**Petroleum Product Price Formation** *An analysis of the factors that influence product prices, with chart data updated monthly, quarterly and annually* 

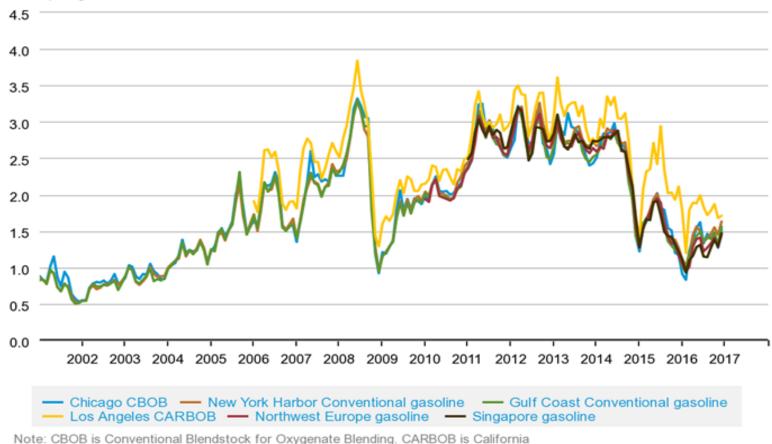
January 10, 2017 / Washington, DC



### Gasoline spot prices

#### **Gasoline spot prices**

dollars per gallon, nominal



Reformulated Gasoline Blendstock for Oxygenate Blending.

Note: CBOB is conventional blendstock for oxygenate blending. CARBOB is California reformulated gasoline blendstock for oxygenate blending.



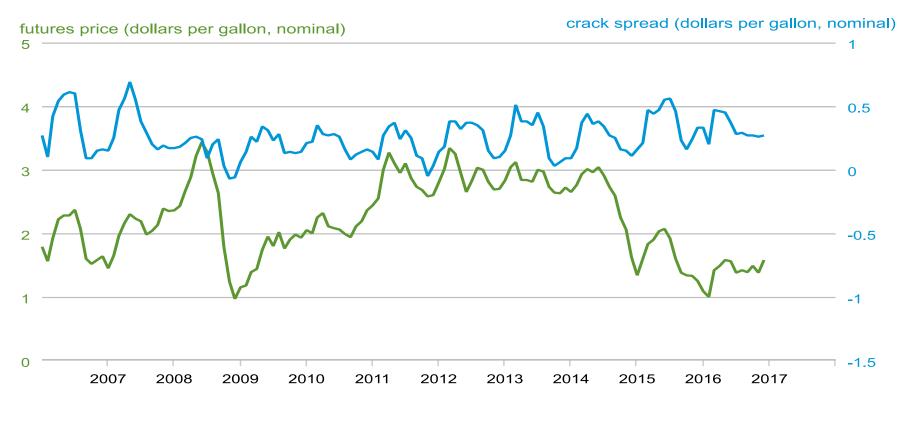
# Distillate spot prices

dollars per gallon, nominal 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0 2012 2010 2011 2013 2014 2015 2016

Chicago ULSD — New York Harbor ULSD — Gulf Coast ULSD — Los Angeles ULSD
Northwest Europe ULSD — Singapore gasoil 500 ppm
Note: ULSD is ultra-low sulfer diesel. 500 ppm is sulfur content in parts per million.



# **RBOB** futures price and crack spread

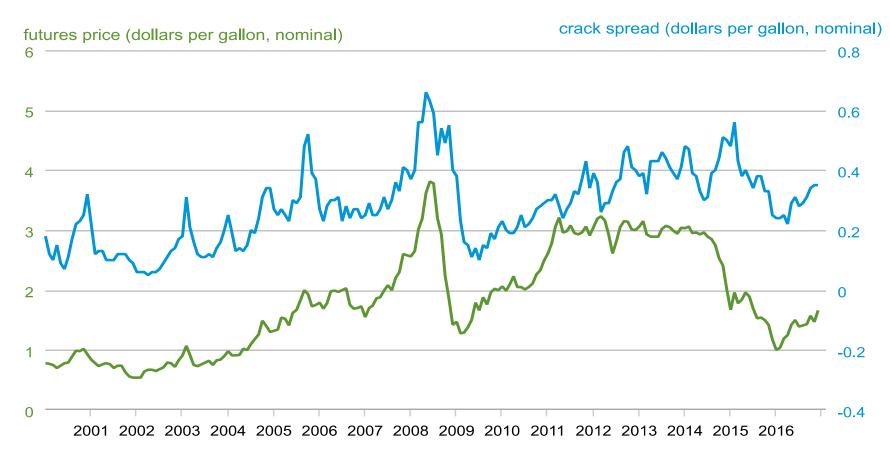


- RBOB front month price - RBOB-Brent crack spread

Note: RBOB is reformulated blendstock for oxygenate blending.



