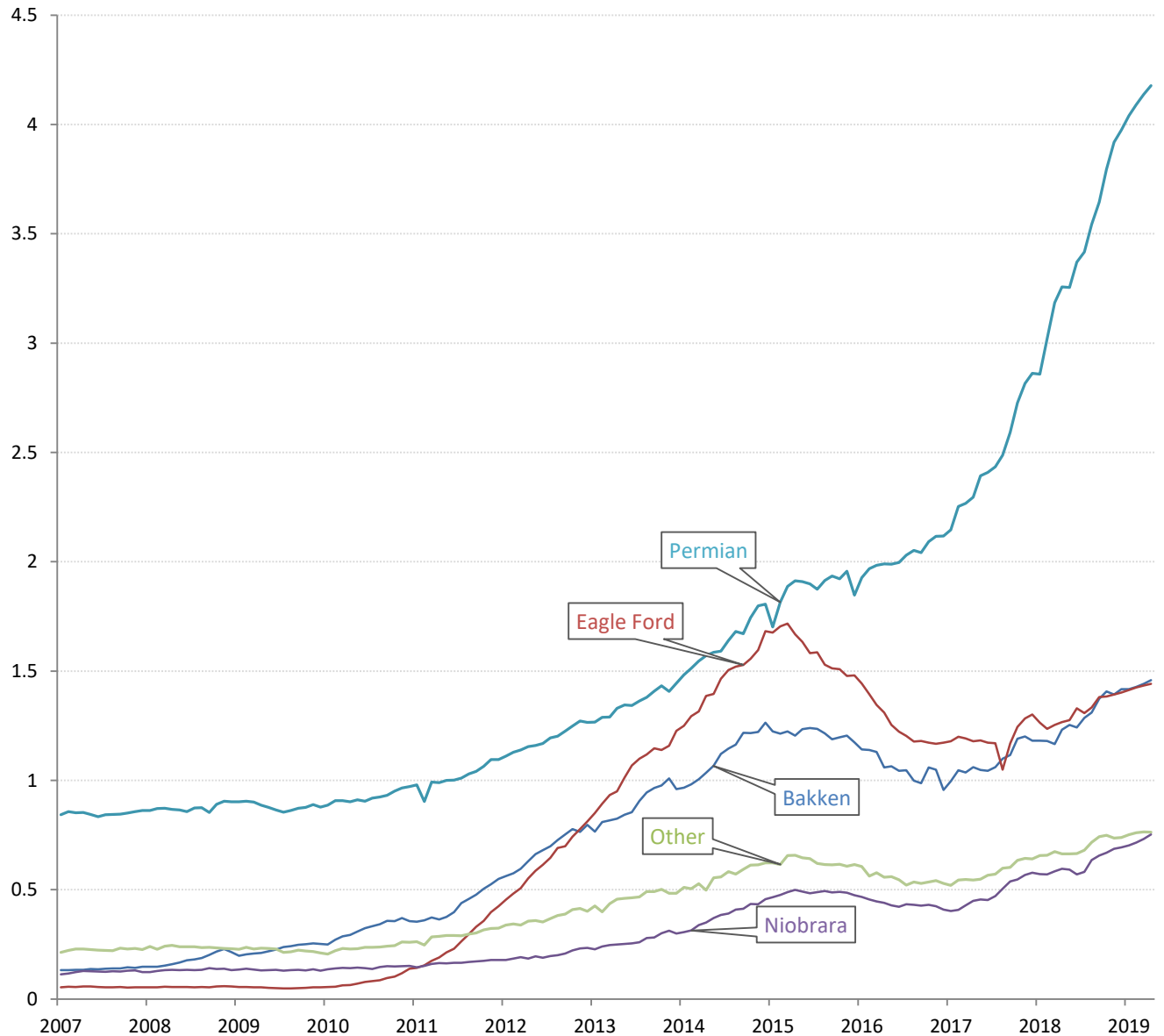


## Data Insights: Oil

Monday, March 18, 2019

### The light tight oil revolution -- the rollover and the recovery Production in major US shale plays, millions of barrels/day

