



# The Oil Battle Explaining the Fight for a Slowing Market



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# Conclusion and Reasons

Price will settle at the **marginal price of production of non-conventional crudes in the US**, well below the price averaged 2011 to mid-2014

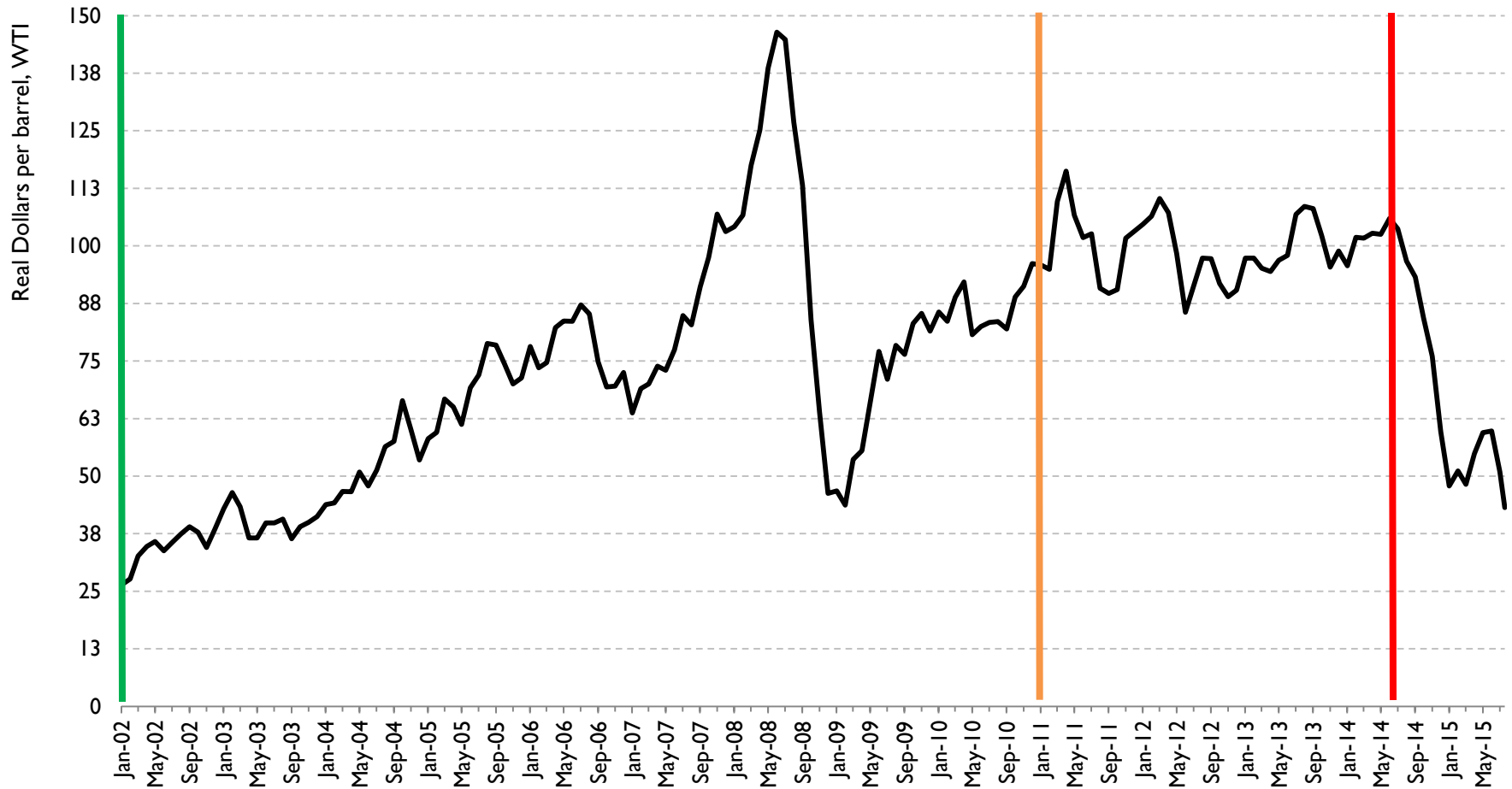
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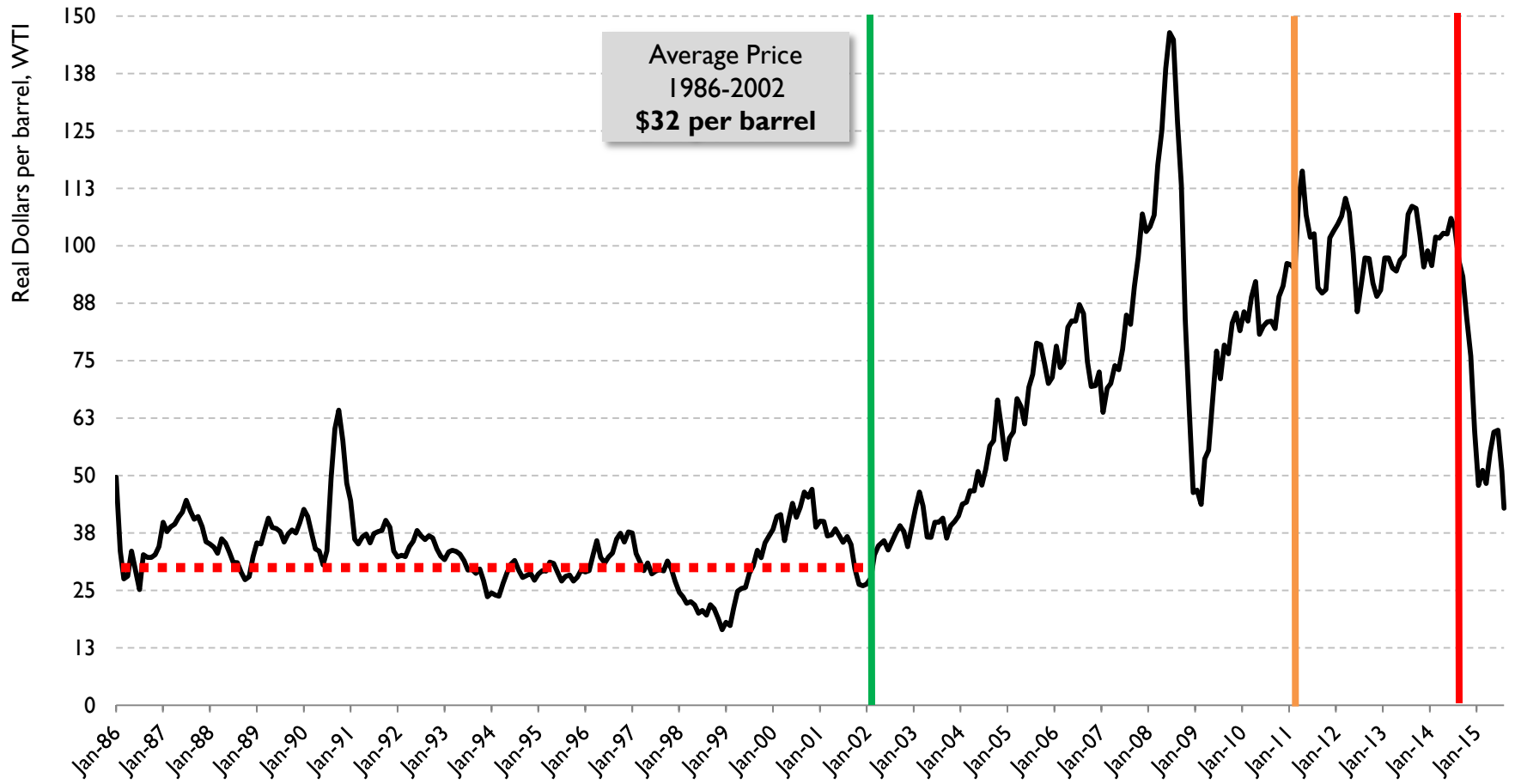
1. Productivity increasing in non-conventional oil in U.S. basins with huge reserves
2. Saudi Arabia increases production
3. Countries such as Libya and Iran with shut-in capacity will increase production as soon as those factors disappear
4. Other large producers (Iraq) are increasing production to regain market share.