# ULSD futures price and crack spread

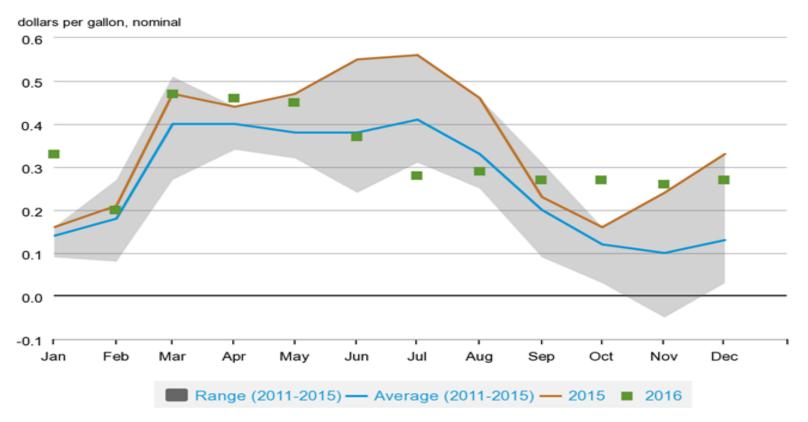


- Distillate front month price - Distillate-Brent crack spread

Note: ULSD is ultra-low sulfur diesel.



### RBOB – Brent Crack Spread Range RBOB - Brent Crack Spread Range



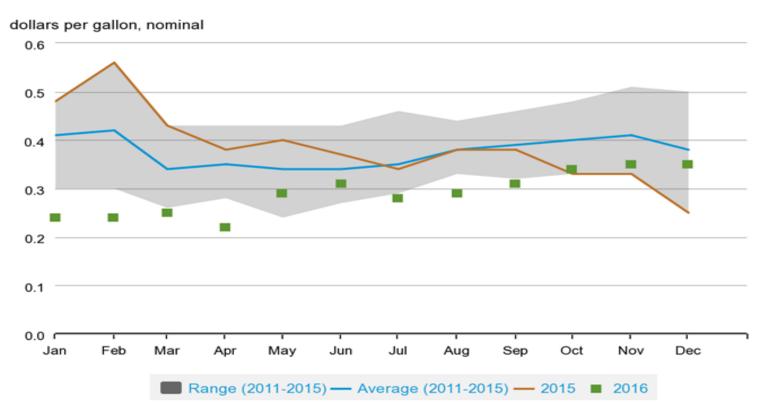
Note: RBOB is reformulated blendstock for oxygenate blending

eja Source: U.S. Energy Information Administration, Bloomberg L.P.

Note: RBOB is reformulated blendstock for oxygenate blending.



#### Distillate – Brent Crack Spread Ranges Distillate - Brent Crack Spread Ranges



Note: Since the spring of 2013, the underlying commodity for the distillate futures contract has been ultra-low sulfur diesel (ULSD)

eja Source: U.S. Energy Information Administration, Bloomberg L.P.

Note: Since the spring of 2013, the underlying commodity for the distillate futures contract has been ultra-low sulfur diesel (ULSD).