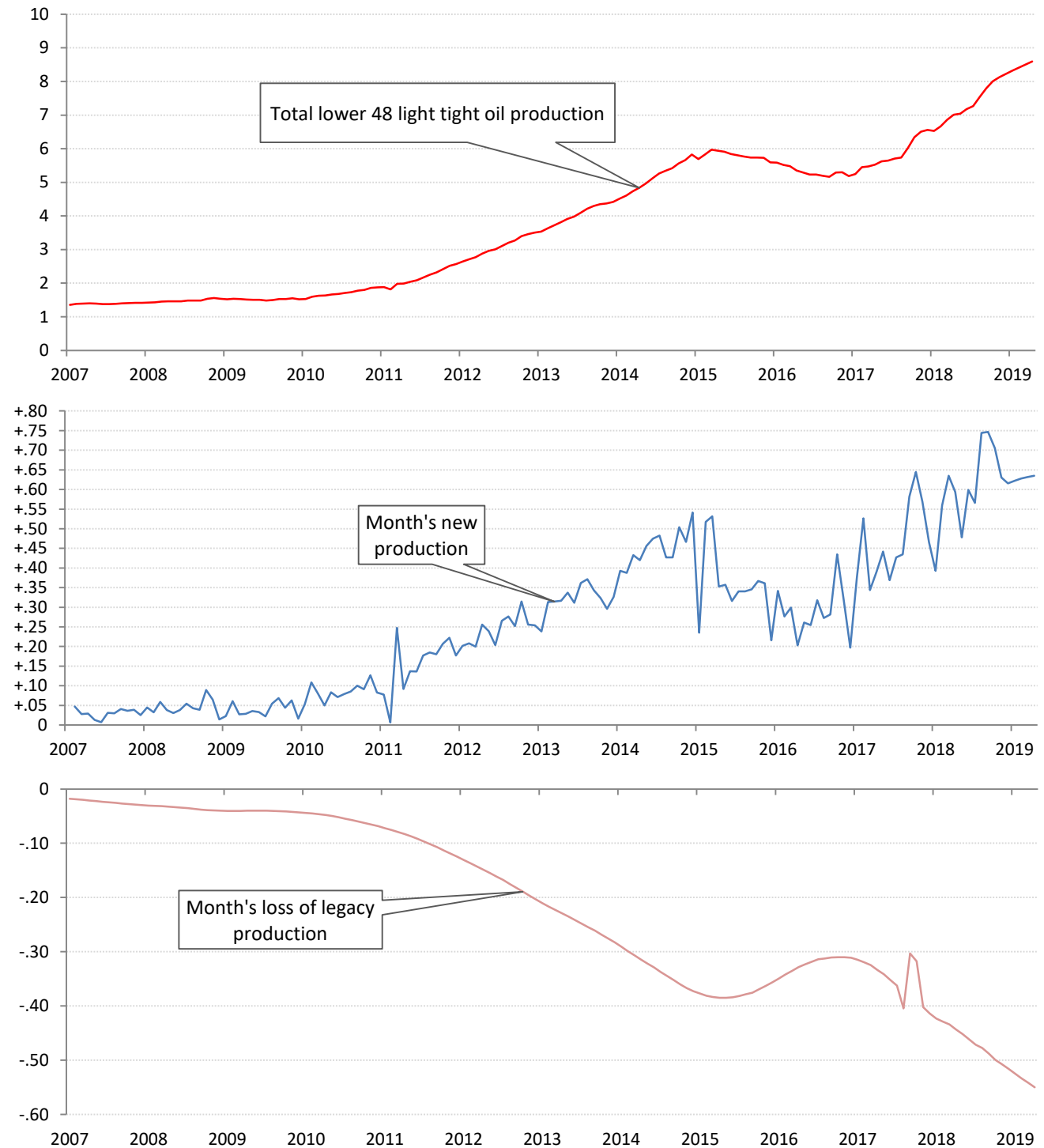


Source:DOE EIA Drilling Productivity Report, TrendMacro calculations

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# Inside the revolution: depleting legacy, diminishing new production

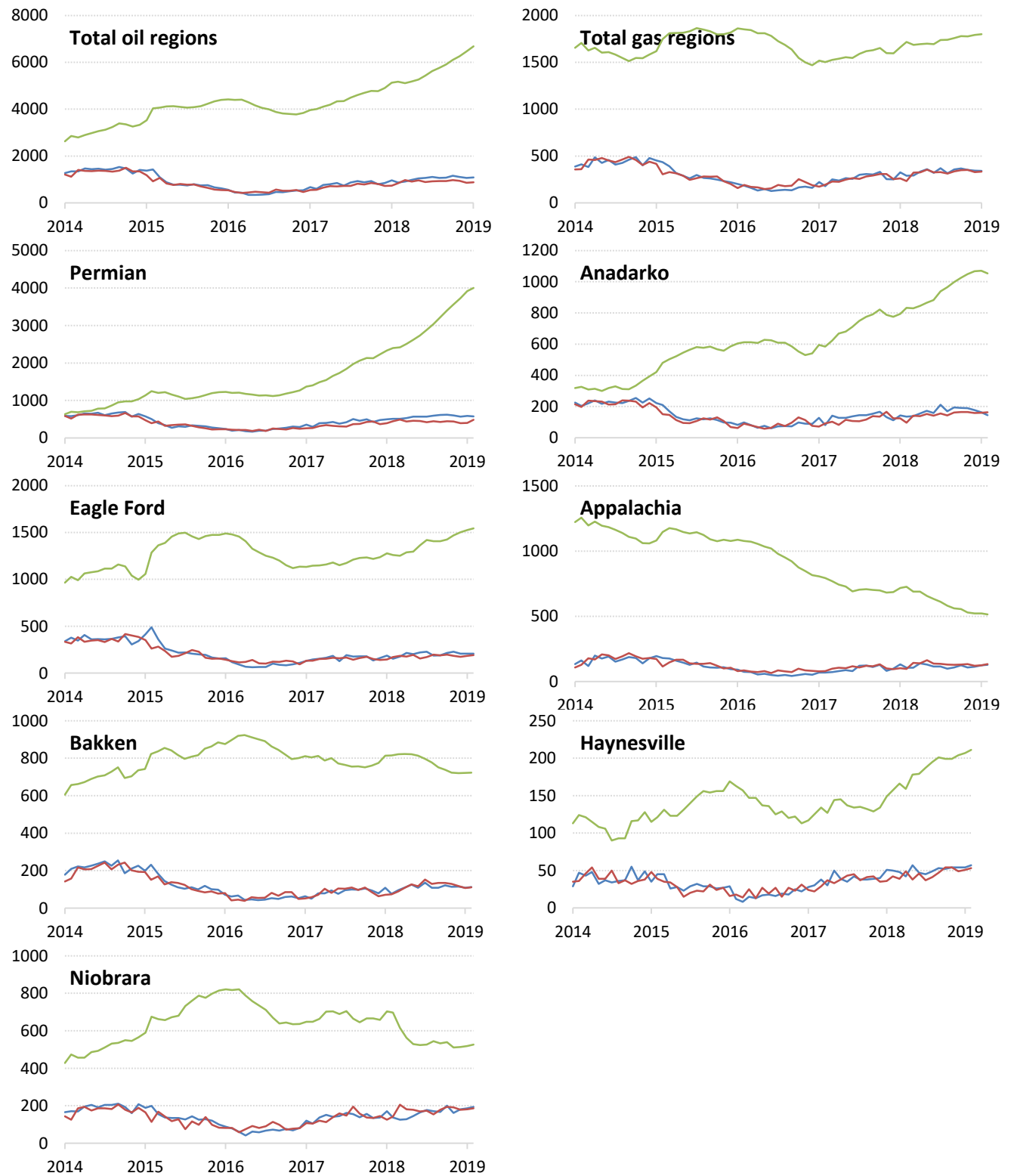