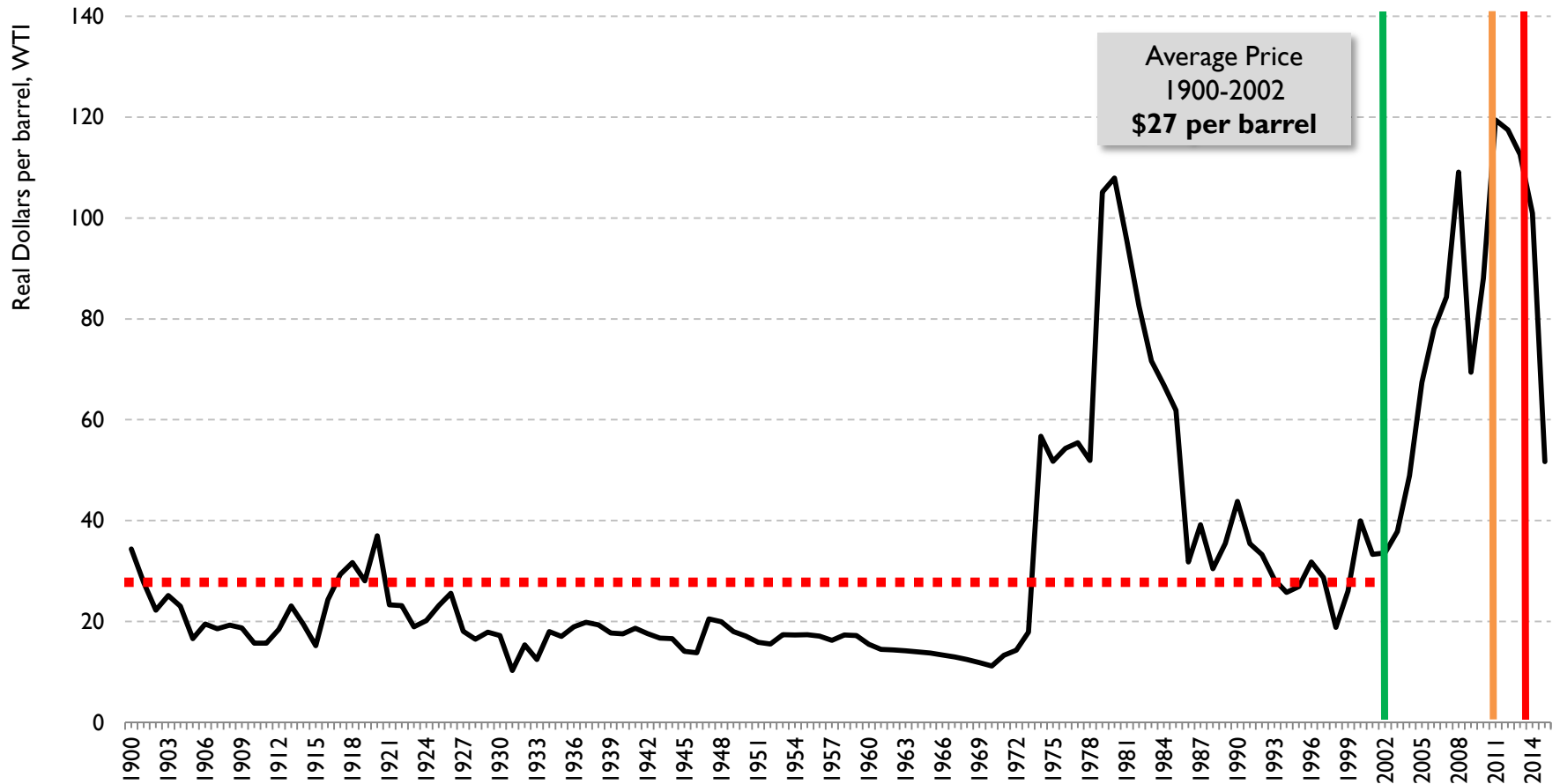
# Crude oil price, real - since 2002



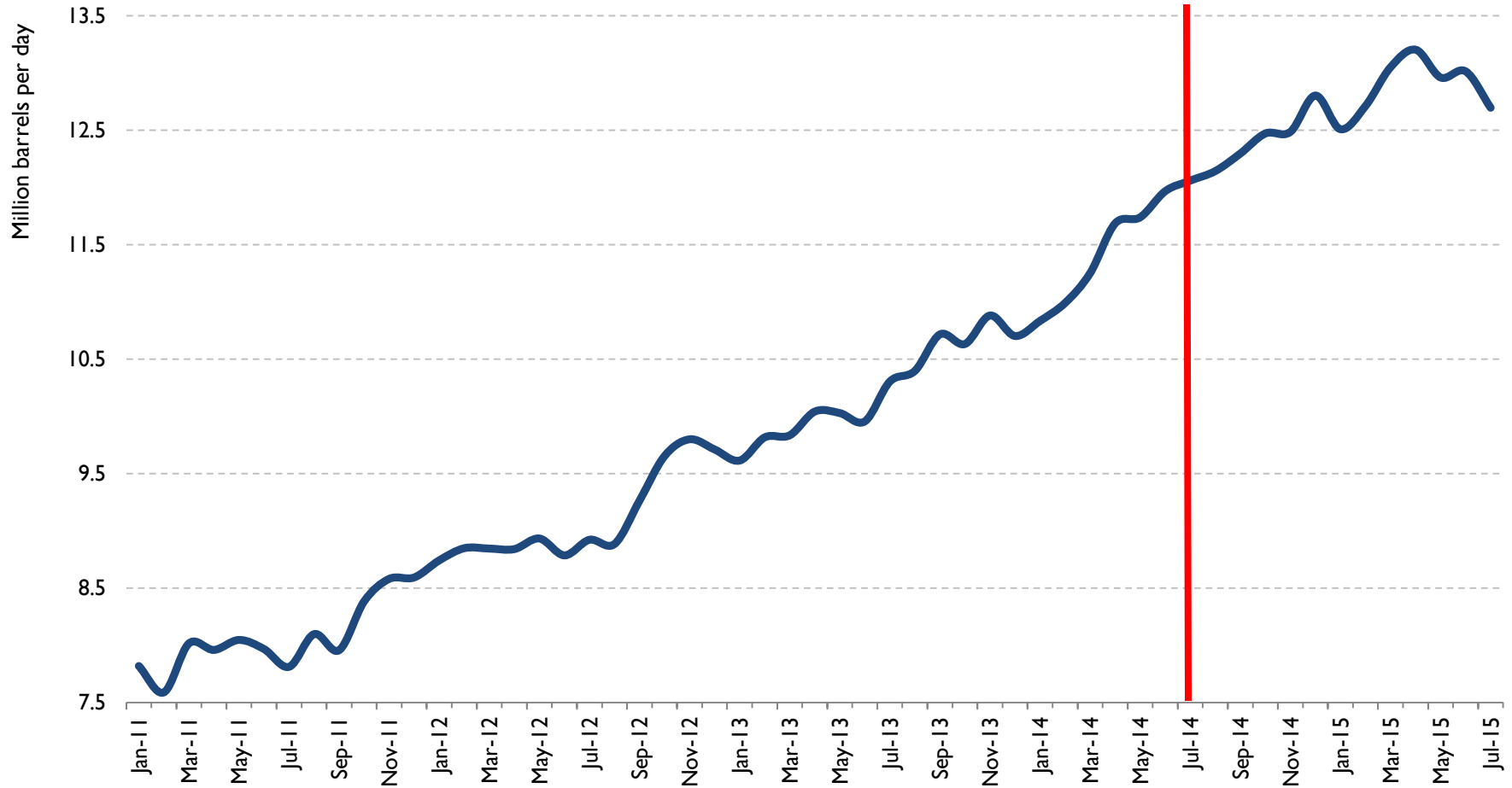
# Crude oil price, real - since 1986



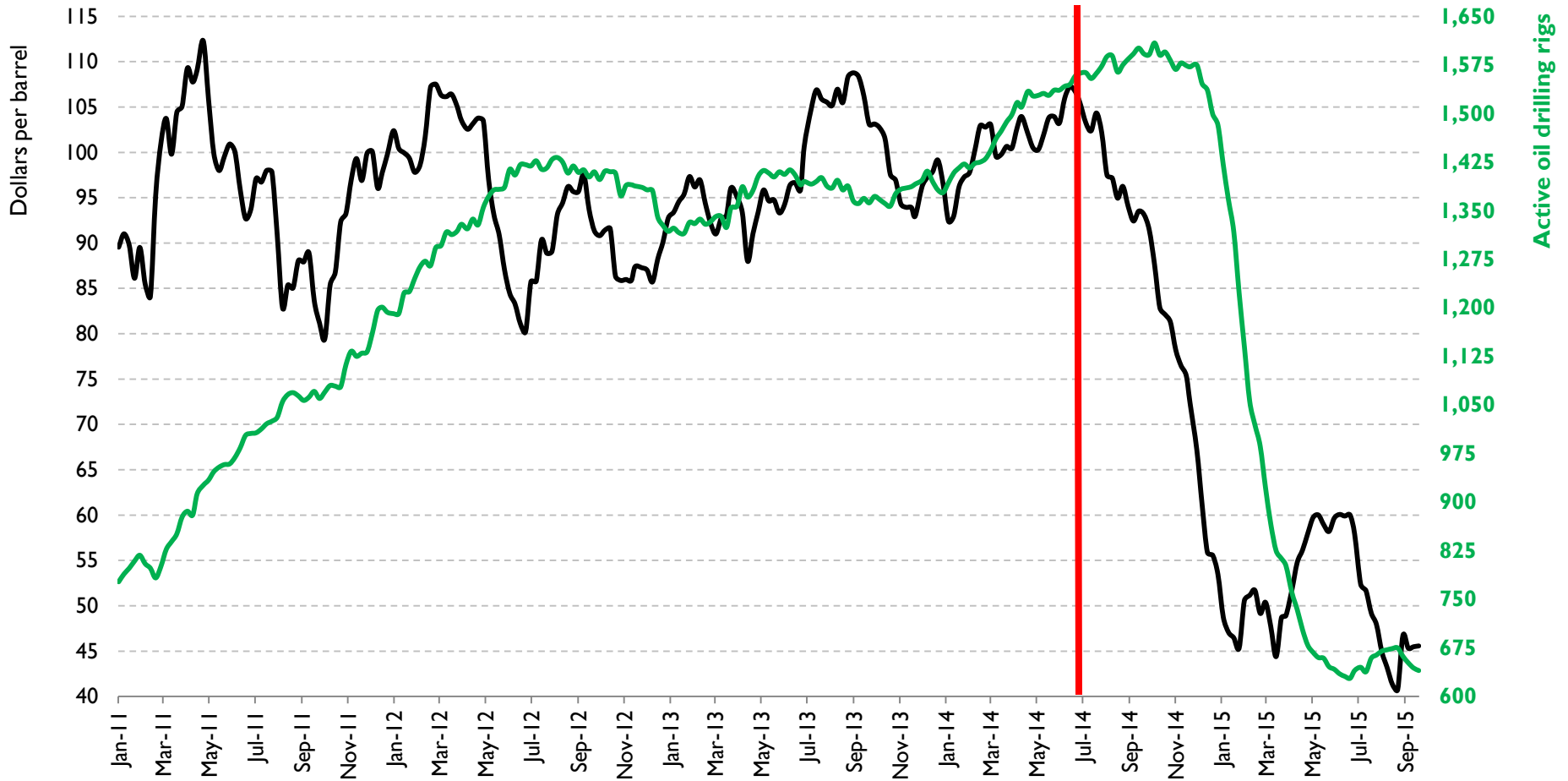
# Crude oil price, real - since 1900



# Production, USA



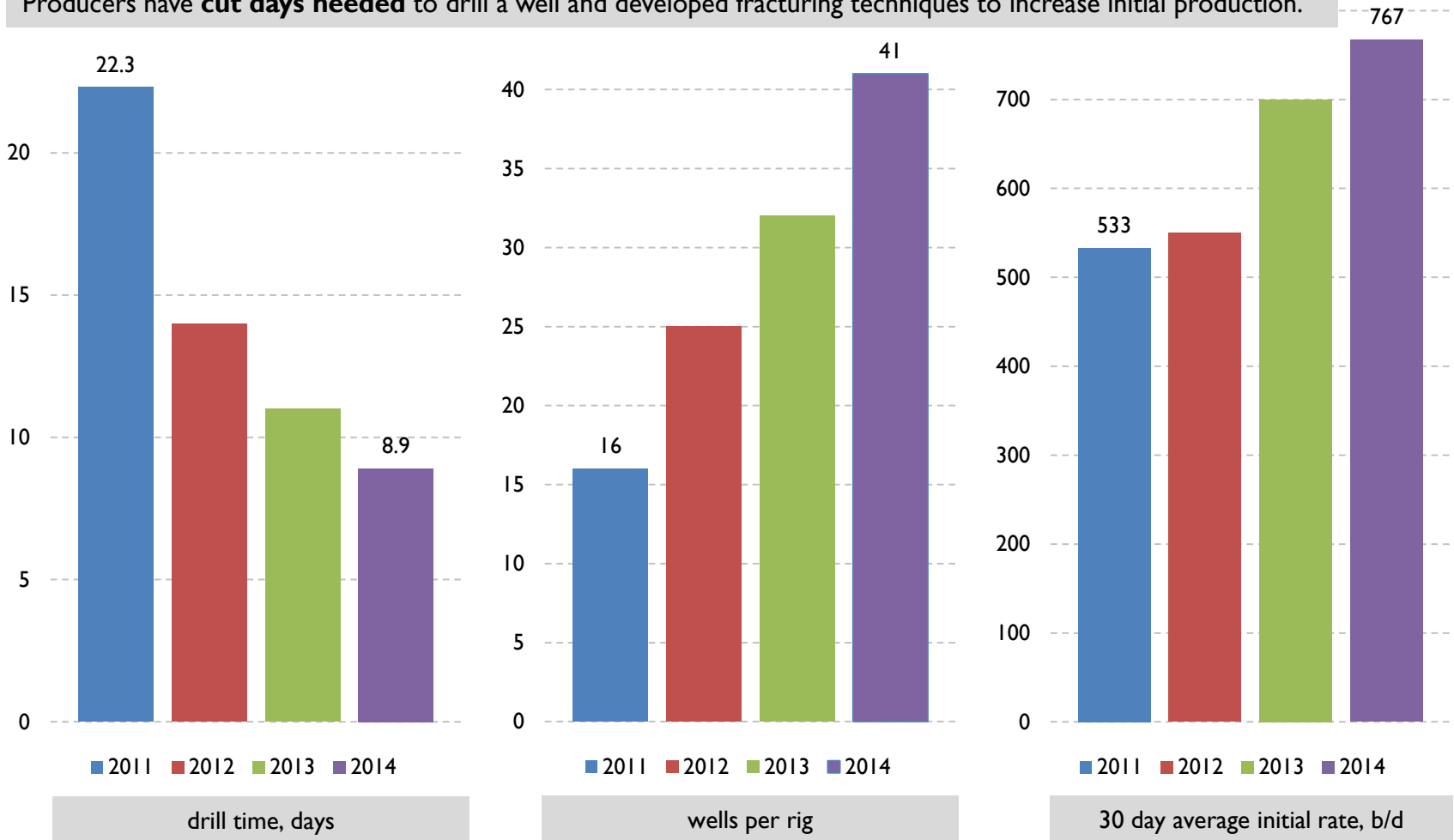
# Drilling & Price, USA



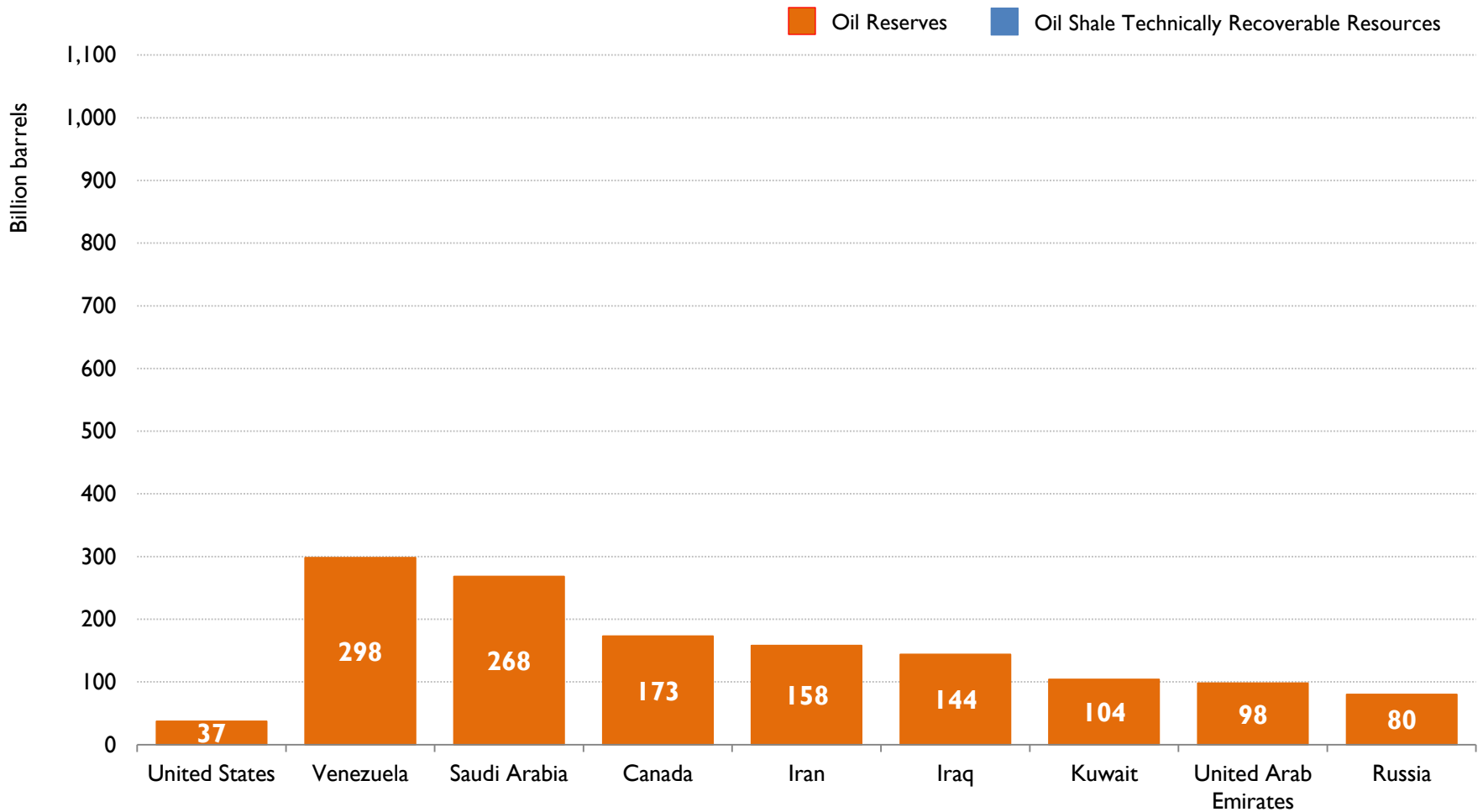


# Shale productivity, Eagle Ford

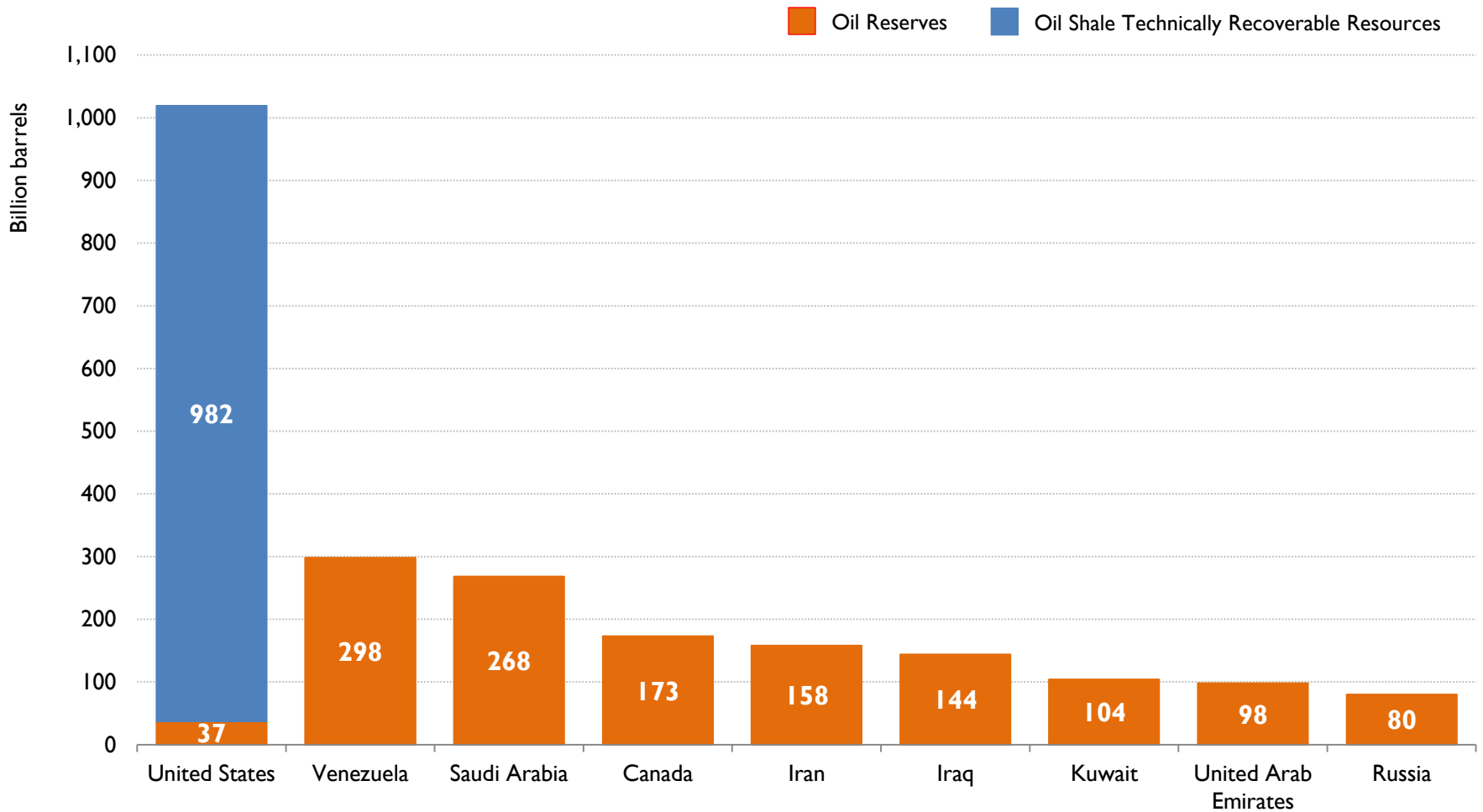
Growth in US production result of important **gains in productivity** in shale formations as **technology matures**. Producers have **cut days needed** to drill a well and developed fracturing techniques to increase initial production.



# Shale reserves



# Shale reserves



# Production, OPEC



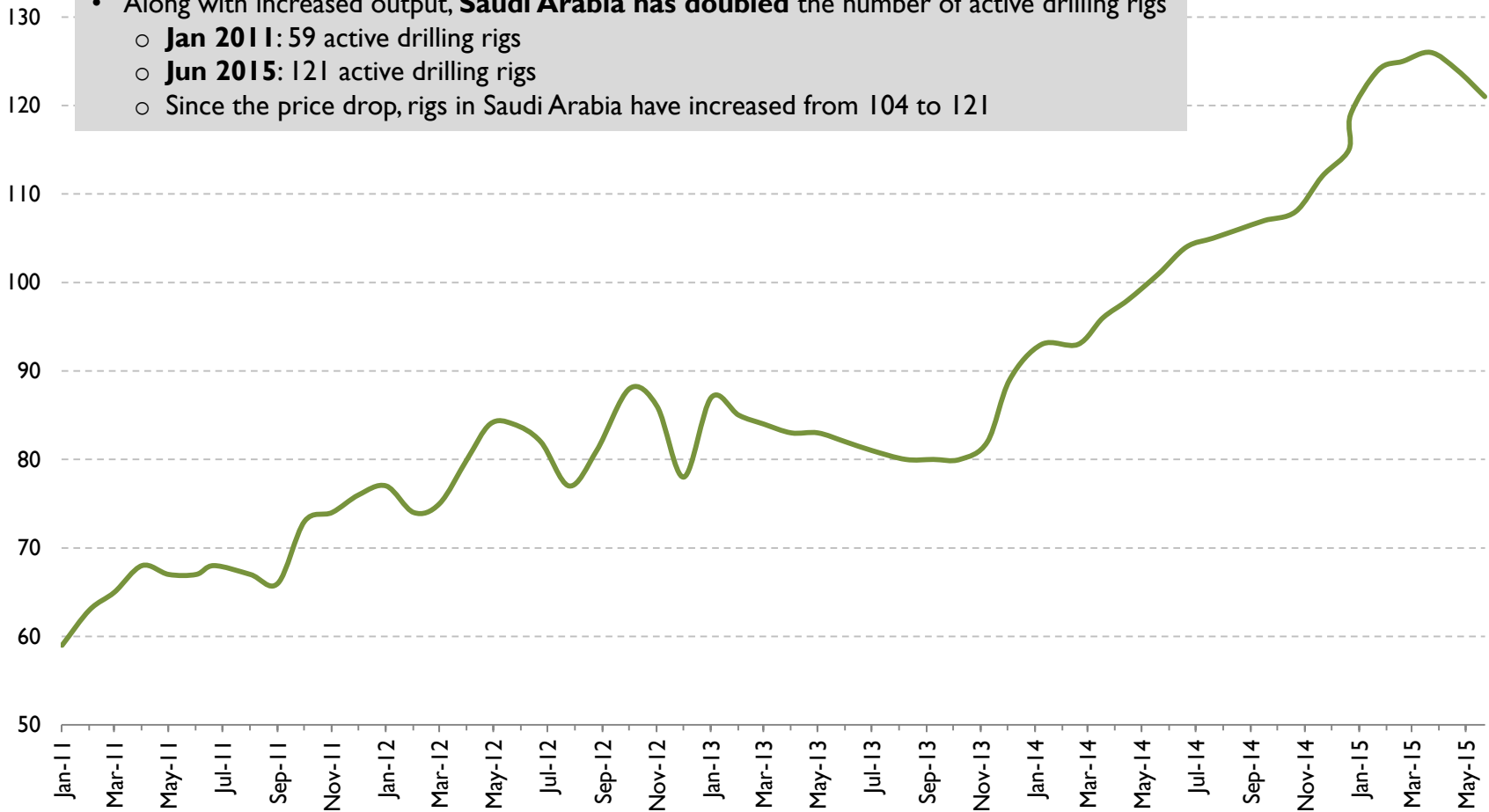
# Production, Saudi Arabia



# Drilling rigs, Saudi Arabia

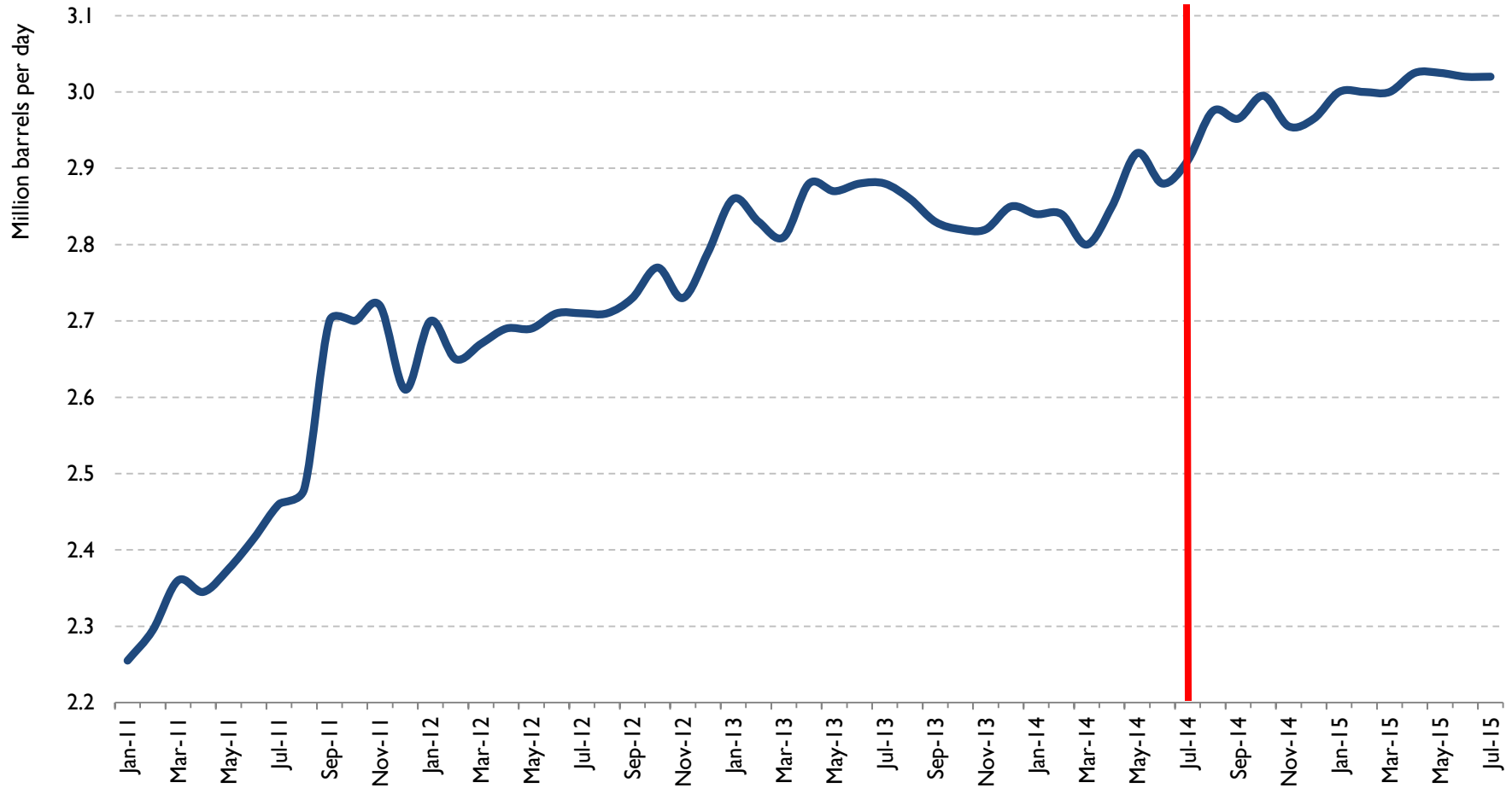
- Along with increased output, **Saudi Arabia has doubled** the number of active drilling rigs
  - **Jan 2011**: 59 active drilling rigs
  - **Jun 2015**: 121 active drilling rigs
  - Since the price drop, rigs in Saudi Arabia have increased from 104 to 121

