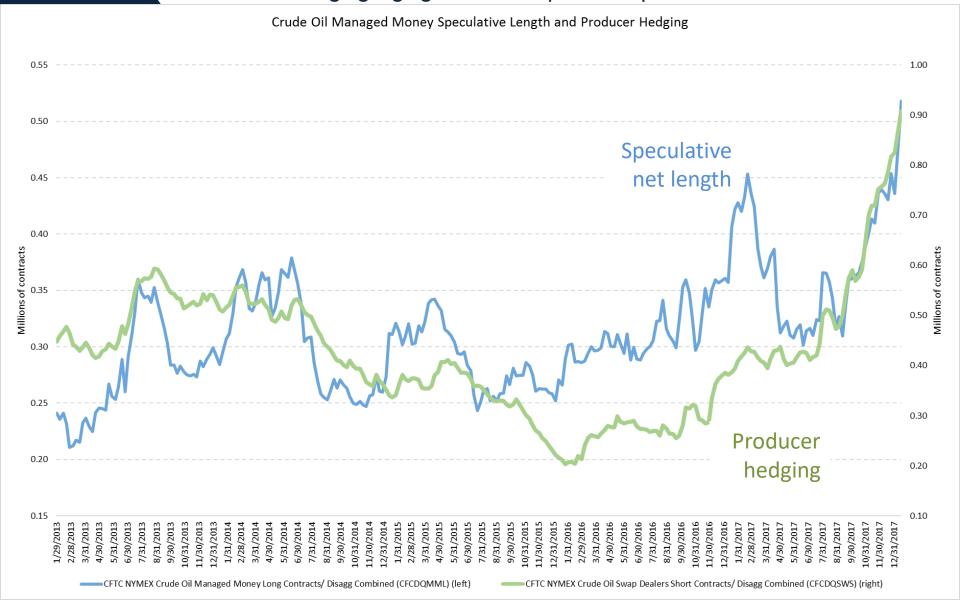




Data Sources: The Rapidan Group, based on The Derrick, API, St. Louis Fed, and EIA



Meanwhile, Speculators Hold Record Bets Crude Prices Are Going Higher Producers are hedging big against a collapse in oil prices - someone's offsides

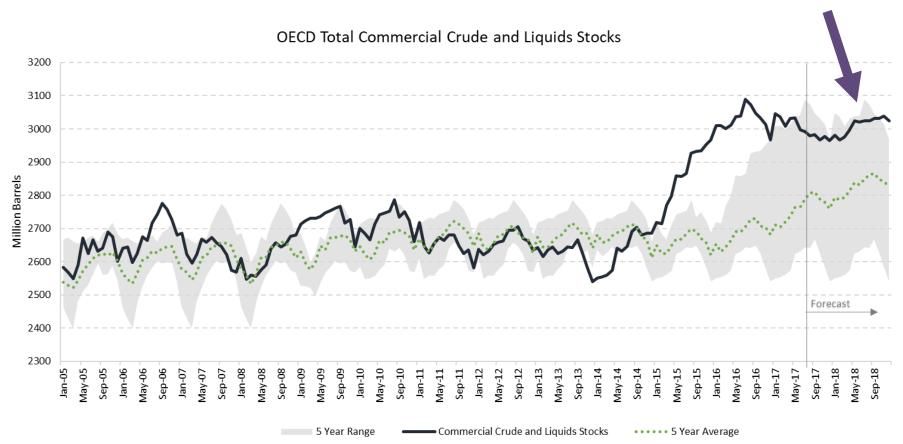




Let's Look Forward

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.