Aggregate production in major US shale plays, millions of barrels/day



Source: DOE EIA Drilling Productivity Report, TrendMacro calculations

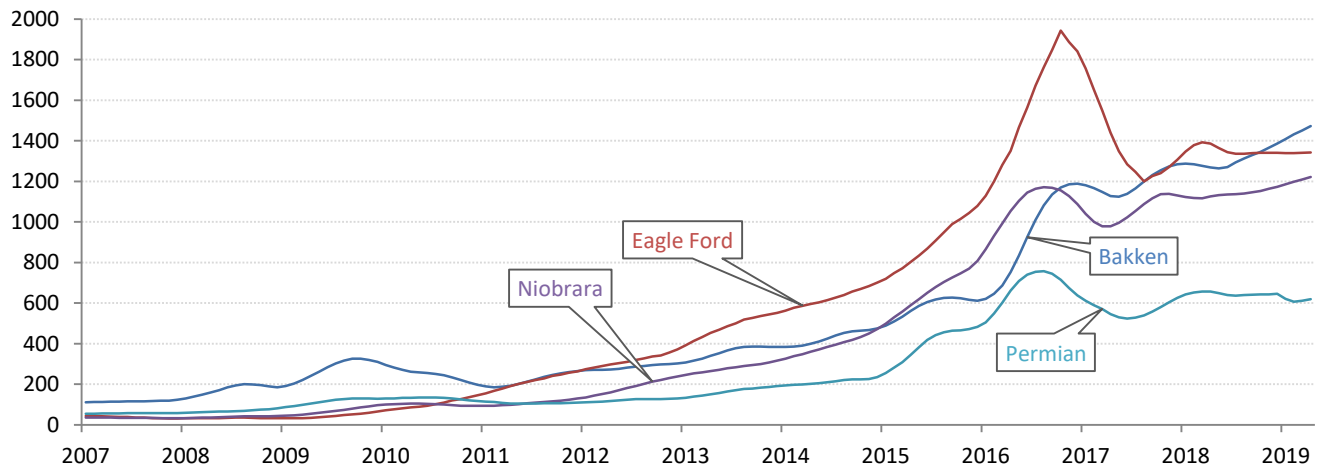
# Low fracking fruit: the inventory of drilled but uncompleted wells (DUC)

