

# The Oil Market: From Boom to Gloom



**Mine Yücel**

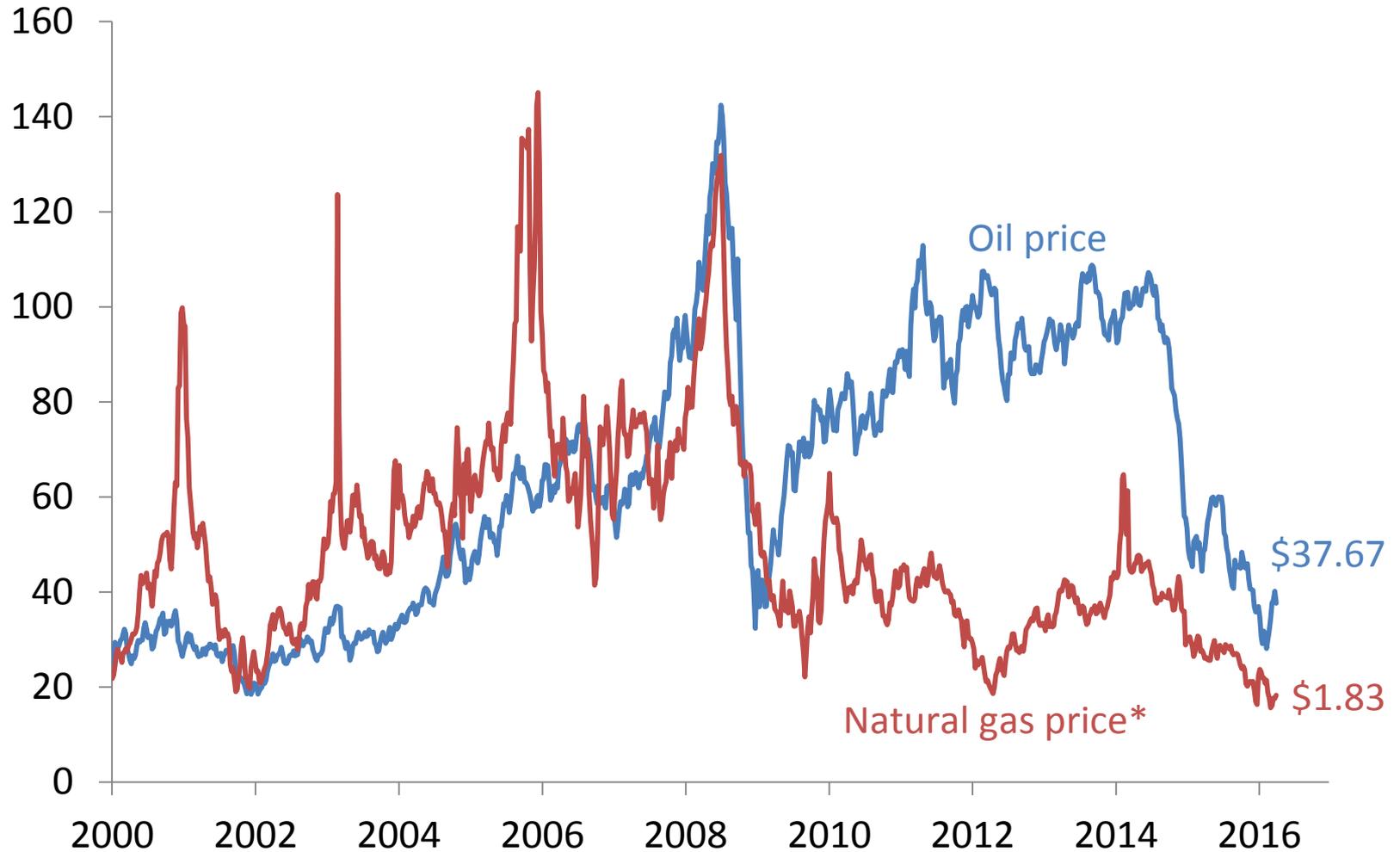
Senior Vice President and  
Director of Research  
Federal Reserve Bank of Dallas

**April 8, 2016**



# Oil and gas prices plunge

Nominal price, \$, weekly



NOTE: \* = Natural gas price is multiplied by 10. Oil is priced in \$/barrel while natural gas is \$/MMBtu. Federal Reserve Bank of Dallas

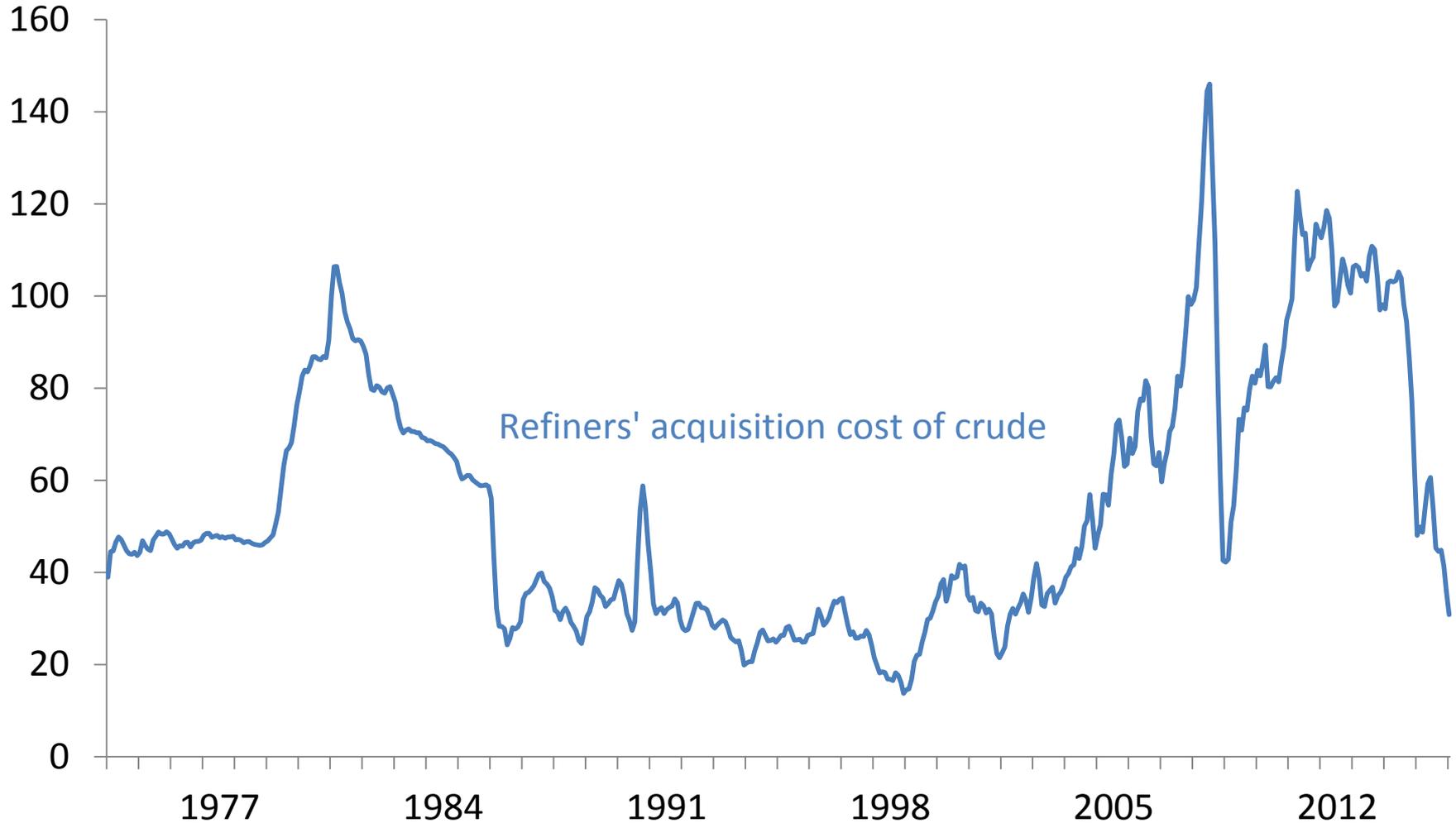
SOURCES: Energy Information Administration; *Wall Street Journal*.



# Current oil prices not a record low

Real prices of crude oil (January 2016 dollars)

