

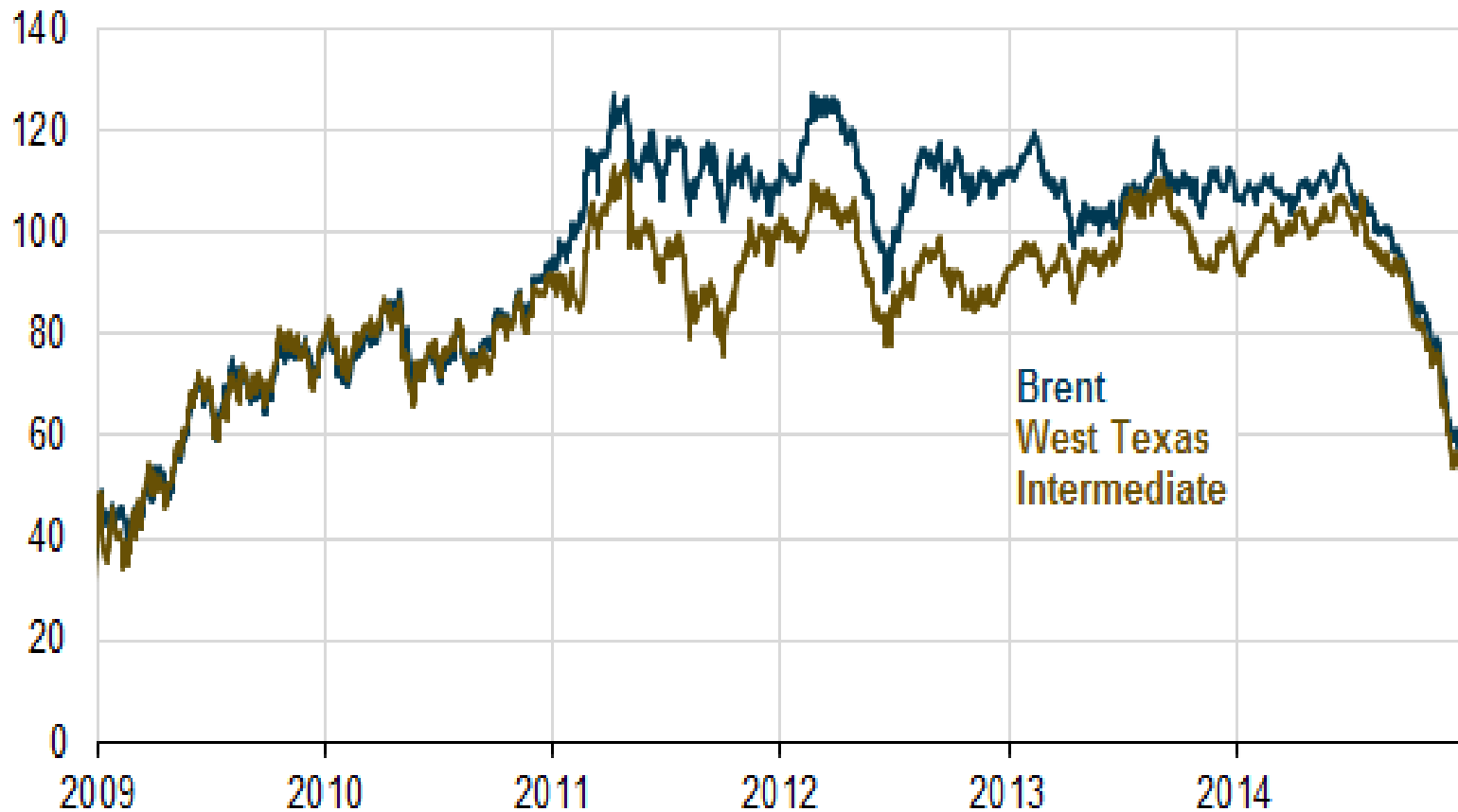
# Global Crude Oil Prices: Why the Big Price Drop?

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# Crude Oil Prices

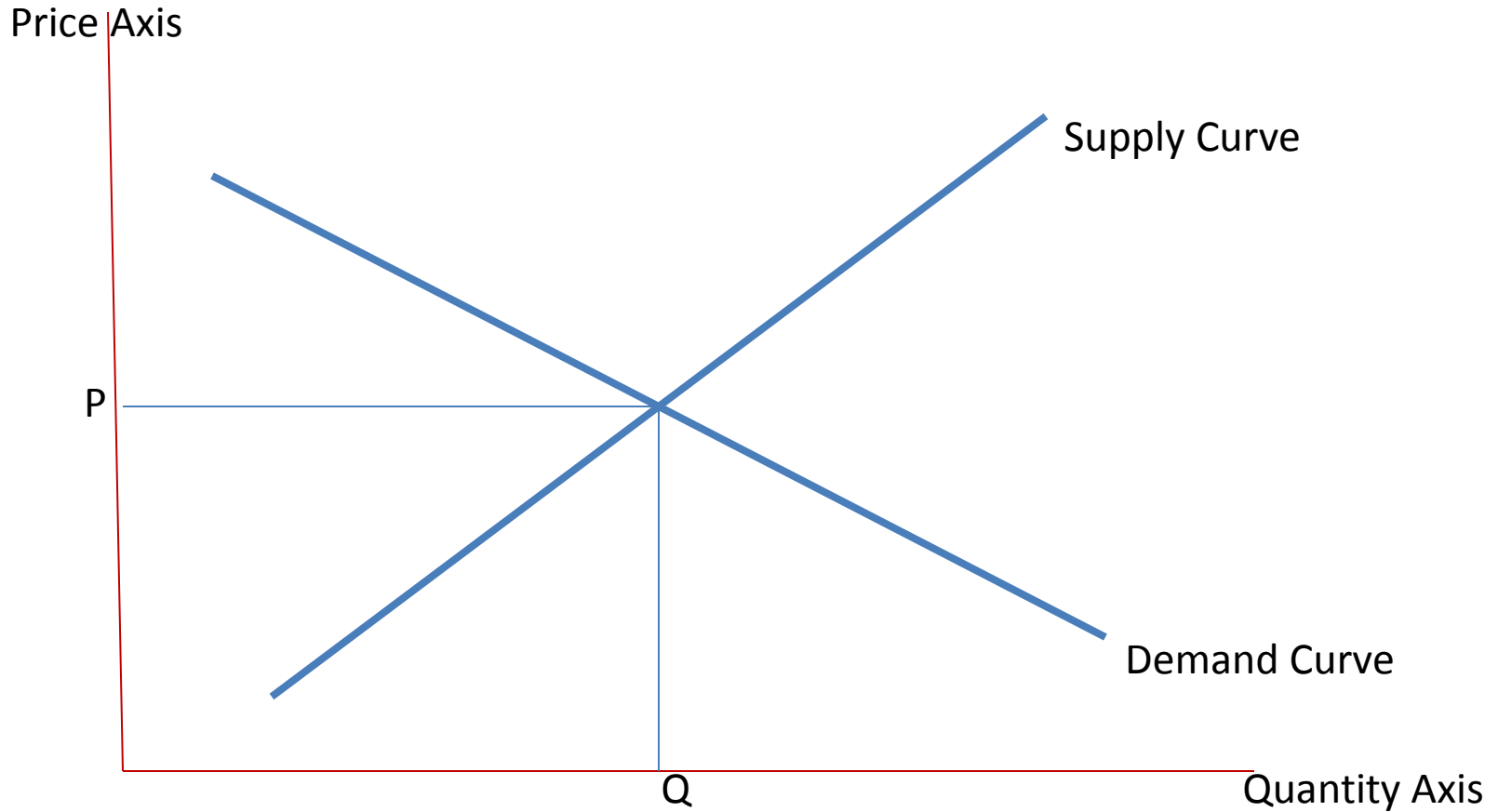
Brent and West Texas Intermediate crude oil prices, 2009-14  
dollars per barrel



# Global Crude Oil

- Crude oil is a commodity.
- It has many buyers and many sellers.
- Oil is the single most traded commodity on our planet.
- Prices for a barrel of oil around the world are equivalent (adjusted for sulphur content).
- The law of supply and demand does a reasonable job of explaining changes in crude oil prices.