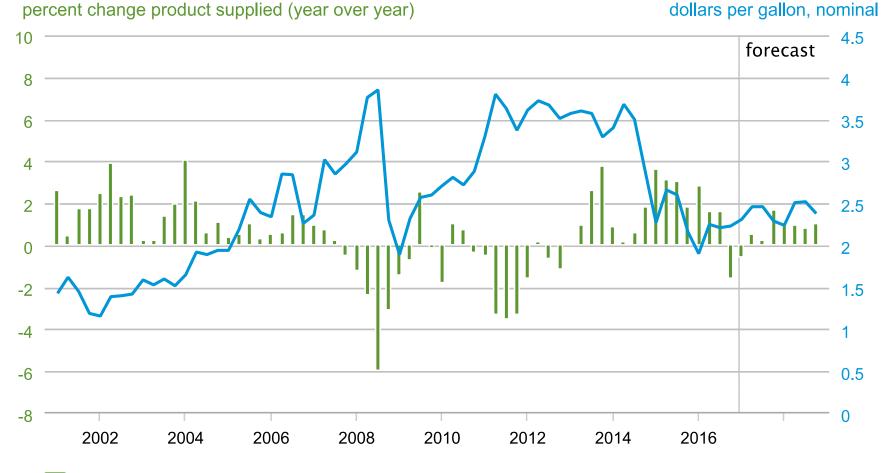
# Petroleum Product Consumption

#### -1 -2 Gasoline Distillate

percent change (year over year)



# U.S. consumption of gasoline and retail gasoline prices

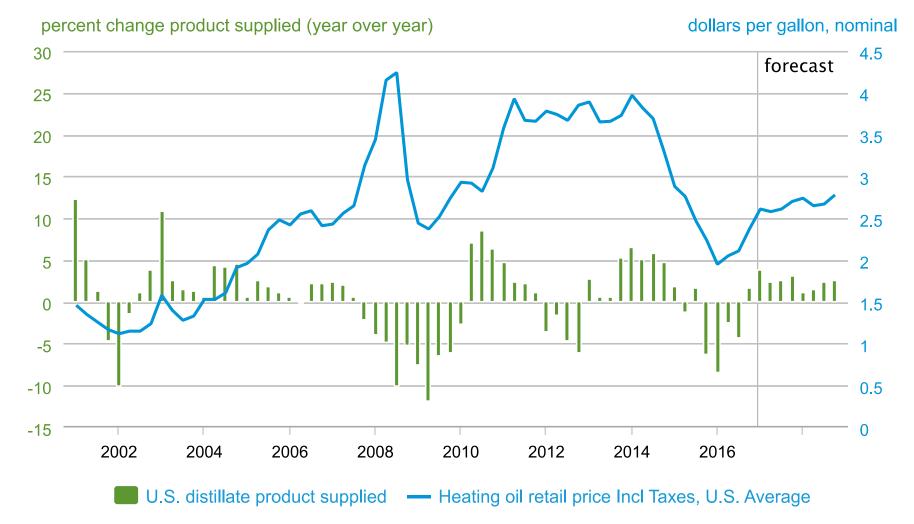


U.S. gasoline product supplied — Gasoline regular grade retail price Incl Taxes, U.S. Average

Sources: U.S. Energy Information Administration



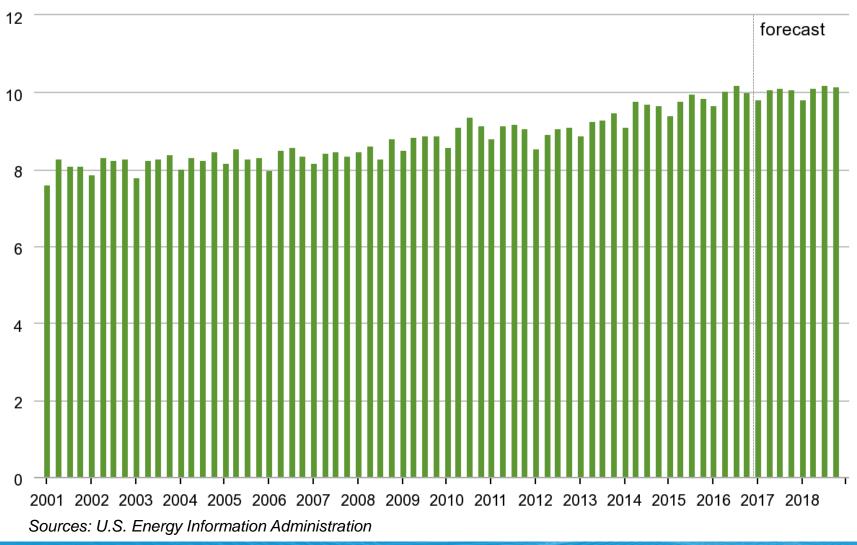
# U.S. consumption of distillate and retail heating oil prices