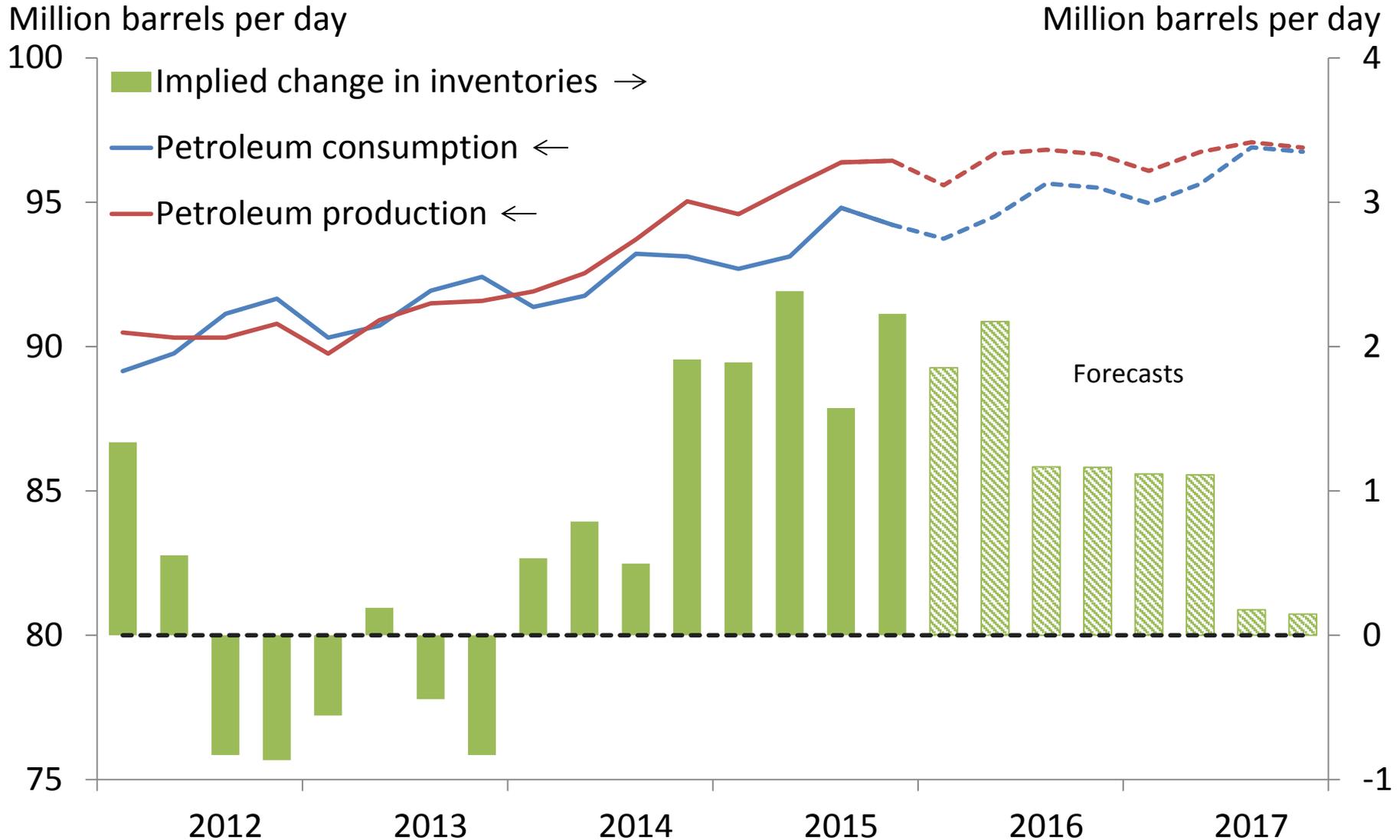
Dollars per barrel



Refiners' acquisition cost of crude



# Supply/demand mismatch



SOURCE: Energy Information Administration.

Federal Reserve Bank of Dallas

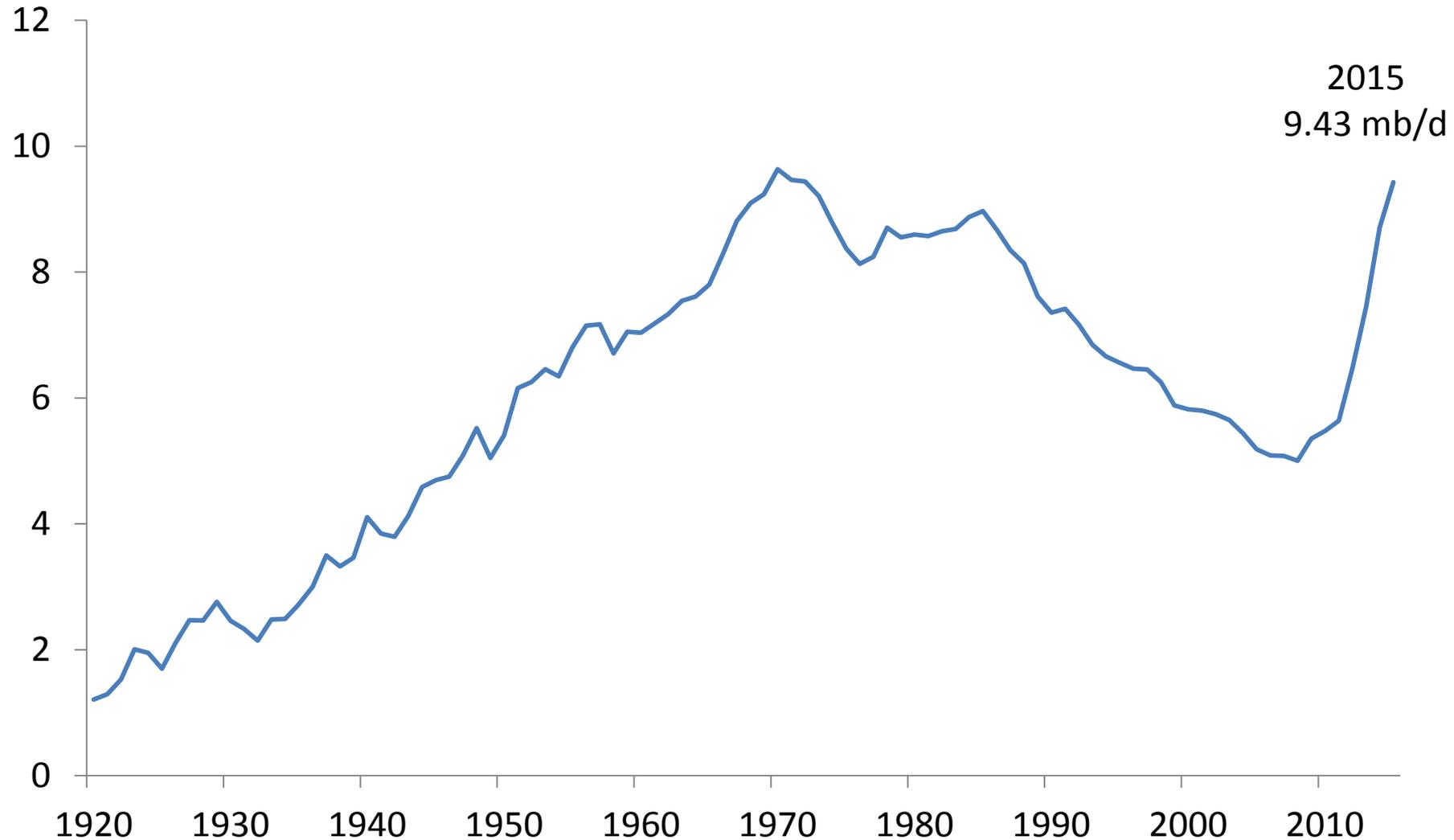


# IMPACT ON U.S. ECONOMY



# Shale boosts U.S. oil production

Million barrels per day



2015  
9.43 mb/d

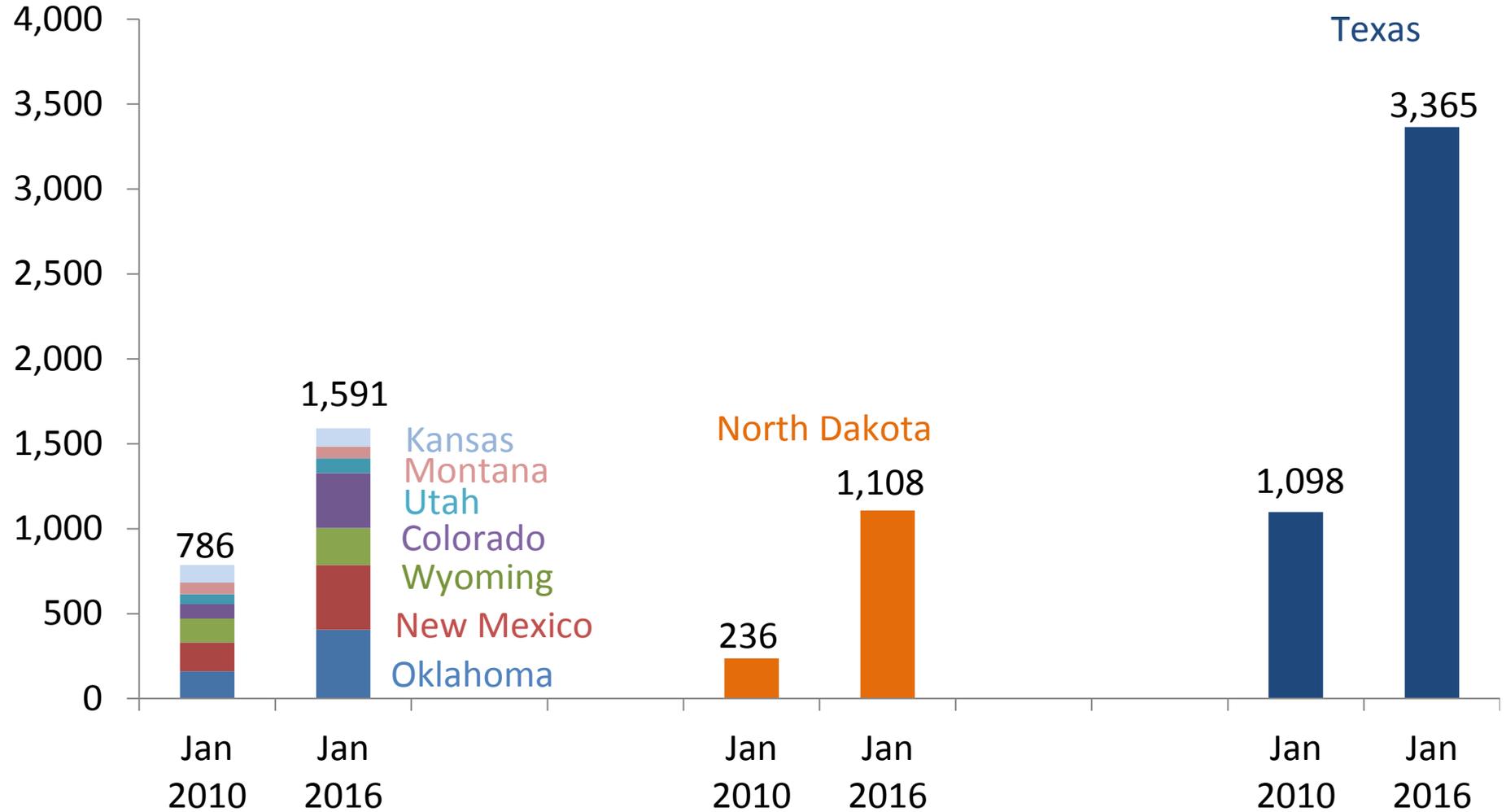
SOURCE: Energy Information Administration.