Wells: — Drilled — Completed — Drilled but uncompleted



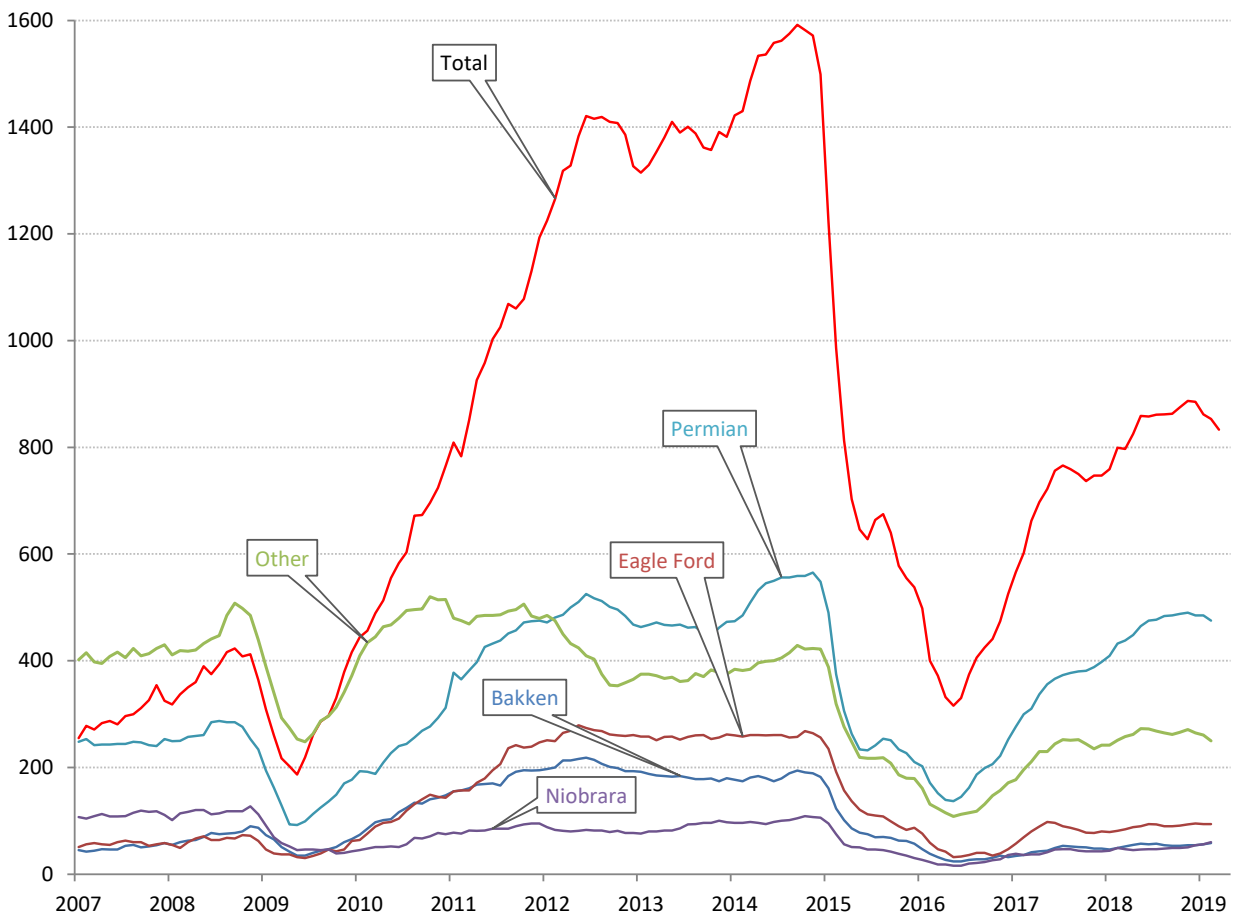
Source: DOE EIA Drilling Productivity Report, TrendMacro calculations

Doing a lot more... New-well oil production per rig, major US shale plays, barrels/day



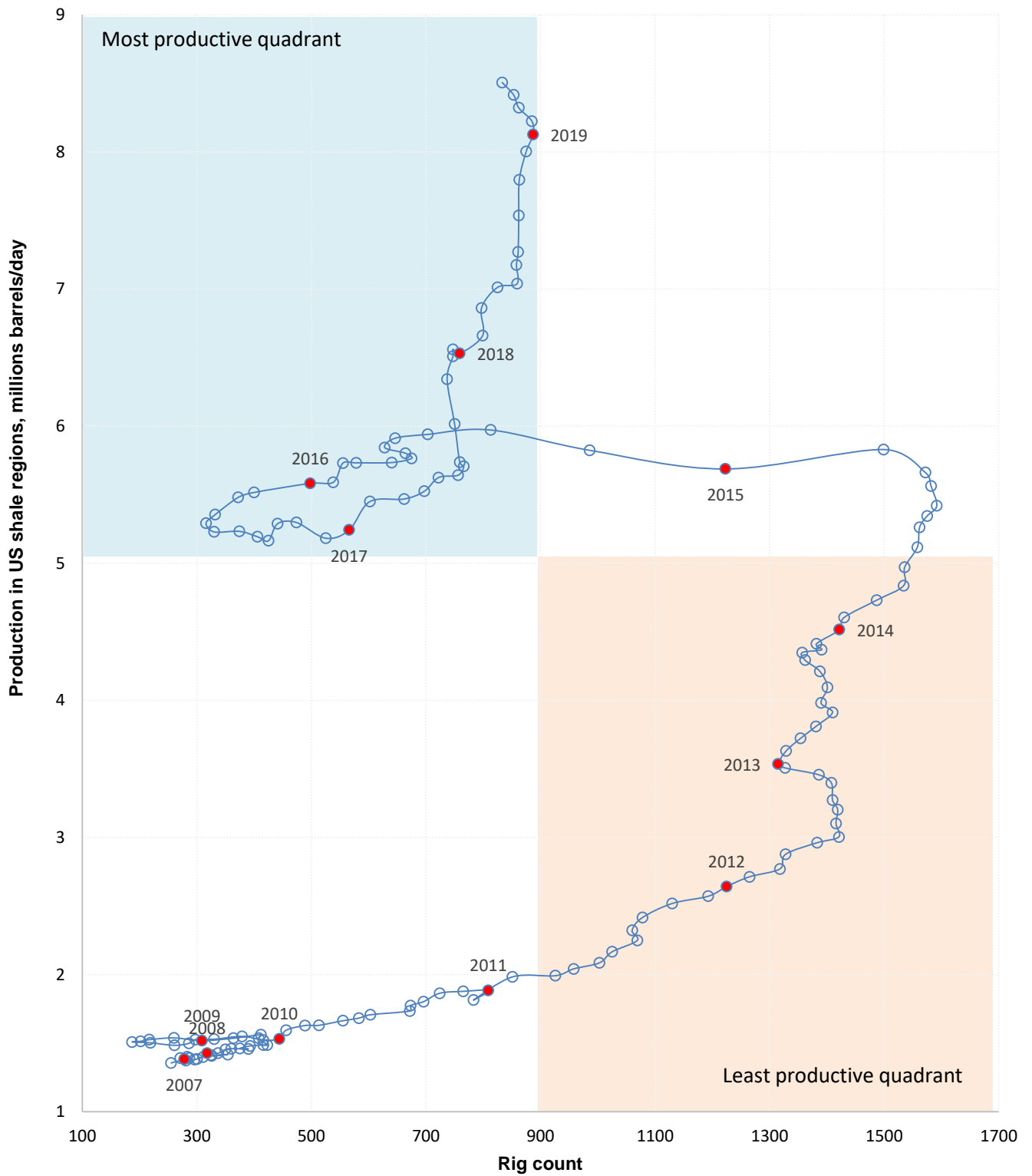
Source: DOE EIA Drilling Productivity Report, TrendMacro calculations