# The Law of Supply and Demand



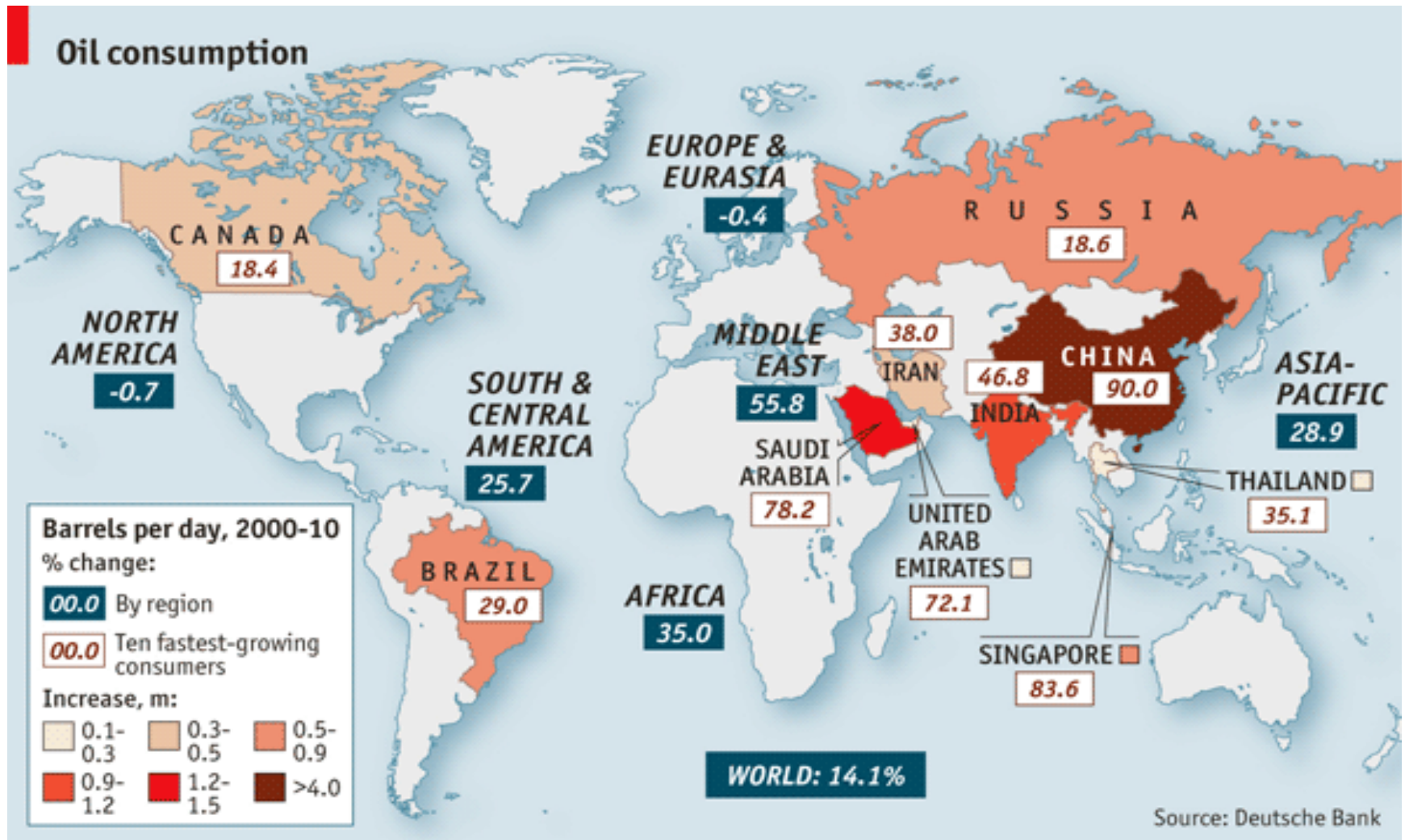
# What can shift the demand curve?

- **Important demand shift factors include:**
  1. Society's income
  2. The prices of other and related goods
  3. Tastes
  4. Expectations
  5. Taxes and subsidies
  6. Number of buyers

# Growth in Oil Demand

- Global demand for oil increased by 14% from 2000 – 2010.
- From 2000 -2010 China increased its consumption of oil more than any other country, a 90% jump. As of 2012, it consumed more than 10% of the world's oil.
- In 2012, global demand for oil was projected to rise to over 100m b/d by 2030.