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# U.S. shale oil production

Thousand barrels per day



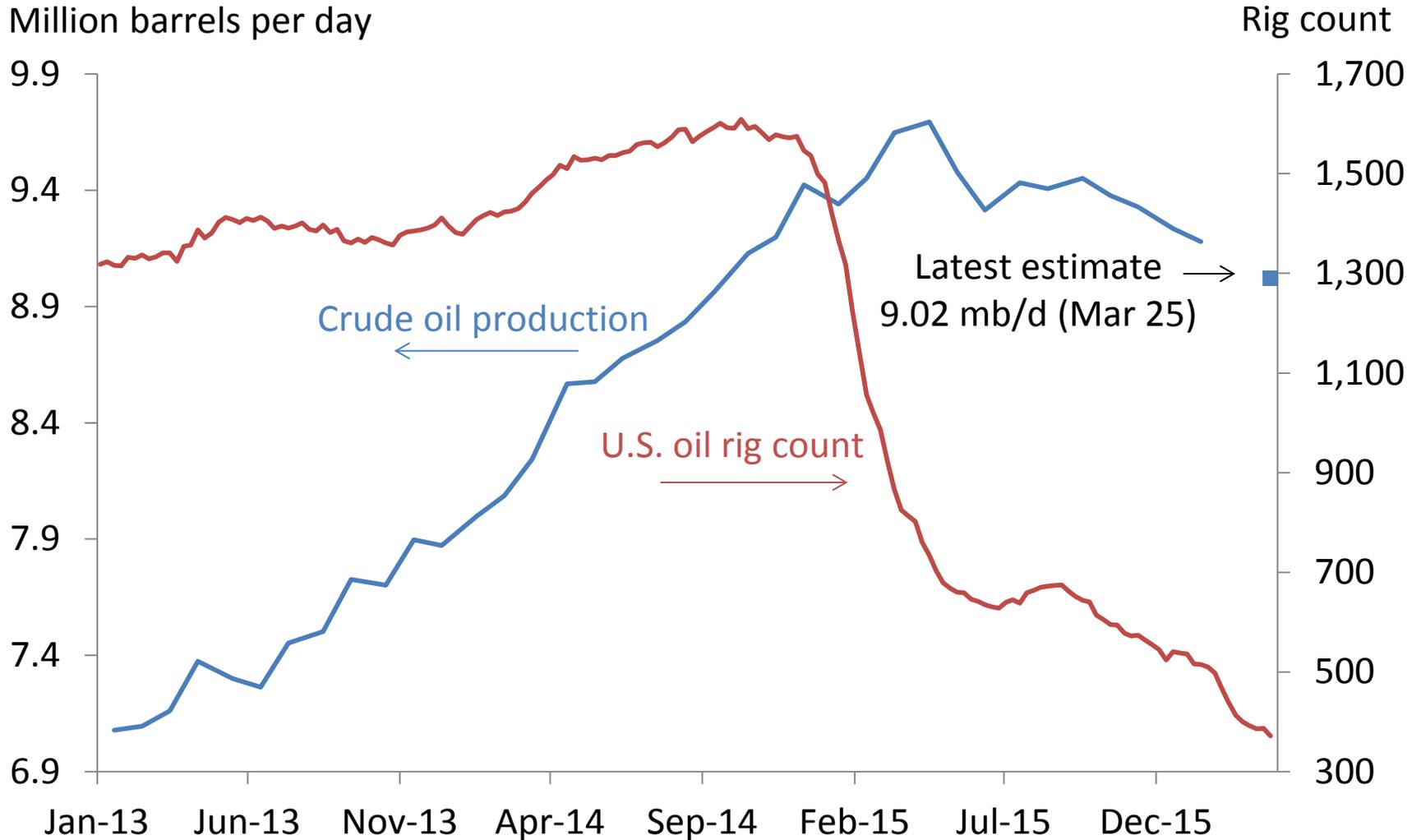
Kansas  
Montana  
Utah  
Colorado  
Wyoming  
New Mexico  
Oklahoma

North Dakota

Texas

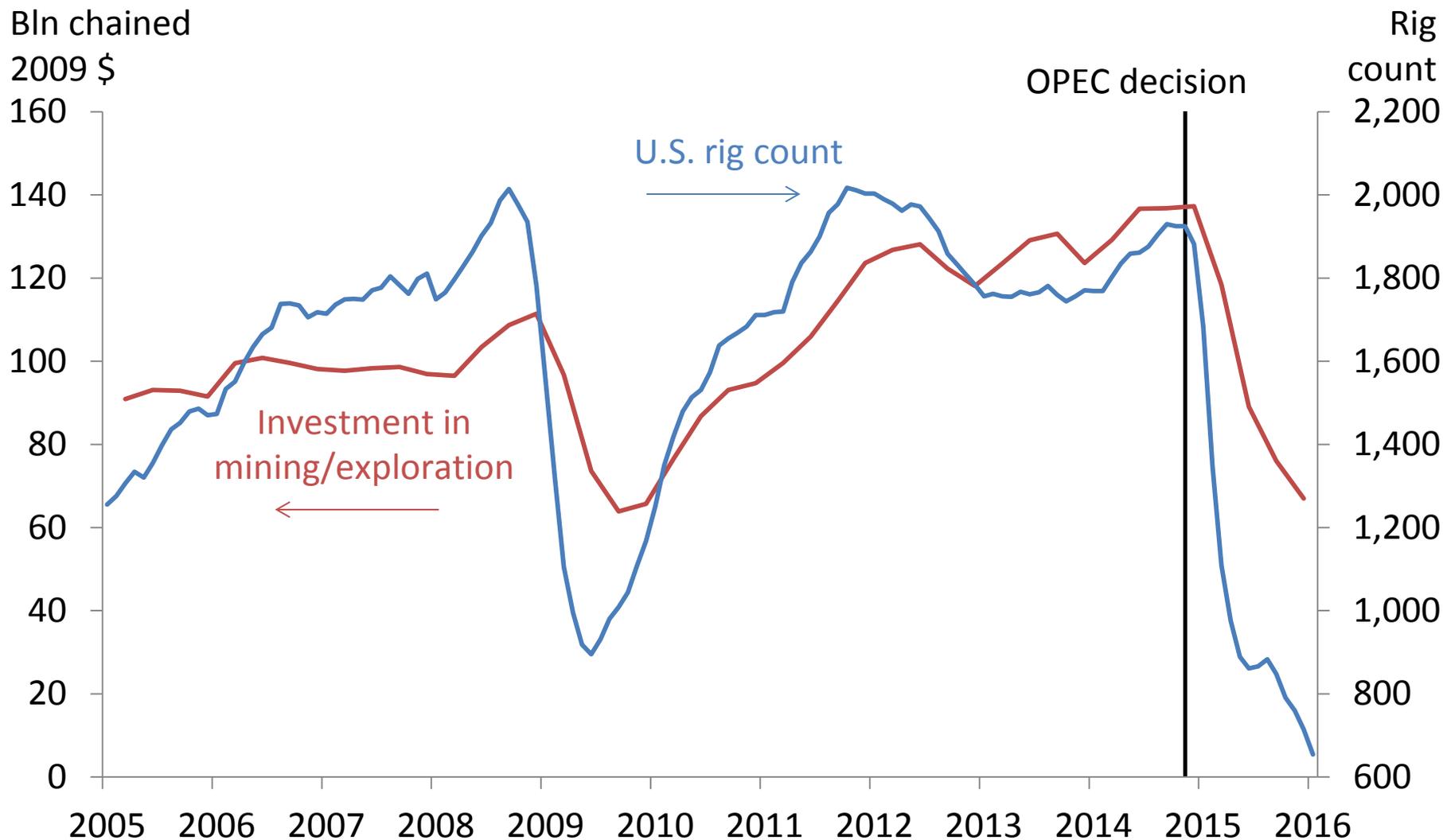


# Rig count plunges, oil production drops



# Drilling investment falls with rig count

Private fixed investment in mining/exploration



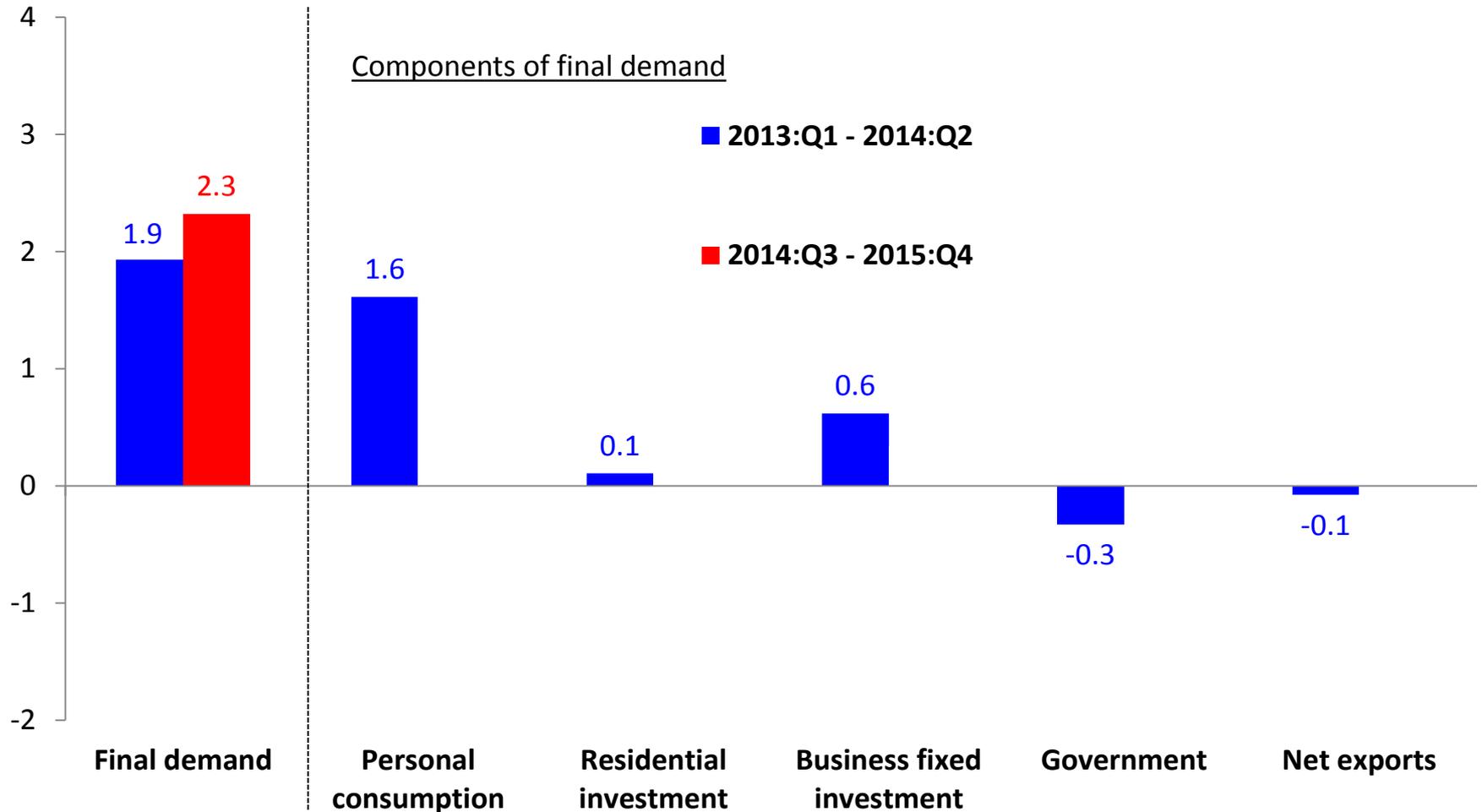
SOURCES: Baker Hughes; Bureau of Economic Analysis.