# Gasoline refinery output

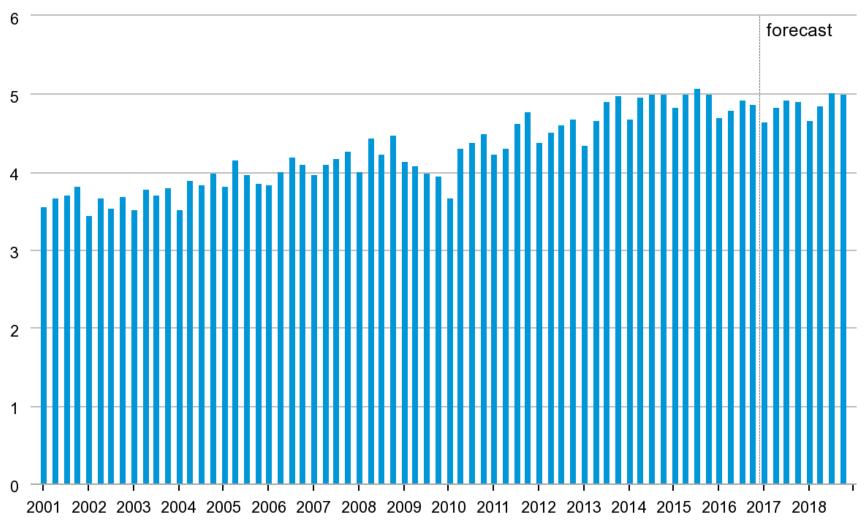
million barrels per day





# Distillate refinery output

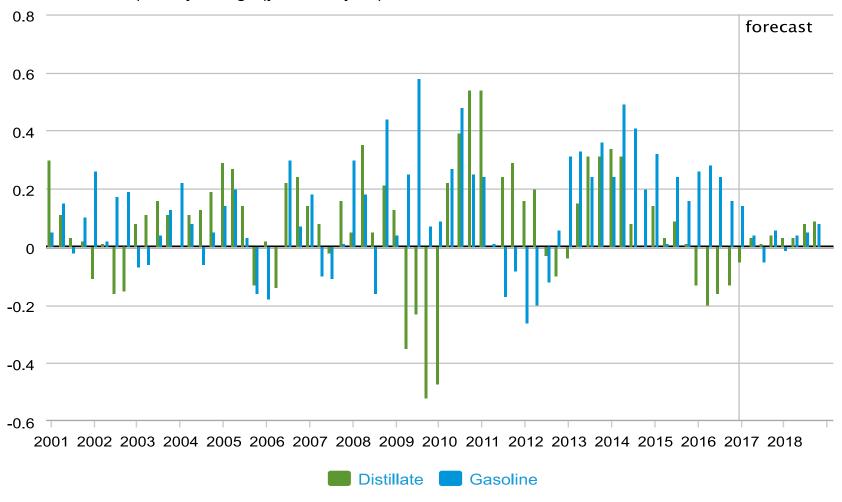
million barrels per day



Sources: U.S. Energy Information Administration



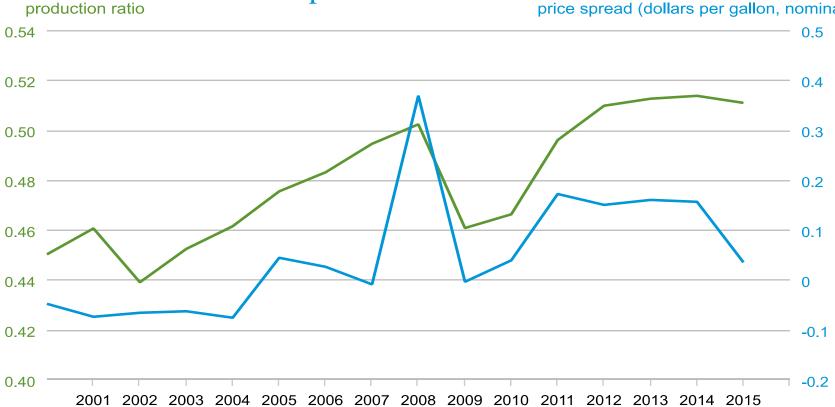
# Refinery output



million barrels per day change (year over year)



## Production and futures prices



price spread (dollars per gallon, nominal)