...with a lot less Rig count, total oil and major US shale plays



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

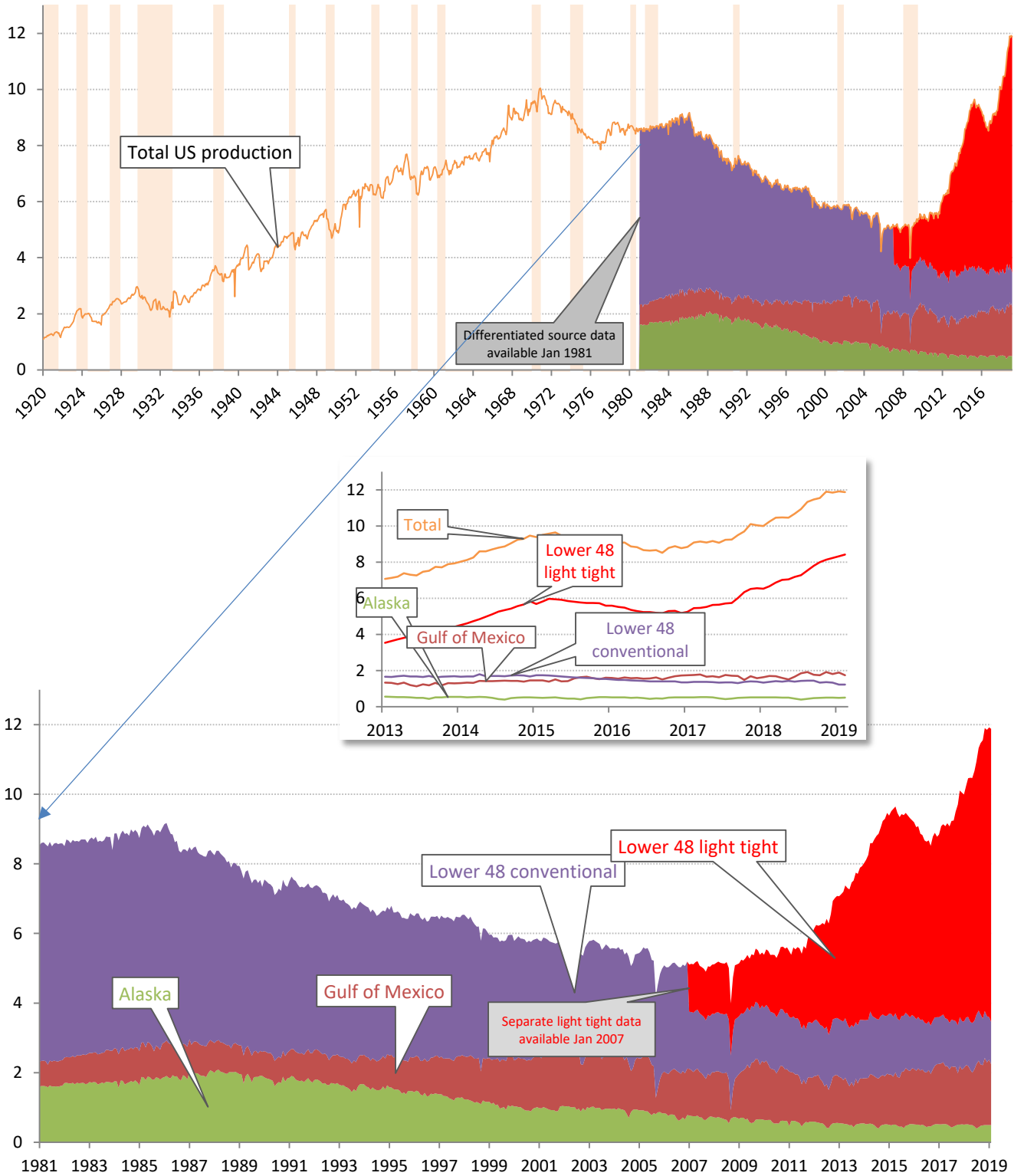
# Flooding the productivity zone



Source: DOE EIA Drilling Productivity Report, TrendMacro calculations

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

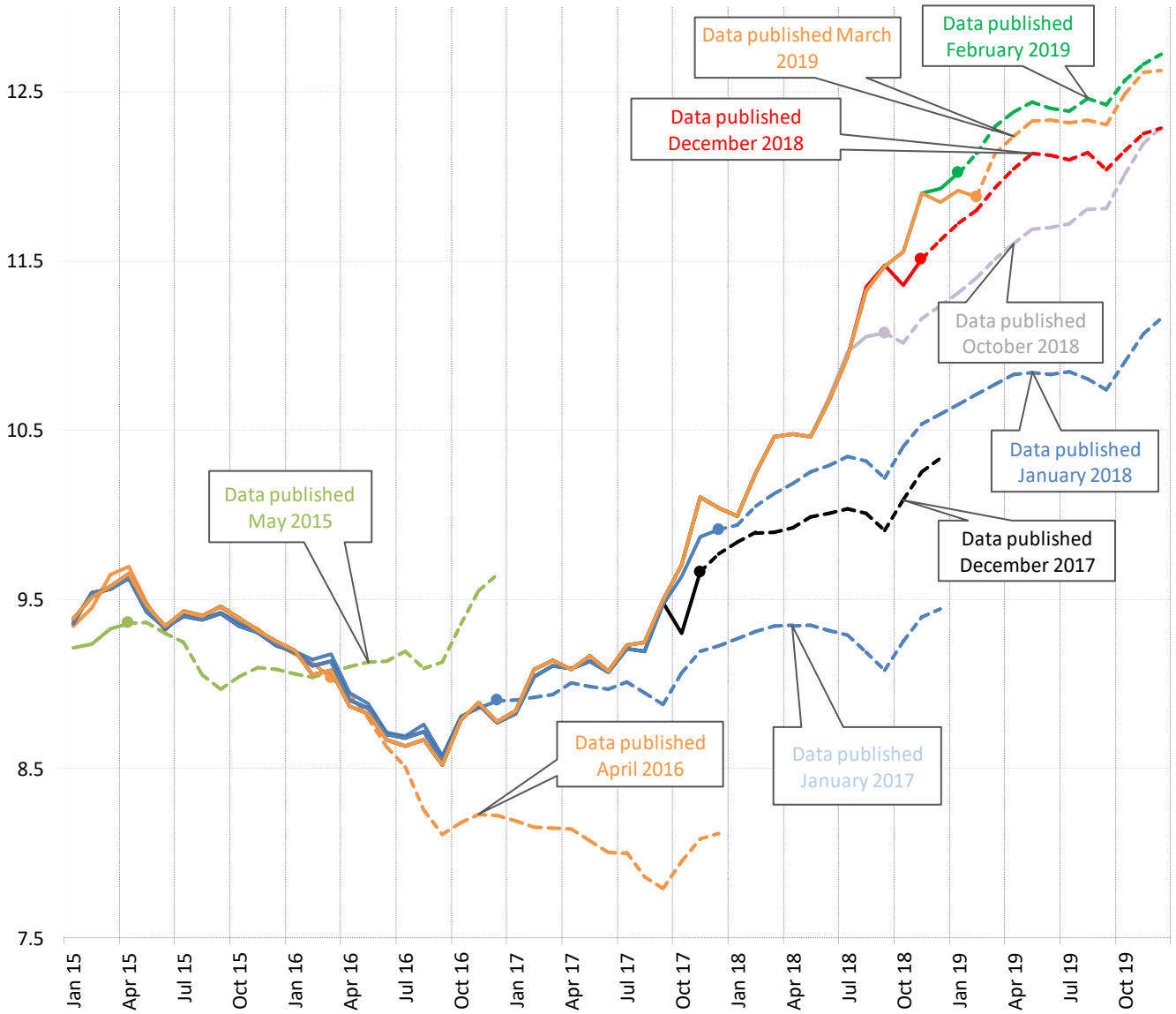
Millions of barrels/day ■ Recession



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

# The evolution of expectations: booms and busts in US production outlooks

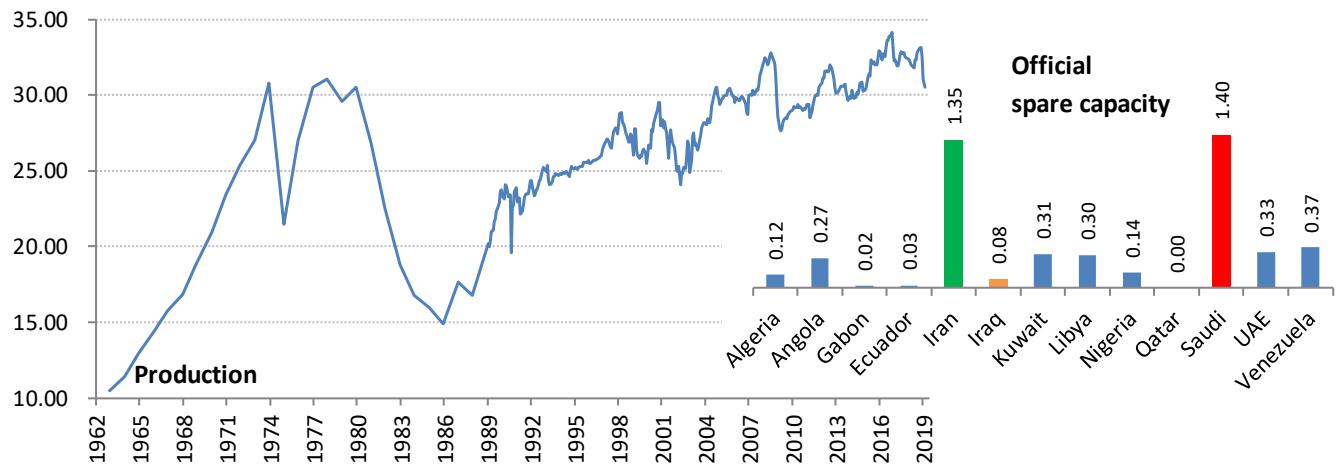
Millions of barrels/day — Actual - - - Forecast