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# Low oil prices boosted growth in final demand

Contribution to real growth,  
percentage points, SAAR

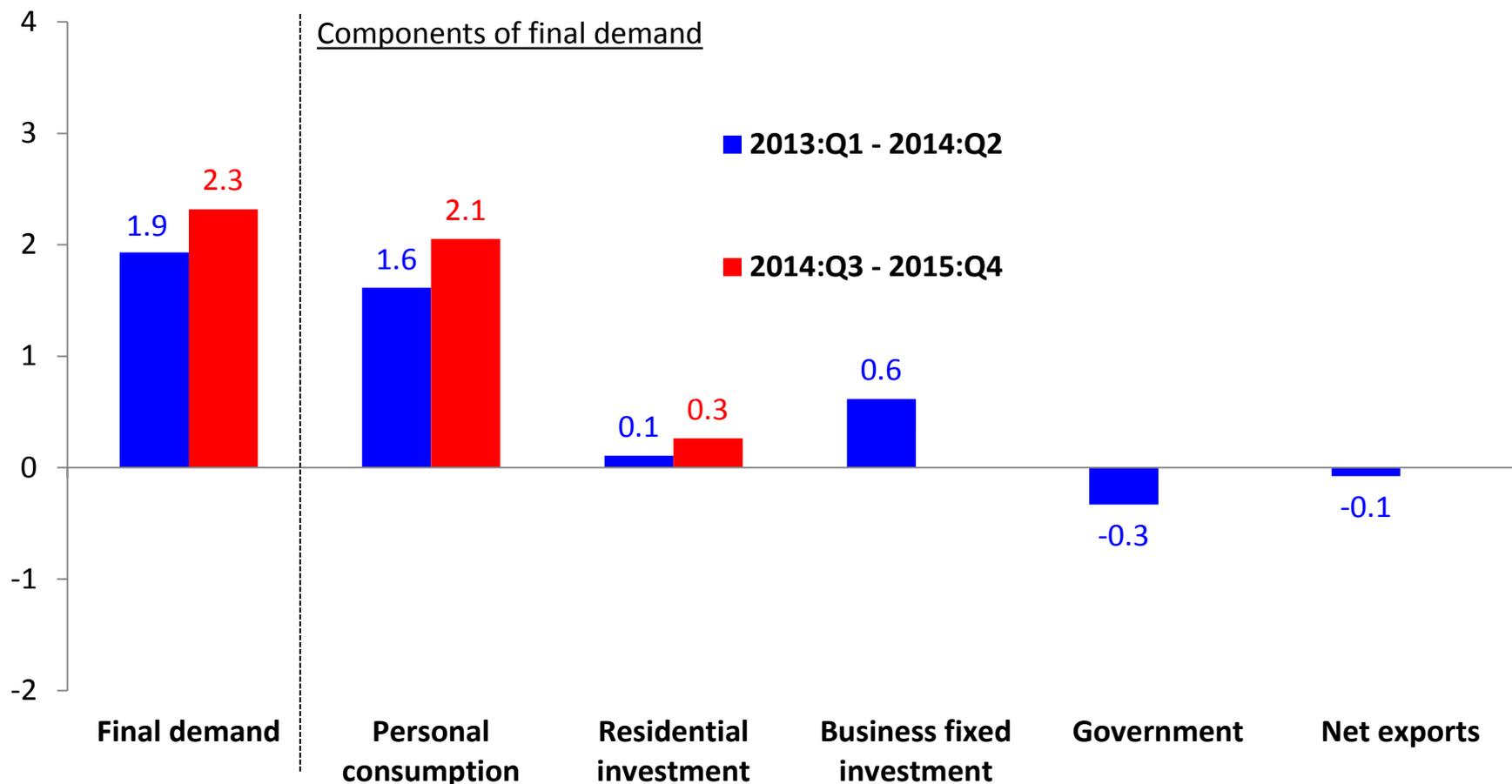


NOTE: Components do not sum exactly to final demand due to rounding.  
SOURCE: Bureau of Economic Analysis.



# Households benefit from low energy prices and a strong dollar

Contribution to real growth, percentage points, SAAR

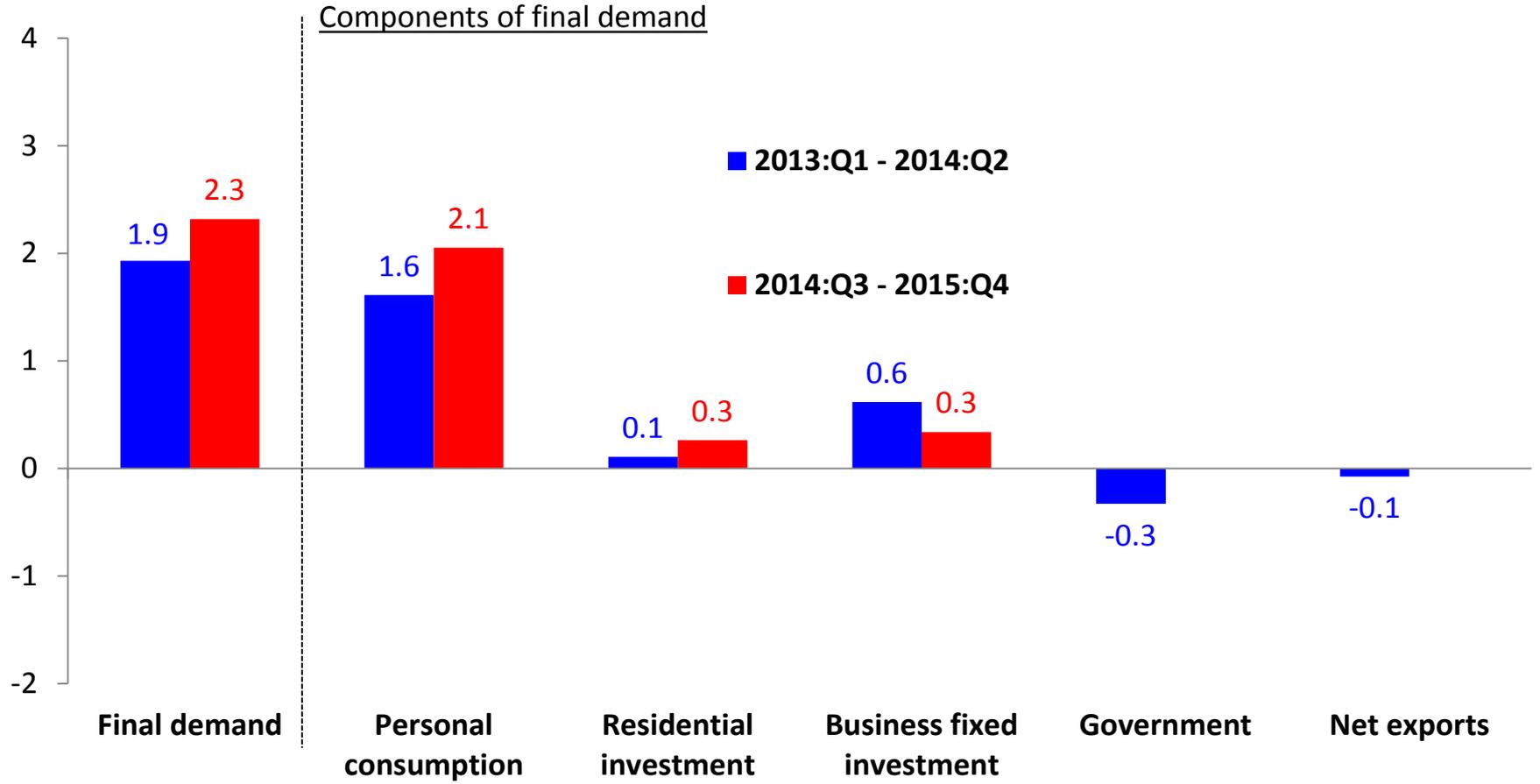


NOTE: Components do not sum exactly to final demand due to rounding.  
SOURCE: Bureau of Economic Analysis.