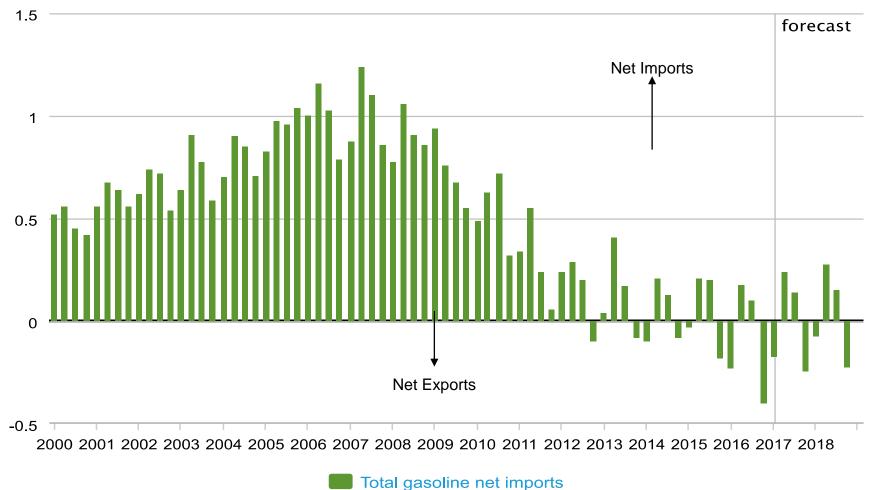
— Distillate to gasoline production ratio — Distillate minus gasoline futures (right side)

Note: Since 2006, the underlying commodity for the gasoline futures contract has been reformulated blendstock for oxygenate blending (RBOB). Since the sprong of 2013, the underlying commodity for the distillate futures contract has been ultra-low sulfur diesel (ULSD).