# Growth in Oil Demand

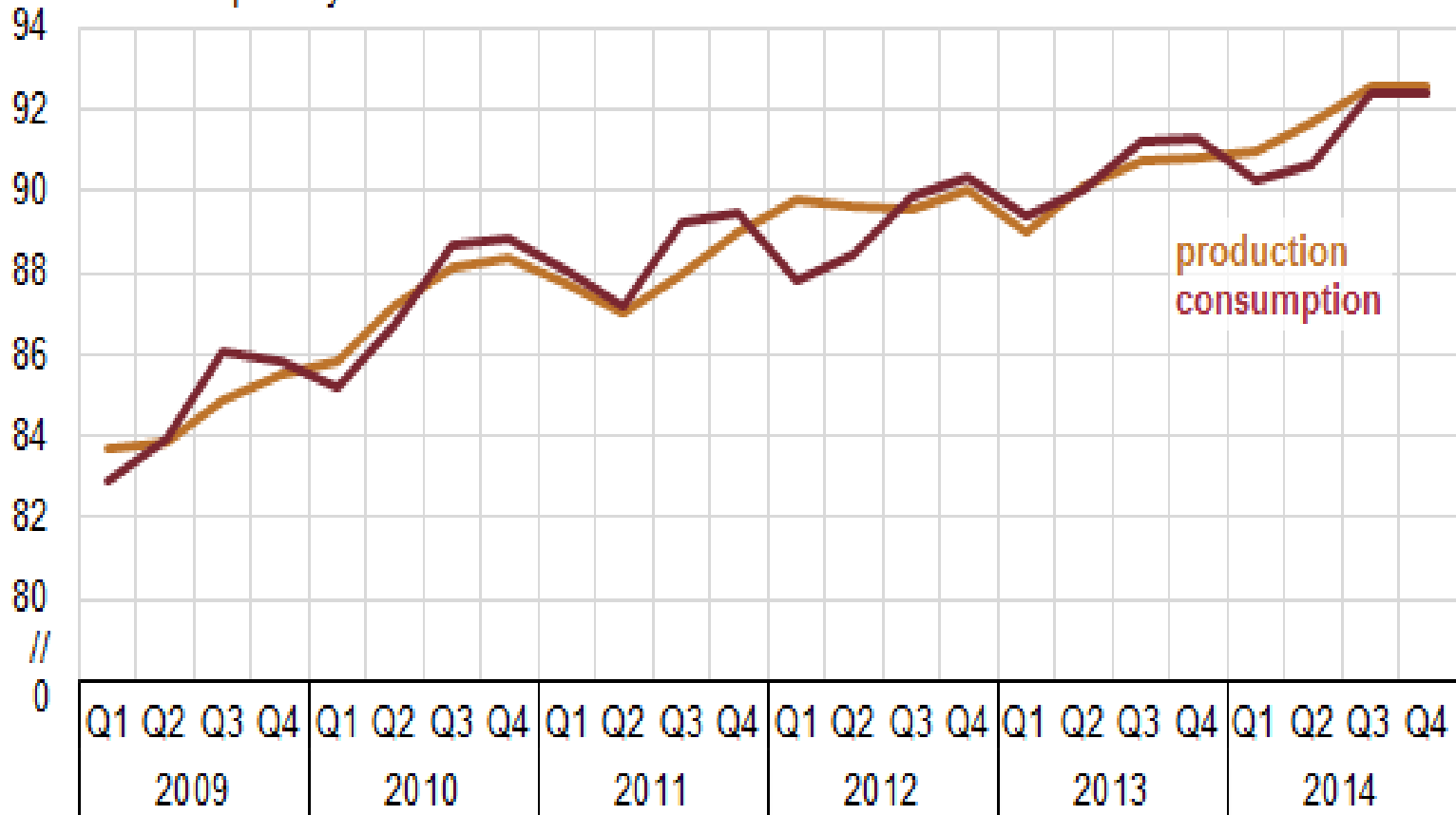


# Growth in Global Consumption of Crude Oil

Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2014

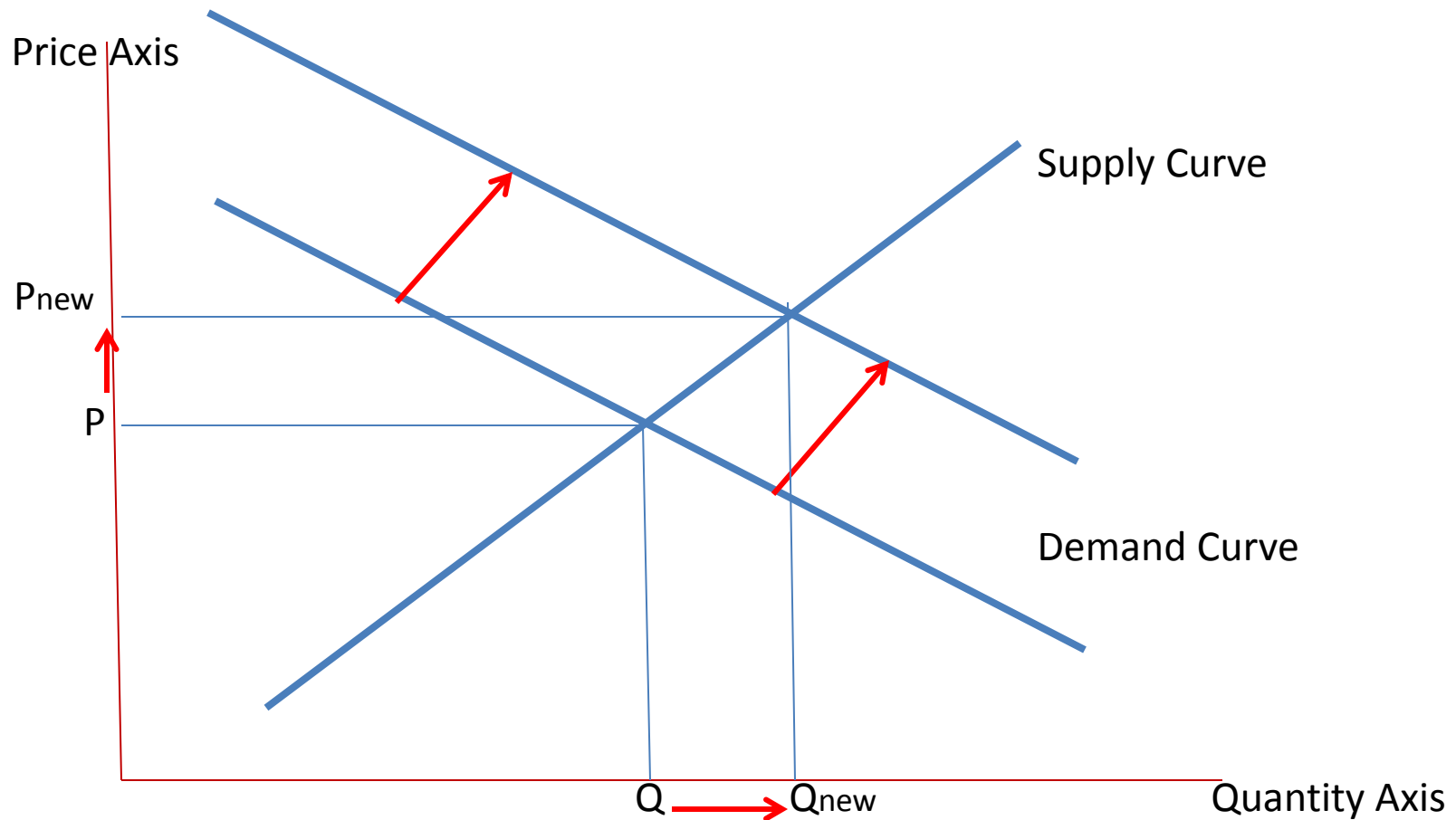
## World liquid fuels production and consumption balance, 2009-14