Source: DOE EIA Short Term Energy Outlook, TrendMacro calculations

# OPEC: what it's producing, what's left to produce

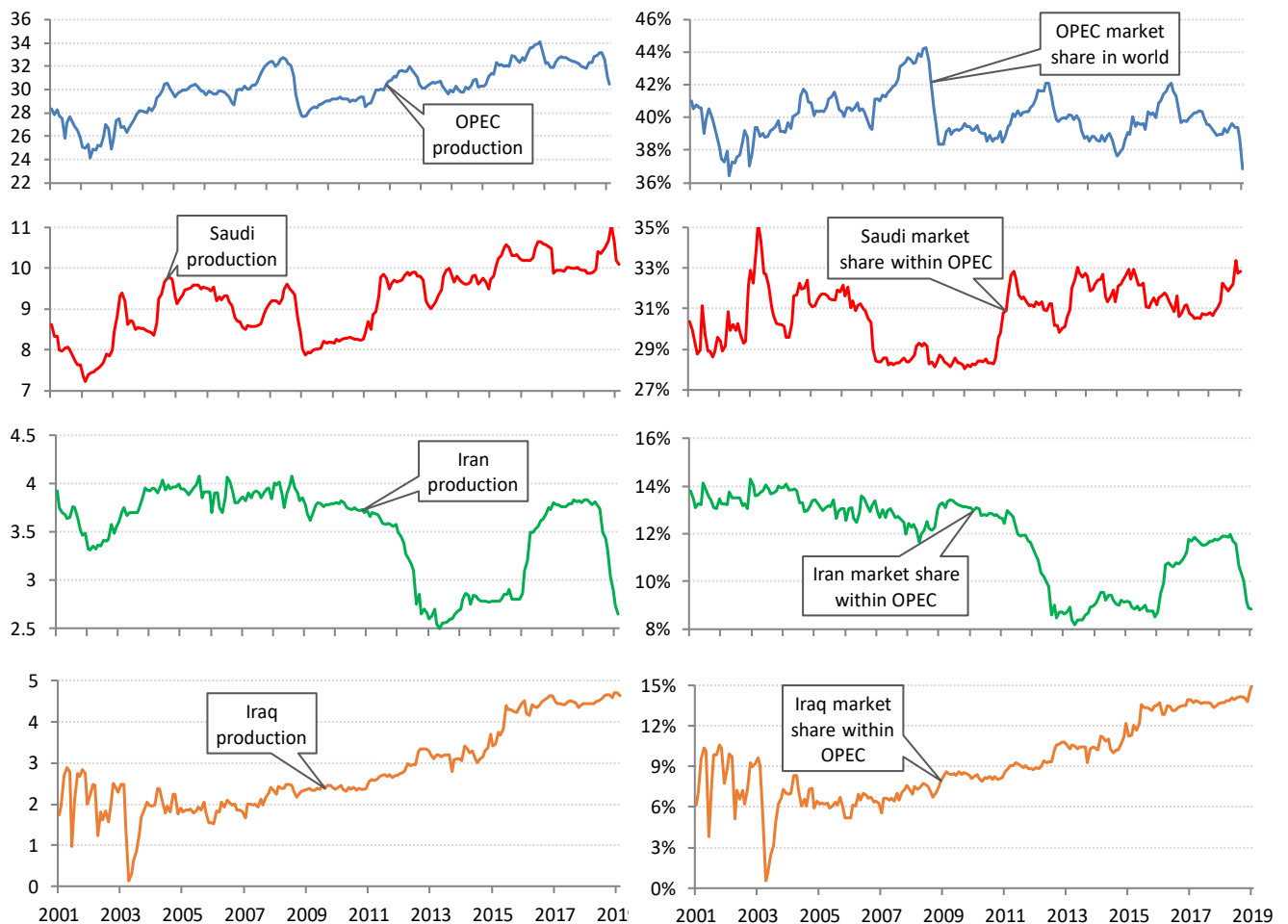
Millions of barrels/day



Source: Bloomberg News, TrendMacro calculations

# OPEC's battle for market share

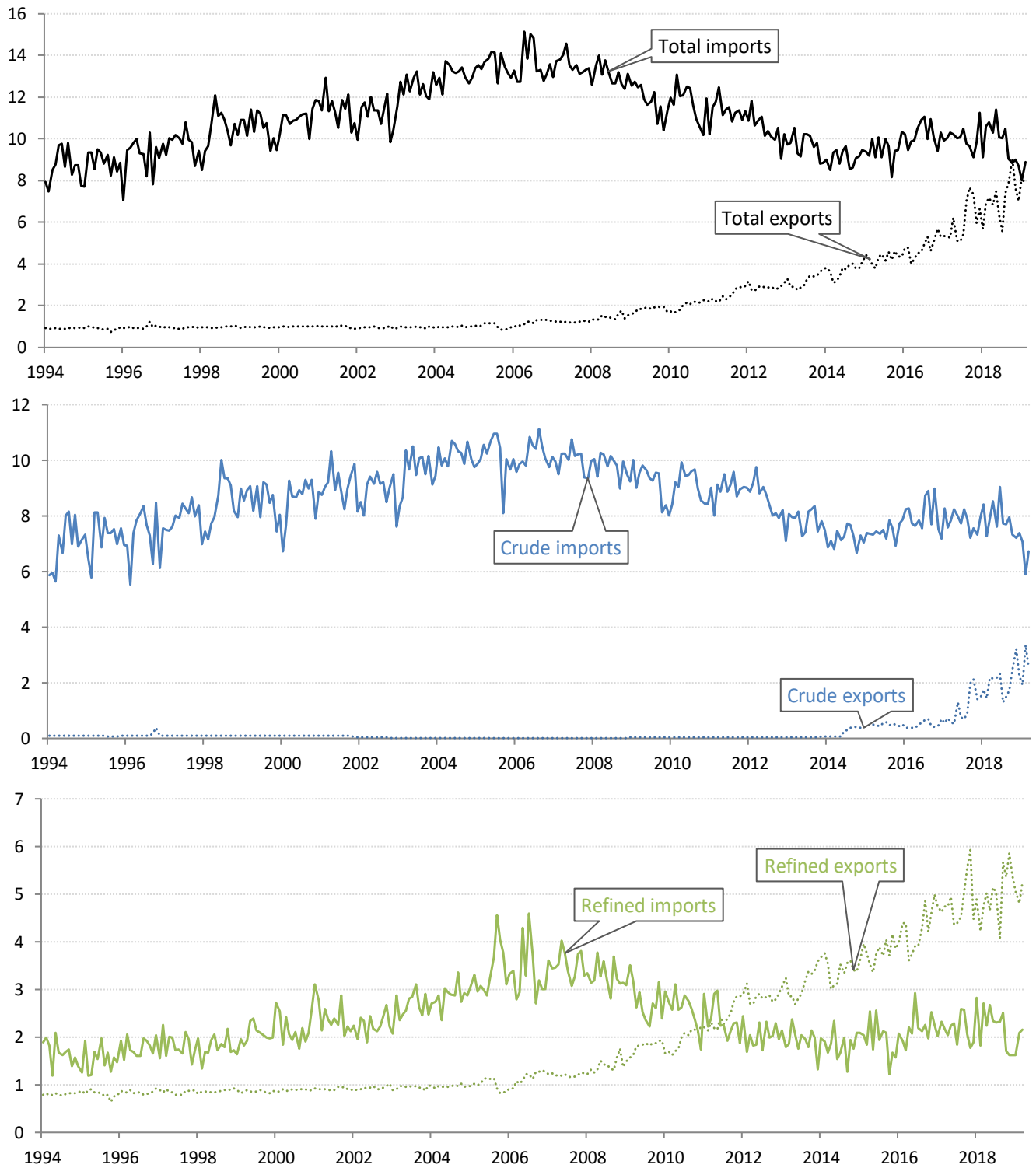