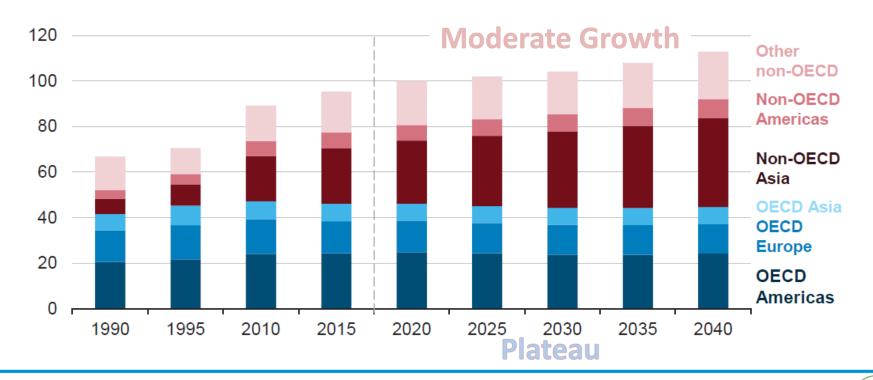


Source: EIA, Rapidan Energy Group



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



U.S. Energy Information Administration

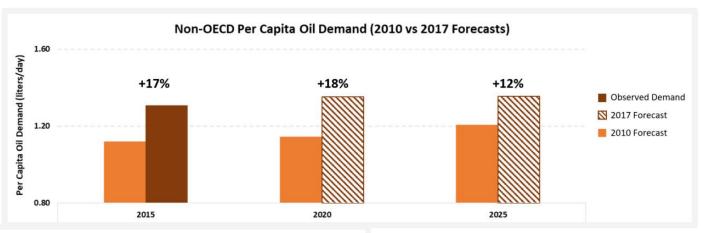
#IEO2017

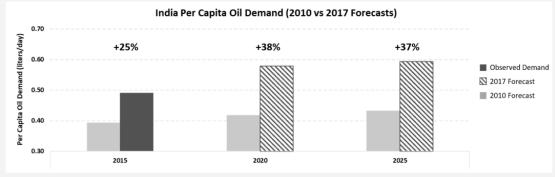
www.eia.gov/ieo

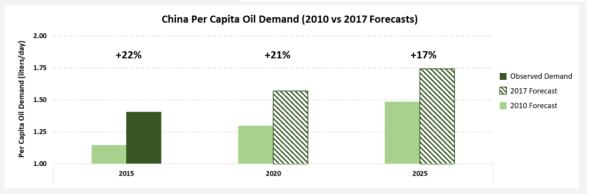




Trend: Forecasters Upwardly Revising Non-OECD Demand