Active Drilling Rigs

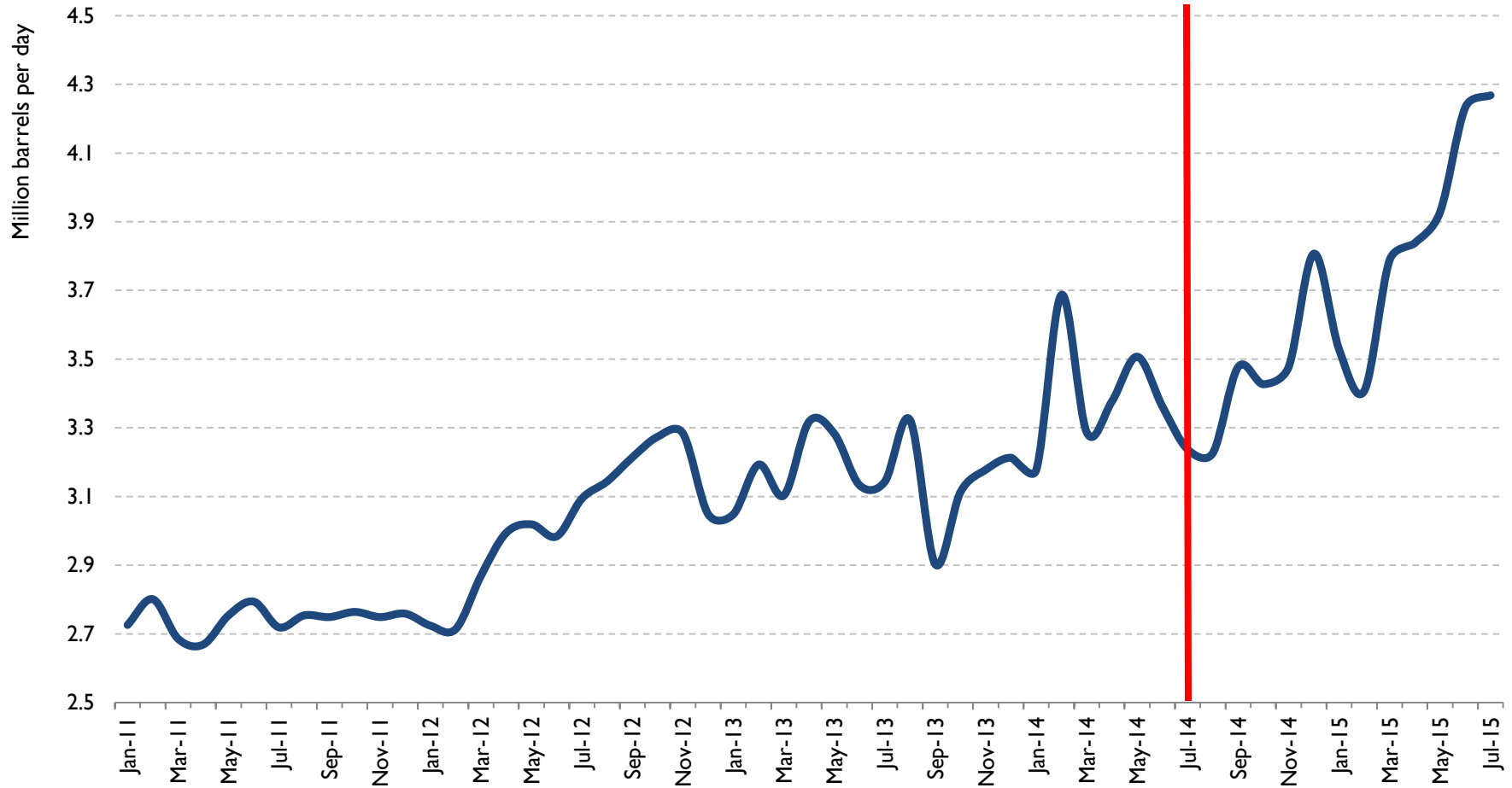




# Production, Kuwait



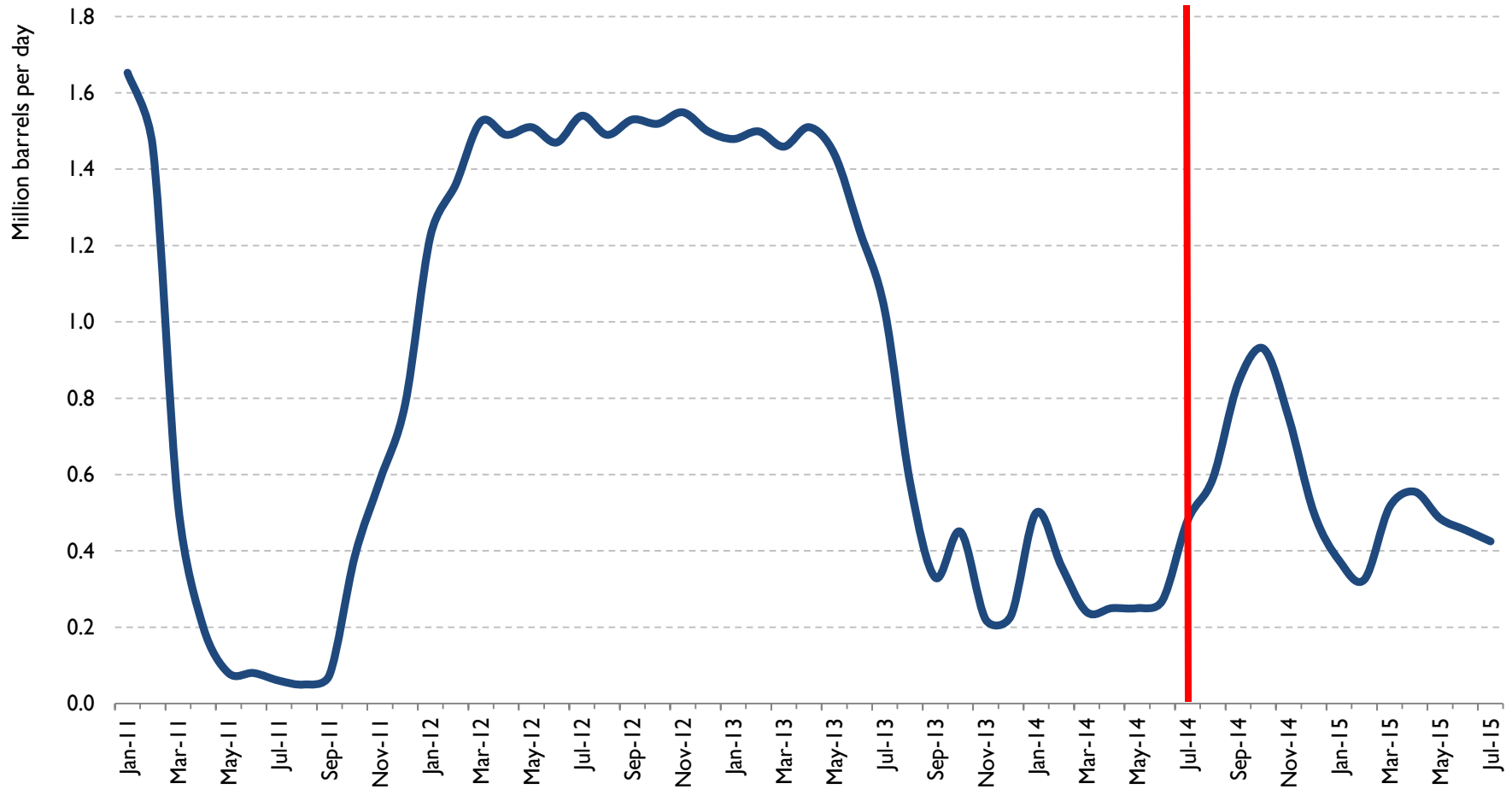
# Production, Iraq



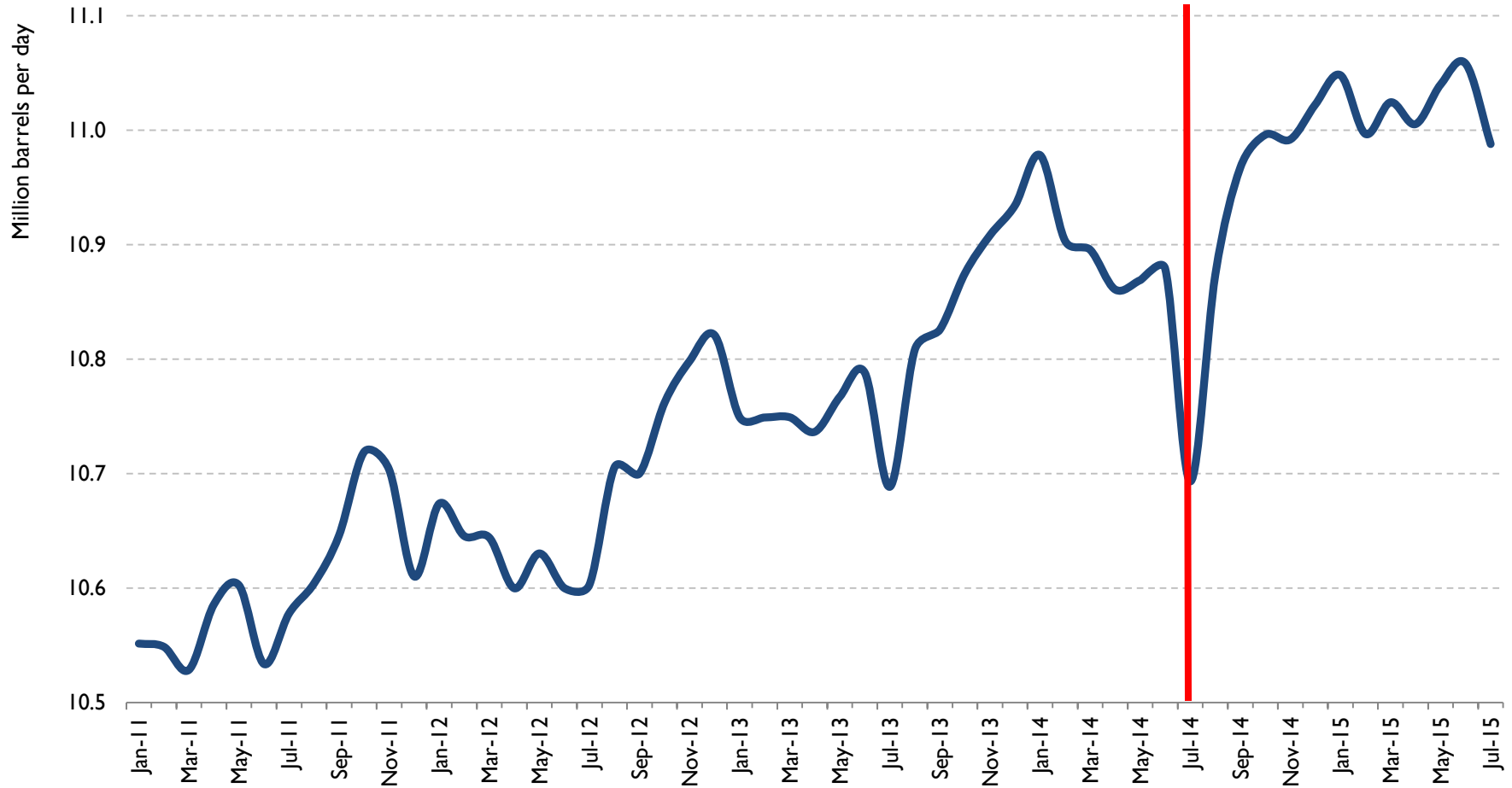
# Production, Iran



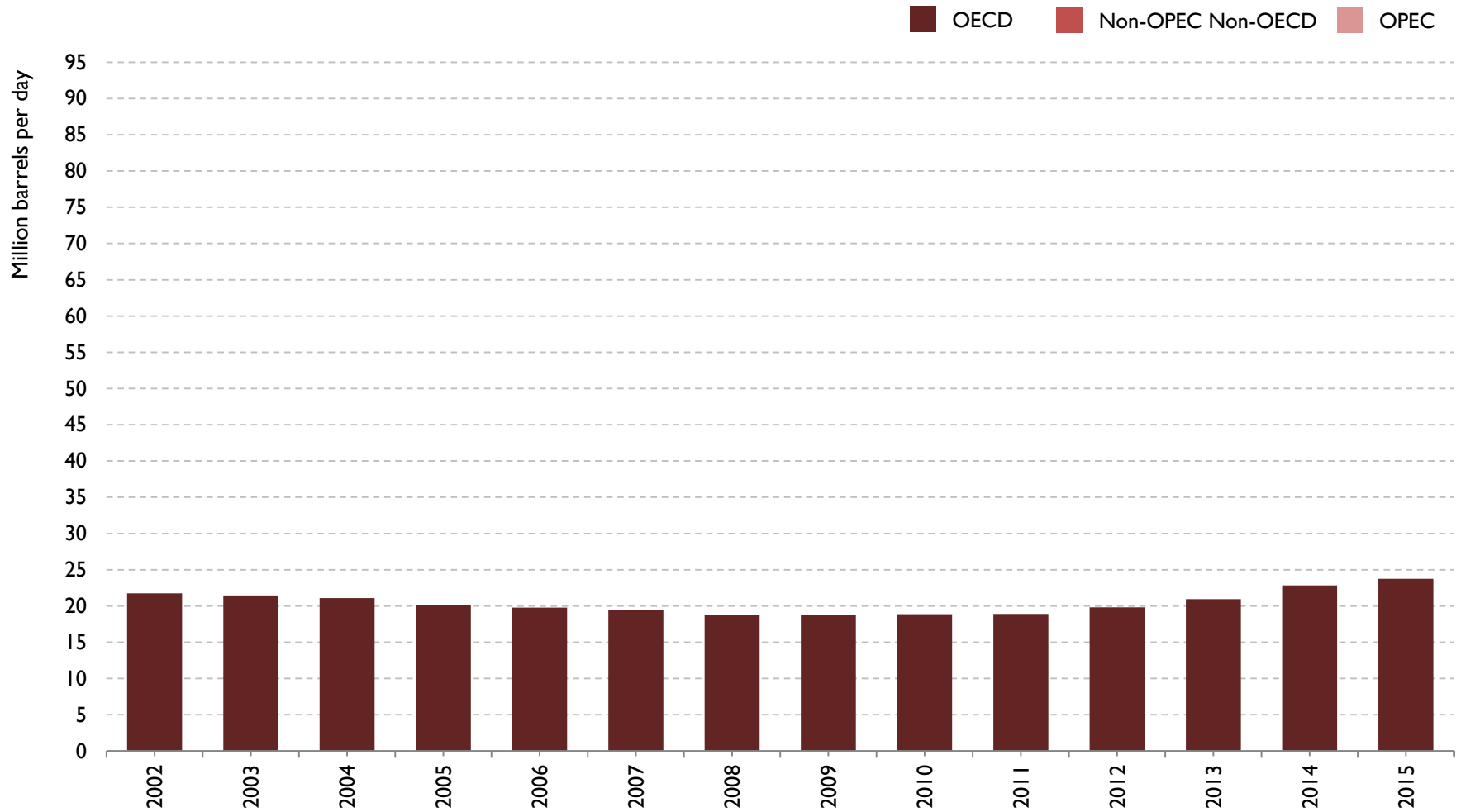
# Production, Libya



# Production, Russia

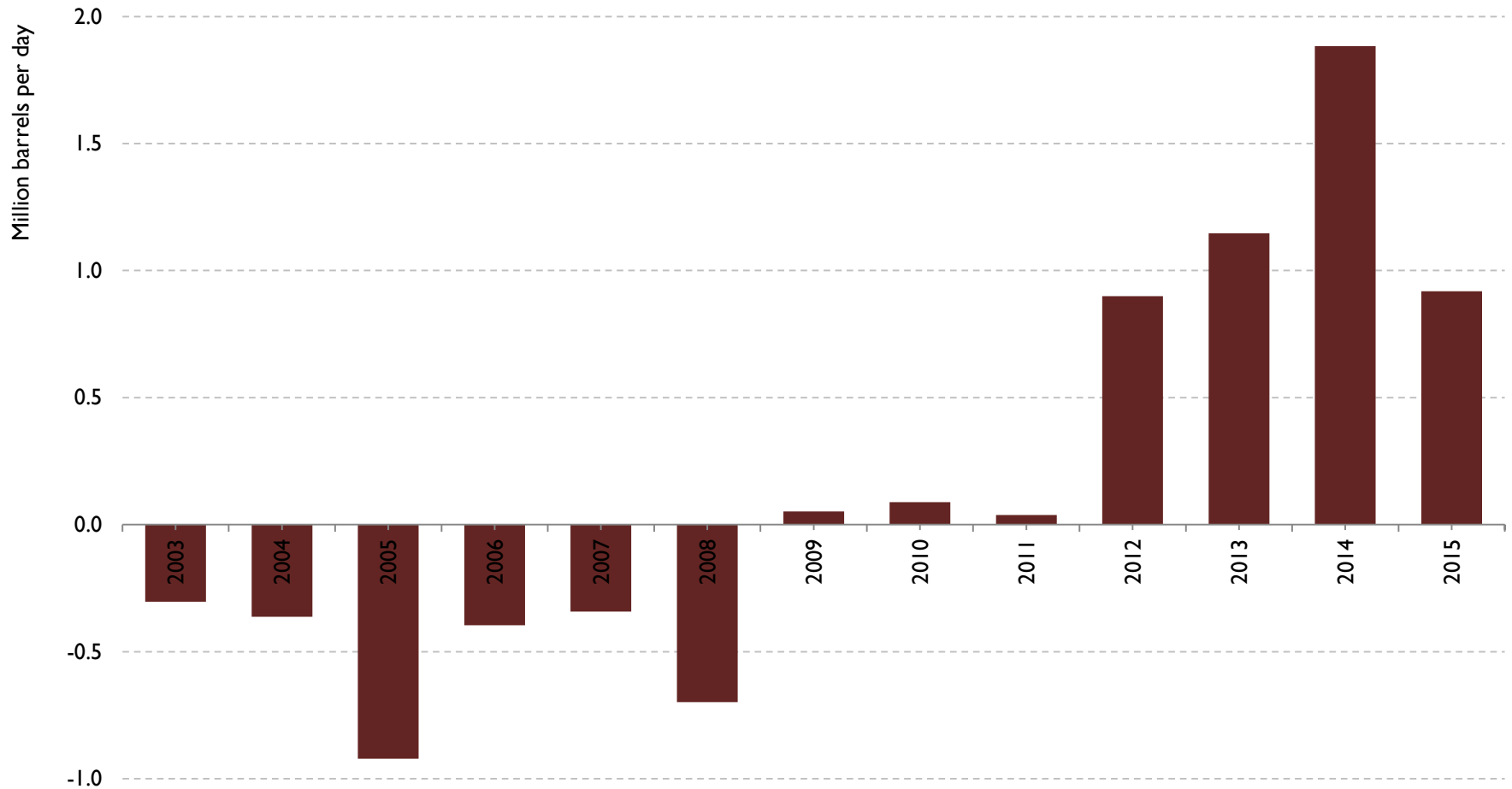


# Supply, absolute

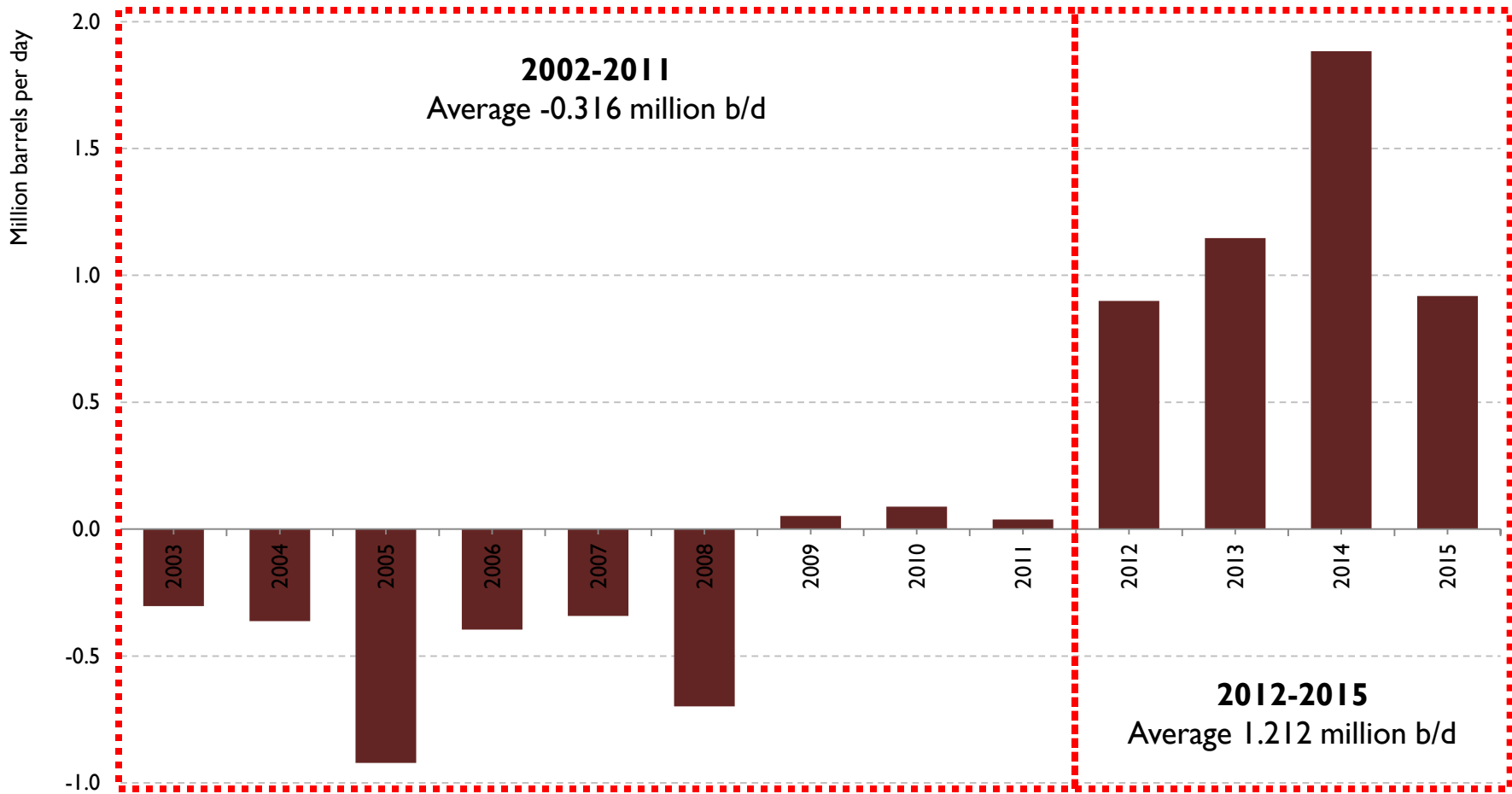




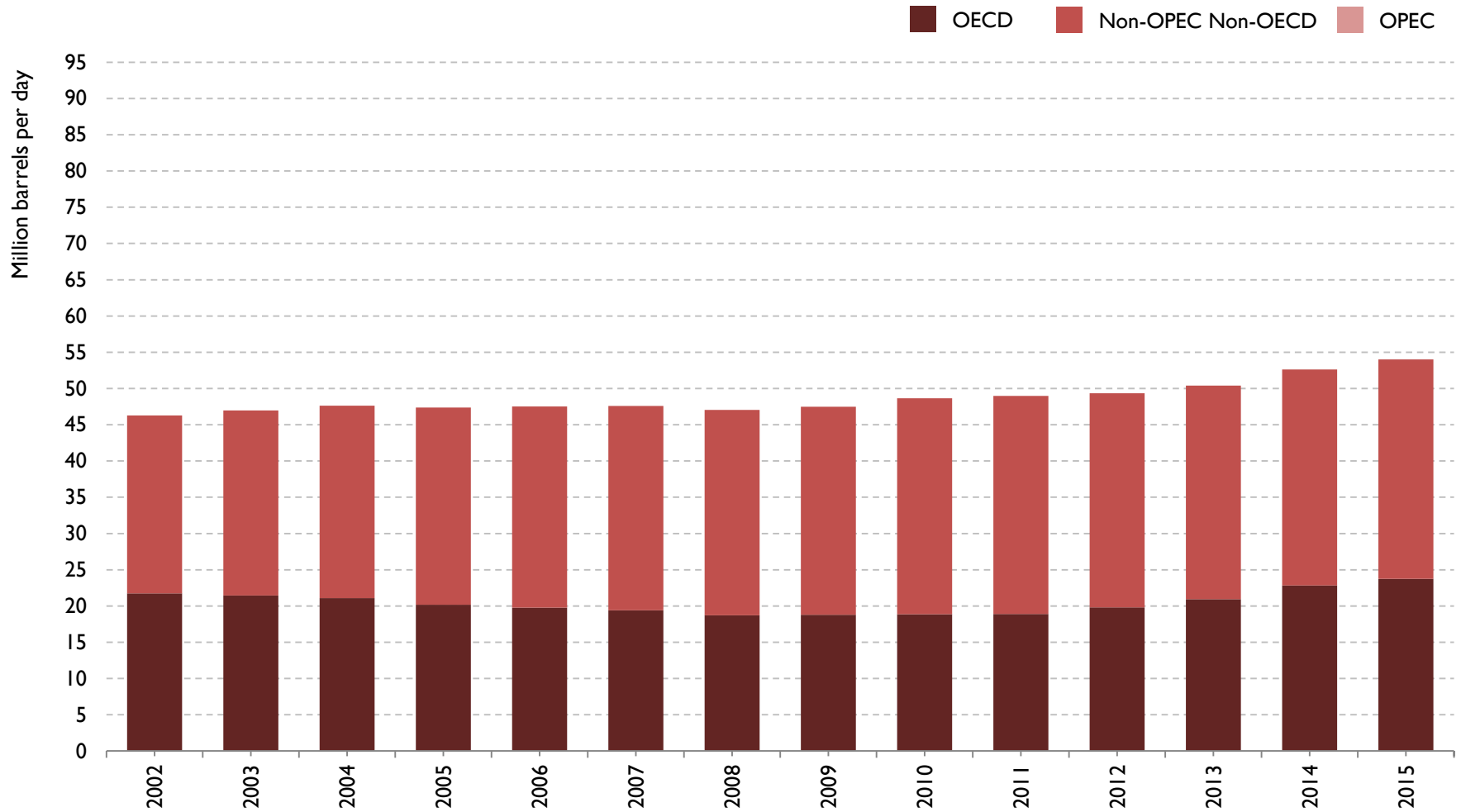
# Supply, changes OECD



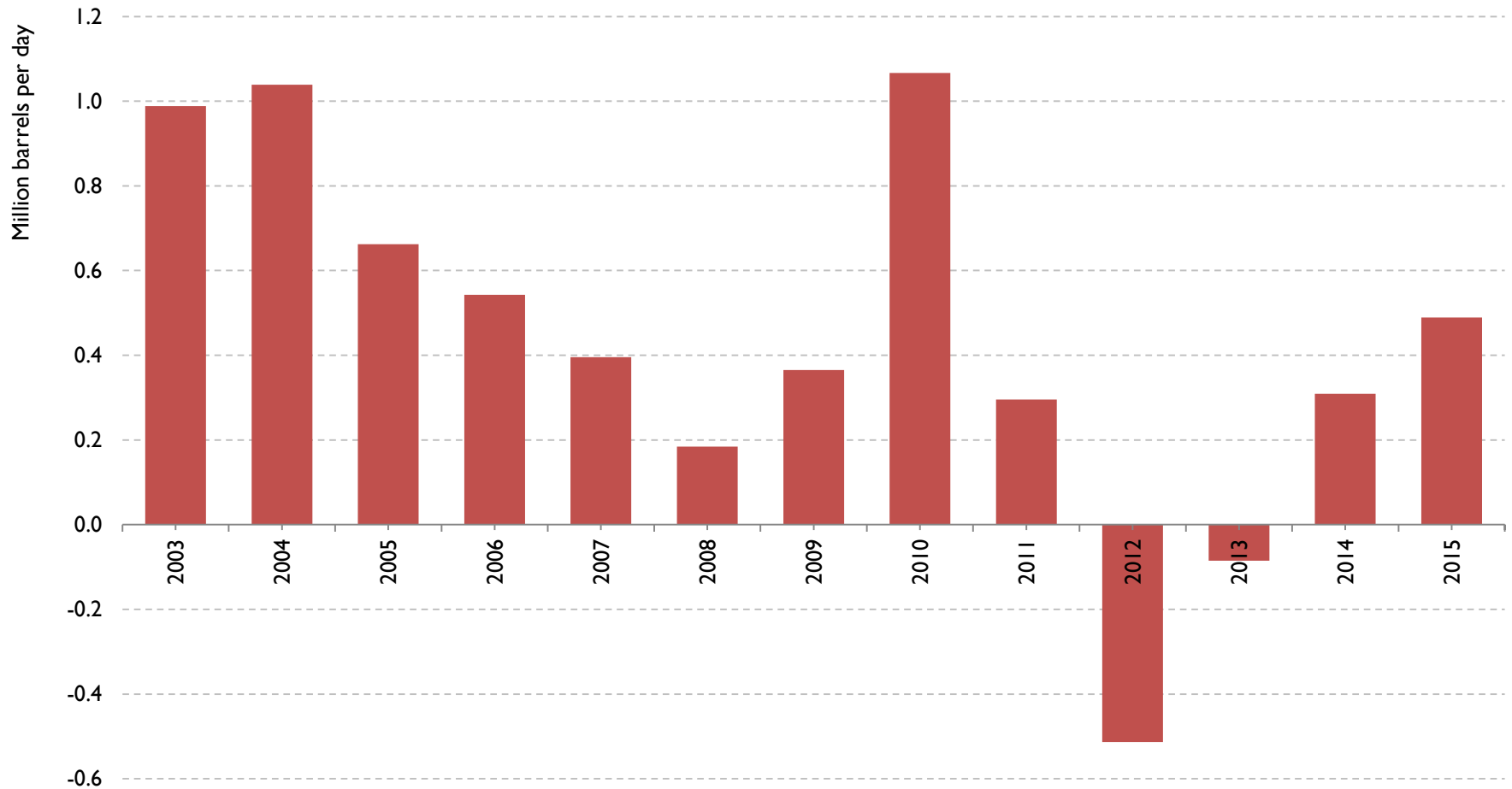