million barrels per day





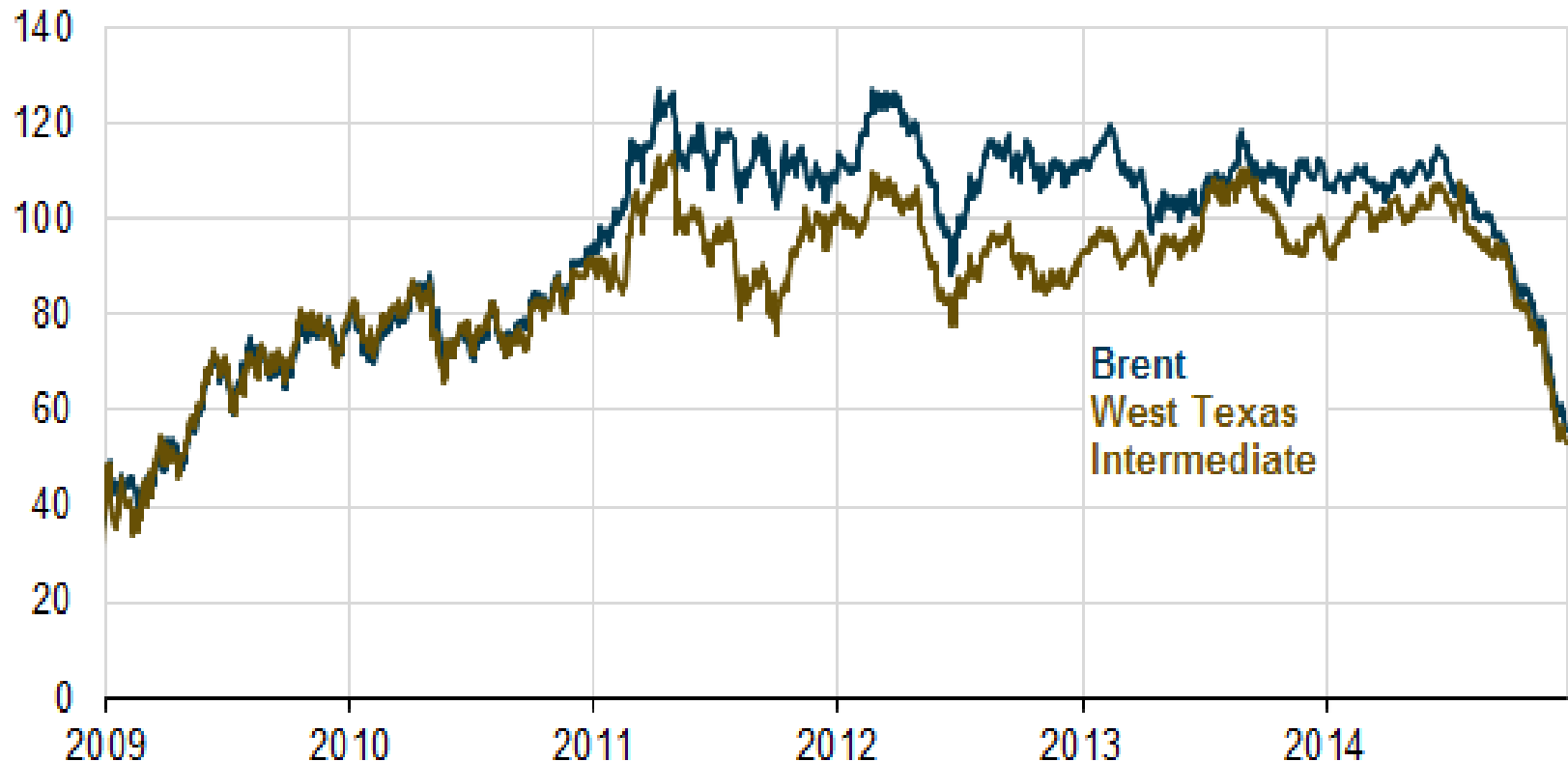
# The global demand for oil shifts “out” creating a new equilibrium point



# Which Takes Us Roughly To This Point in Time



Brent and West Texas Intermediate crude oil prices, 2009-14  
dollars per barrel



# What can shift the supply curve?

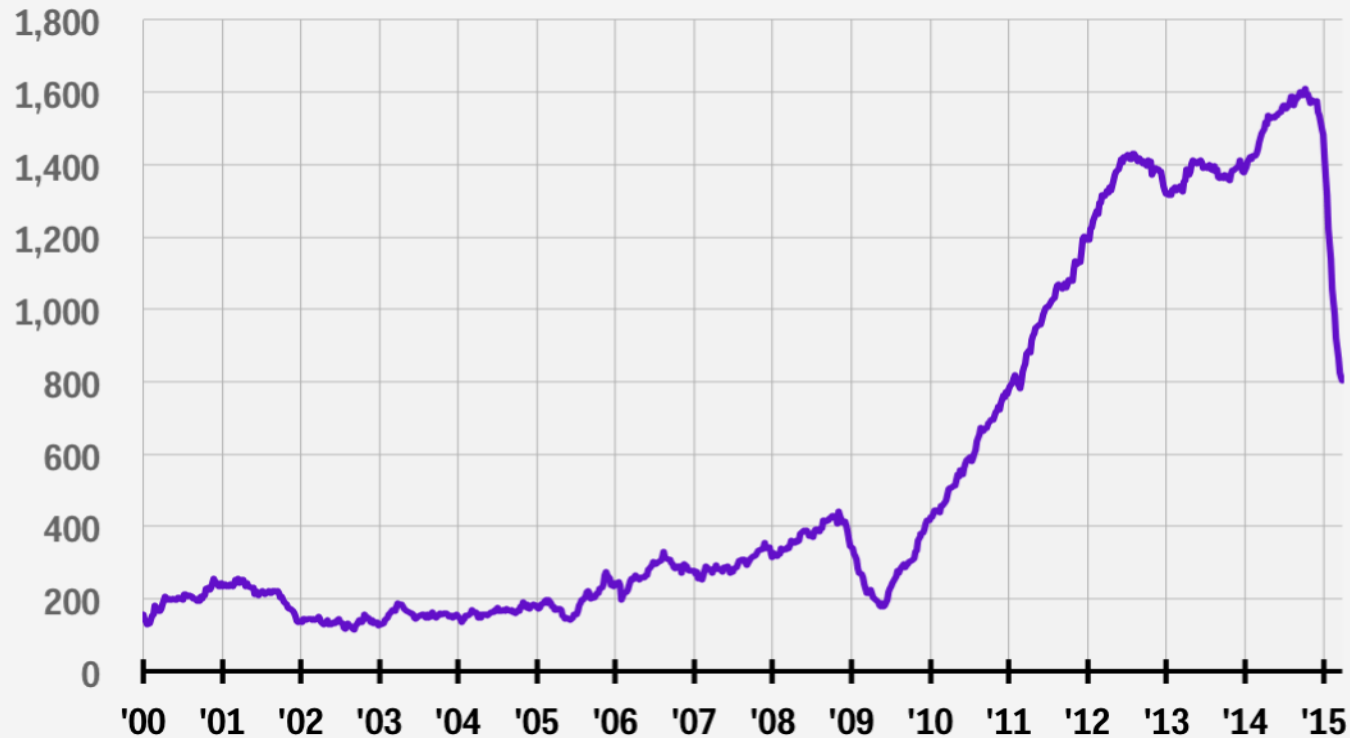
- **Important supply shift factors include:**
  1. Price of inputs
  2. Technology
  3. Expectations
  4. Taxes and subsidies
  5. Number of sellers

# New Technologies Respond to the Higher Prices

- New technologies enable producers to access new oil supplies at lower costs of production
- Example: Hydraulic Fracturing (fracking)
  - **Between 2012 and 2014 US oil production was up 23%.**
  - **The rapid increase underscores how improvements in fracking technology transformed the US oil market allowing producers to retrieve shale oil from tight rock formations.**
  - **Similar gains from fracking have been seen worldwide.**
- There were also similar gains from other technologies such as from oil sands formations.