# Mining & manufacturing firms have scaled back cap-ex plans, and investment growth has slowed

Contribution to real growth,  
percentage points, SAAR

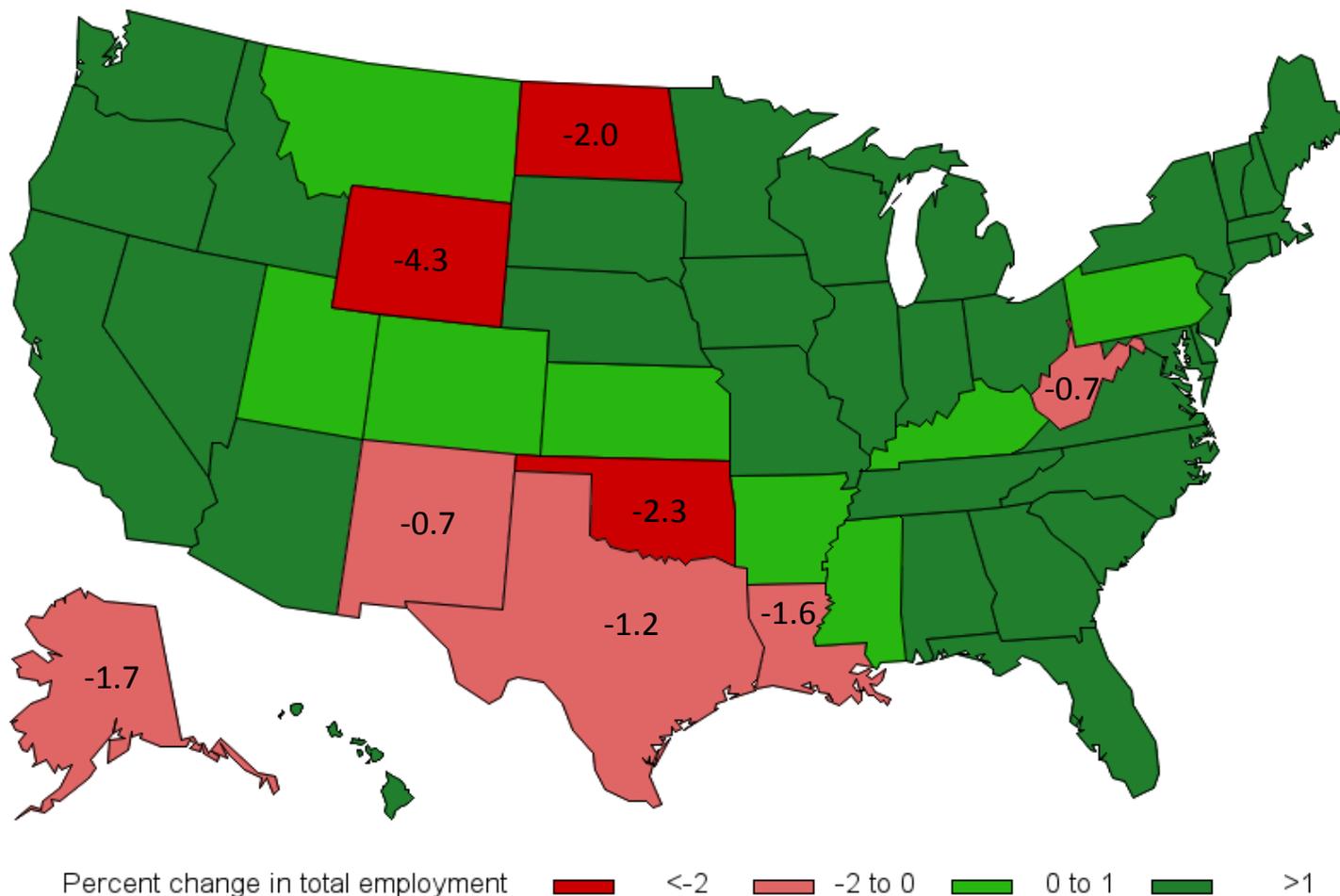


NOTE: Components do not sum exactly to final demand due to rounding.  
SOURCE: Bureau of Economic Analysis.

# IMPACT ON STATE ECONOMIES

# Low oil prices benefit most states

(Effect of a 50% decline in oil prices on employment)

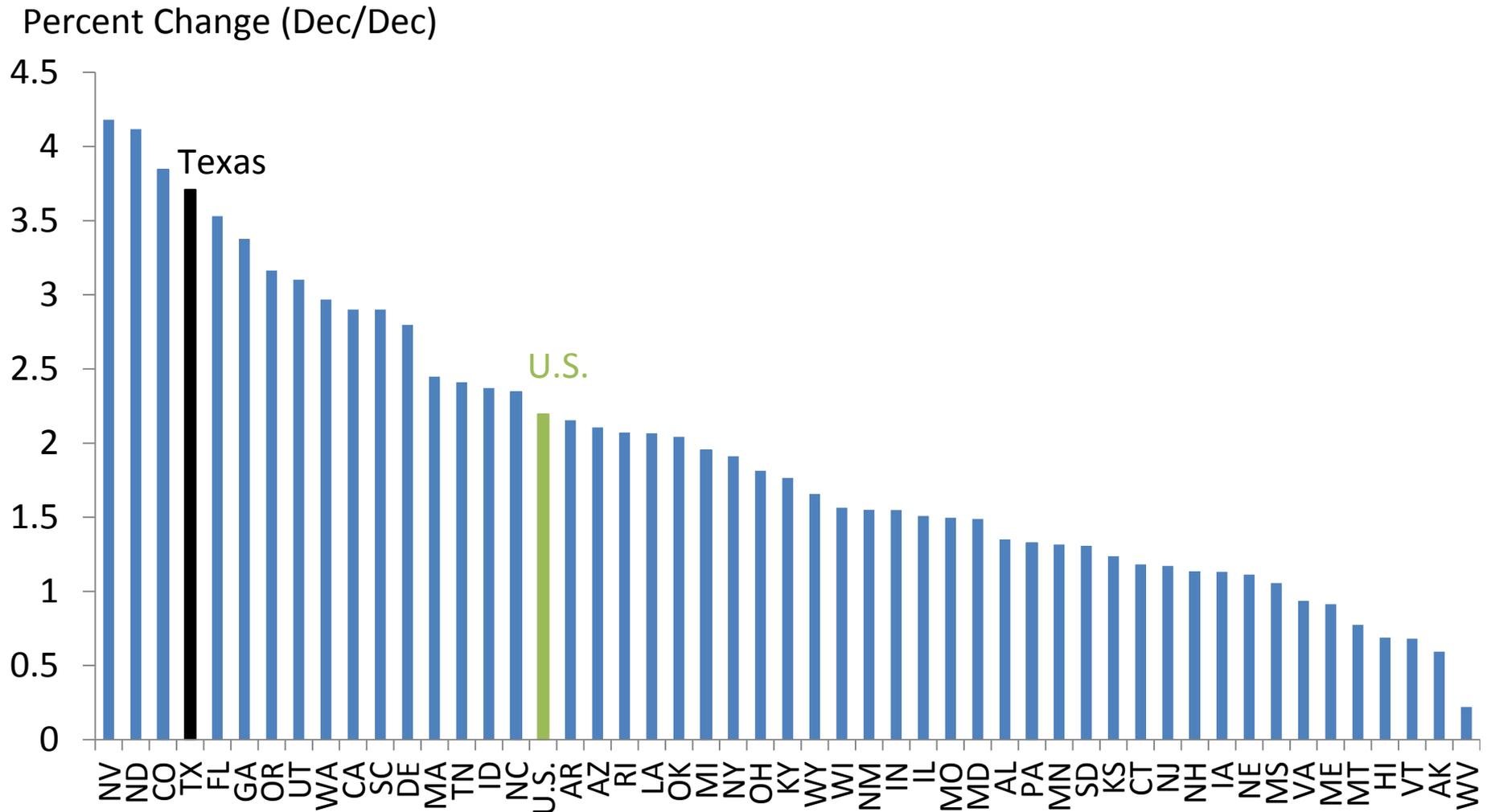


SOURCE: "The Shale Gas and Tight Oil Boom: U.S. States' Economic Gains and Vulnerabilities," by Stephen P.A. Brown and Mine K. Yücel, Council on Foreign Relations, *Energy Brief*, Oct. 2013.

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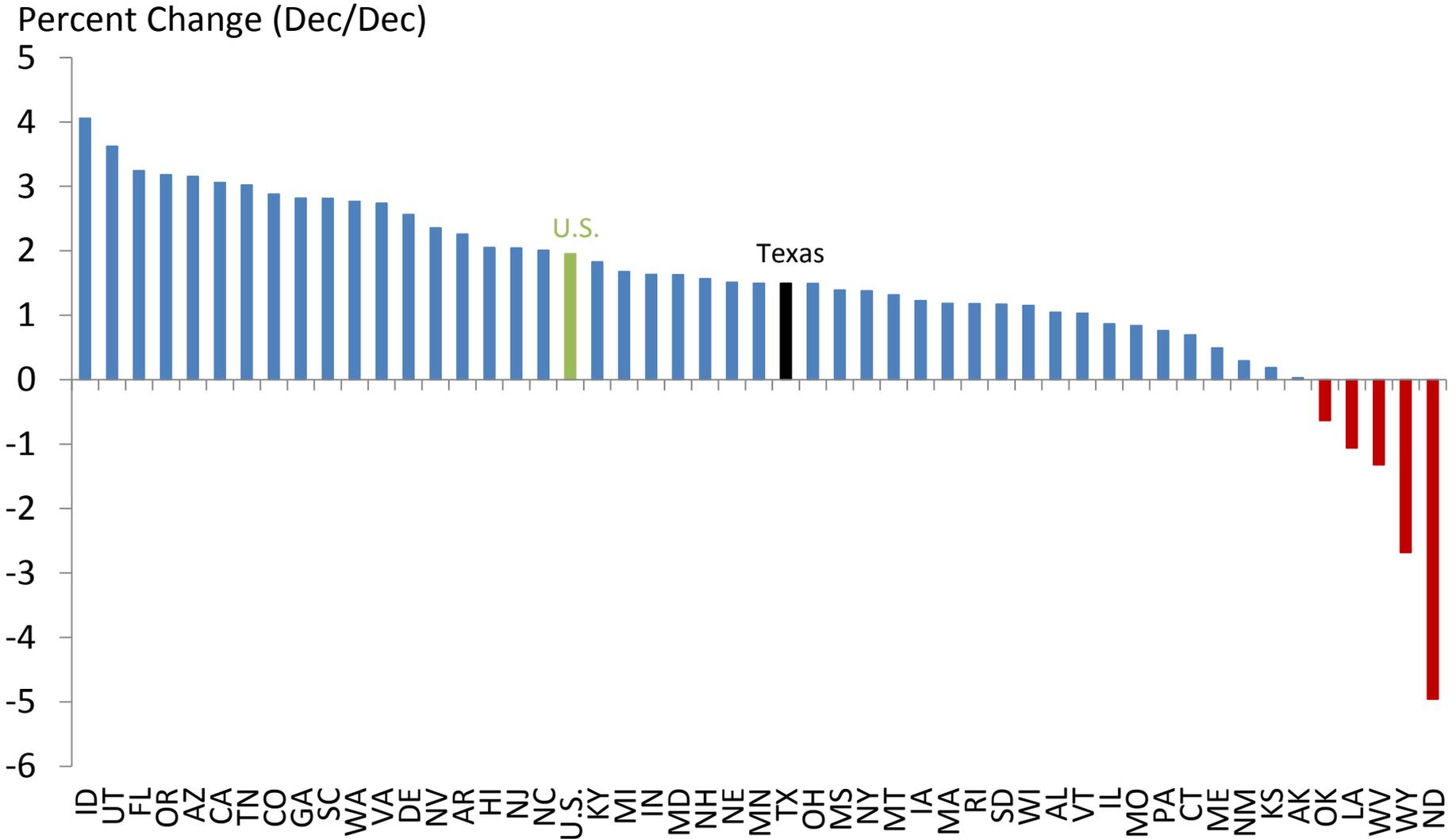