# Supply, changes OECD



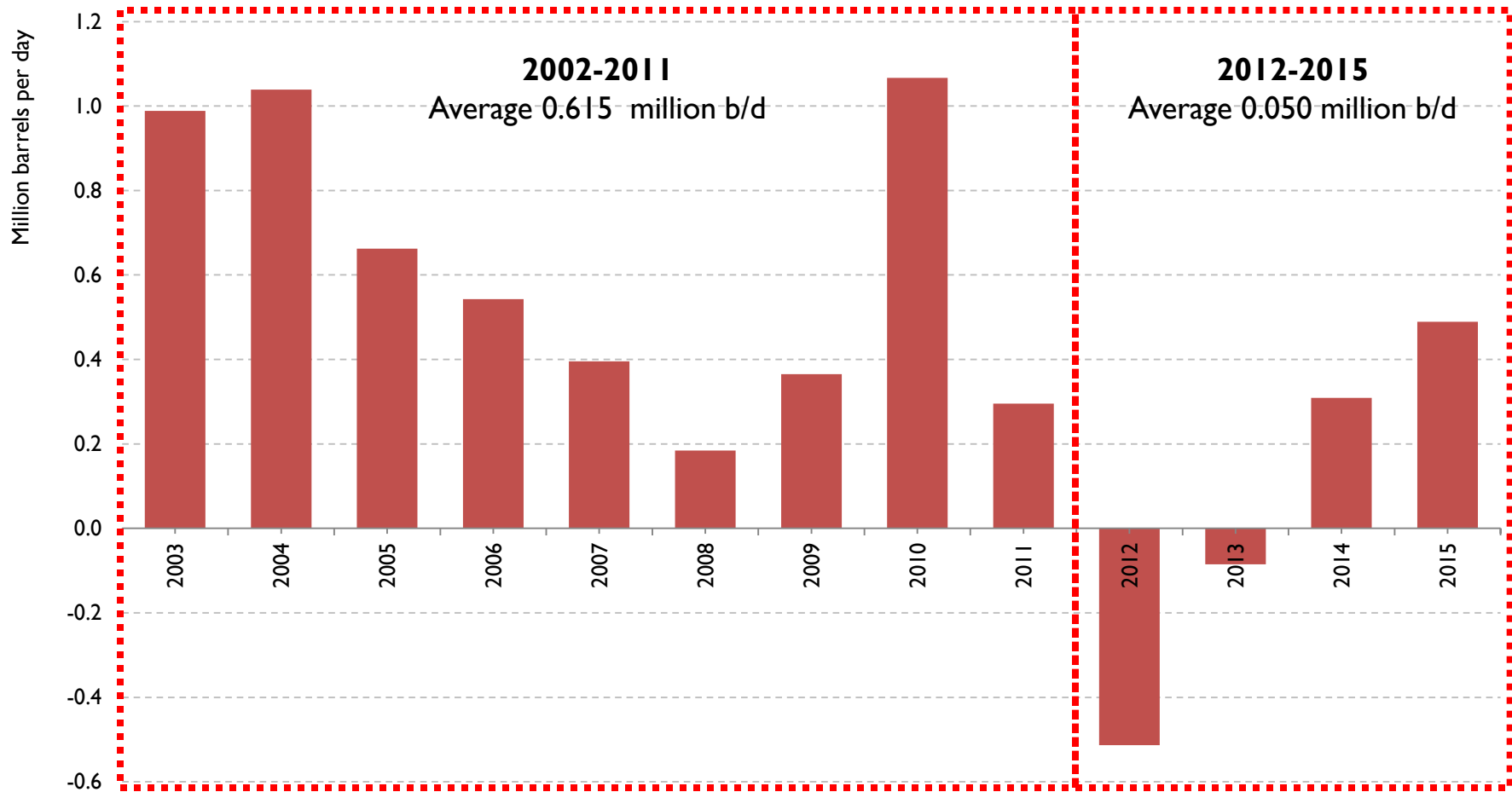
# Supply, absolute



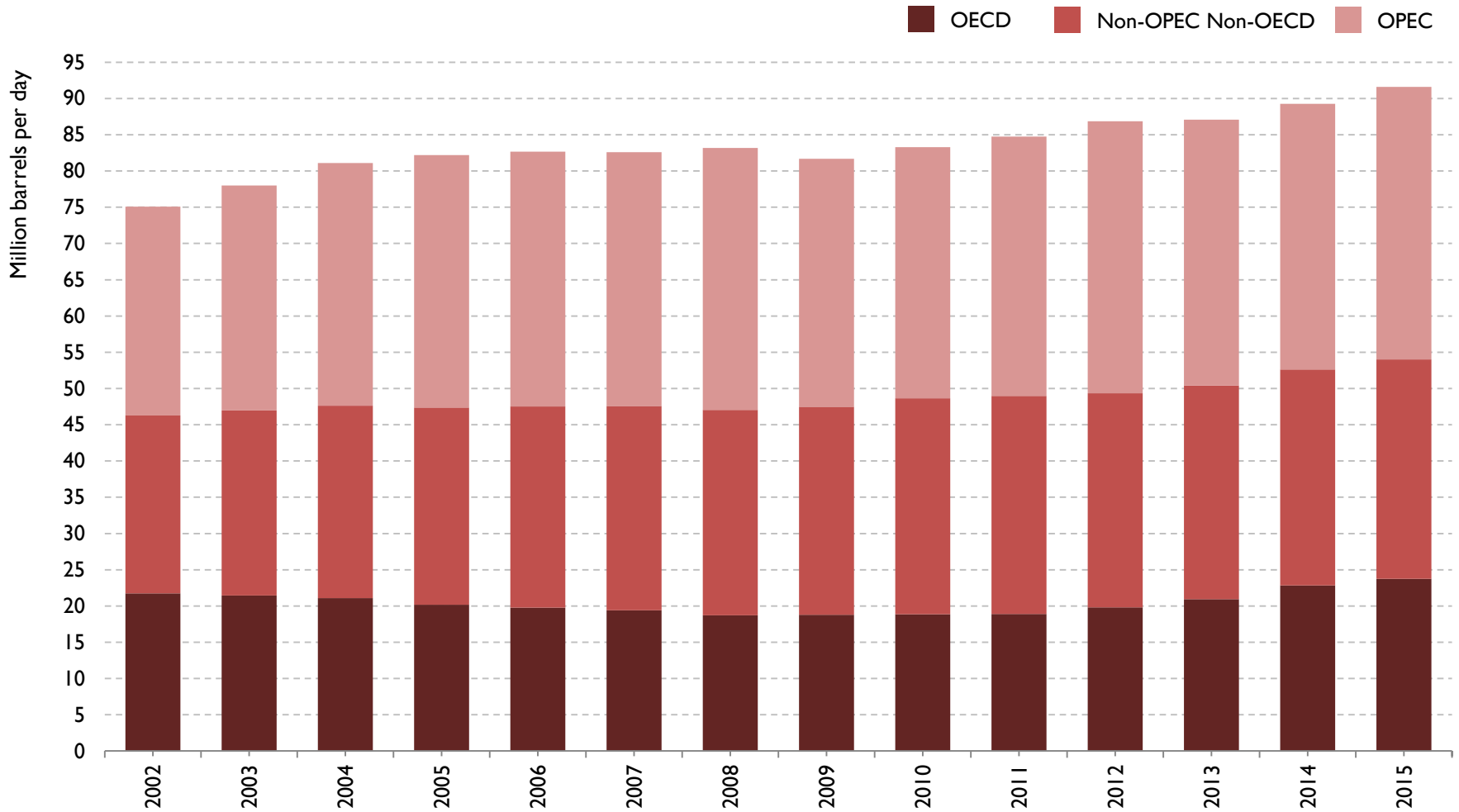
# Supply, changes No OPEC/OECD



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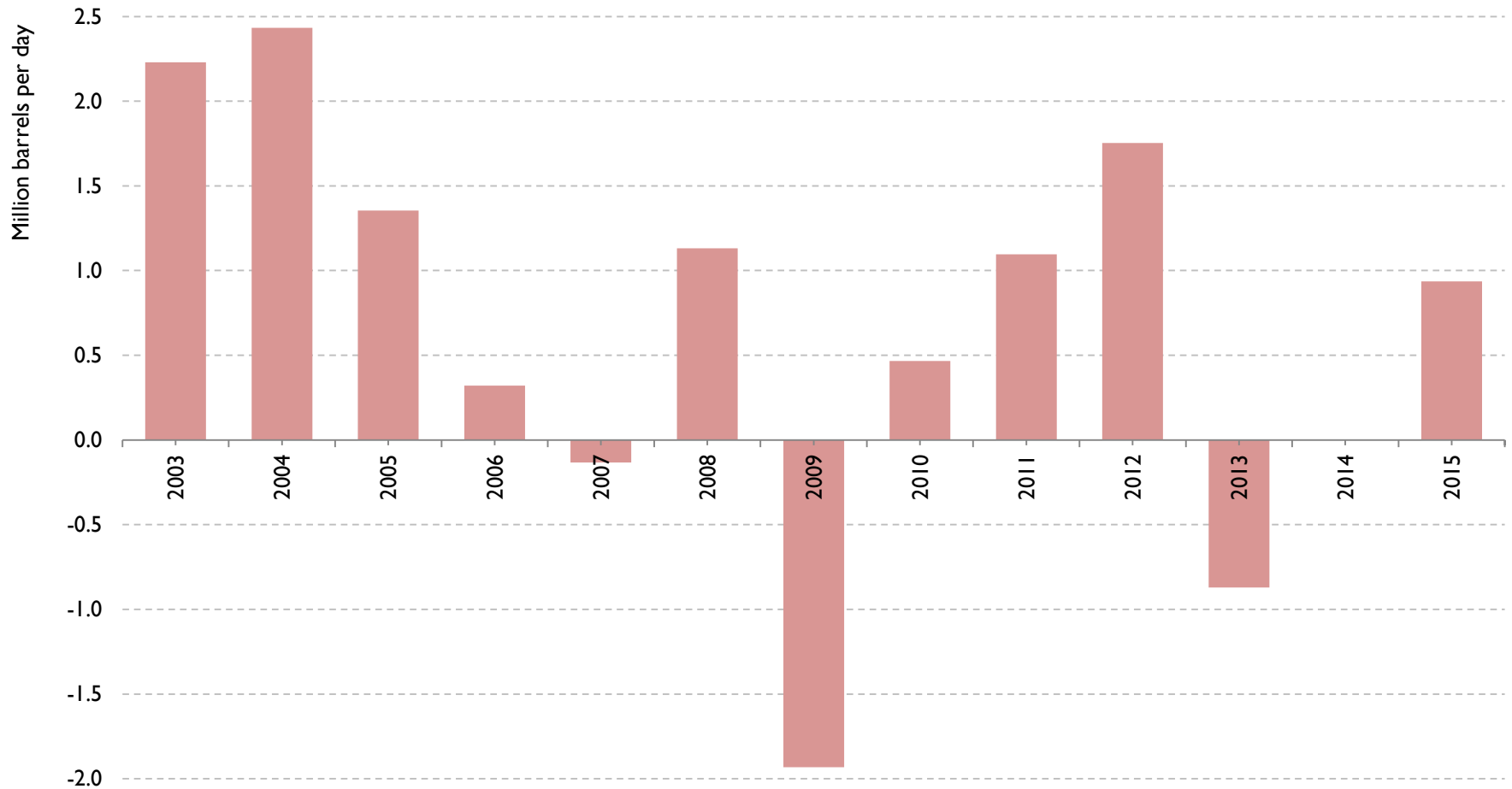


# Supply, absolute

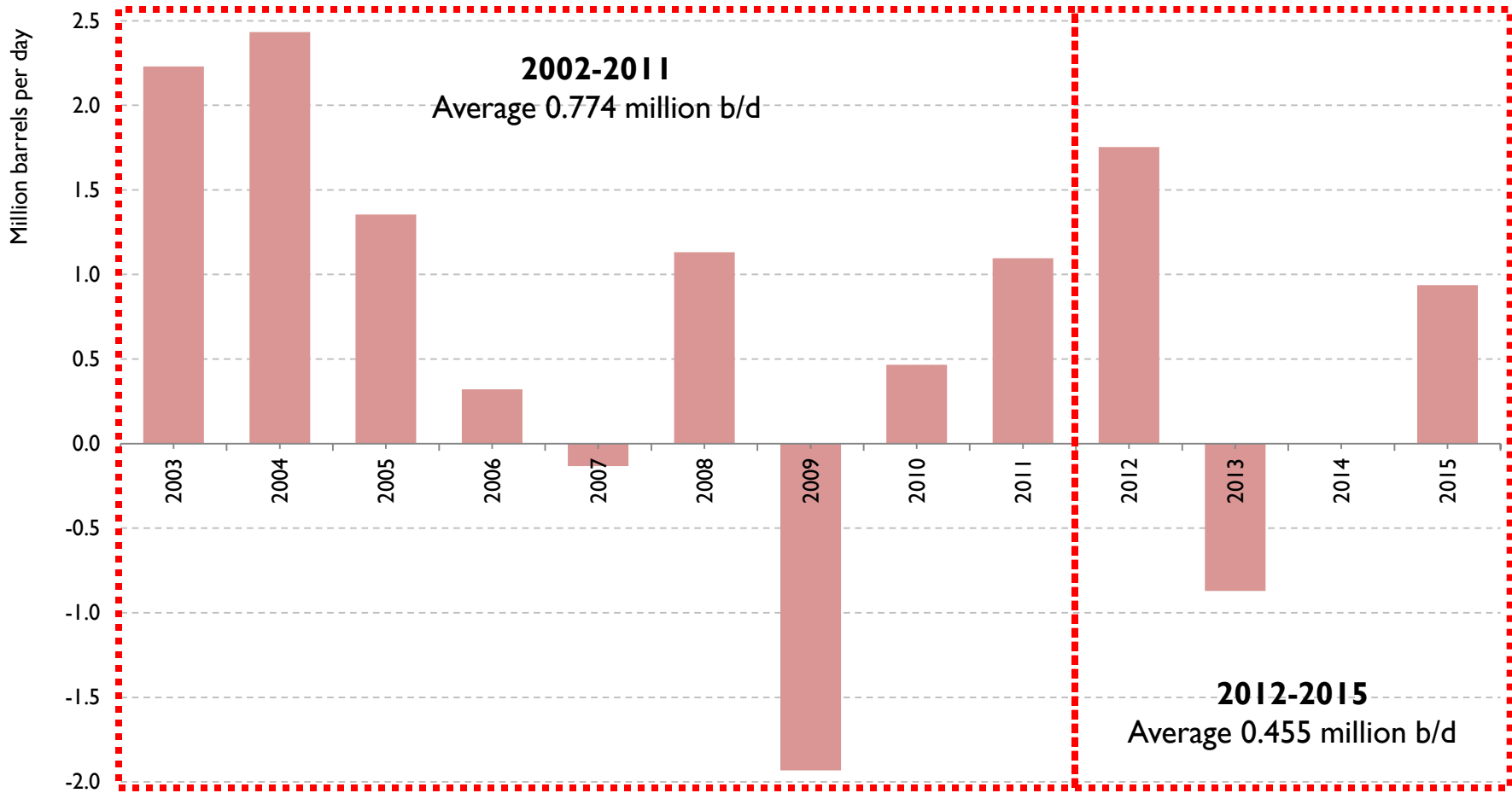




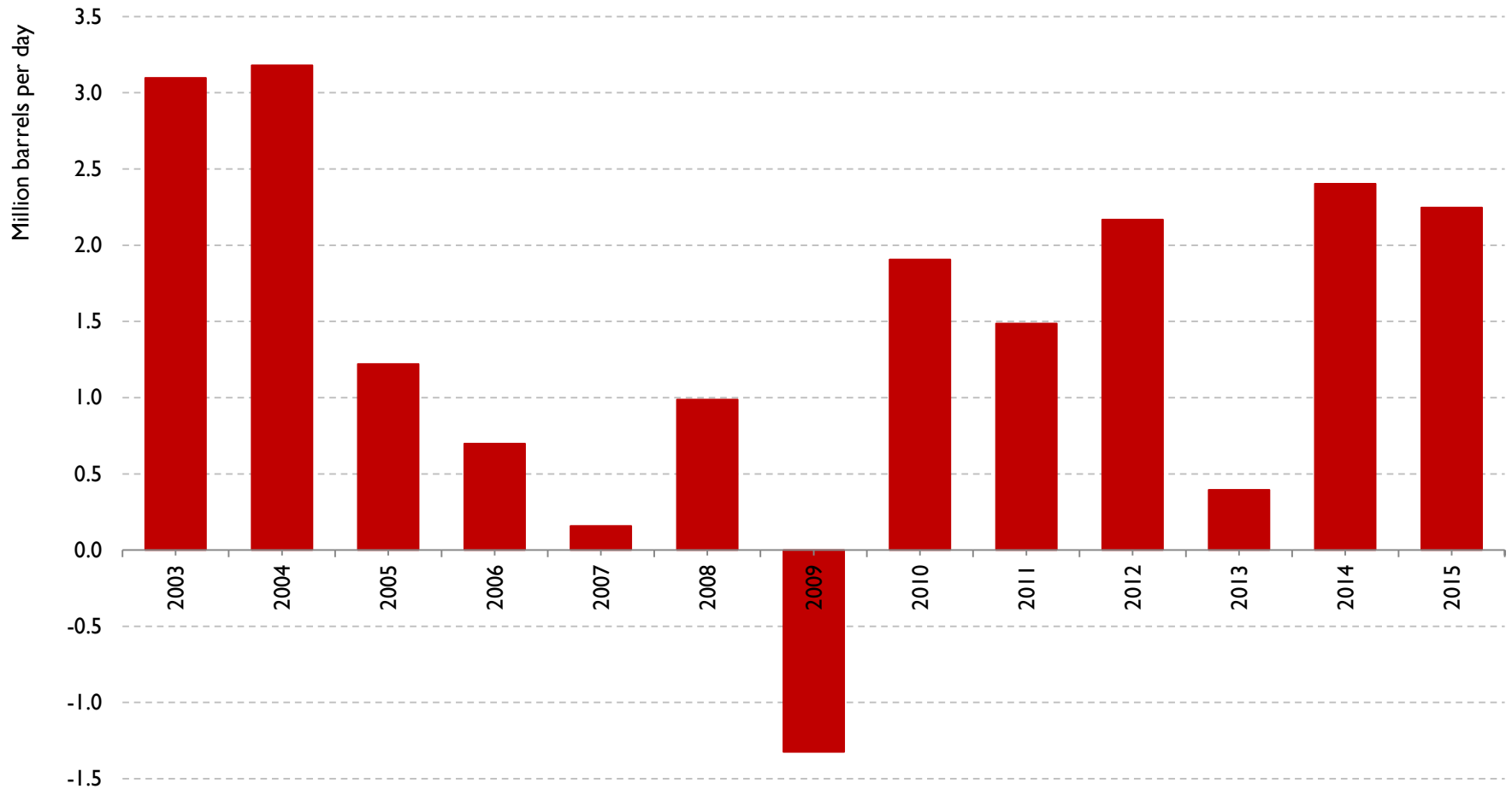
# Supply, changes OPEC



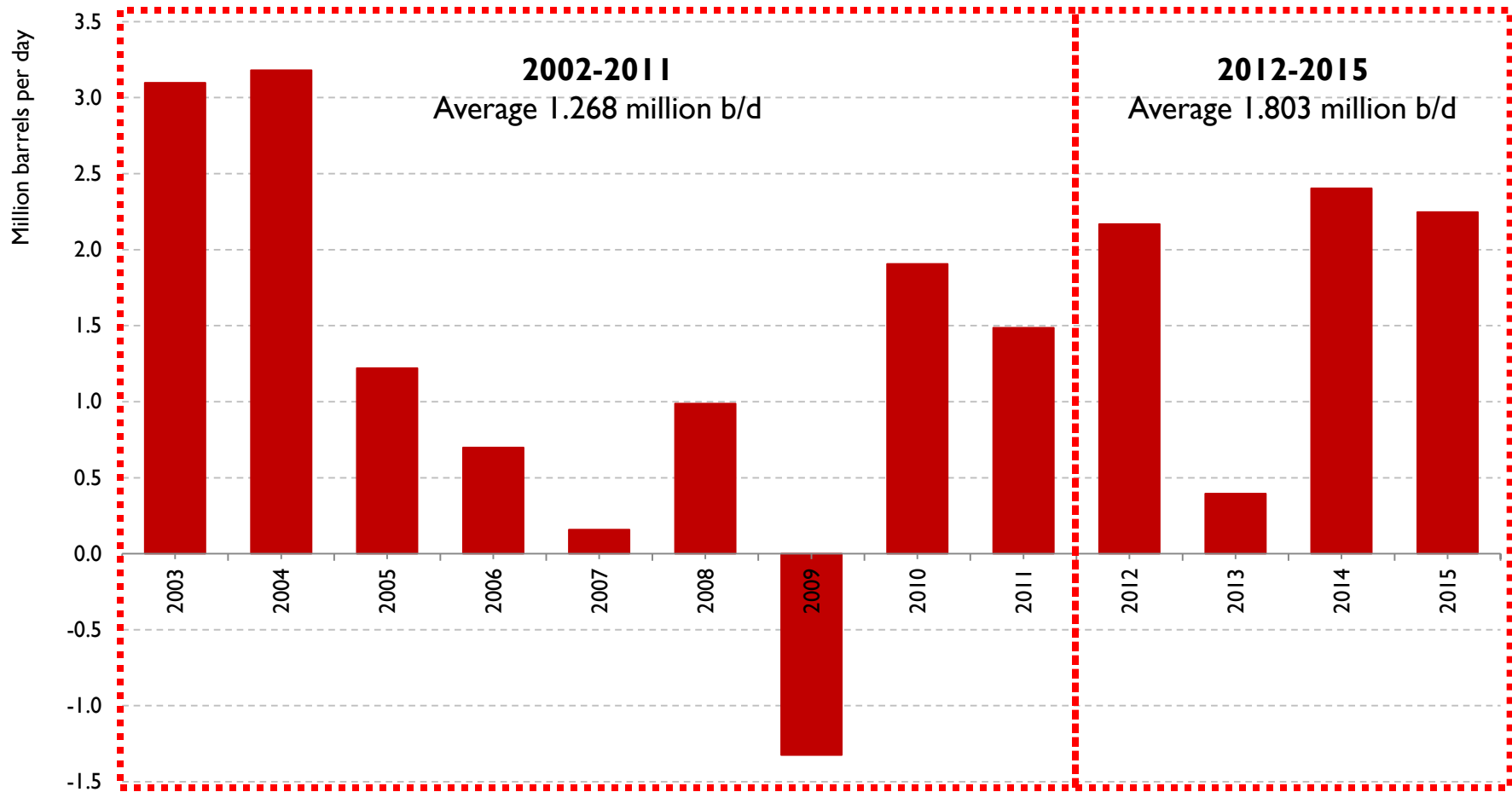
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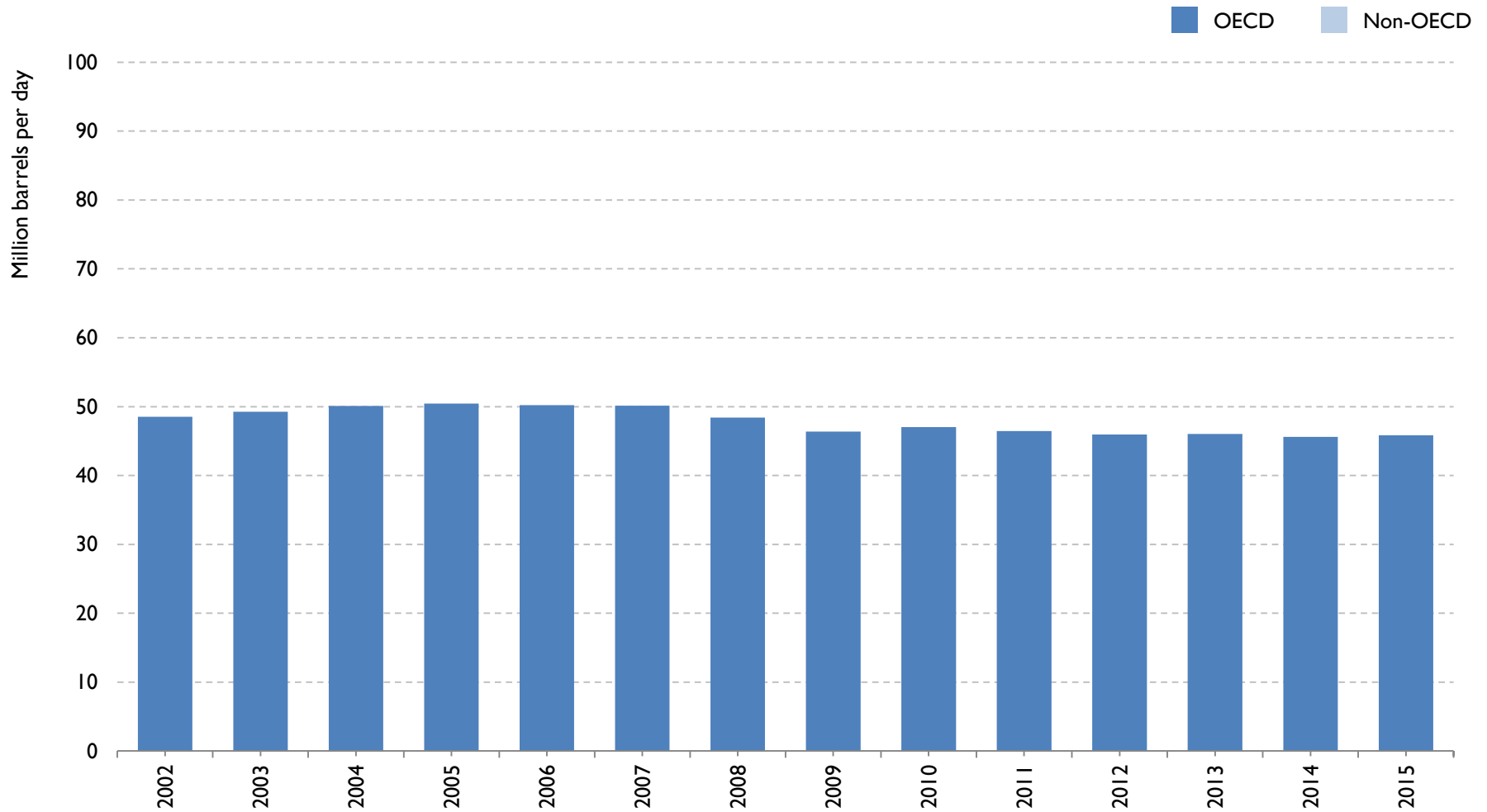
# Supply, changes