# The Number of Oil Wells Increases

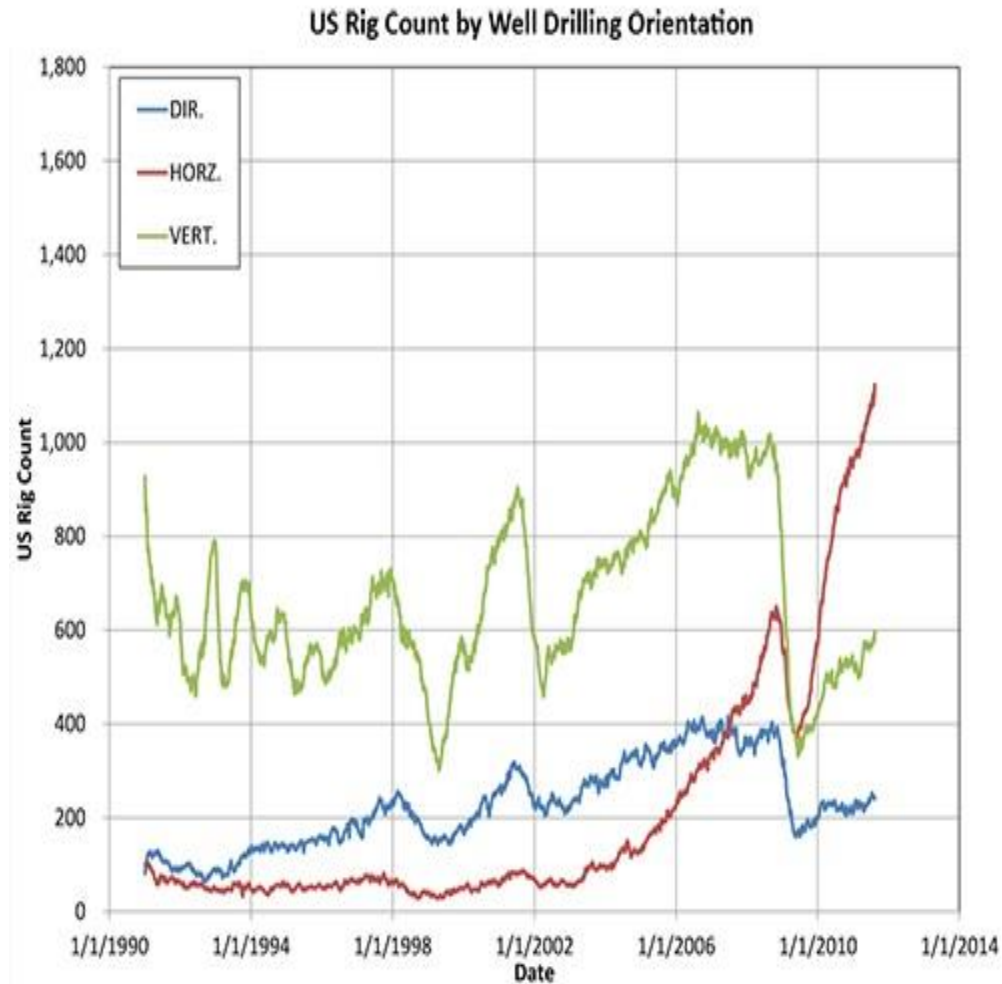
## US Oil Rig Count



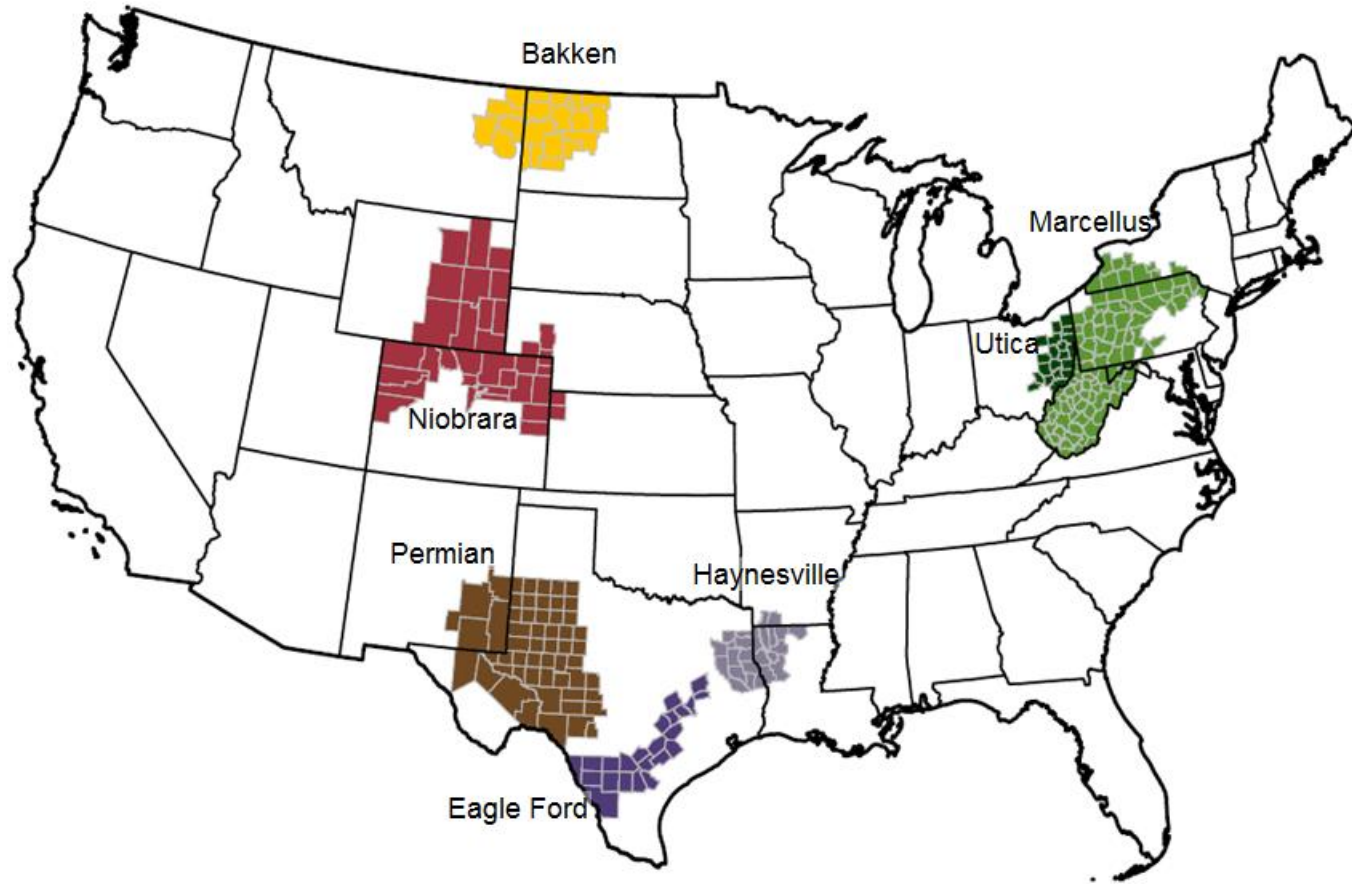
Source: Baker Hughes

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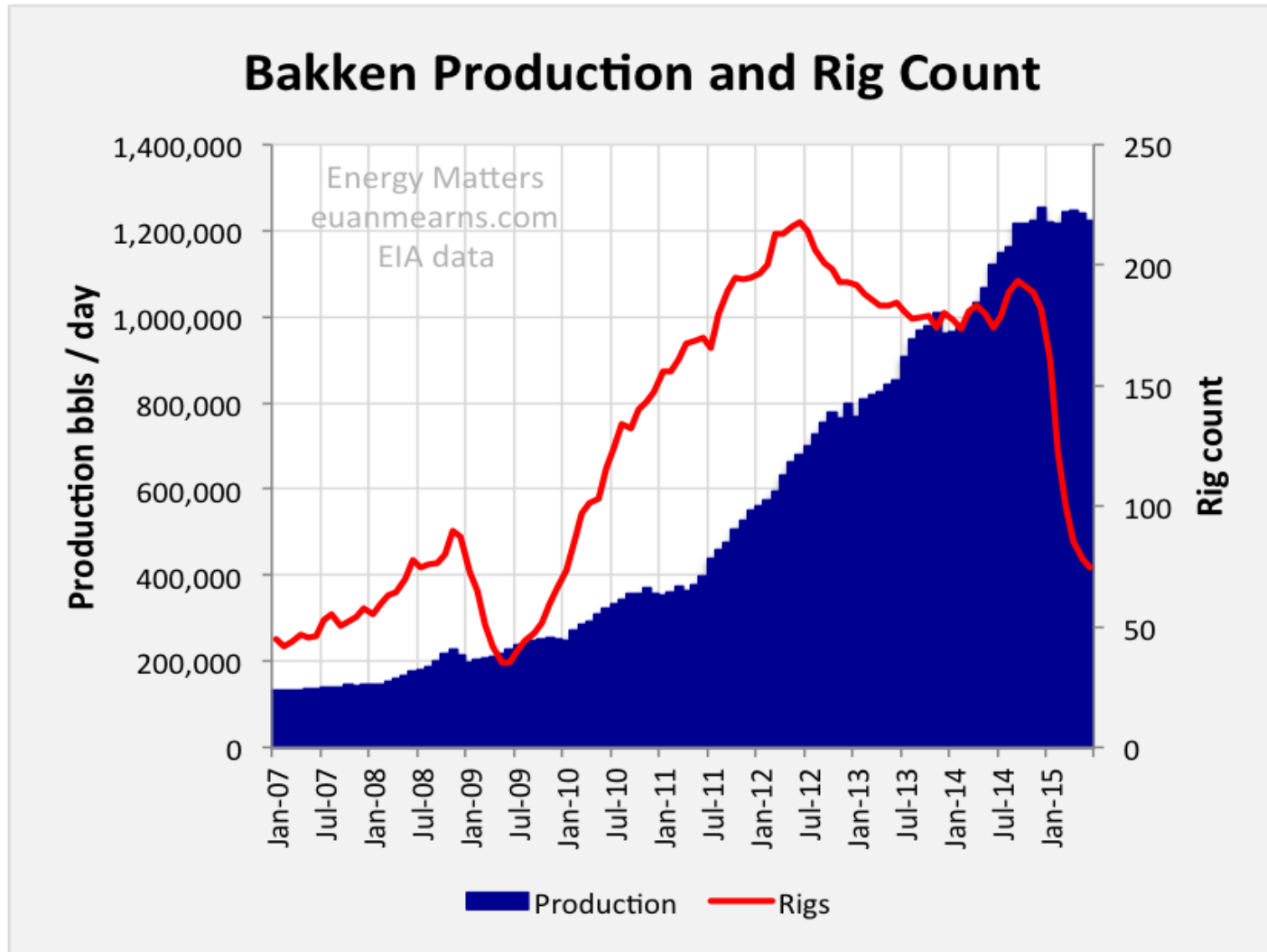
# The Number of Fracking Wells Increases