Millions of barrels/day



Source: Bloomberg News, TrendMacro calculations

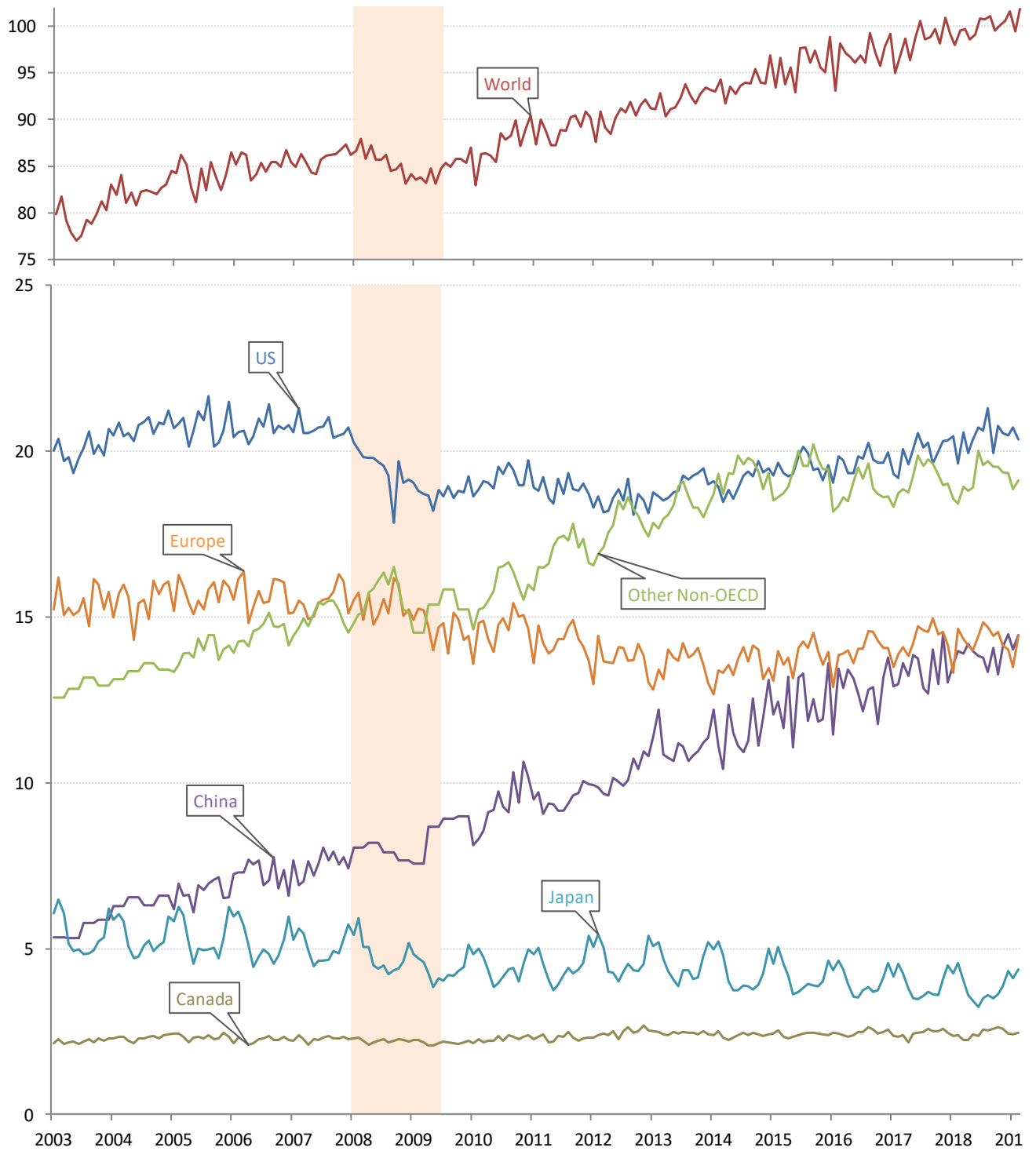


# US petroleum imports and exports Millions of barrels/day



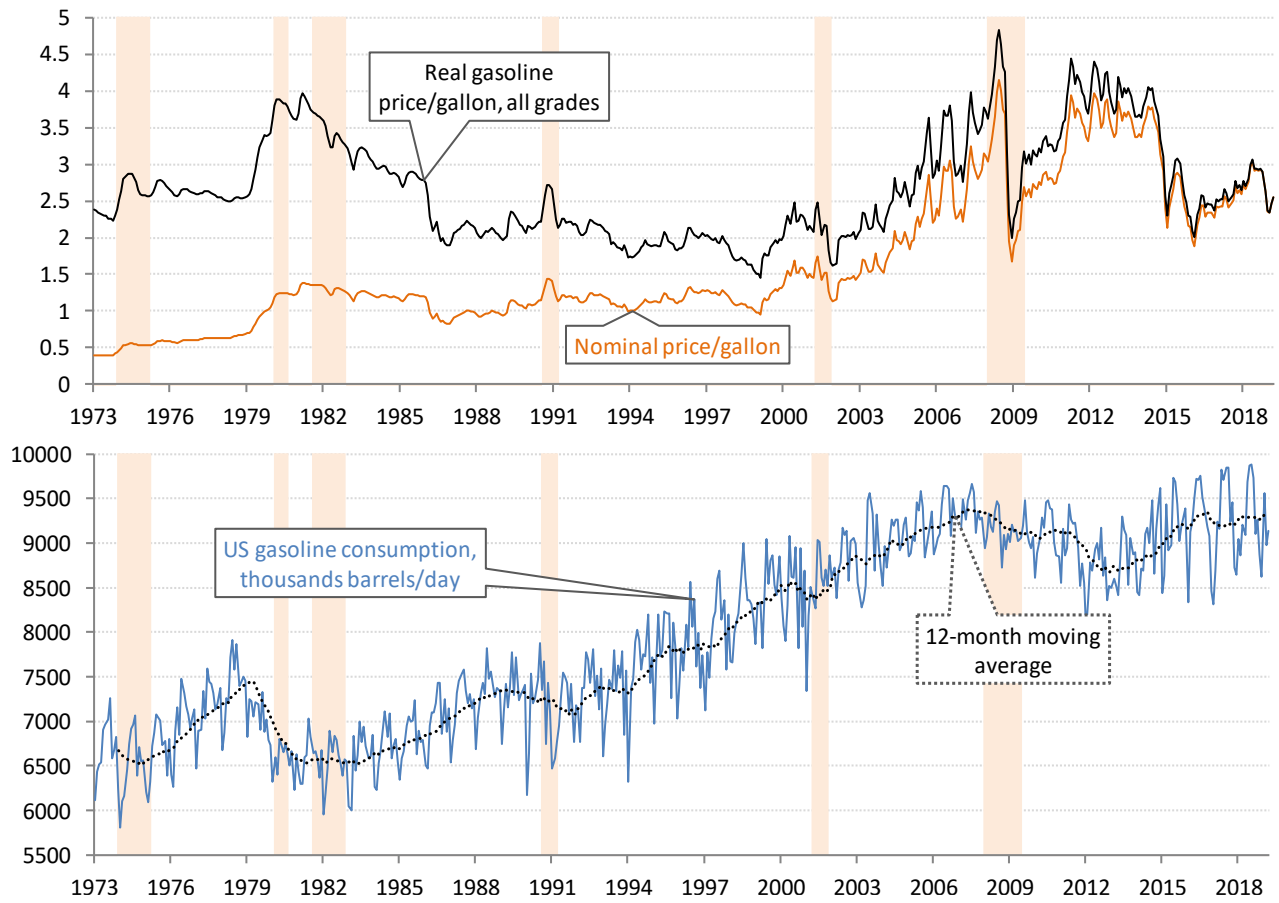
Source: DOE Weekly Petroleum Status Report, TrendMacro calculations