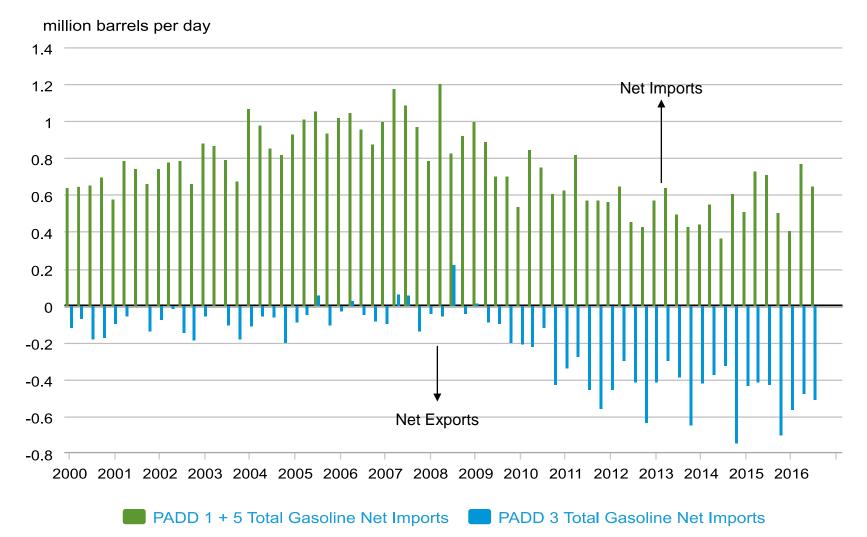
# U.S. total gasoline net imports

million barrels per day



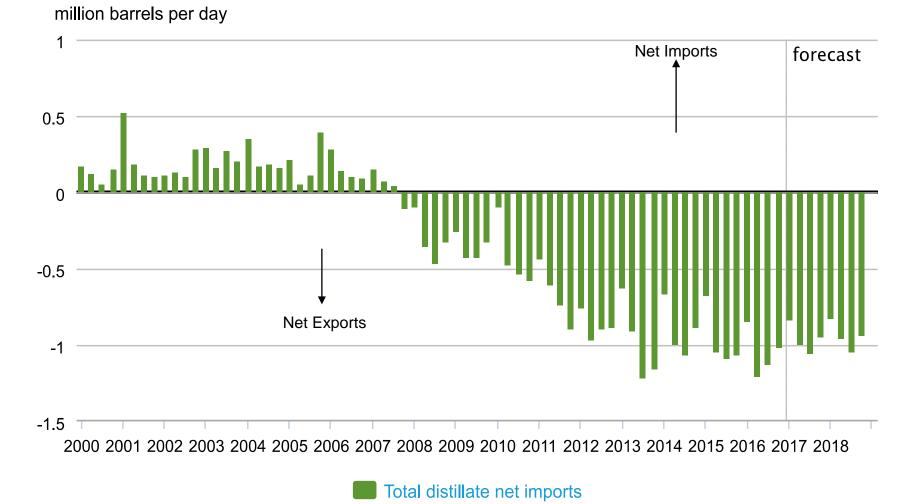


# U.S. total gasoline net imports by PADD



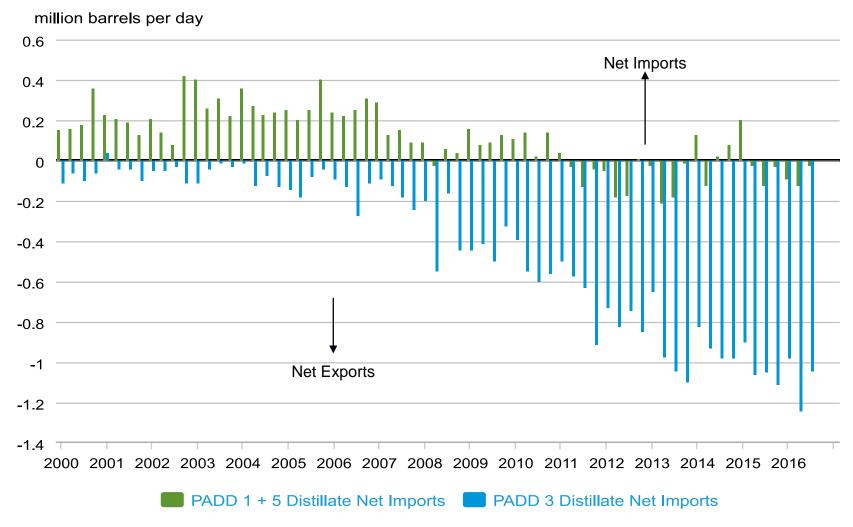


# U.S. distillate fuel net imports





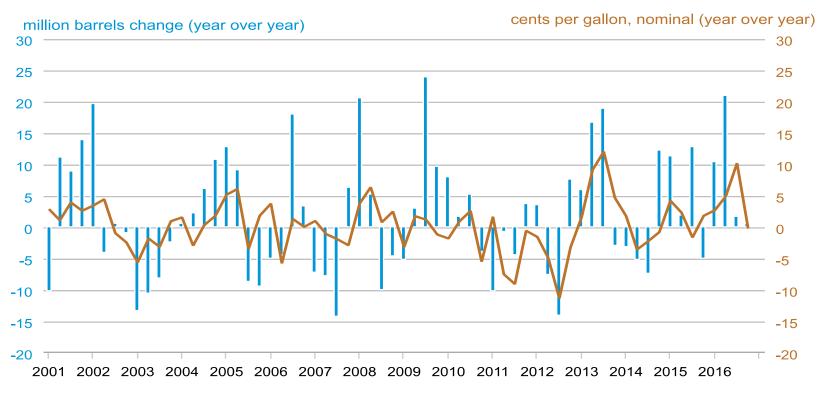
# U.S. distillate fuel oil net imports by PADD



Source : U.S. Energy Information Administration



# Gasoline Inventories and RBOB 3rd minus 1st month futures contract

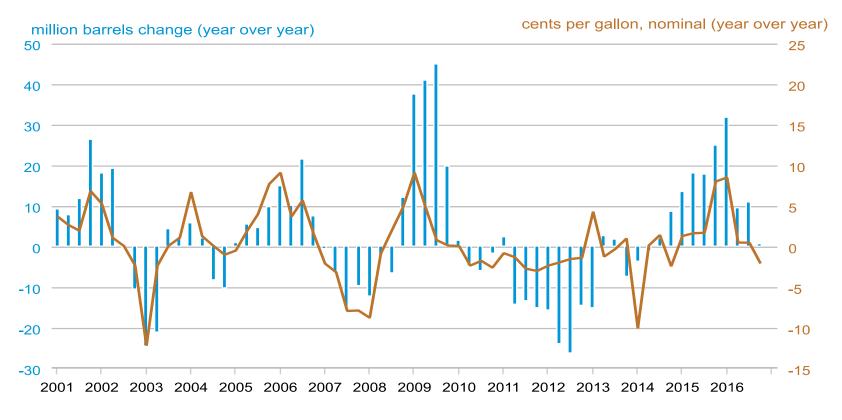


U.S. total gasoline inventories — RBOB 3rd - 1st month

Note: Since 2006, the underlying commodity for the gasoline futures contract has been reformulated blendstock for oxygenate blending (RBOB).