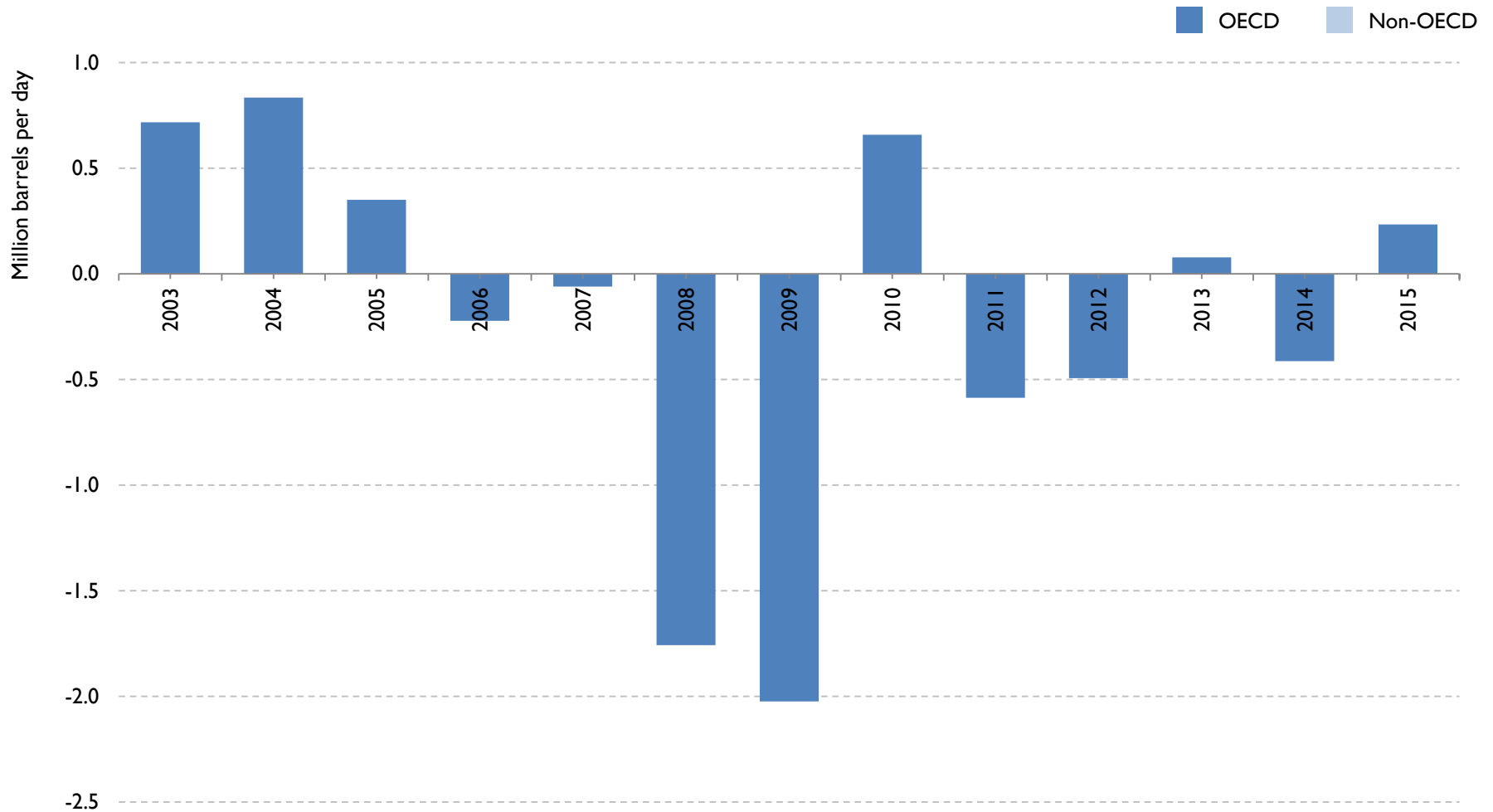
# Supply, changes



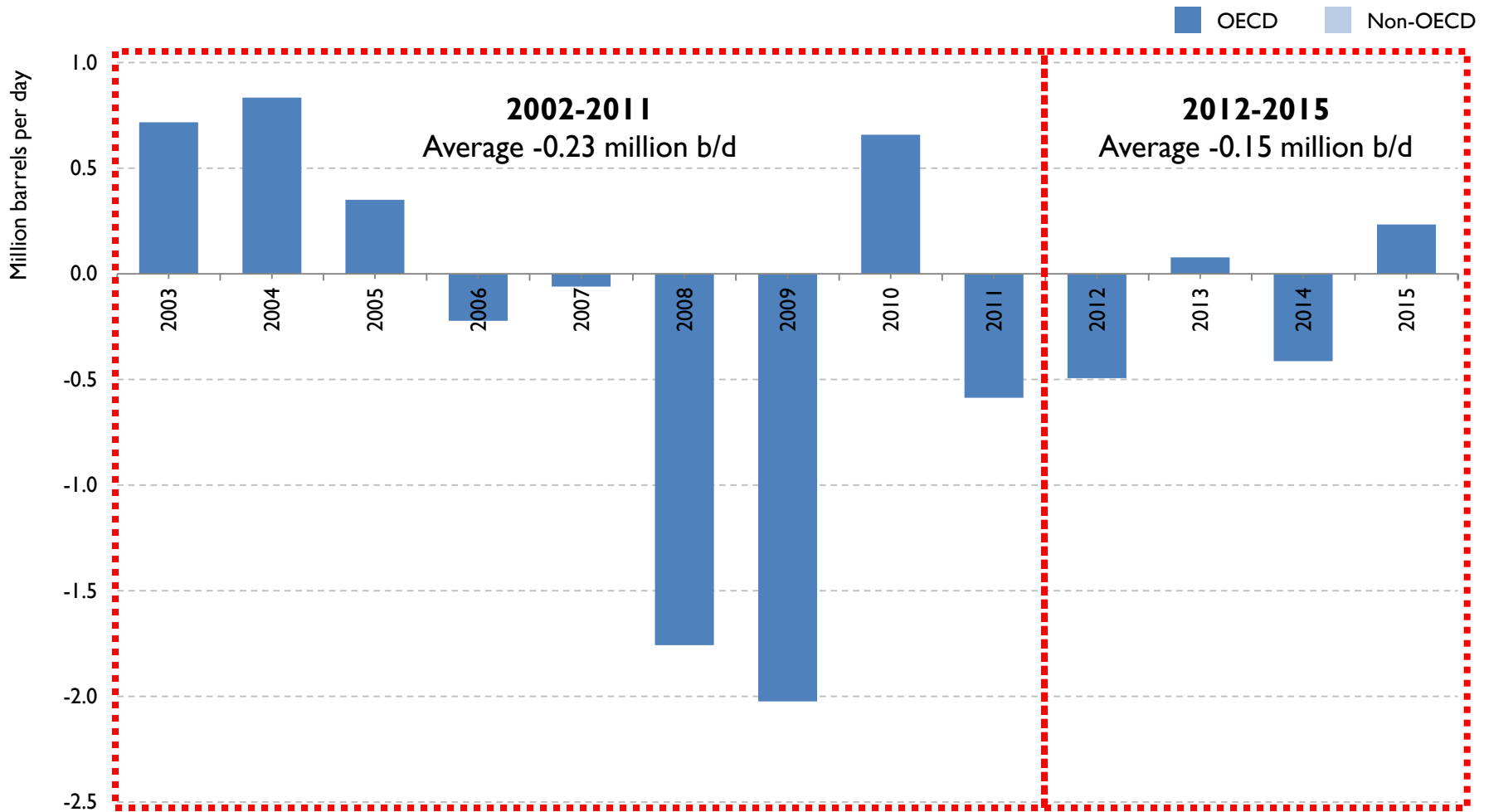
# Demand, absolute



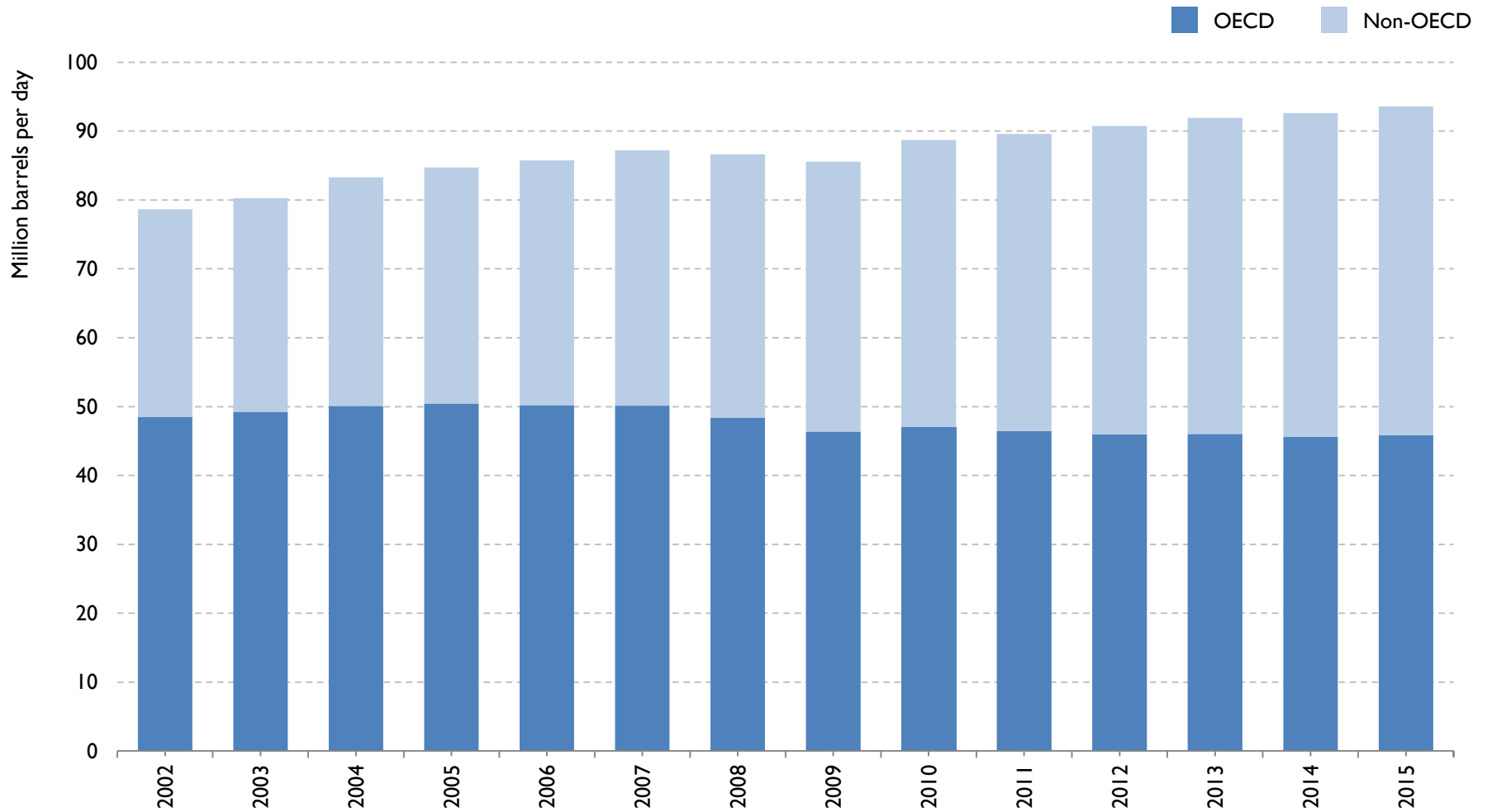
# Demand changes, OECD



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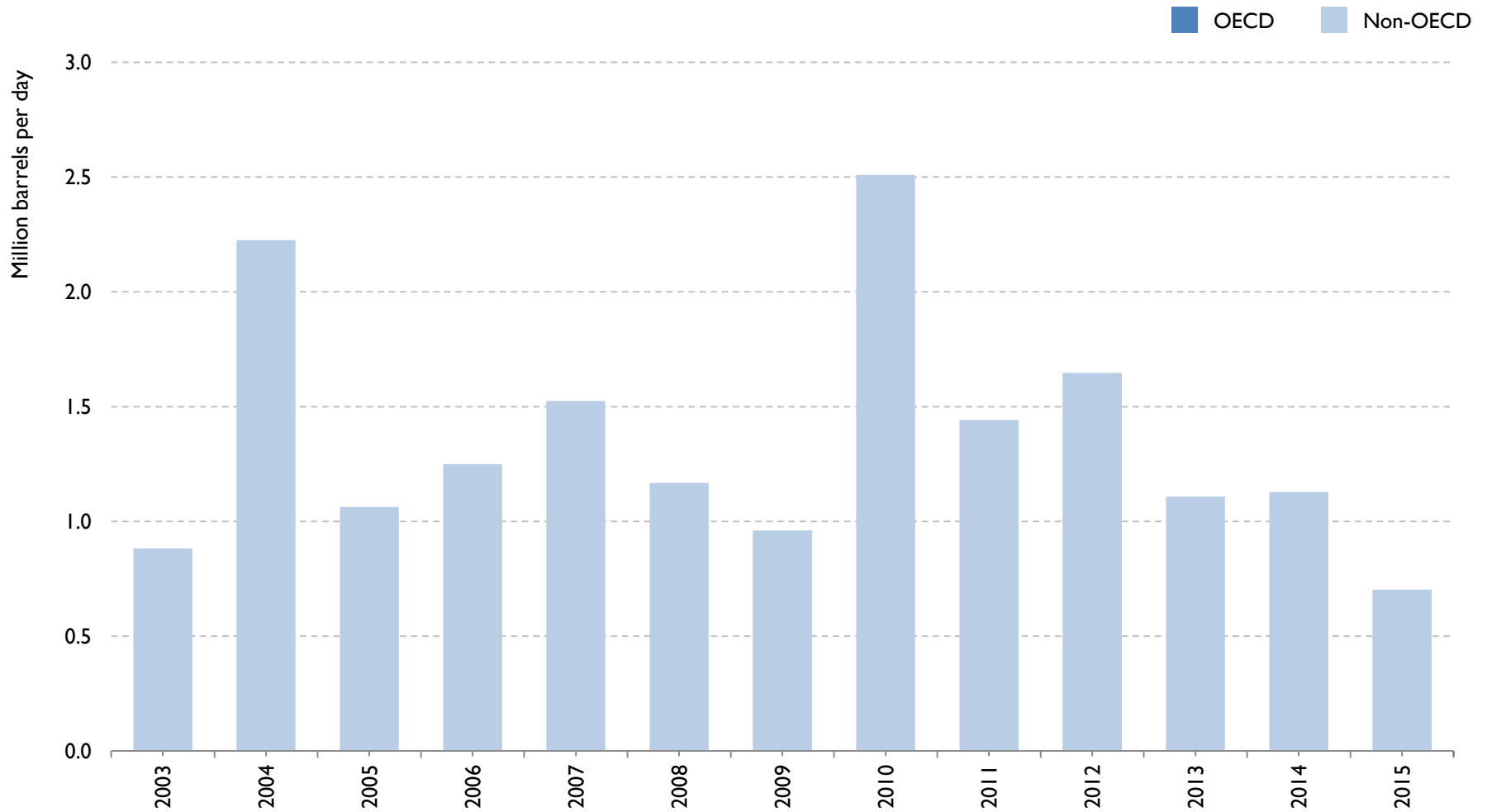