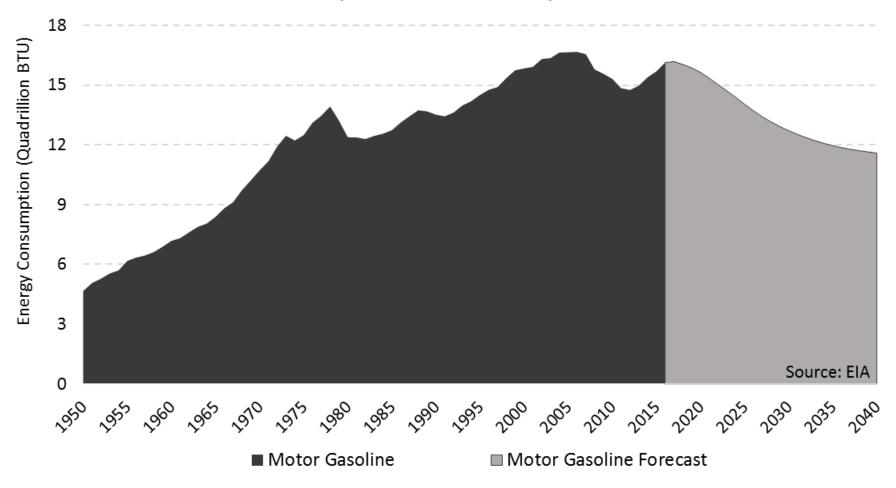






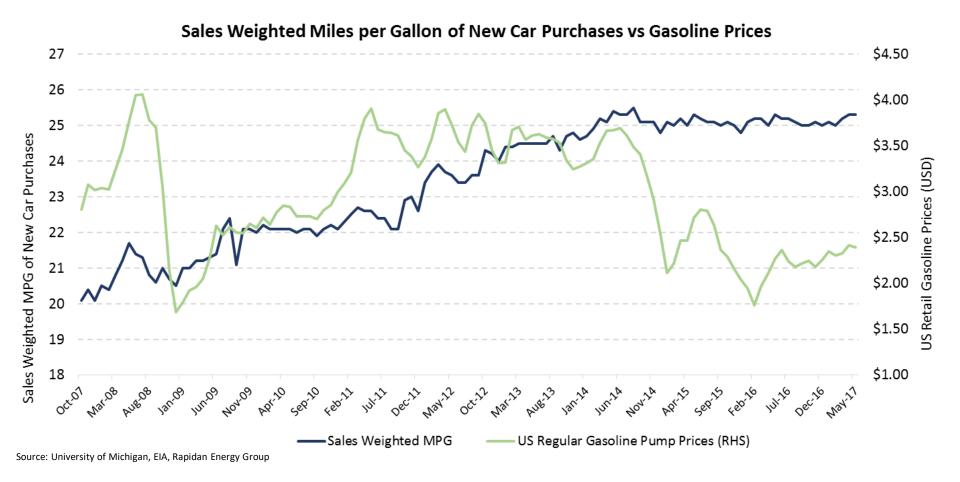








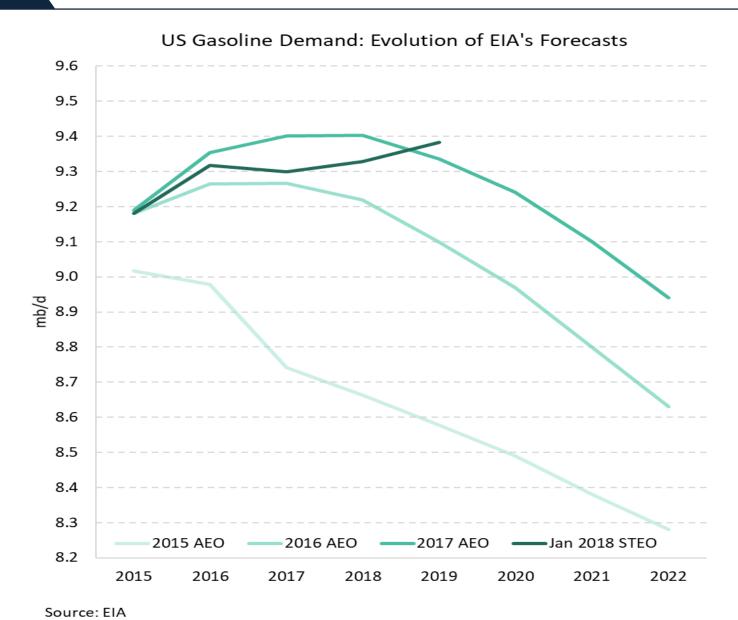
Consumers Prefer Thirstier Cars When Pump Prices Fall - Will Elected Officials Stop Them?





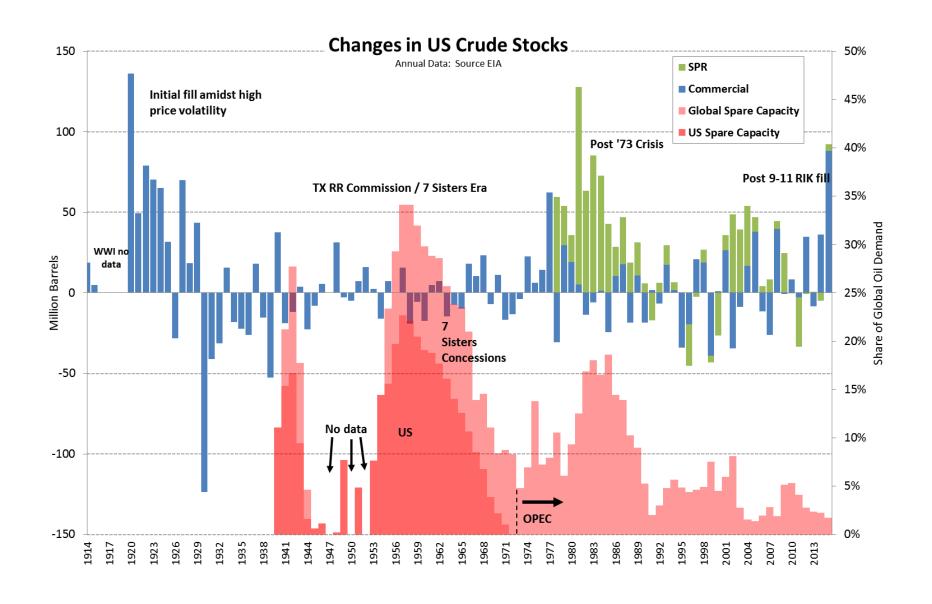
Latest EIA Forecasts Show Upward Revision Trend in Mogas Demand