# Energy states did well in 2014



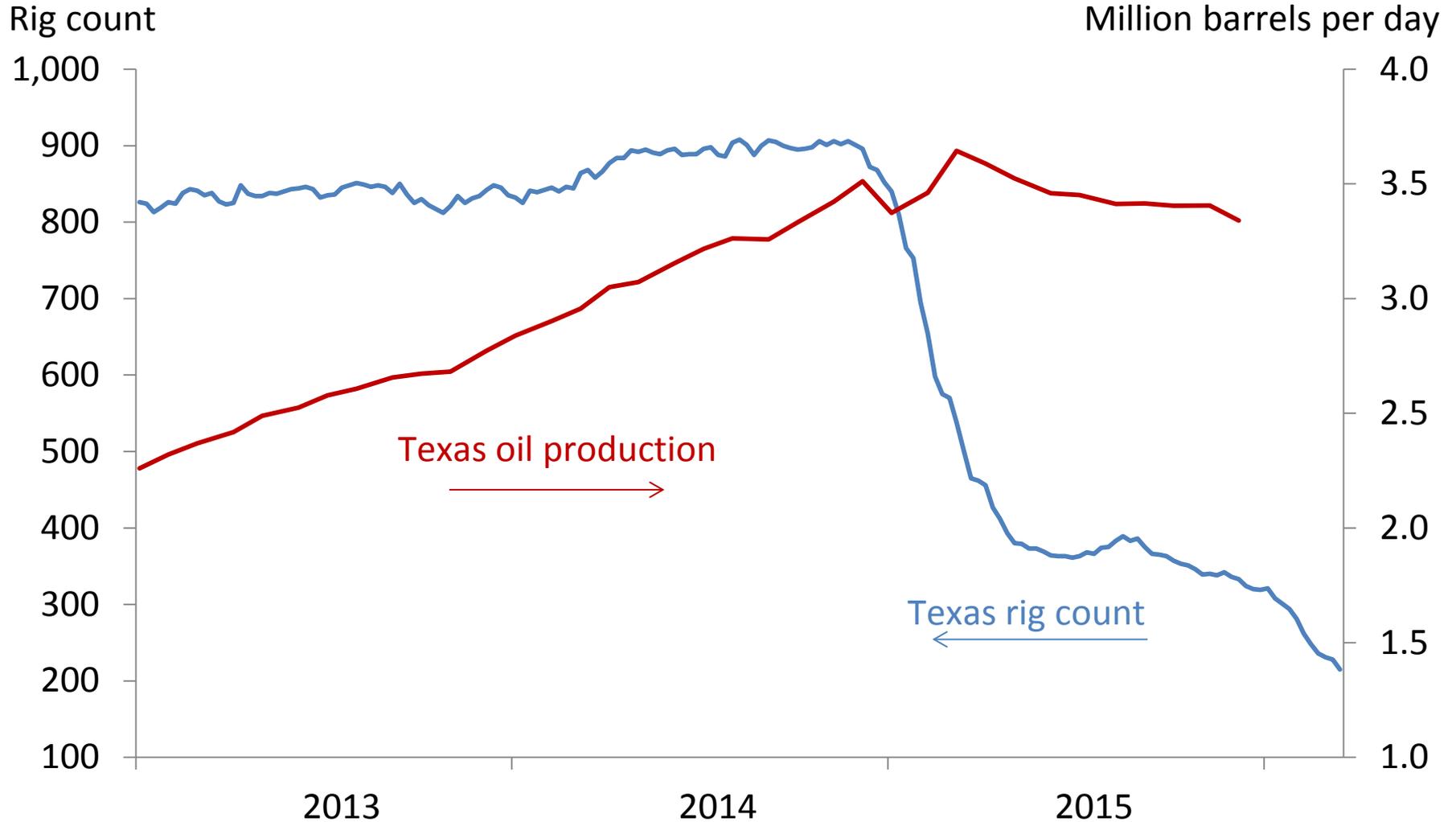
SOURCE: Bureau of Labor Statistics.

# Energy states lose jobs in 2015



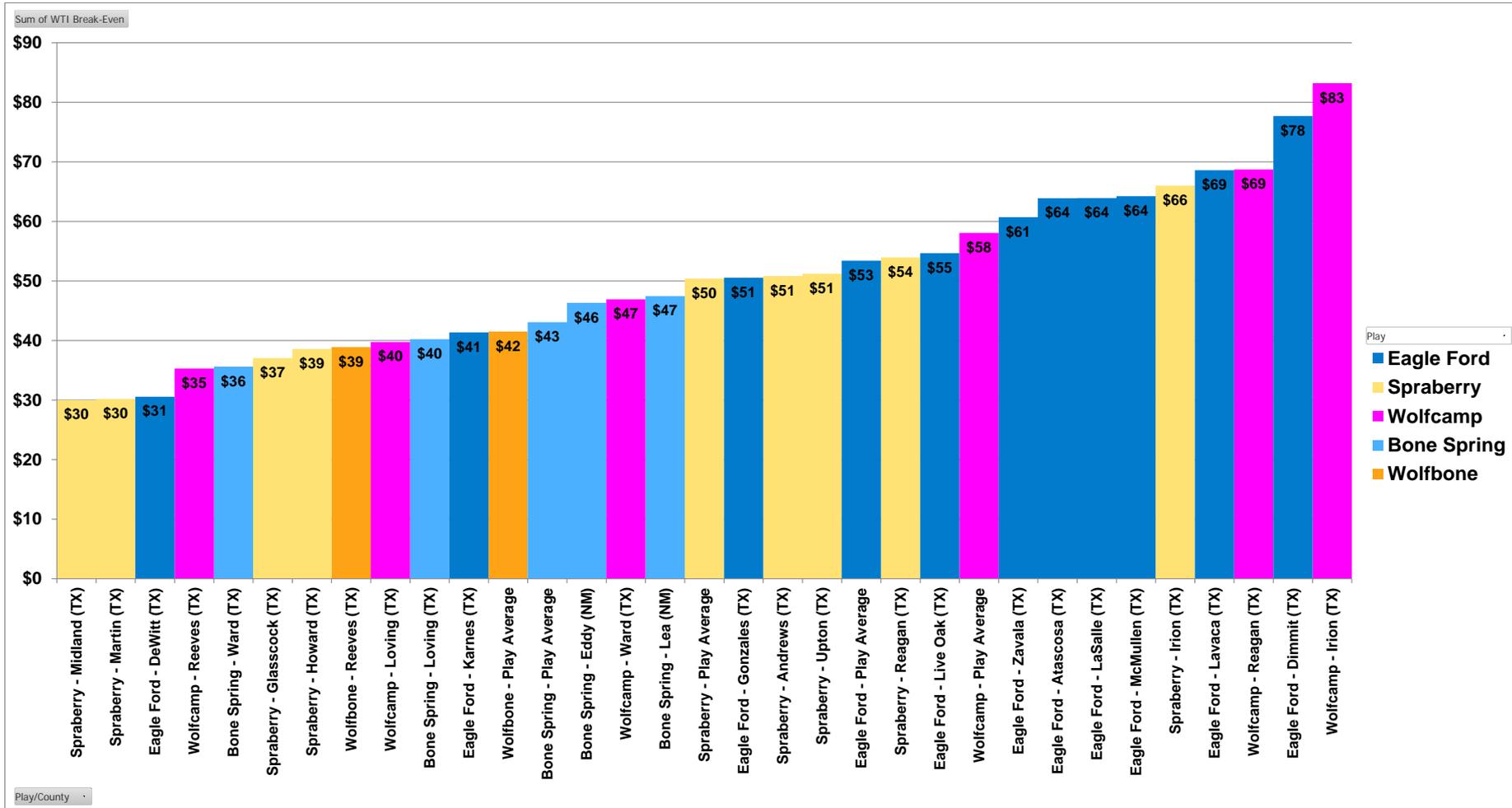
SOURCE: Bureau of Labor Statistics.

# Texas rig count and oil production continue to decline



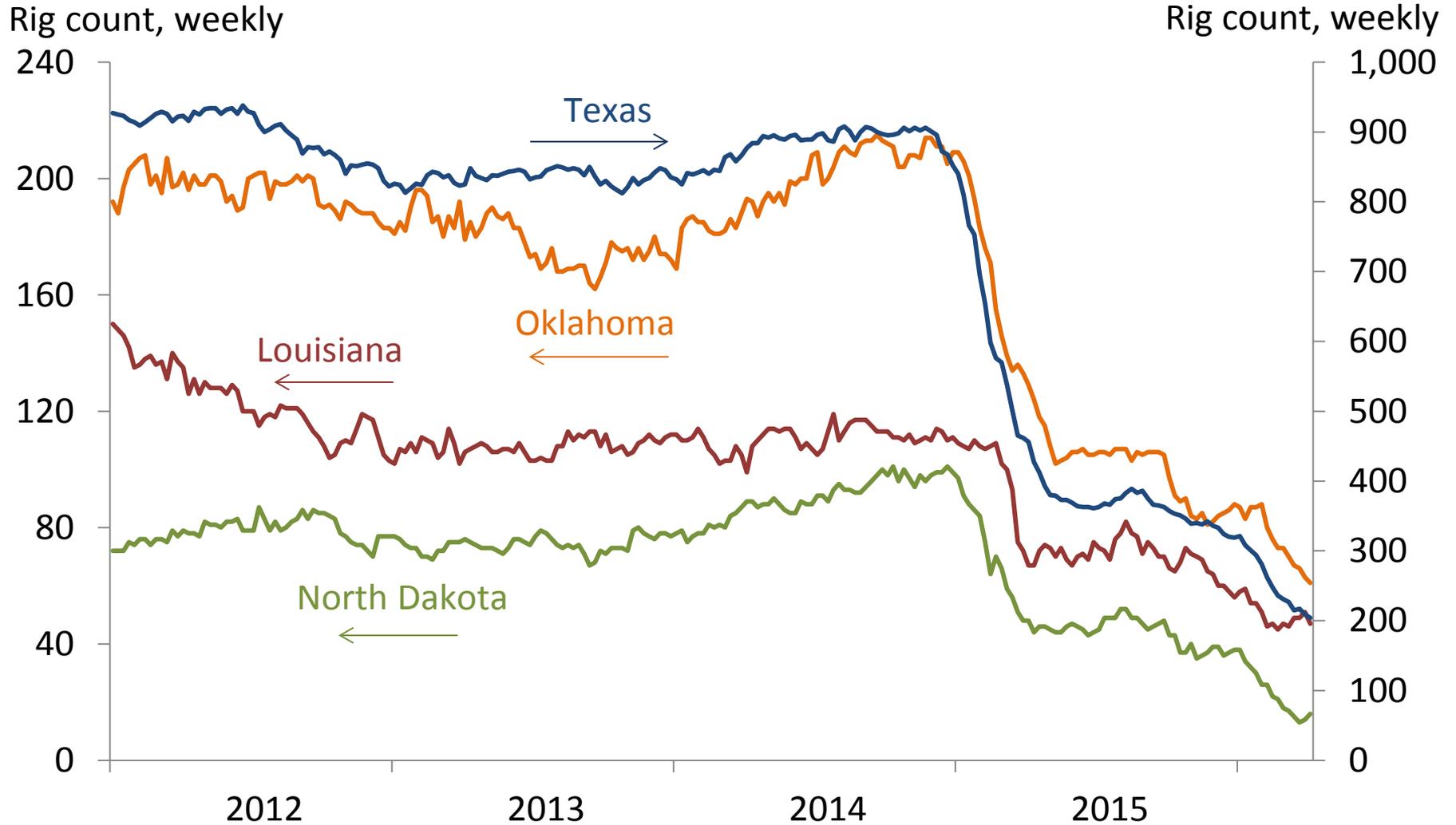
# Regional breakeven prices vary

(20% rate of return)



SOURCE: Bloomberg.