# Distillate Inventories and ULSD 3rd minus 1st month futures contract



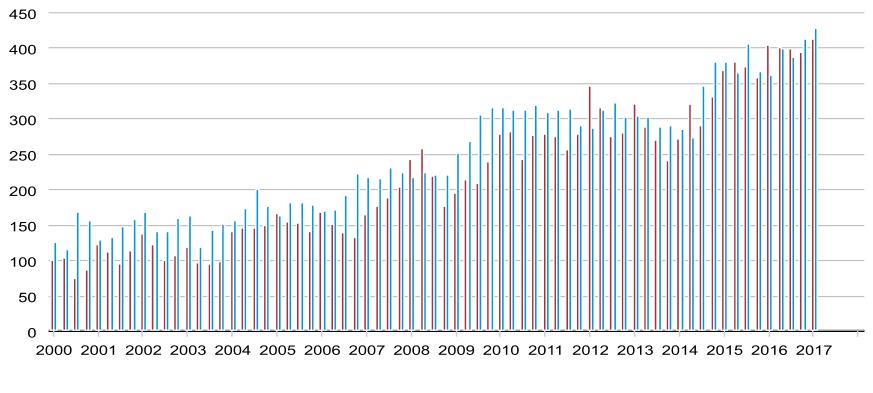
Note: Since 2013, the underlying commodity for the distillate futures contract has been ulatra-low sulfur diesel (ULSD).



# Average daily open interest of petroleum product futures

### contracts

thousands of contracts



Note: Gasoline data prior to 2006 used the unleaded gasoline contract. After 2006 the contract changed to reformulated blendstock for oxygenate blending (RBOB). Since the spring of 2013, the underlying commodity for the distillate futures contract has been ultra-low sulfur diesel (ULSD).

Distillate

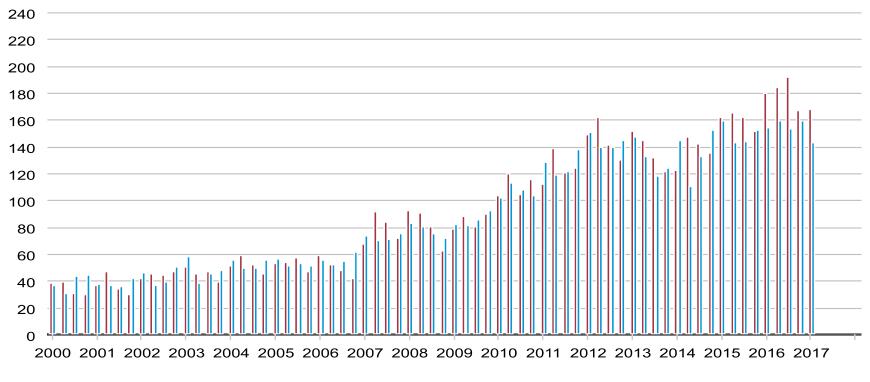
Gasoline

Sources: Bloomberg L.P.



# Average daily volume of petroleum product futures contracts

thousands of contracts



📕 Gasoline 🛛 🗖 Distillate

Note: Gasoline data prior to 2006 used the unleaded gasoline contract. After 2006 the contract changed to reformulated blendstock for oxygenate blending (RBOB). Since the spring of 2013, the underlying commodity for the distillate futures contract has been ultra-low sulfur diesel (ULSD).

Sources: Bloomberg L.P.



# U.S. exchange-traded futures positions by money managers

thousands of contracts Net long -20 Net short -40 

## Net Money Manger open interest in all RBOB futures Net Money Manger open interest in all distillate futures

Note: Since the spring of 2013, the underlying commodity for the distillate futures contract has been ultra-low sulfur diesel (ULSD).

Sources: CFTC Commitment of Traders.



# For more information

U.S. Energy Information Administration home page | <a href="www.eia.gov">www.eia.gov</a>

Short-Term Energy Outlook | <u>www.eia.gov/steo</u>

Annual Energy Outlook | <u>www.eia.gov/aeo</u>

International Energy Outlook | www.eia.gov/ieo

Monthly Energy Review | www.eia.gov/mer

EIA Information Center (202) 586-8800 | email: <u>InfoCtr@eia.gov</u>