# The main shale oil fields of the US

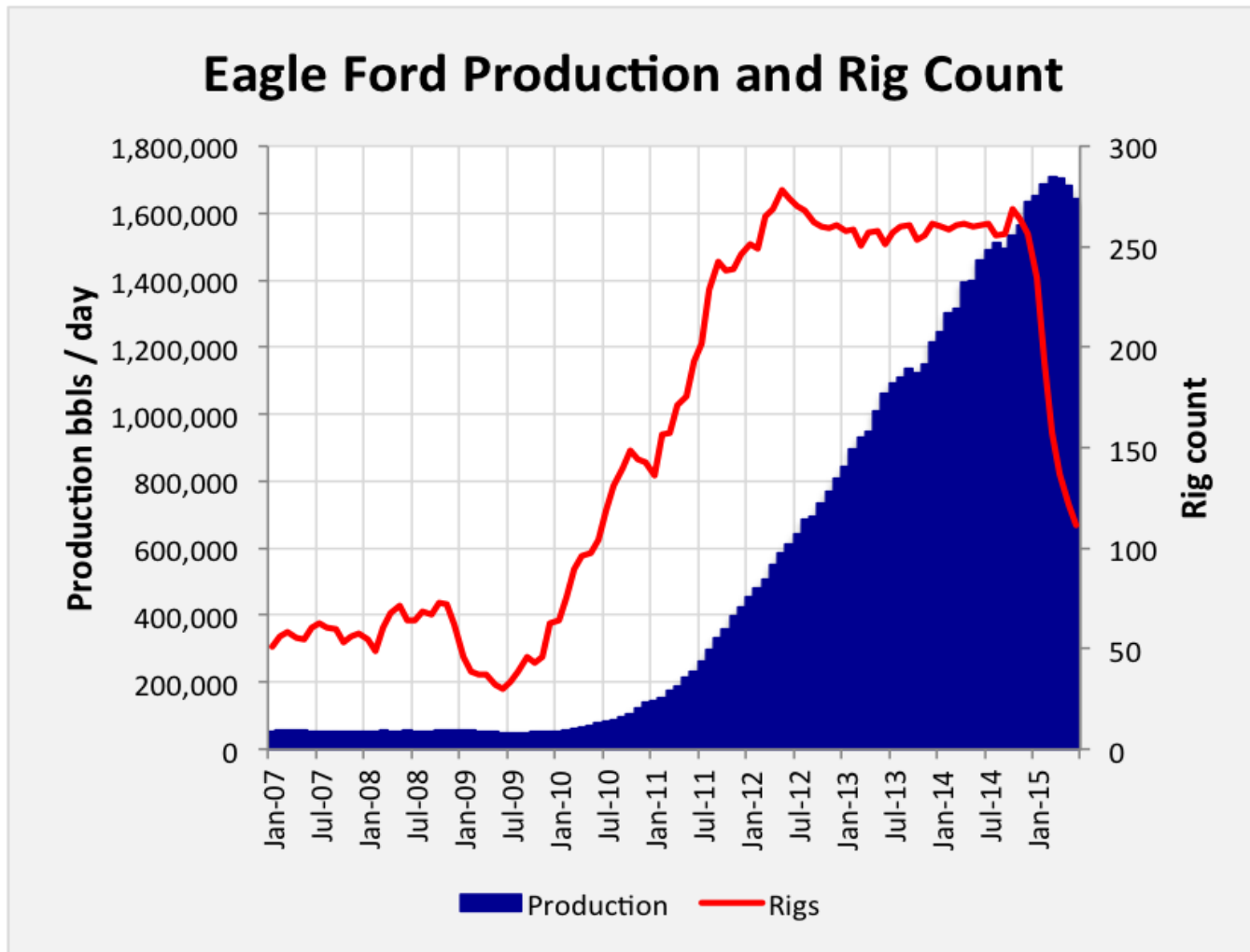


# Recent Growth in Oil Production

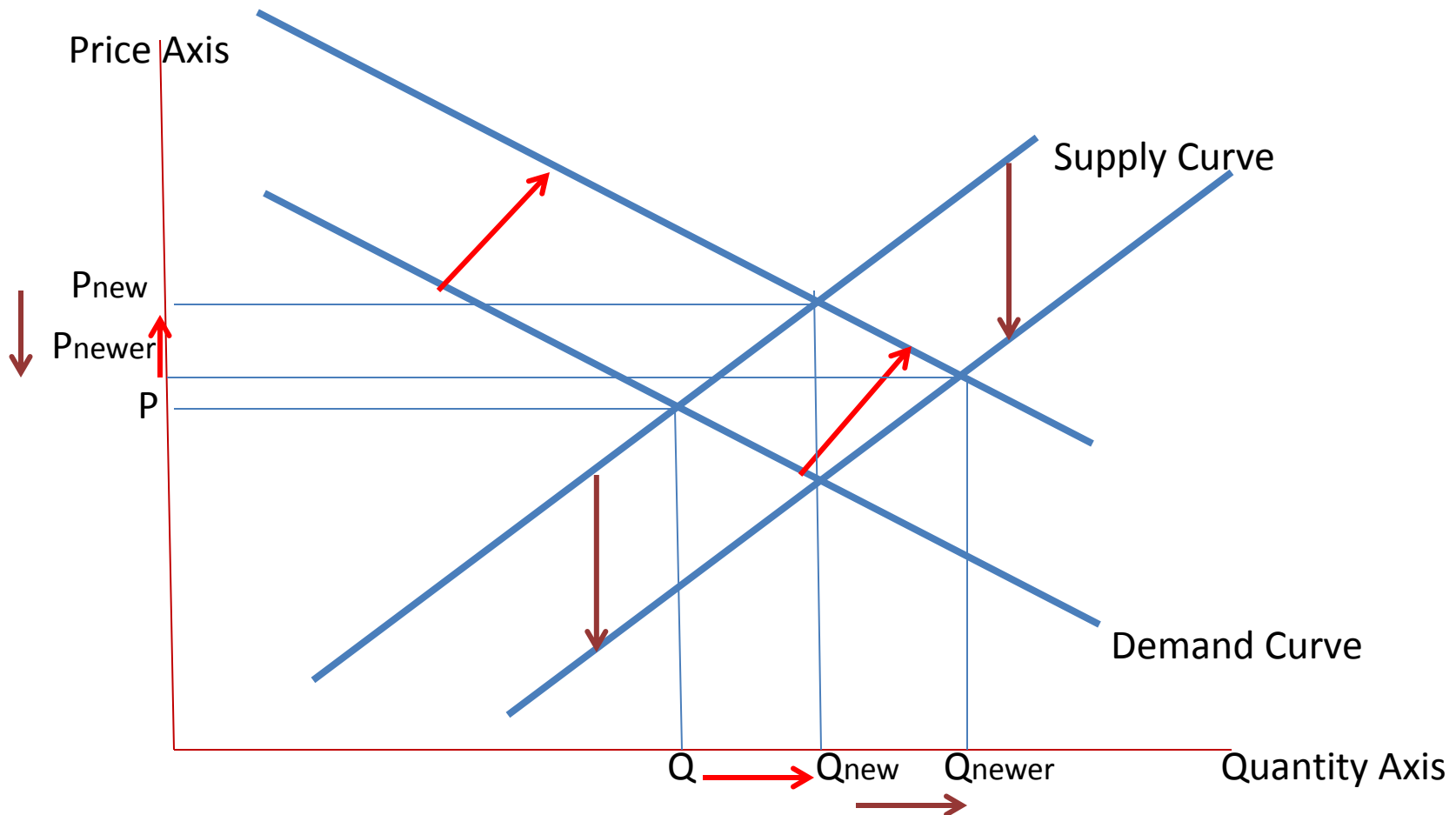