# Rig counts still falling



NOTE: Last data point is April 1.

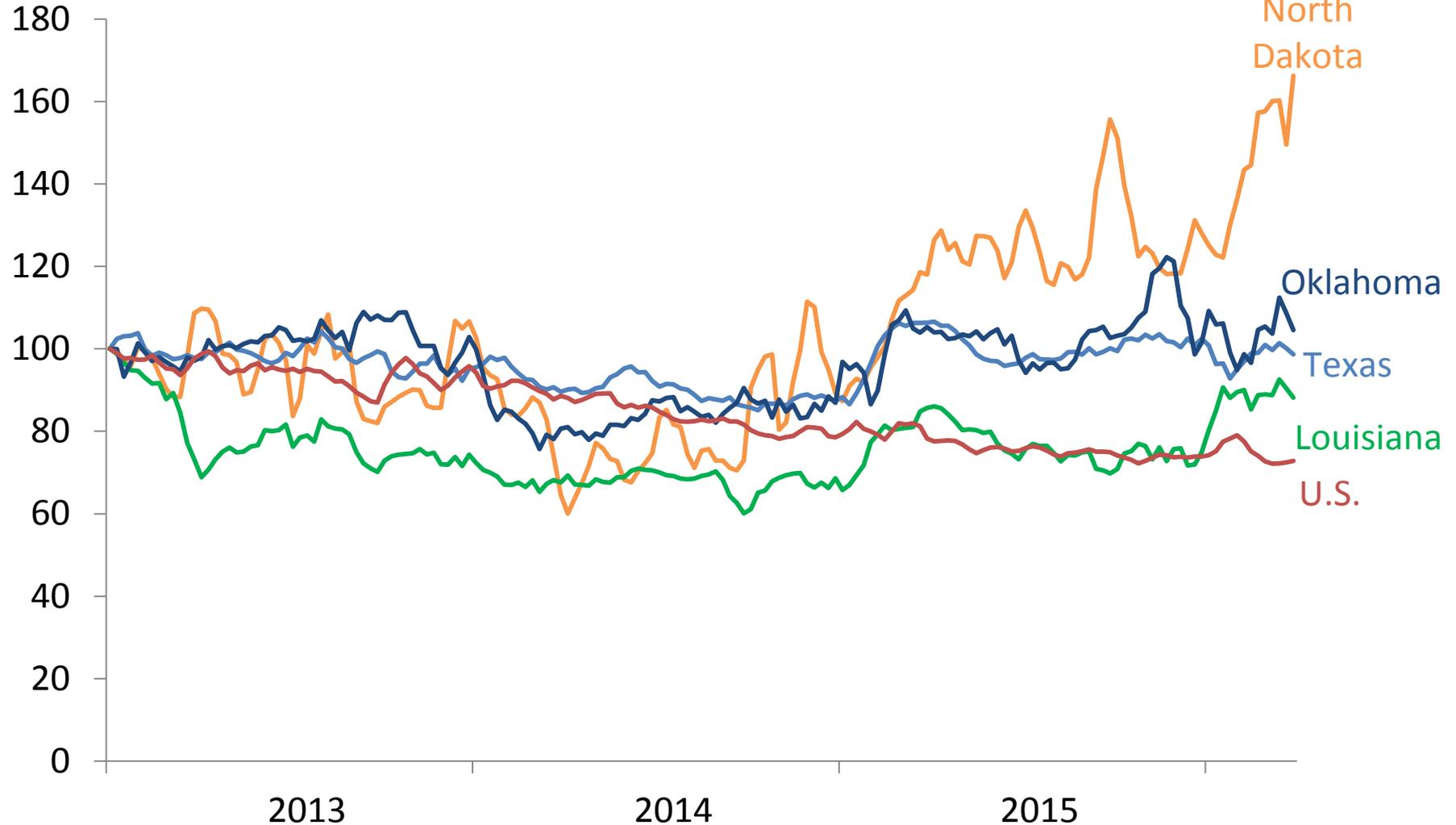
SOURCE: Baker Hughes.

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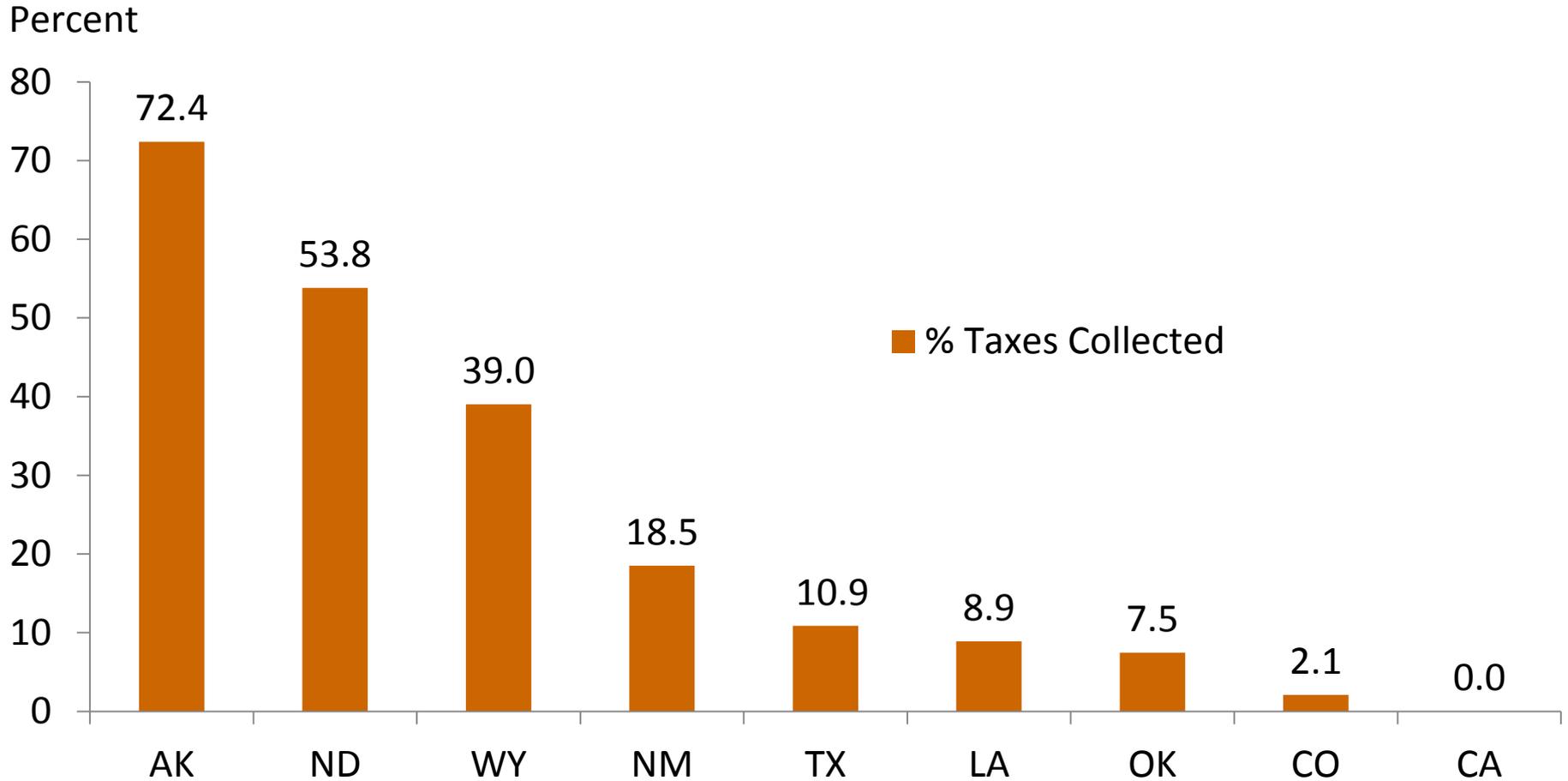
# Initial jobless claims still high

Index, Jan. 5 '13 = 100, 4 WMA



# Some states rely heavily on oil and gas severance taxes

(Share of 2014 state tax revenues)