The world of oil consumption Millions of barrels/day   Recession



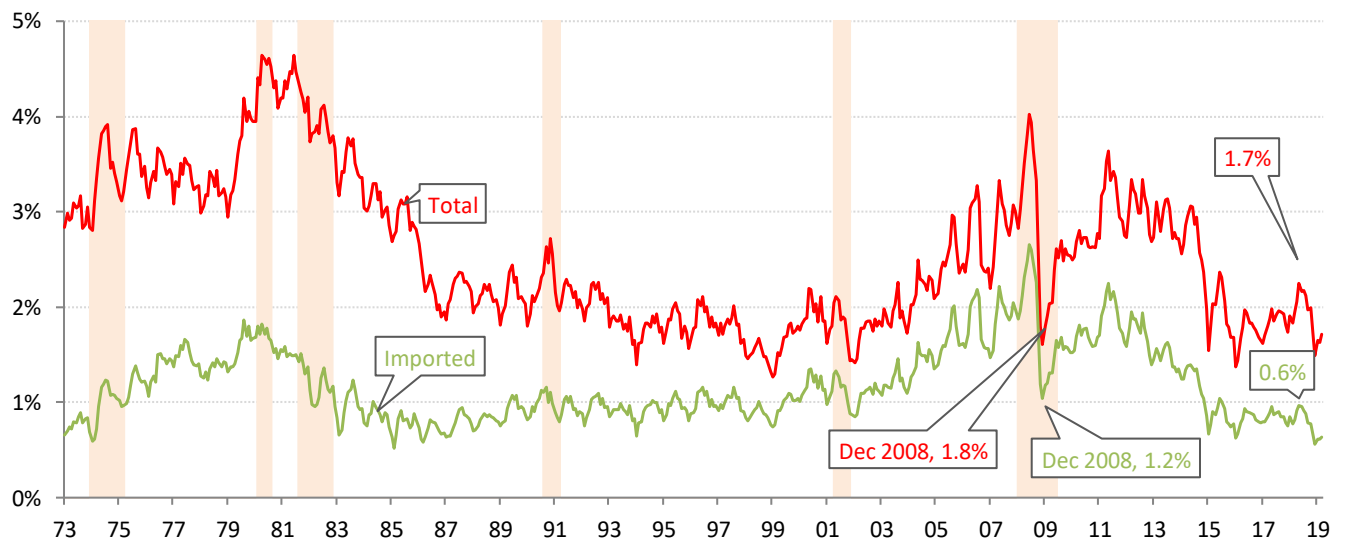
Source: DOE EIA Short Term Energy Outlook, TrendMacro calculations

## US gasoline: paying a lot, using a lot



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

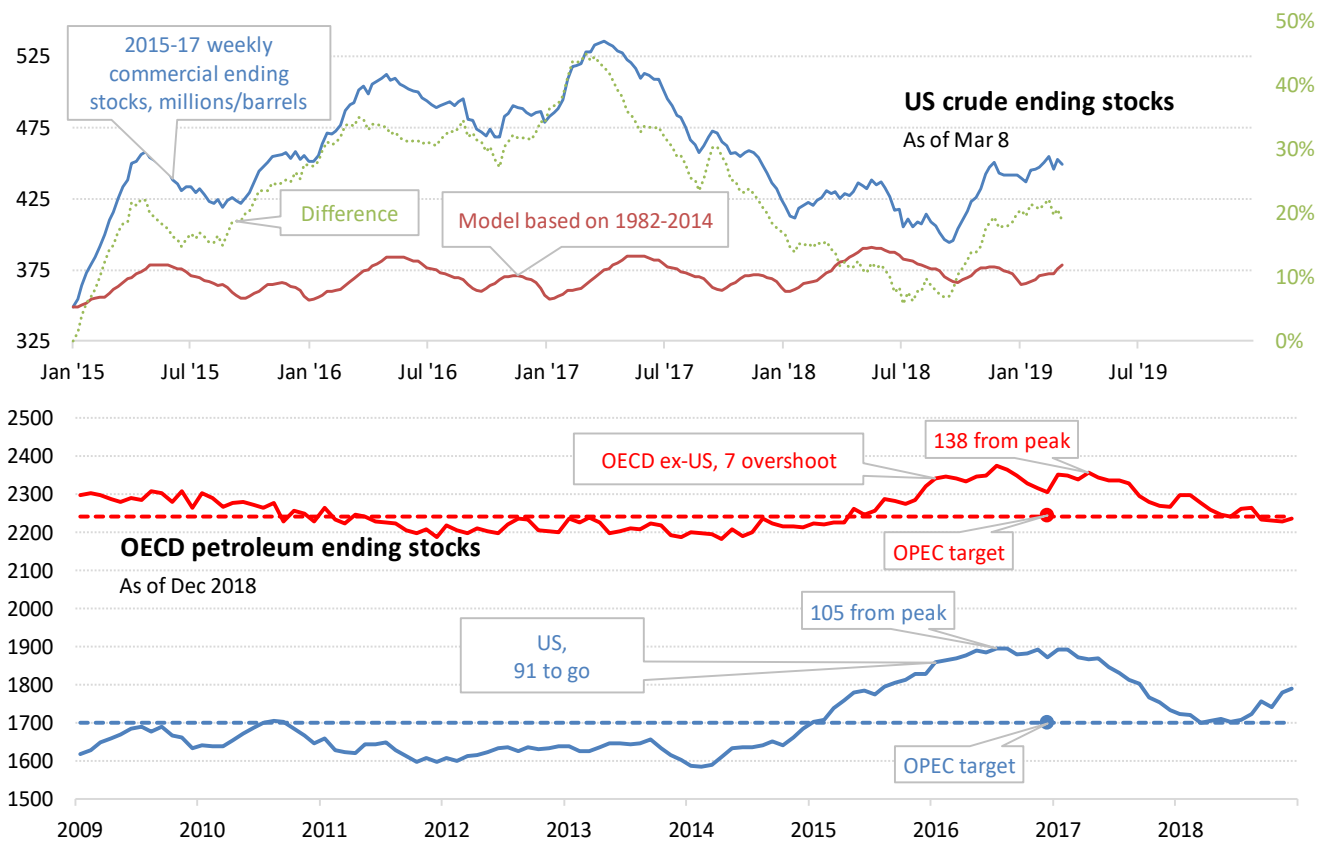
## The rubber meets the road: US gasoline spending as share of GDP



Source: BEA, DOE EIA, TrendMacro calculations

# The mirror of apparent demand: long-term storage dynamics

Millions barrels



Source: DOE EIA Weekly Petroleum Status Report, JODI, TrendMacro calculations