# Recent Growth in Oil Production



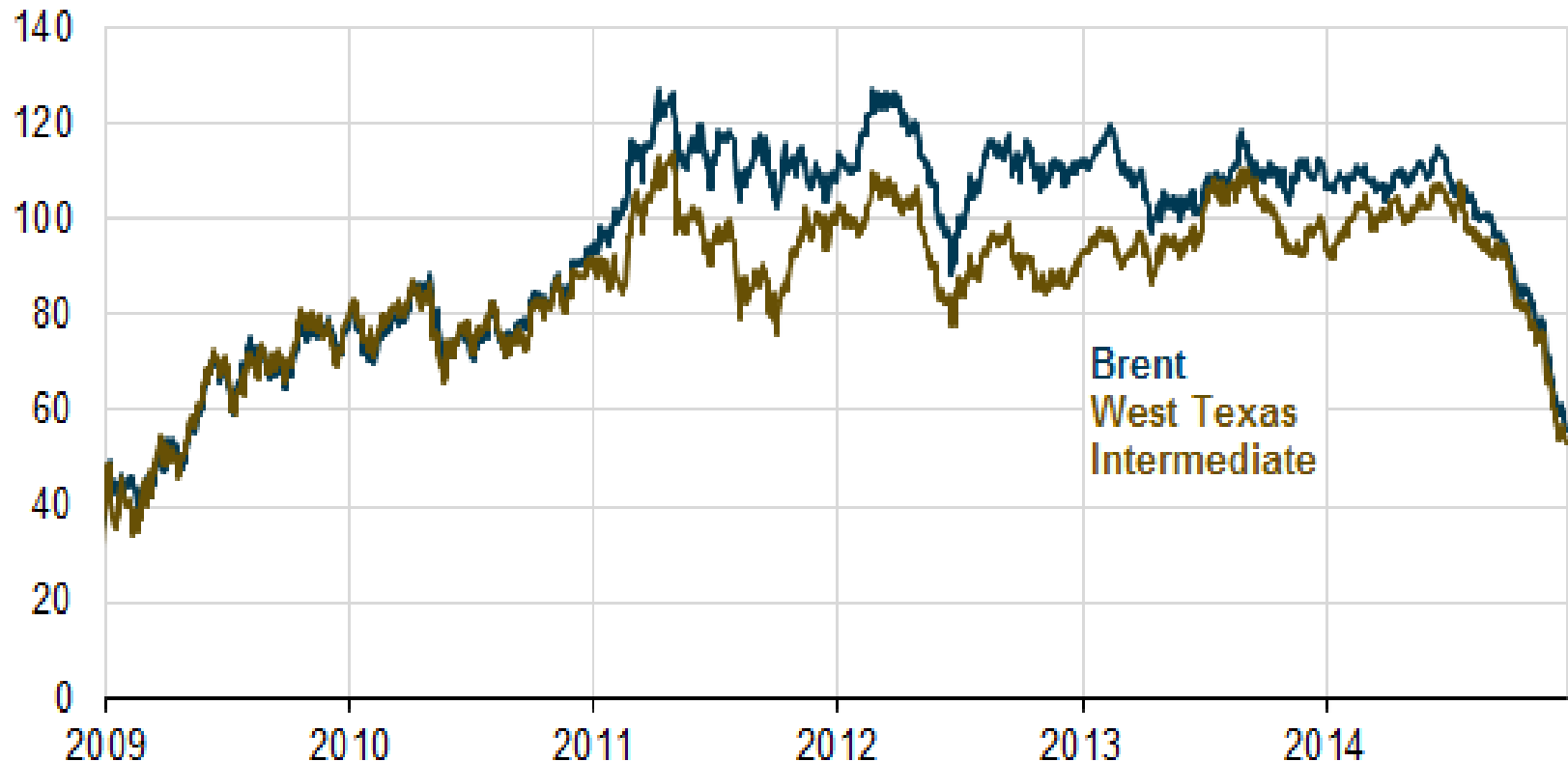
The lower cost of production from new technology shifts “down” the supply curve creating a new equilibrium point