# Demand, absolute

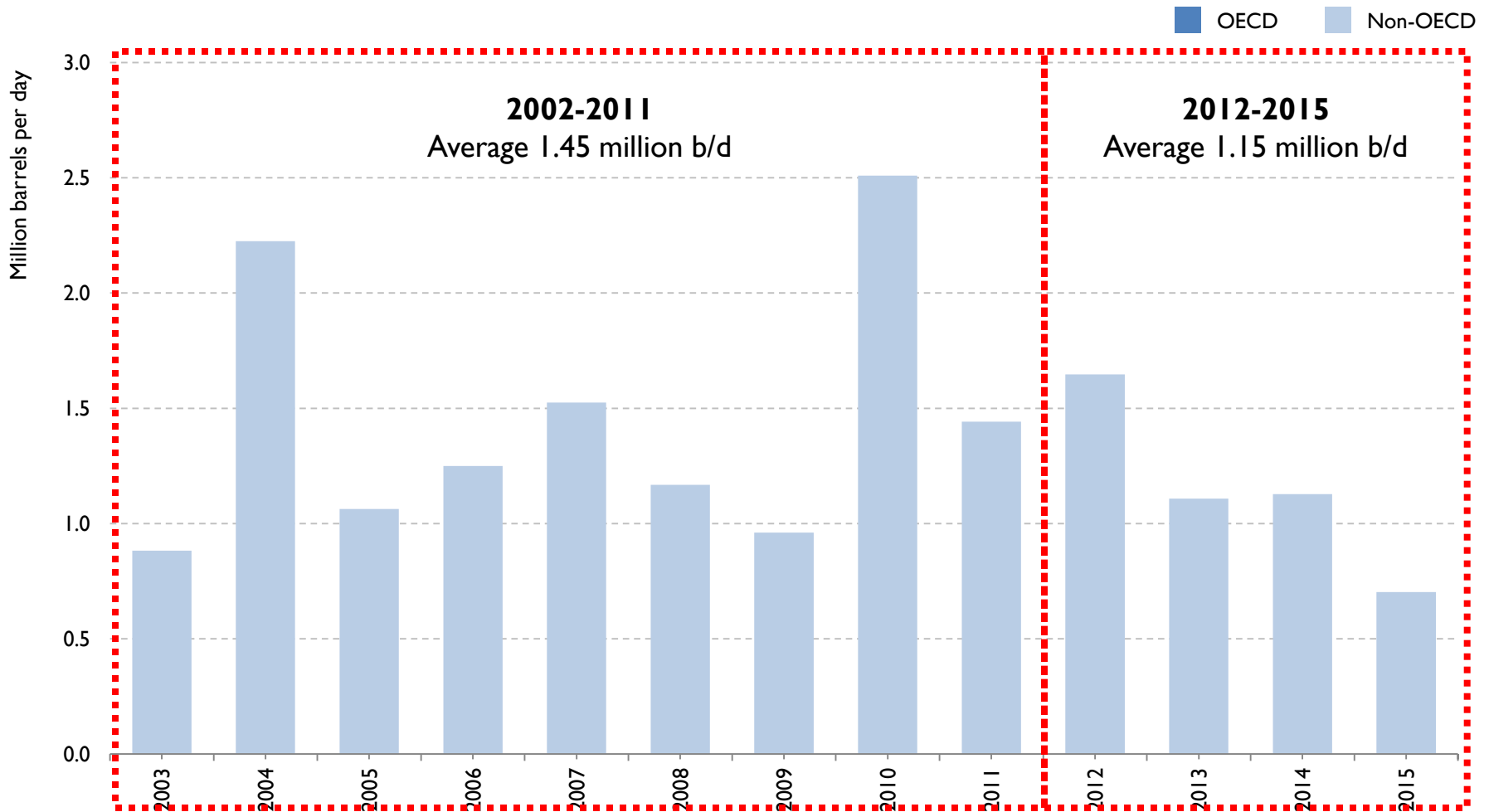




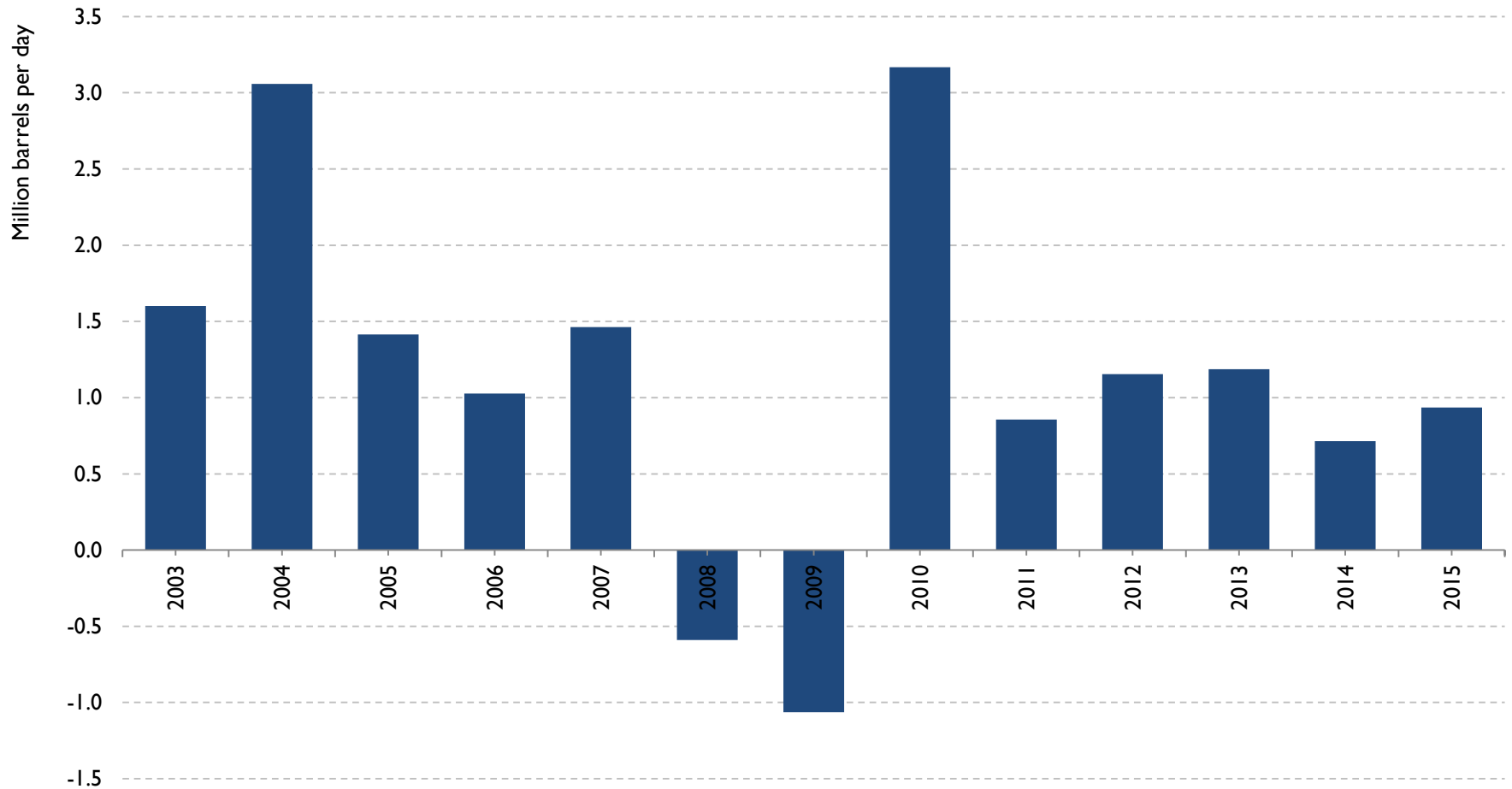
# Demand changes, Non-OECD



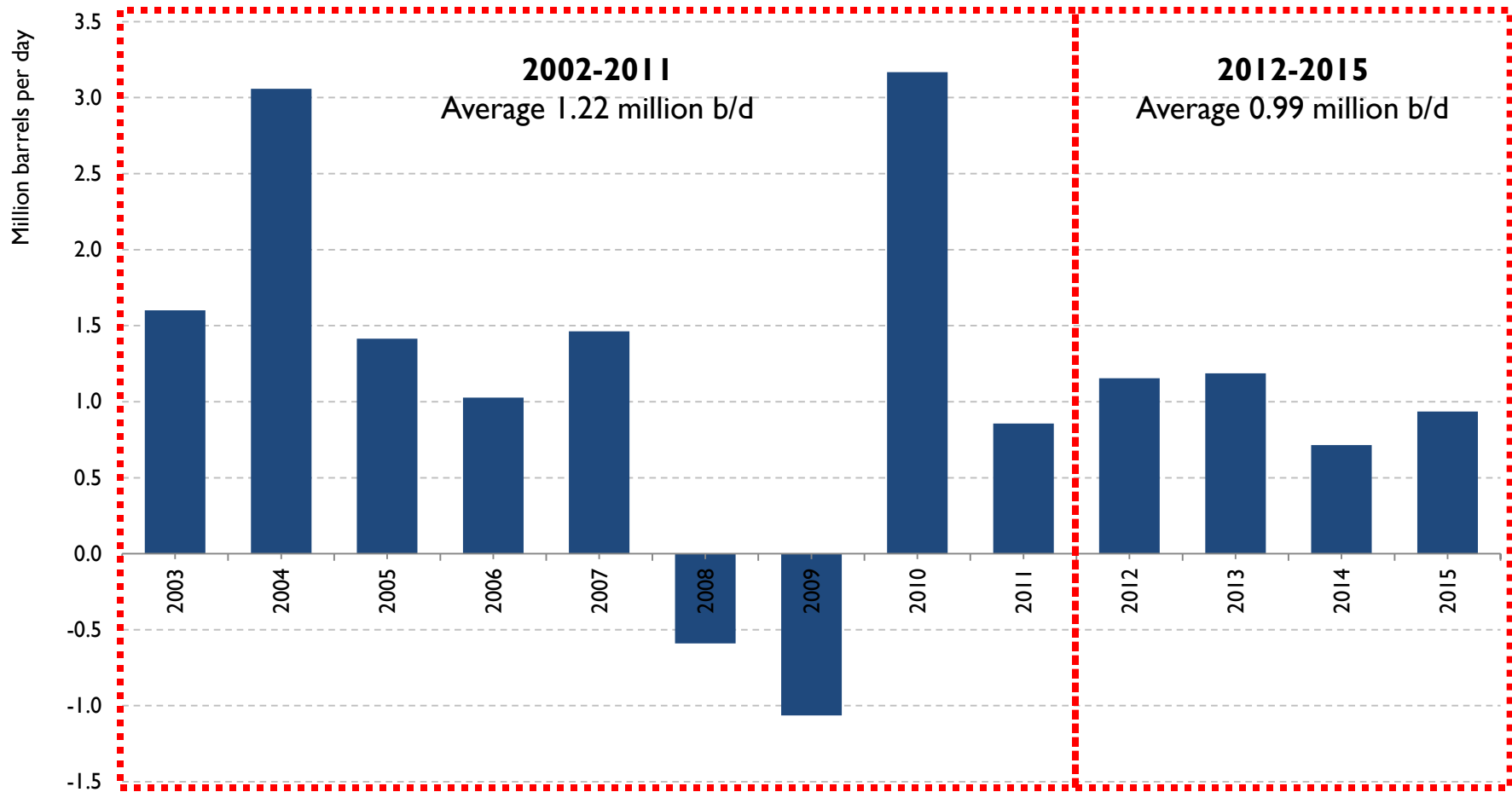
# Demand changes, Non-OECD



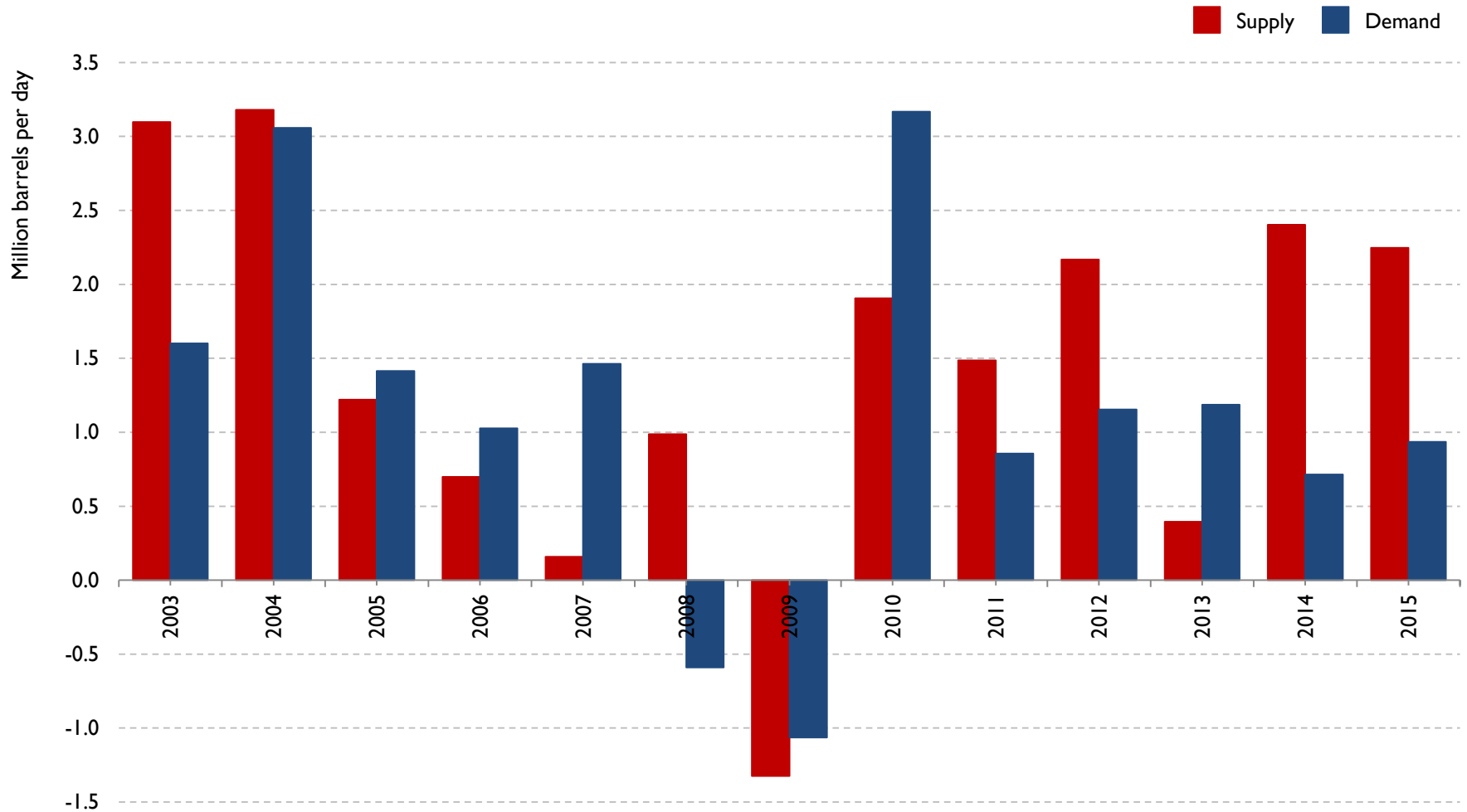
# Demand, net changes



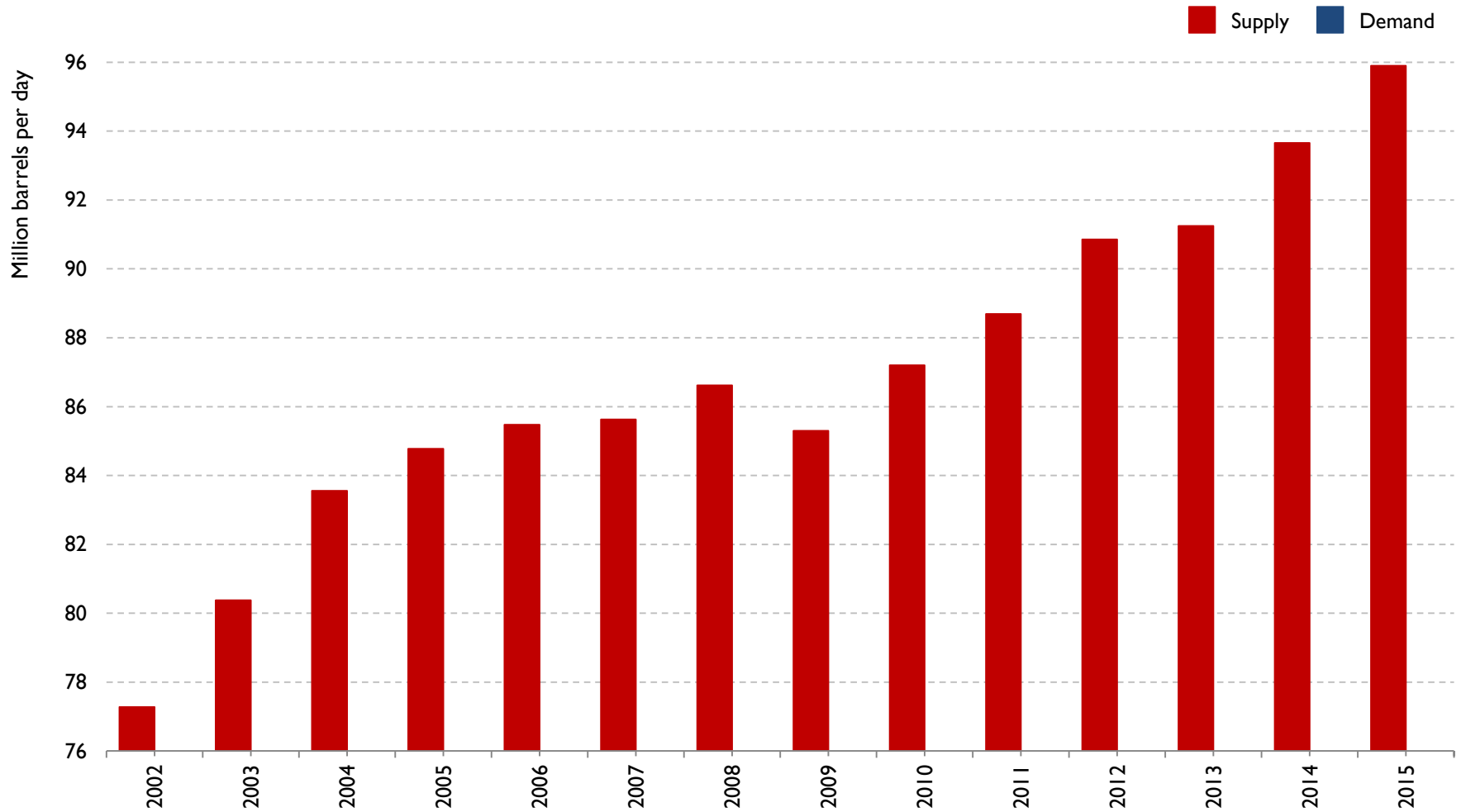
# Demand, net changes



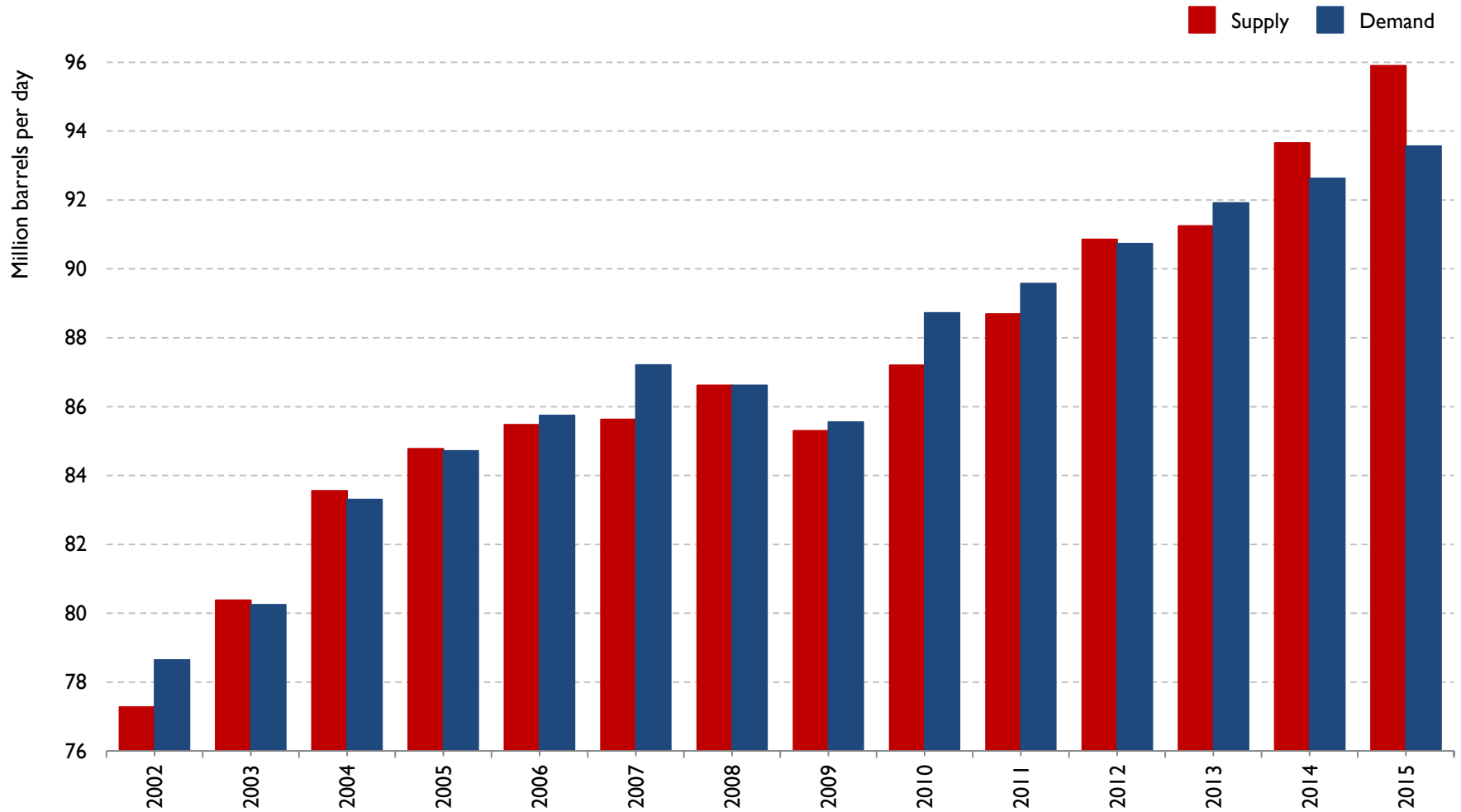
# Supply & Demand, changes



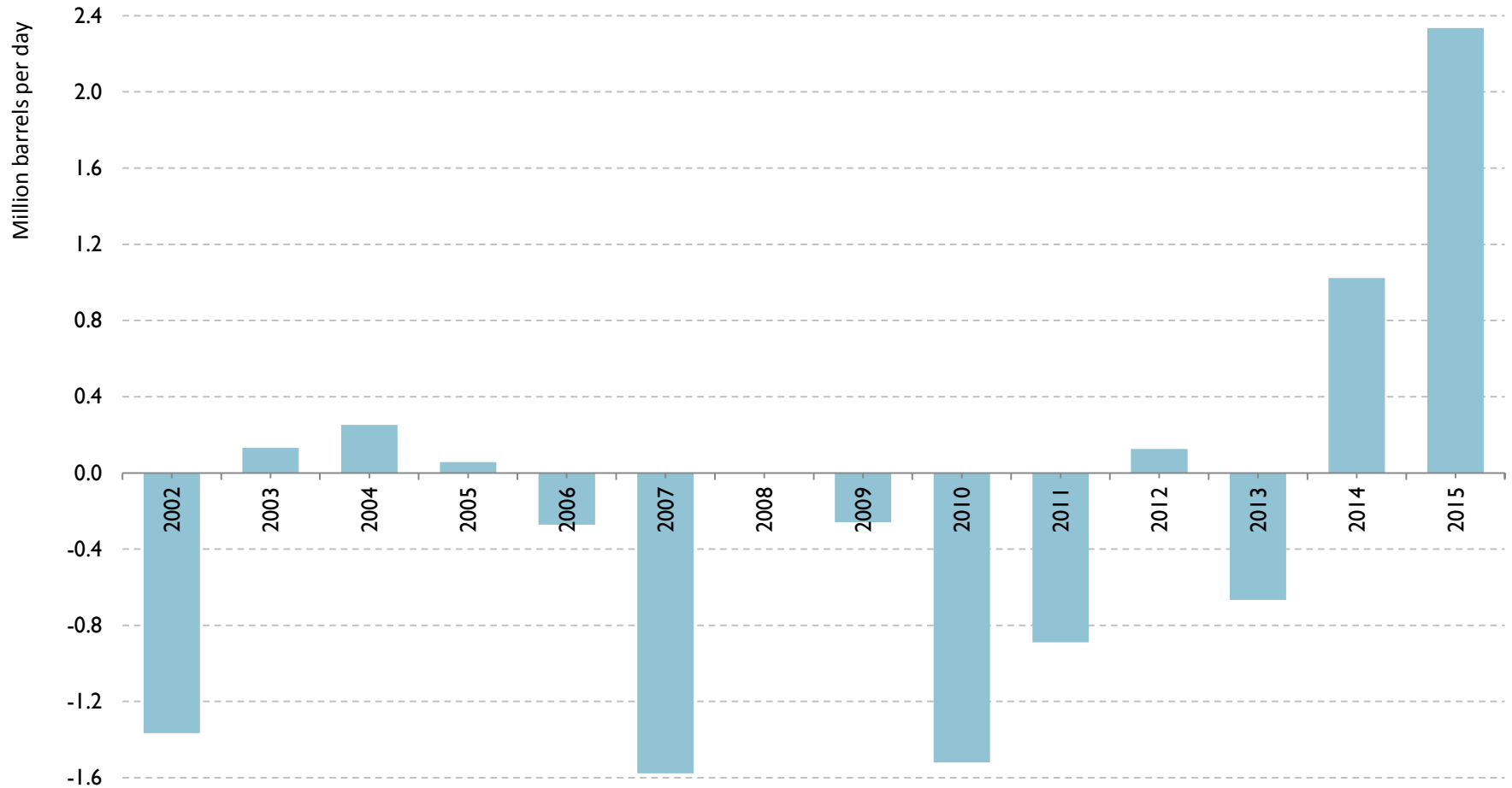
# Supply & Demand, absolute



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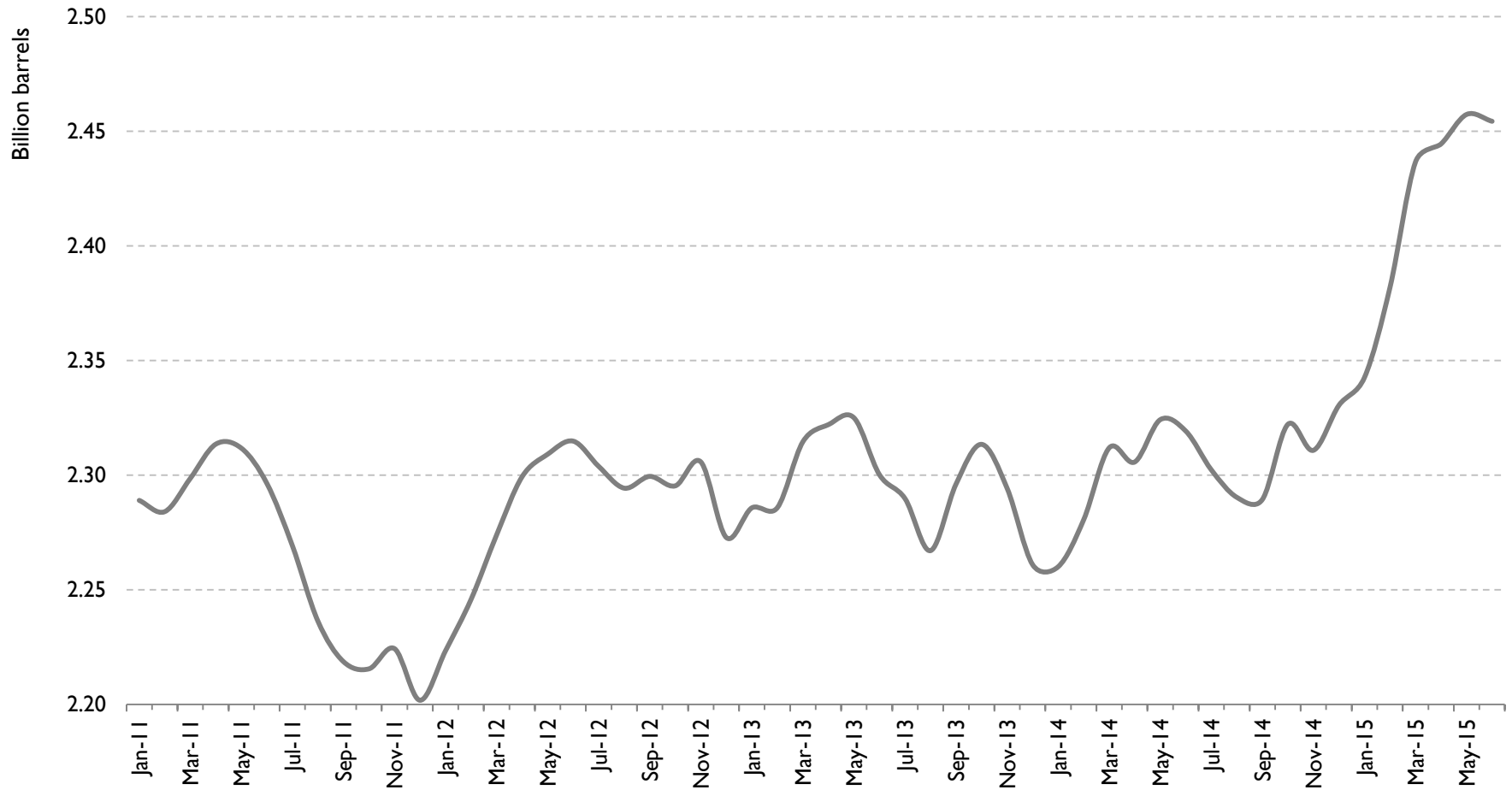