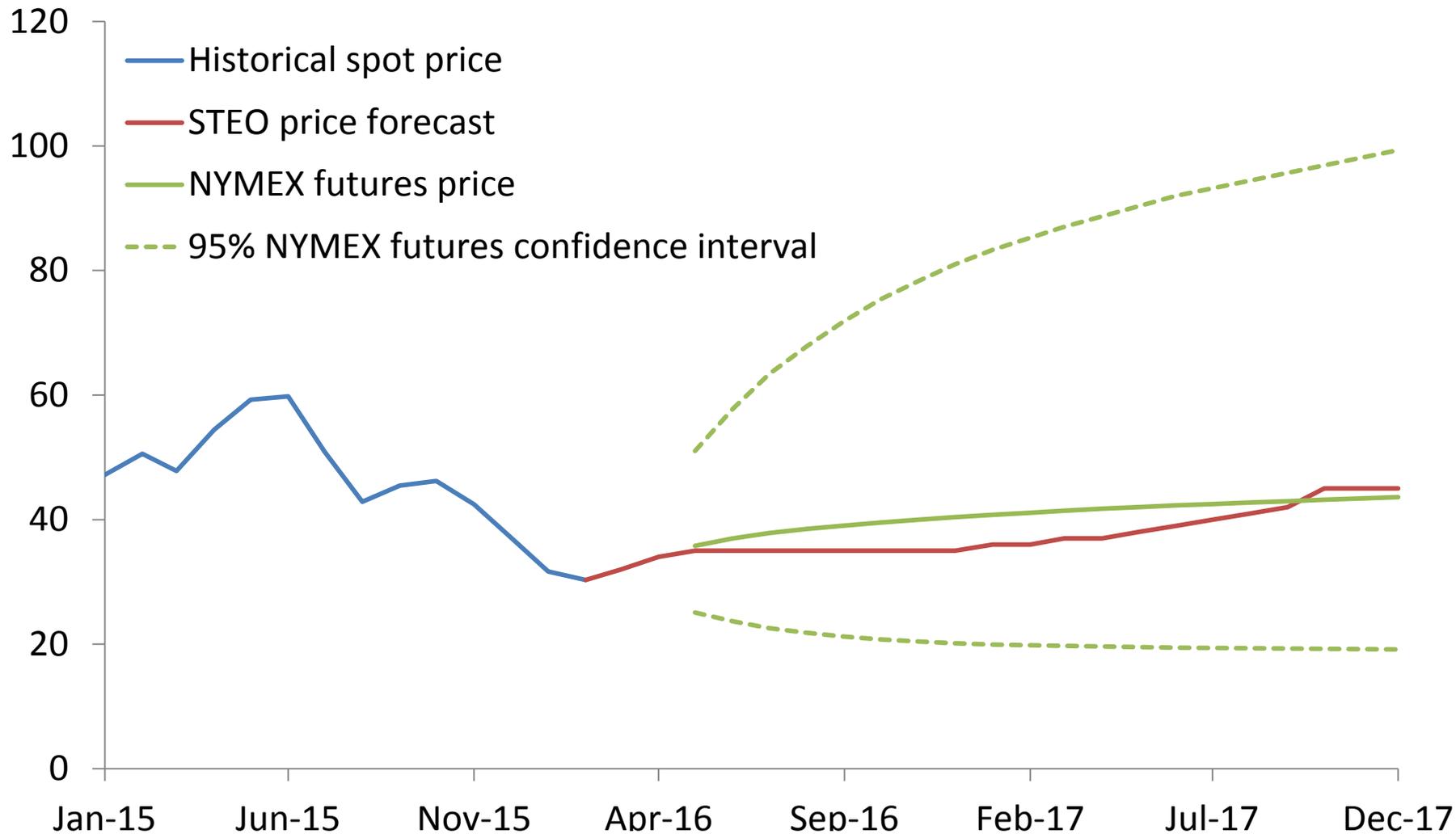


SOURCE: U.S. Census Bureau, 2014 Annual Survey of State Government Tax Collections.

**WHERE DO WE GO FROM HERE?**

# Much uncertainty in crude price forecasts

Dollars per barrel



SOURCE: Energy Information Administration.

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# Outlook

- “Lower for longer” outlook for oil prices
- Oil demand growth is expected to rise over time
- Oil price risks :
  - Downside risks: China, Iran, high inventories
  - Upside risks: Geopolitical turmoil, low investment, “Production freeze”
- Energy importers such as the U.S. should continue to benefit from lower oil prices.
- Rough patch for energy-producing countries and states.
- Reform makes Mexican energy sector more open and nimble
- Increased opportunities for energy partnership



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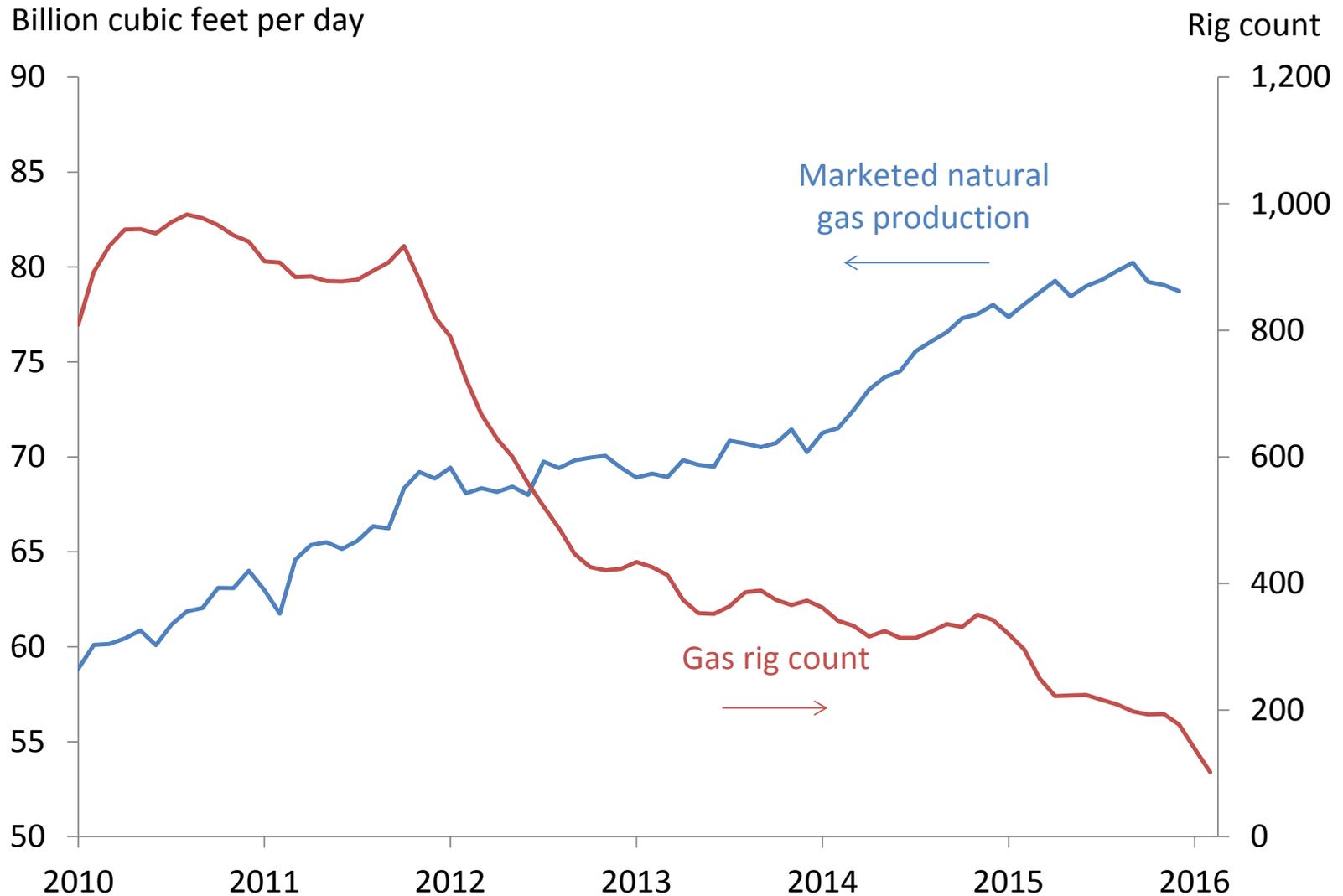


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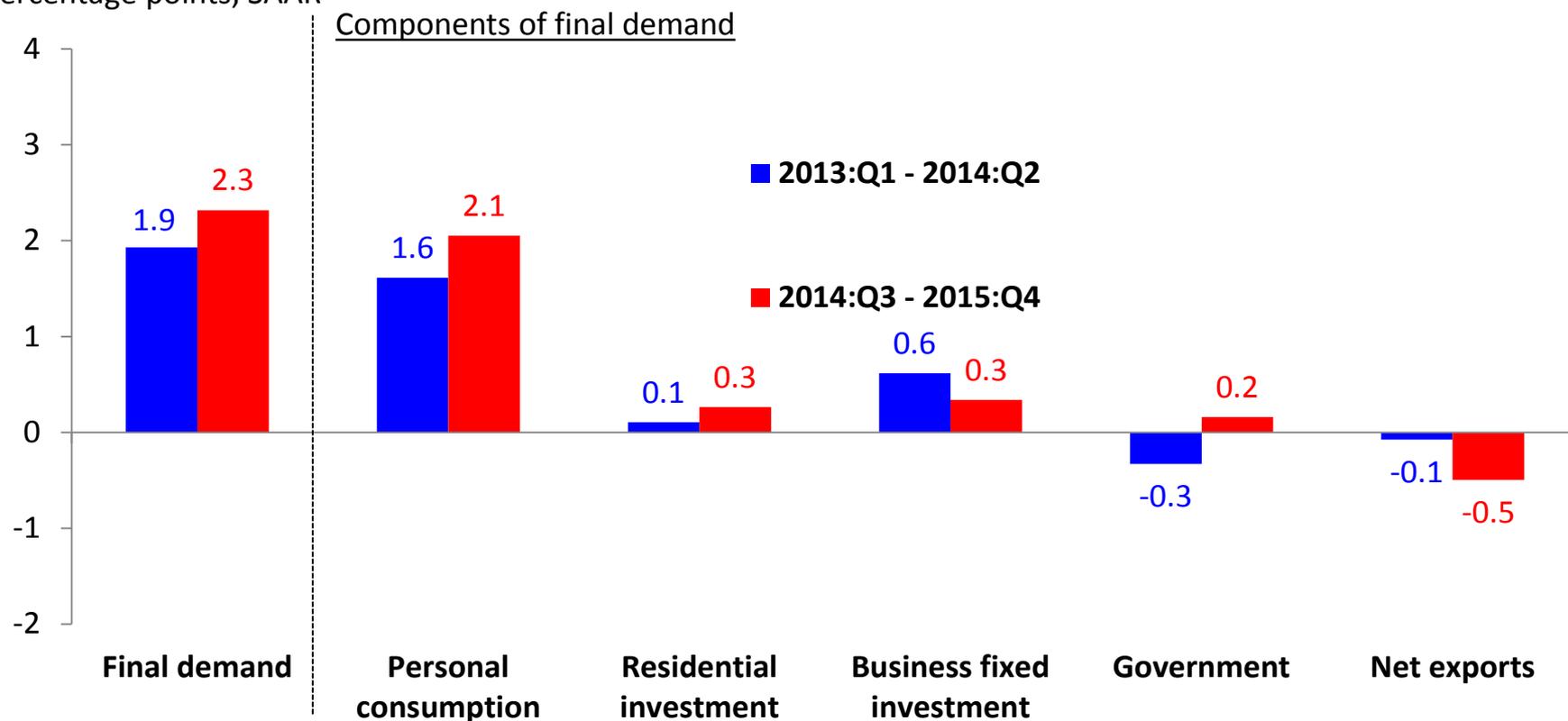


# Gas production still robust



# Households benefit from low energy prices

Contribution to real growth,  
percentage points, SAAR



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SOURCE: Bureau of Economic Analysis.