EIA's Updated 2019 Forecast Shows a +120kb/d Swing From Most Recent AEO

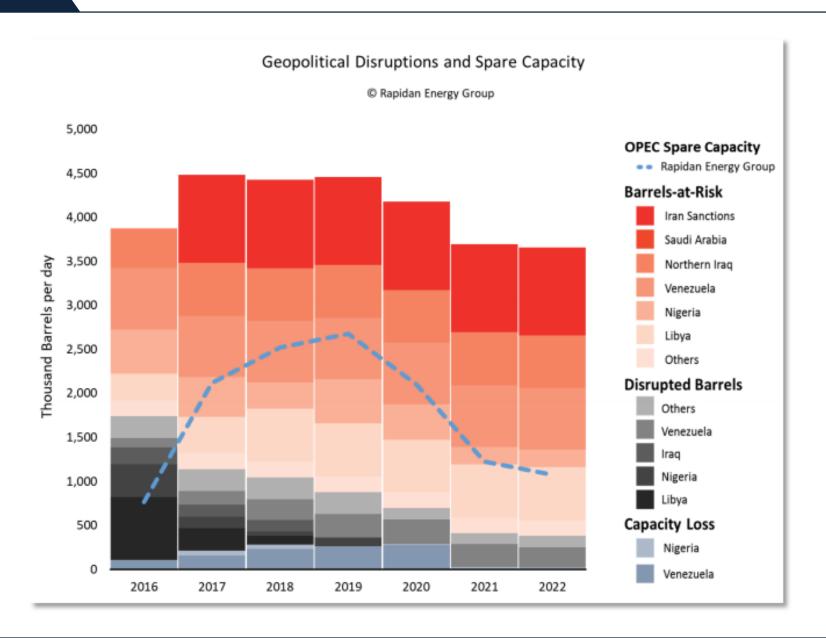




New Importers Will Build Stocks in a Tighter Market



High Disruption Risk, Tight Spare Capacity Buffer



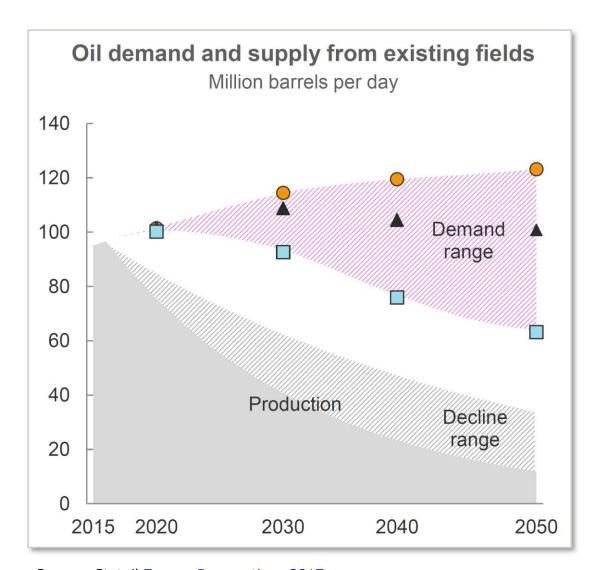


Let's Hope (But Maybe Not Wager) We Won't Need A Swing Producer





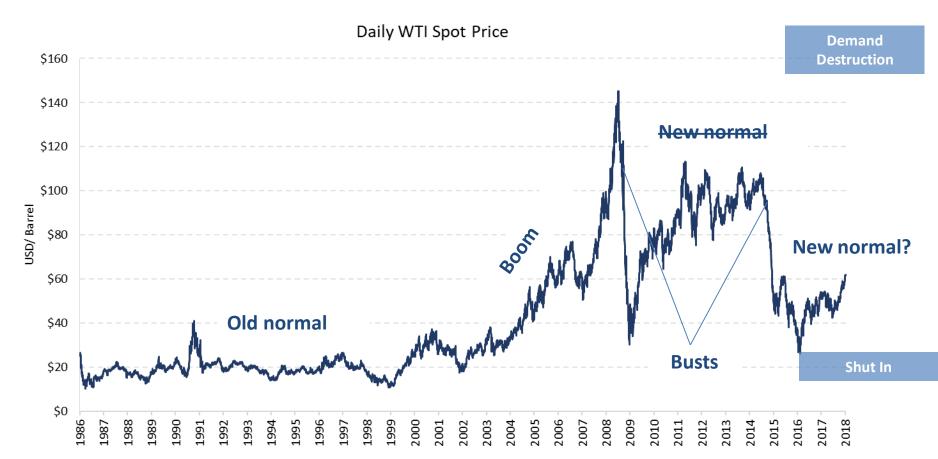




Source: Statoil **Energy Perspectives 2017**



Unbalanced Market + No Swing Producer = Price Swings Between Demand Destruction and Shut In



Source: EIA, Rapidan Energy Group