# Supply & Demand, balance

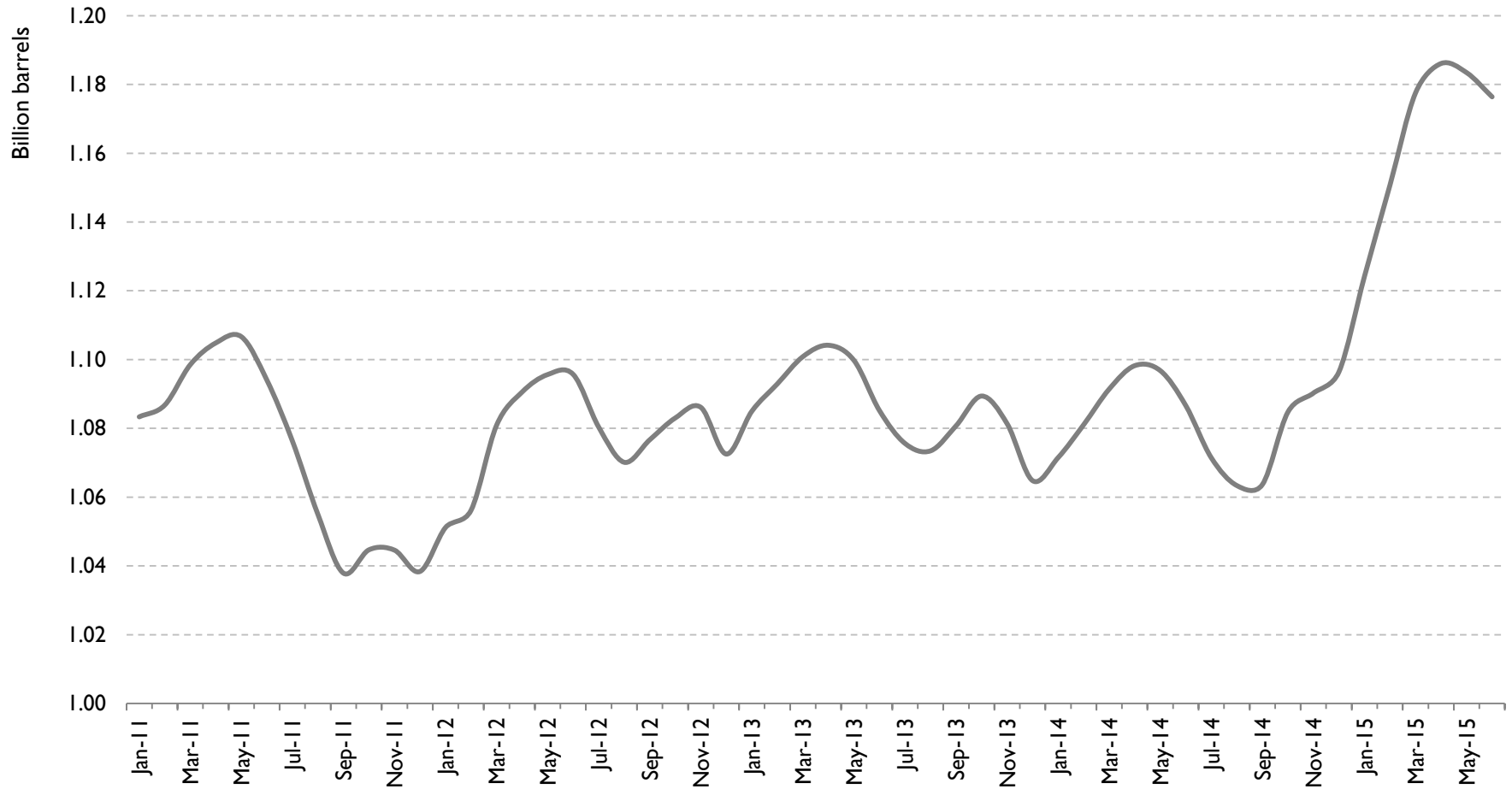




# Stockpiles, OECD



# Stockpiles, USA



# Closing perspectives

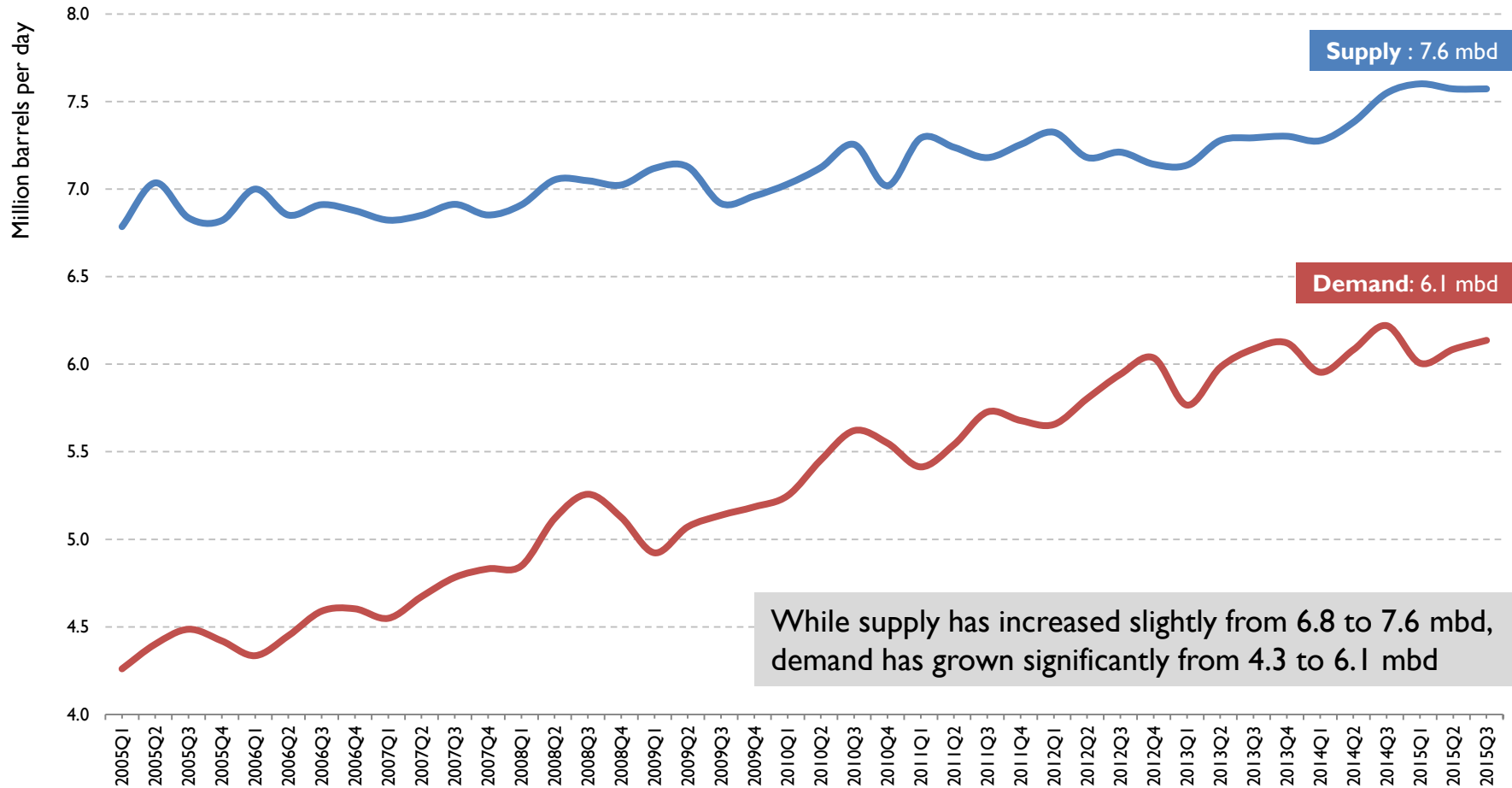
- Market is in a **competitive process** to find an **equilibrium price** set by the cost of production in the **marginal production areas**
  - Price setting mechanism is developing
  - External non-economic factors that can affect price still remain
- Large **spare capacity in OPEC**, for non-economic reasons, will be re-introduced at almost any price
- Demand **growth from Non-OECD is sluggish** at best
- Process of finding a competitive equilibrium price **may lead to seemingly very low prices**
  - In historical context these prices are not so low

# Hemispheric Oil Balance

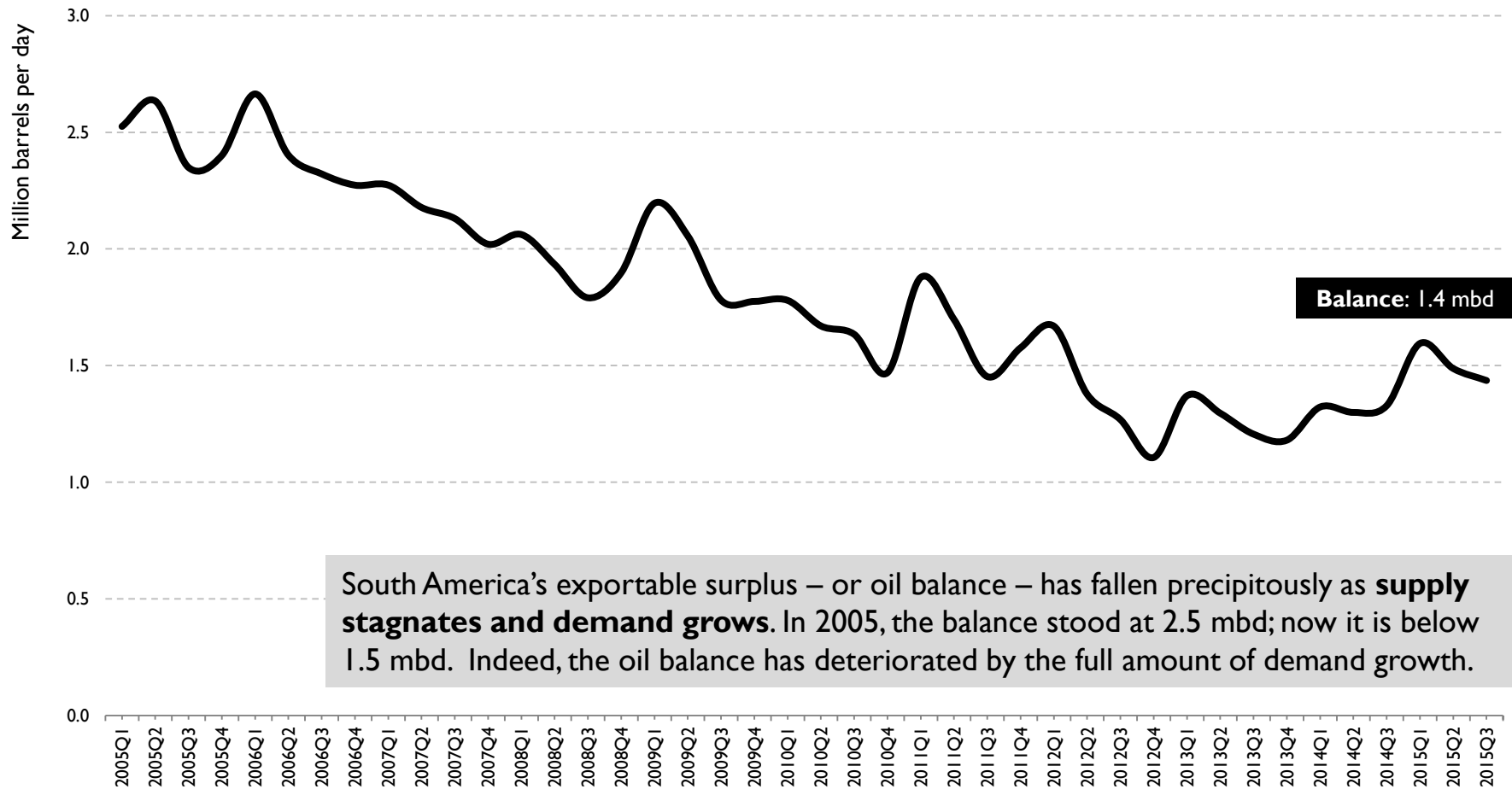


- The Western Hemisphere is split into:
  - South America and North America
- The regional oil balance of supply and demand is derived by each component sub-region.
  - In turn, each sub-regional balance is derived from the component countries
- Data from the International Energy Agency
  - Quarterly from 2005-Q1 till 2015-Q3