# Which Takes Us Roughly To This Point in Time



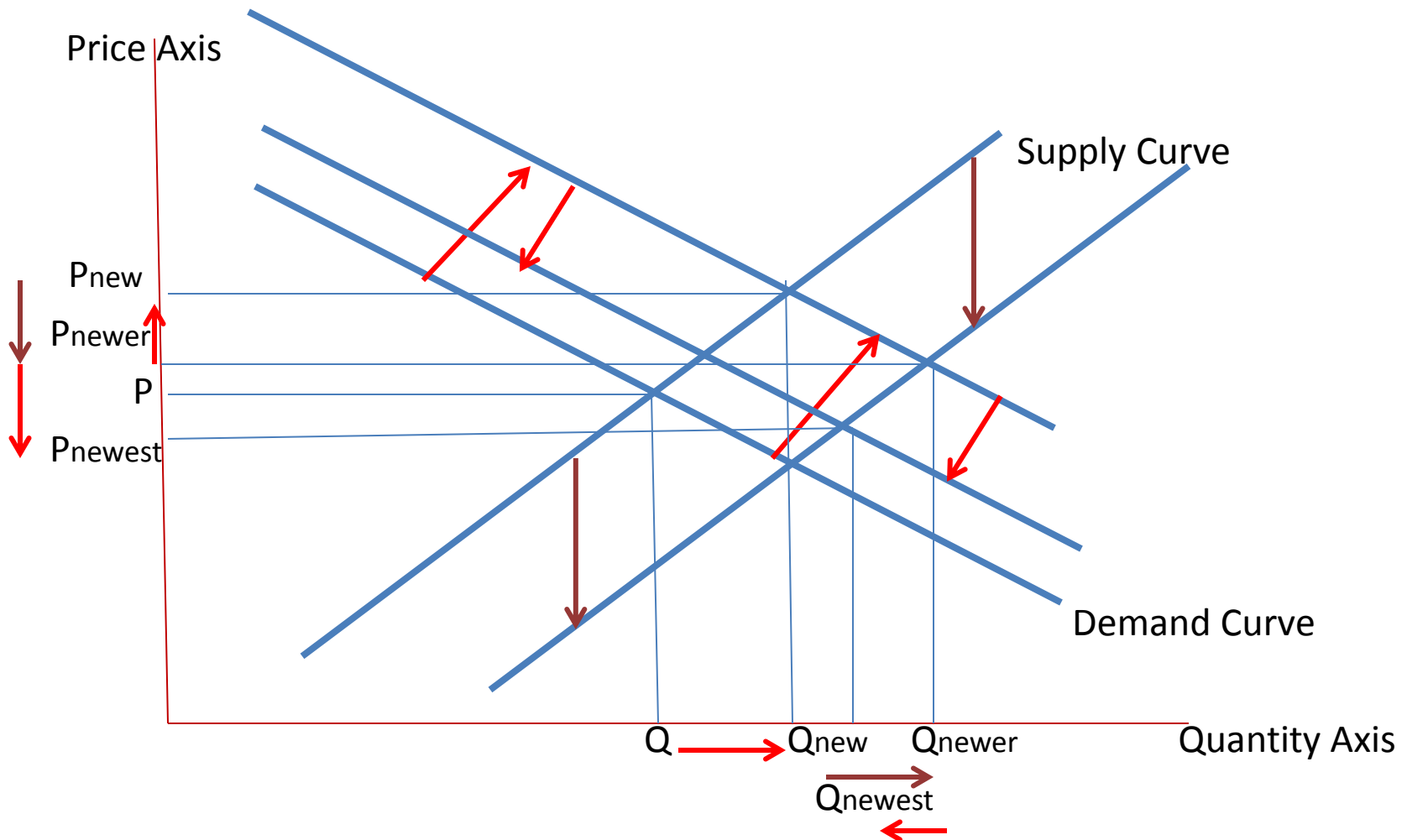
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# Then, a Decrease in the Demand for Oil

- In 2014, China's economy begins to sputter, ends its multiyear period of growth, and enters into a recession.
- Global demand for oil decreases.
- This causes the demand curve to shift "in".

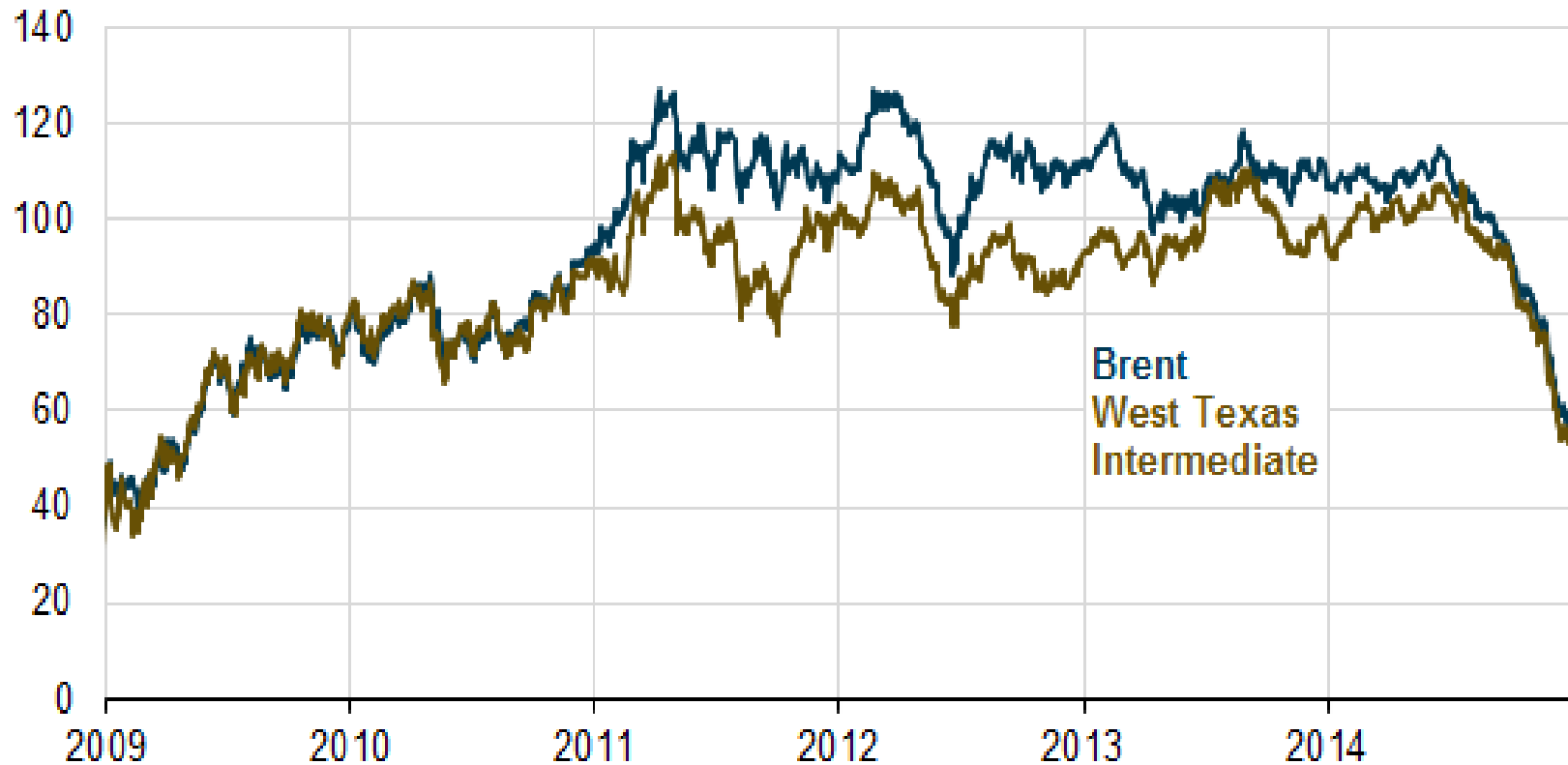
# The decreased global demand shifts “in” the demand curve creating a new equilibrium point



# Which Takes Us To Today



Brent and West Texas Intermediate crude oil prices, 2009-14  
dollars per barrel



# Summary

The law of supply and demand does a good job of explaining changes in crude oil prices.

An increase in global demand, followed by the introduction of new technology, followed by a decrease in global demand caused the “bumpy ride”.