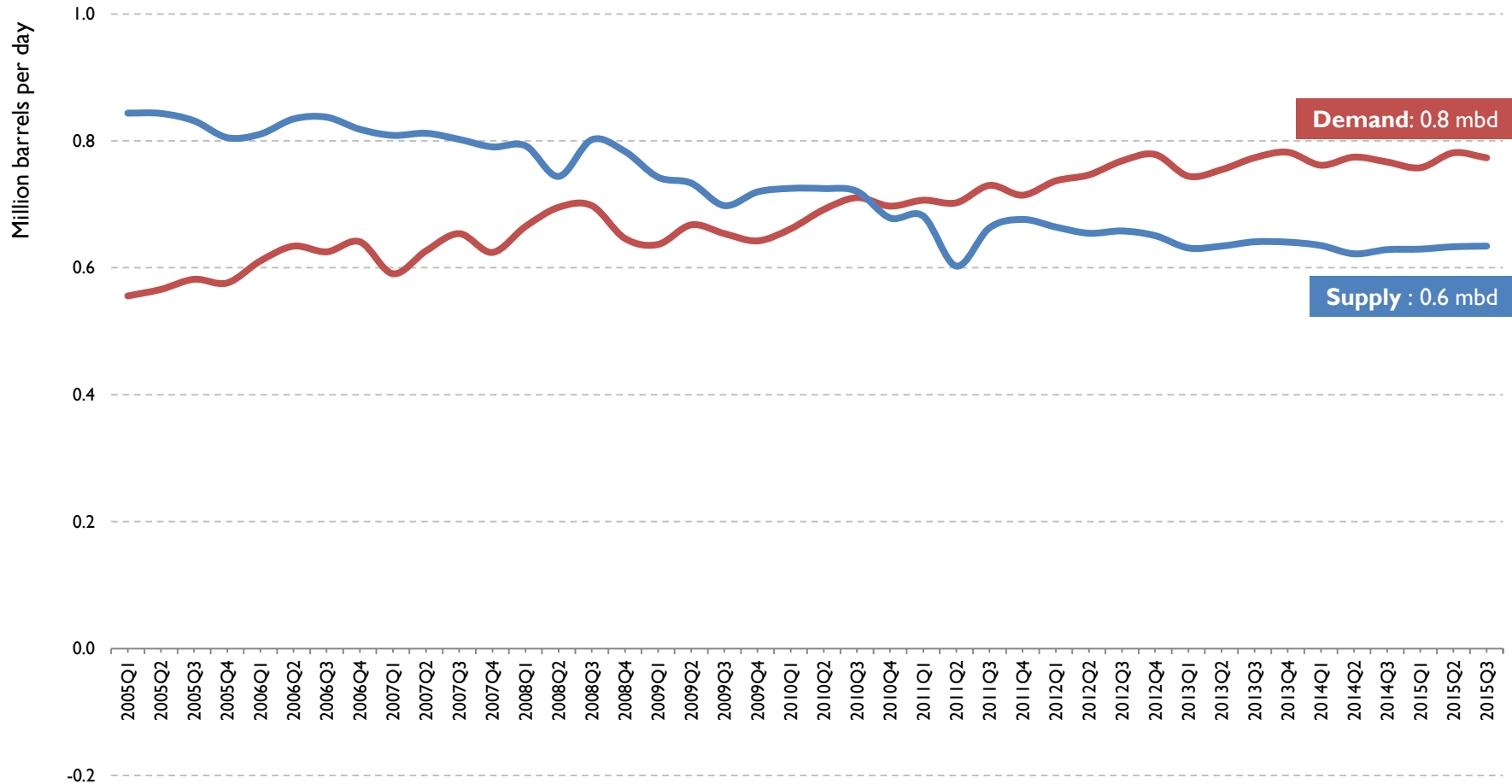
# South America



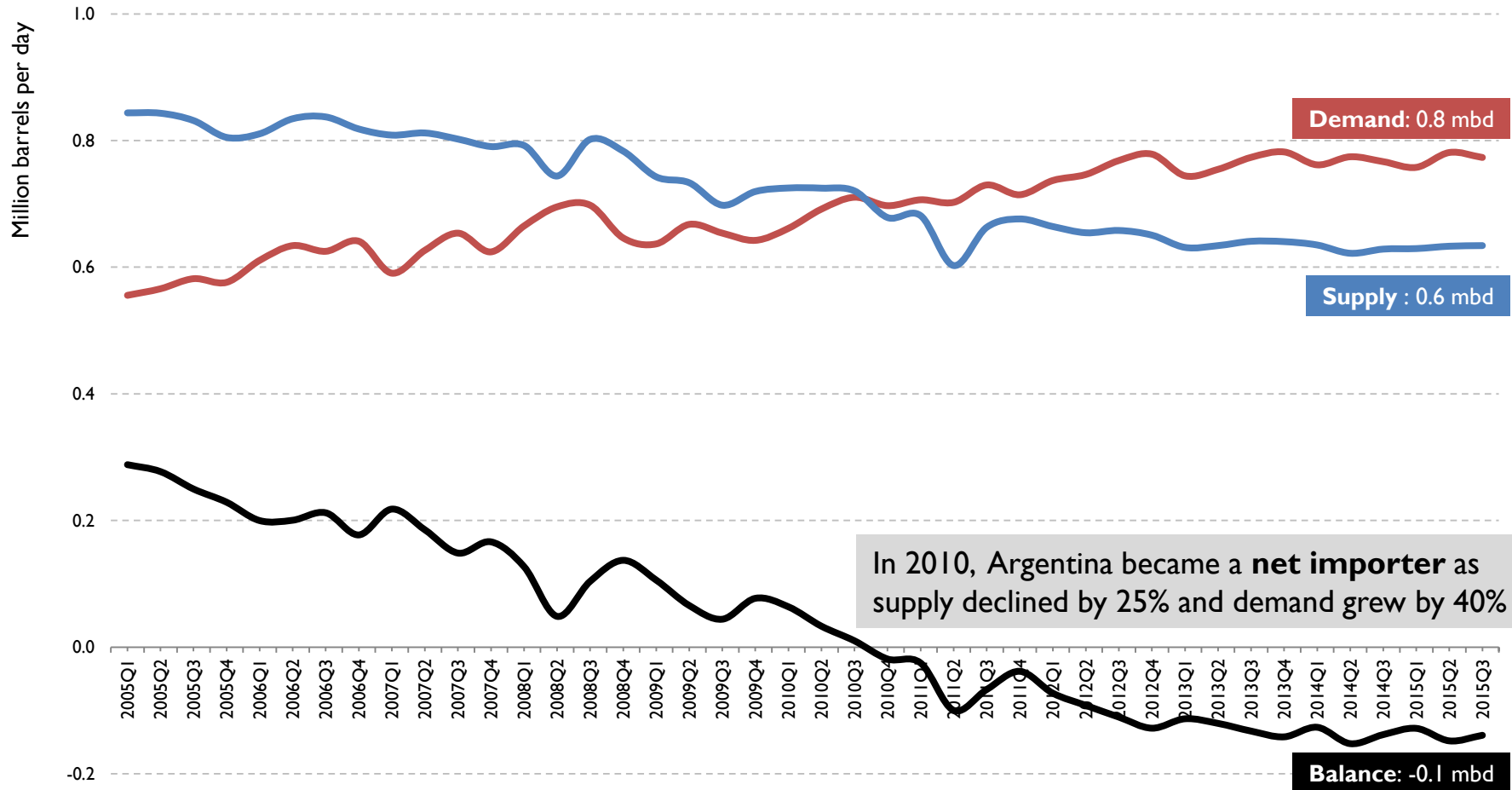
# South America



# South America: Argentina

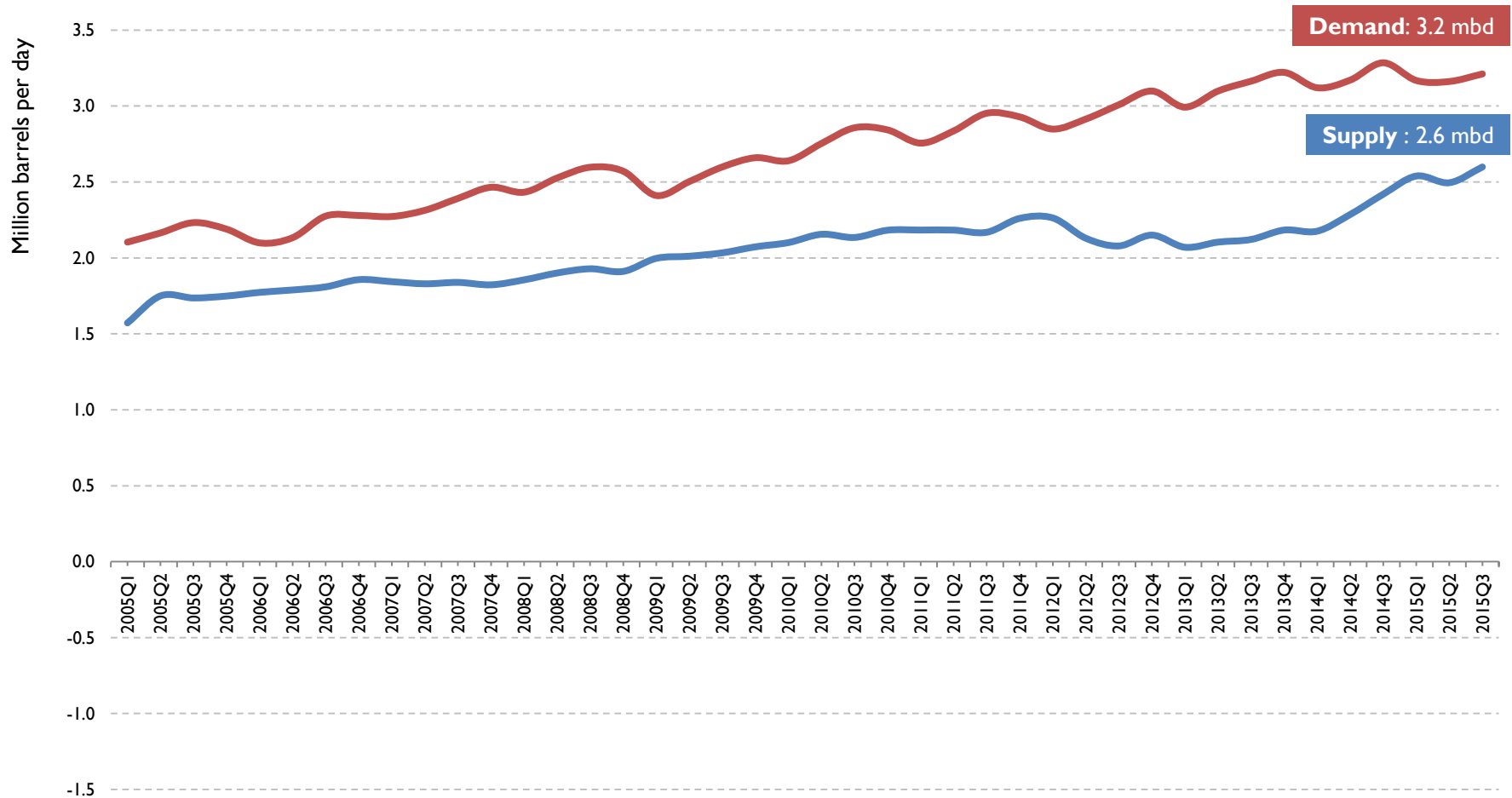


# South America: Argentina

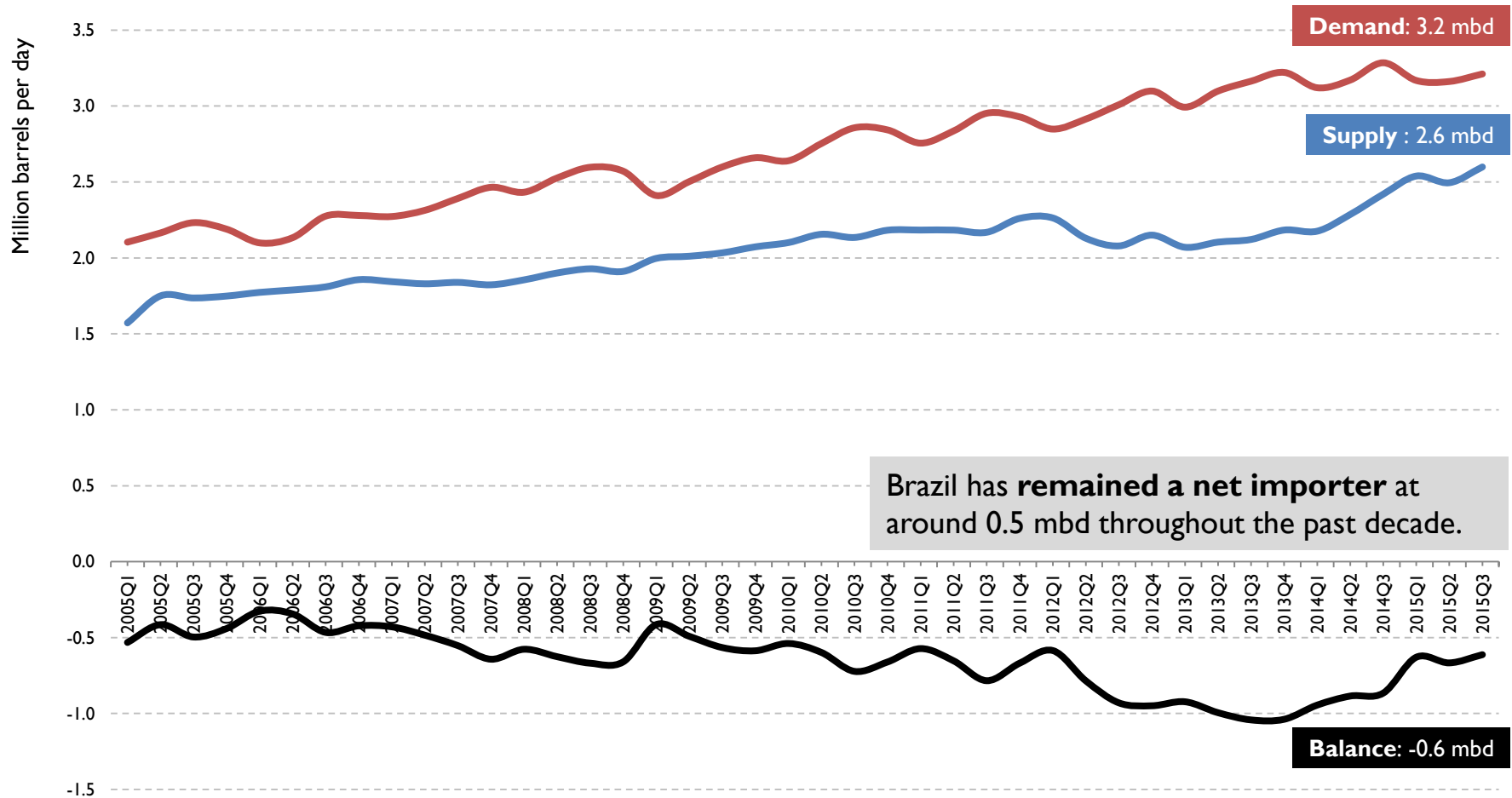




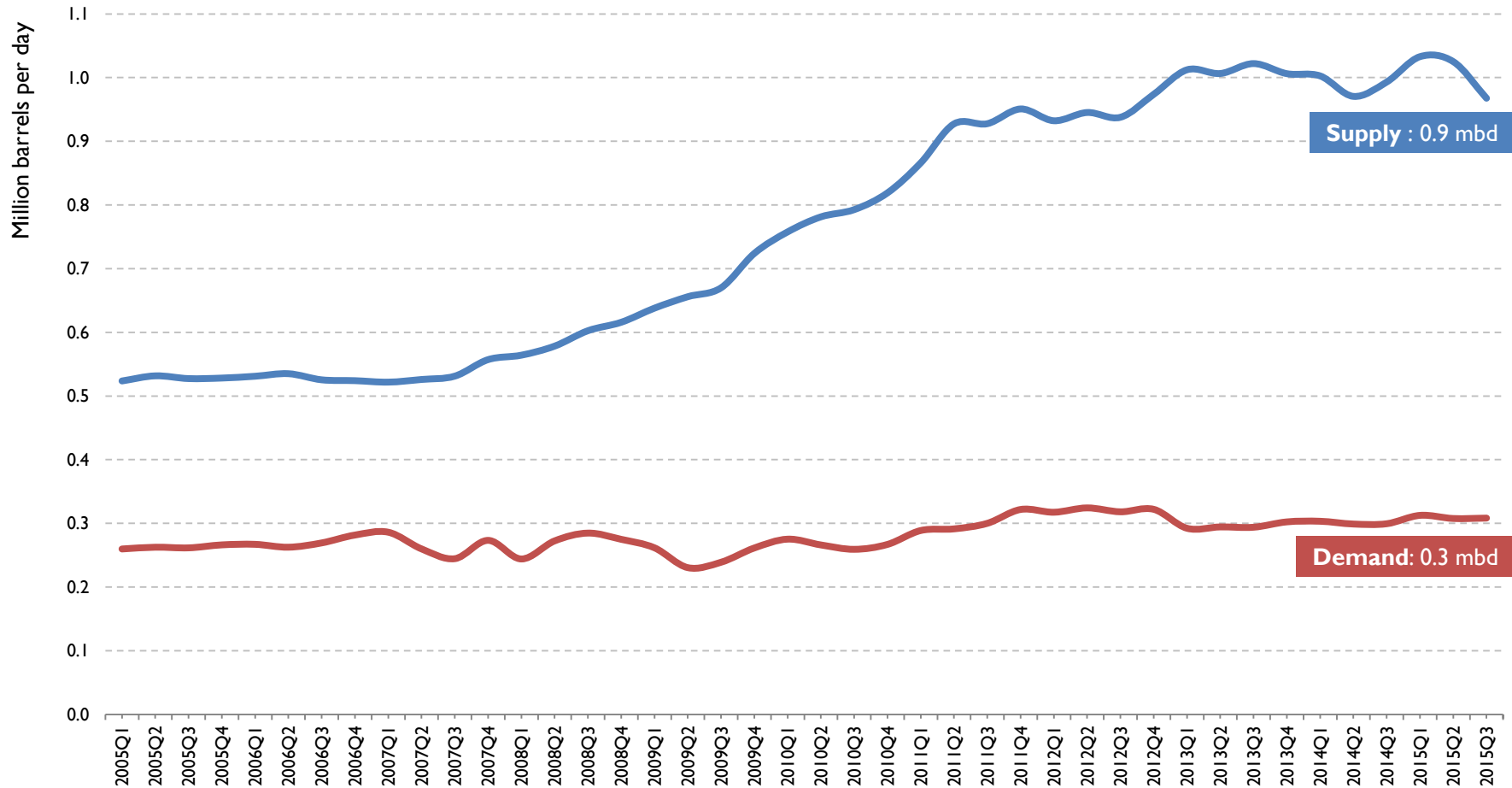
# South America: Brazil



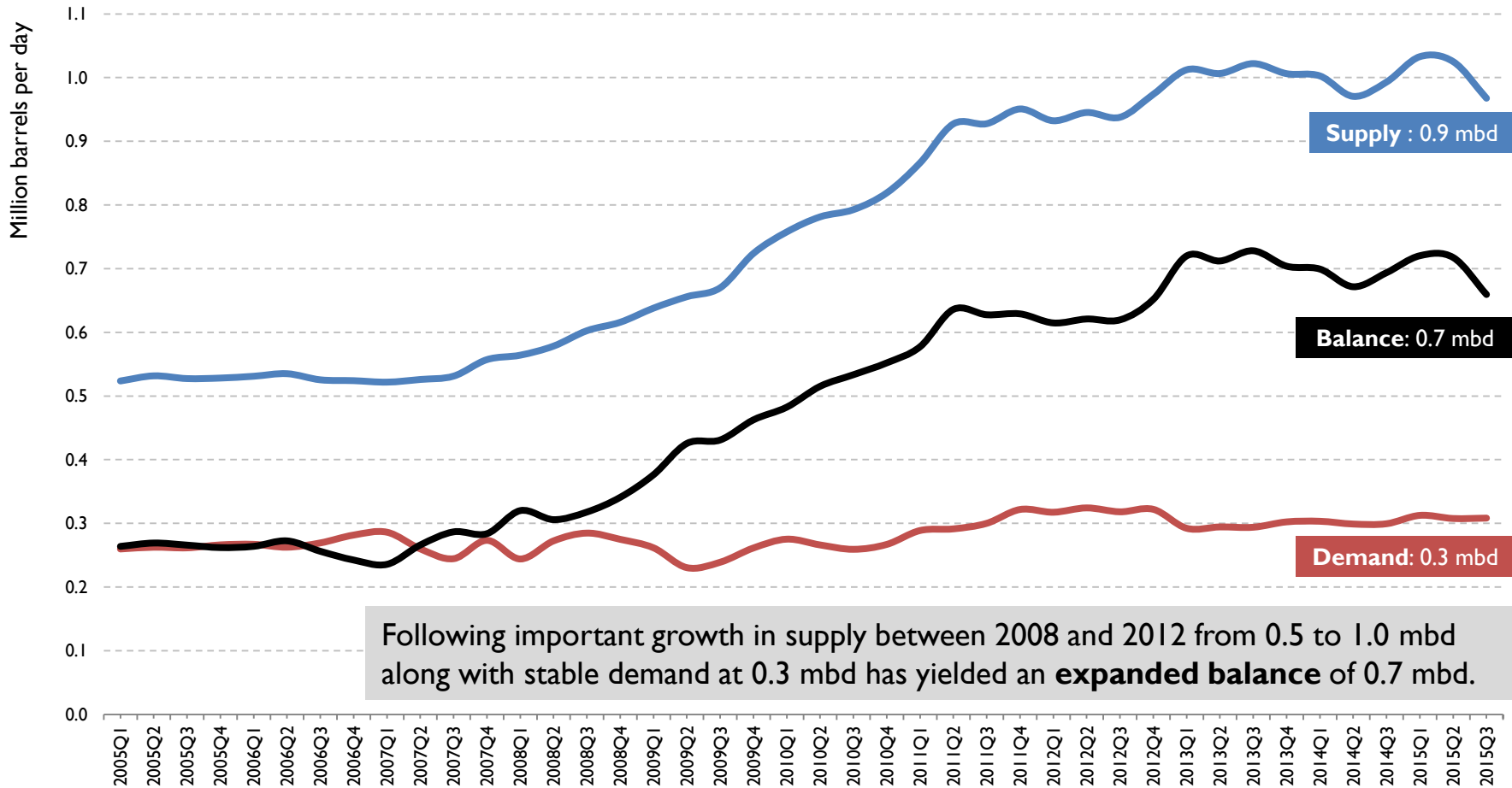
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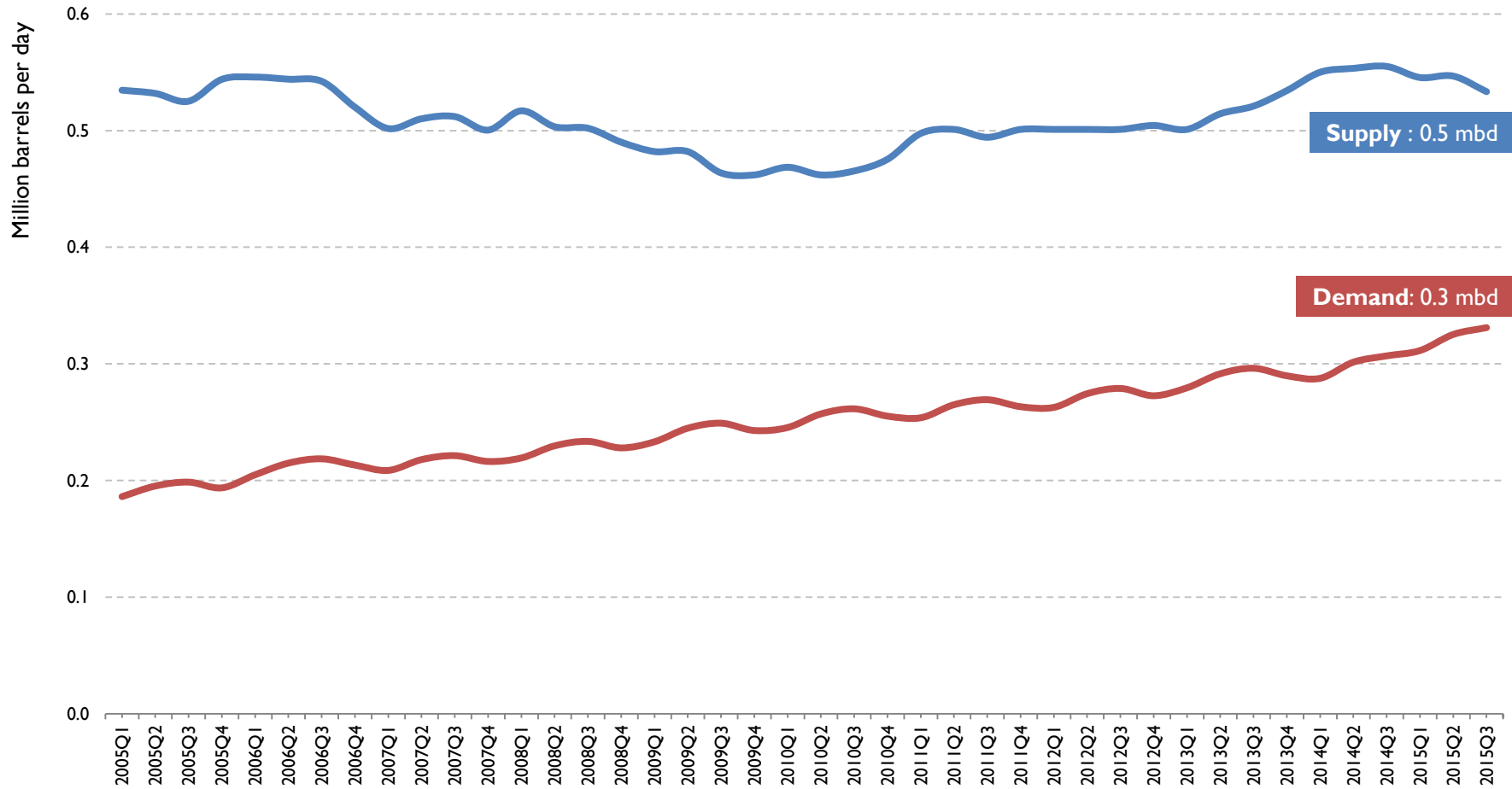
# South America: Colombia



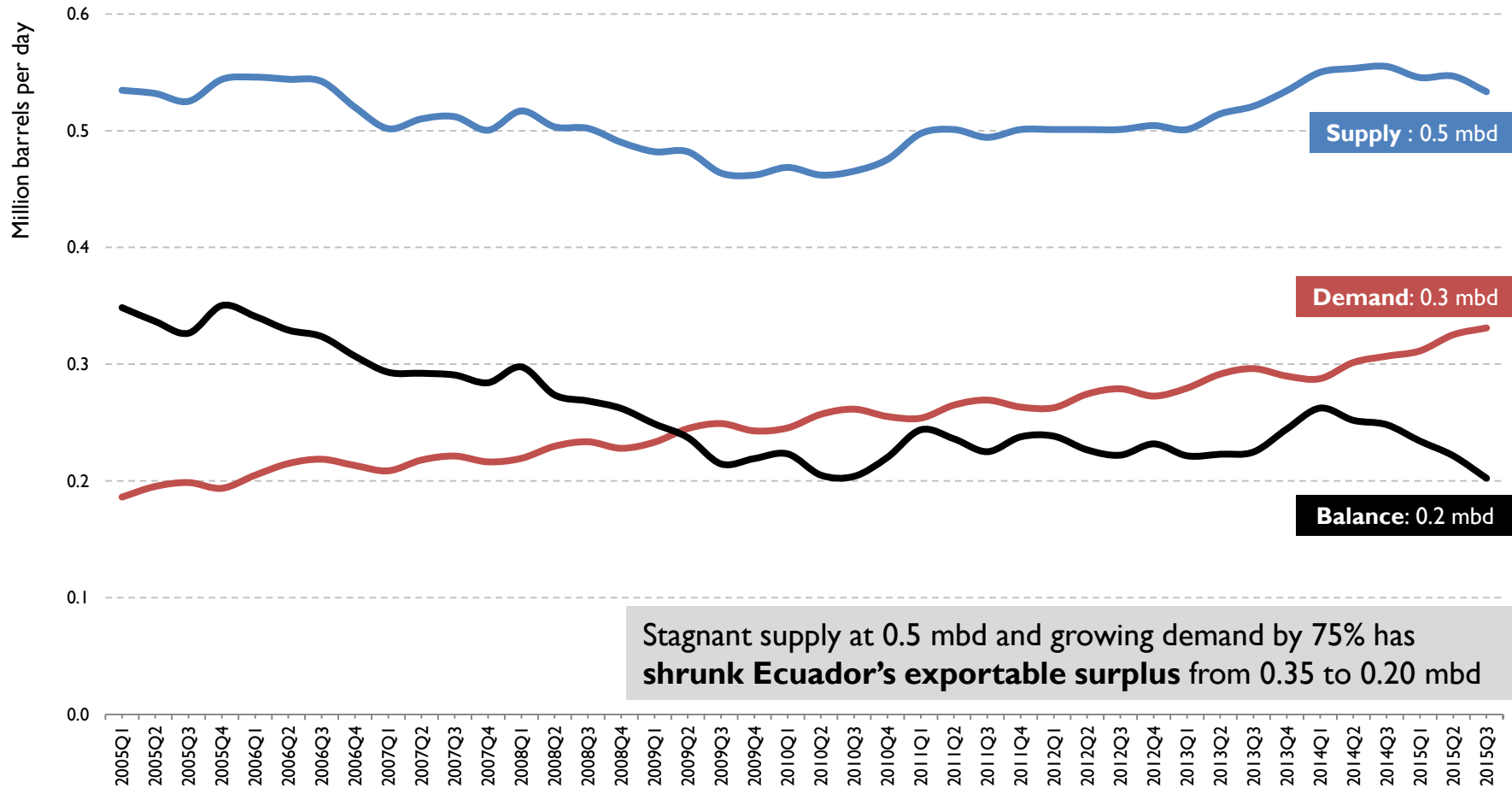
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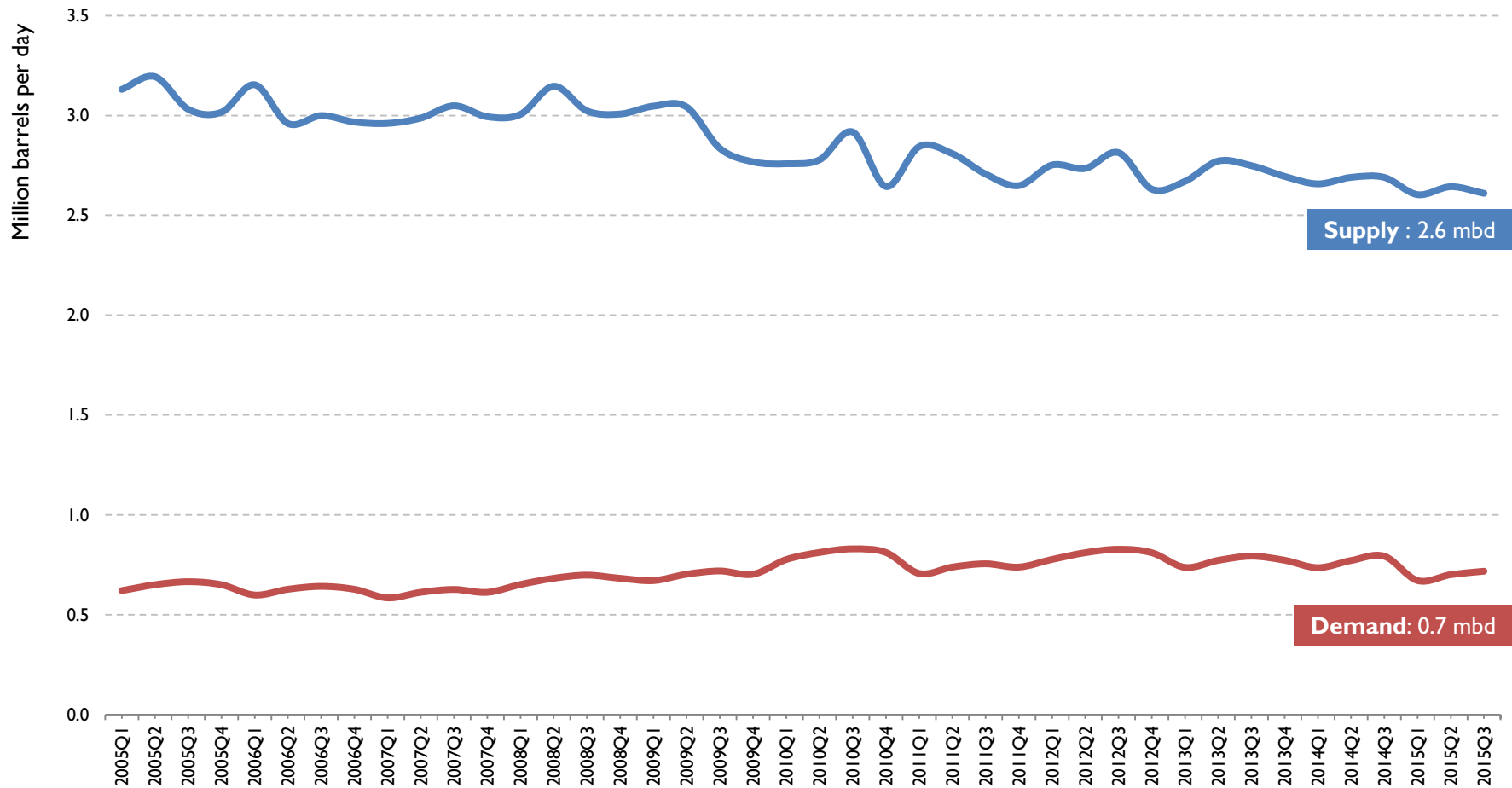
# South America: Ecuador



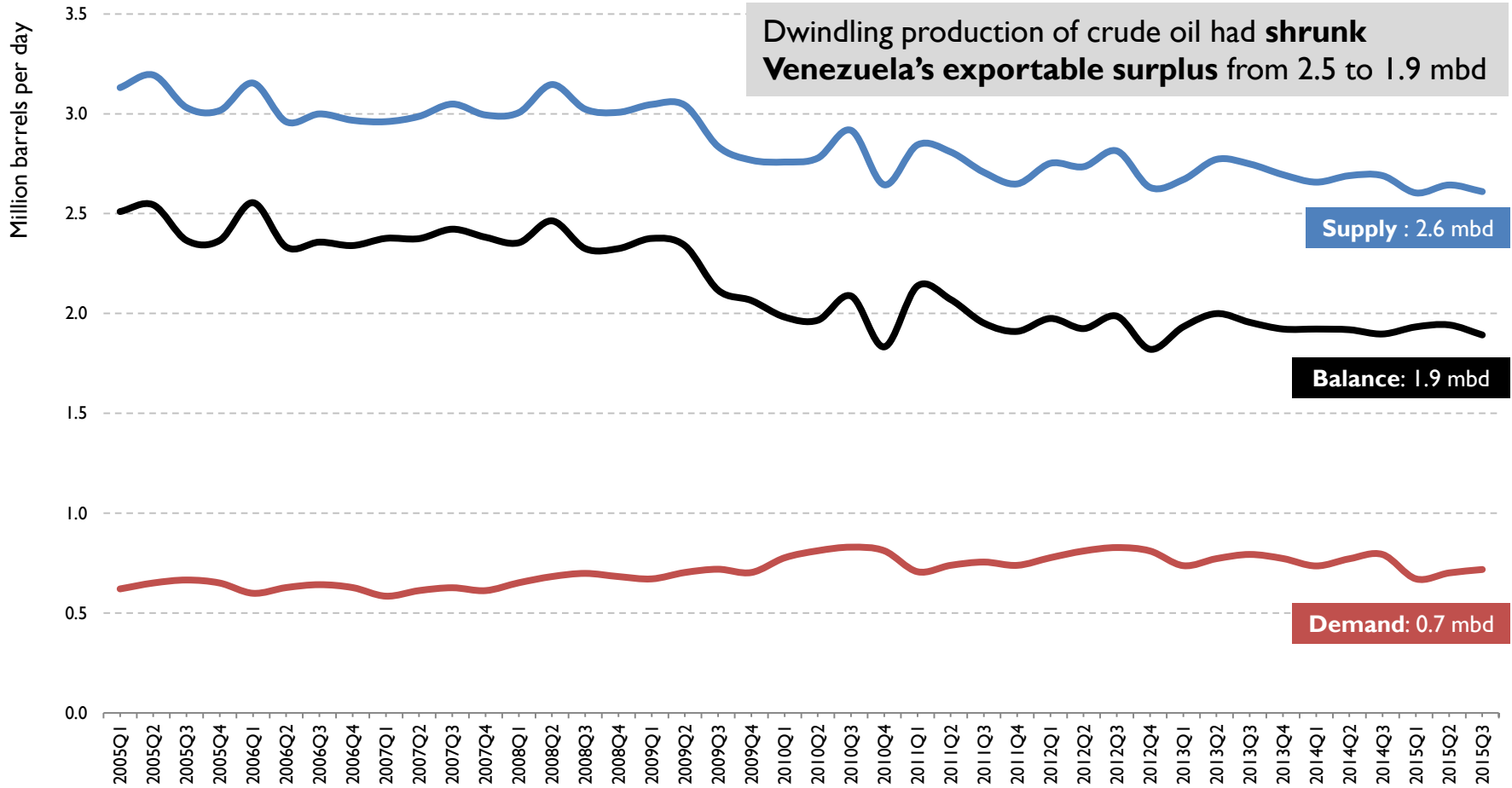
# South America: Ecuador



# South America: Venezuela



# South America: Venezuela





# South America



2015 Q3	Supply	Demand	Balance	Status
	million barrels per day			
Argentina	0.63	0.77	-0.14	Net Importer
Brazil	2.60	3.21	-0.61	Net Importer
Chile	0.00	0.33	-0.33	Net Importer
Colombia	0.97	0.31	0.66	Net Exporter
Ecuador	0.53	0.33	0.20	Net Exporter
Peru	0.14	0.27	-0.13	Net Importer
Venezuela	2.61	0.72	1.89	Net Exporter
Others	0.08	0.12	-0.12	Net Importer
<b>South America</b>	<b>7.57</b>	<b>6.14</b>	<b>1.44</b>	<b>Net Exporter</b>



**IDB**

**Inter-American  
Development Bank**