

How much will low prices stimulate oil demand?



For

Oil and Money

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by

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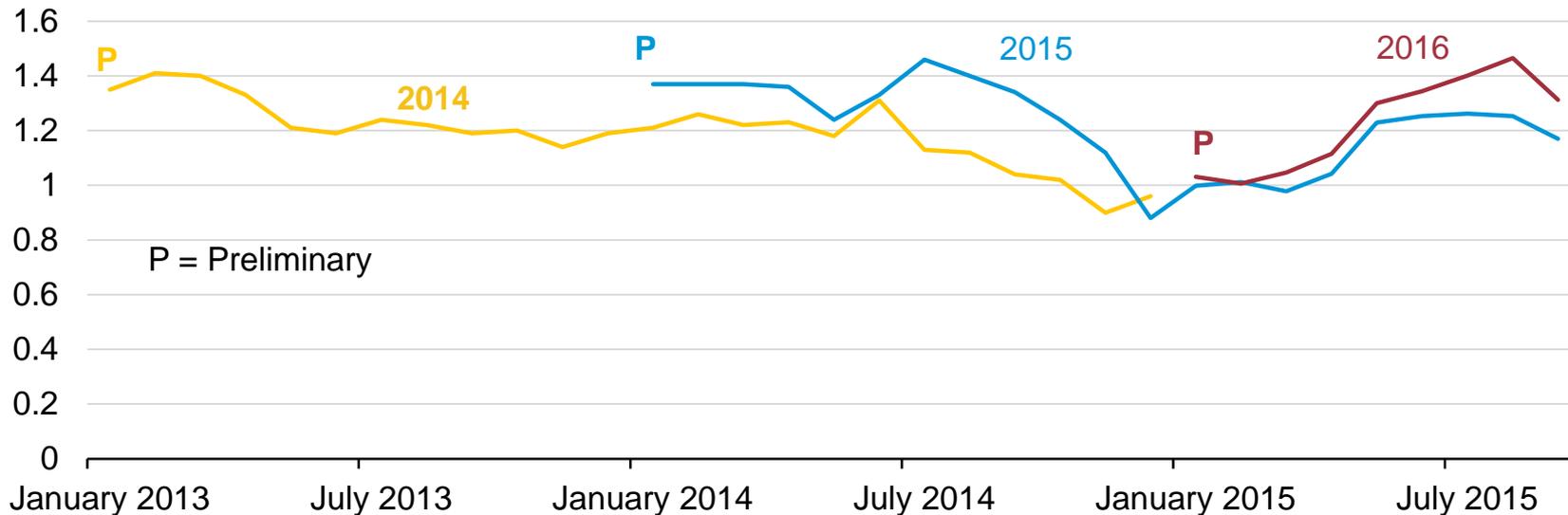
U.S. Energy Information Administration

What are the key cyclical and structural factors driving oil demand?

Cyclical: EIA's world oil demand growth projections for 2014 and 2015 were lowered significantly in late 2014 (from preliminary estimates)

changes in projected world oil demand growth year-over-year

million barrels per day

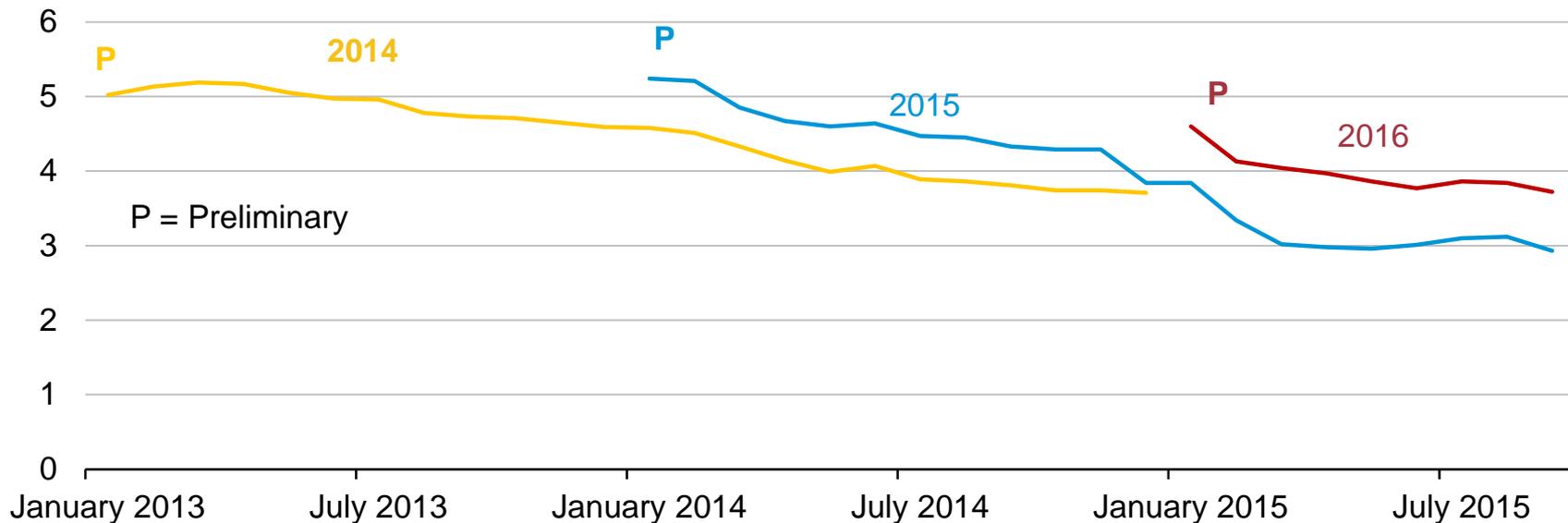


Note: Starting in January of each year, each line shows the expected forecast of world oil demand growth year-over-year for the specified calendar year, which tends to move toward the actual realized growth outcome as the year progresses.

Source: Energy Information Administration, September 2015 Short-term Energy Outlook

Cyclical: EIA's non-OECD GDP growth projections were steadily lowered for most of the past two years (from preliminary estimates)

changes in projected non-OECD GDP growth
percent



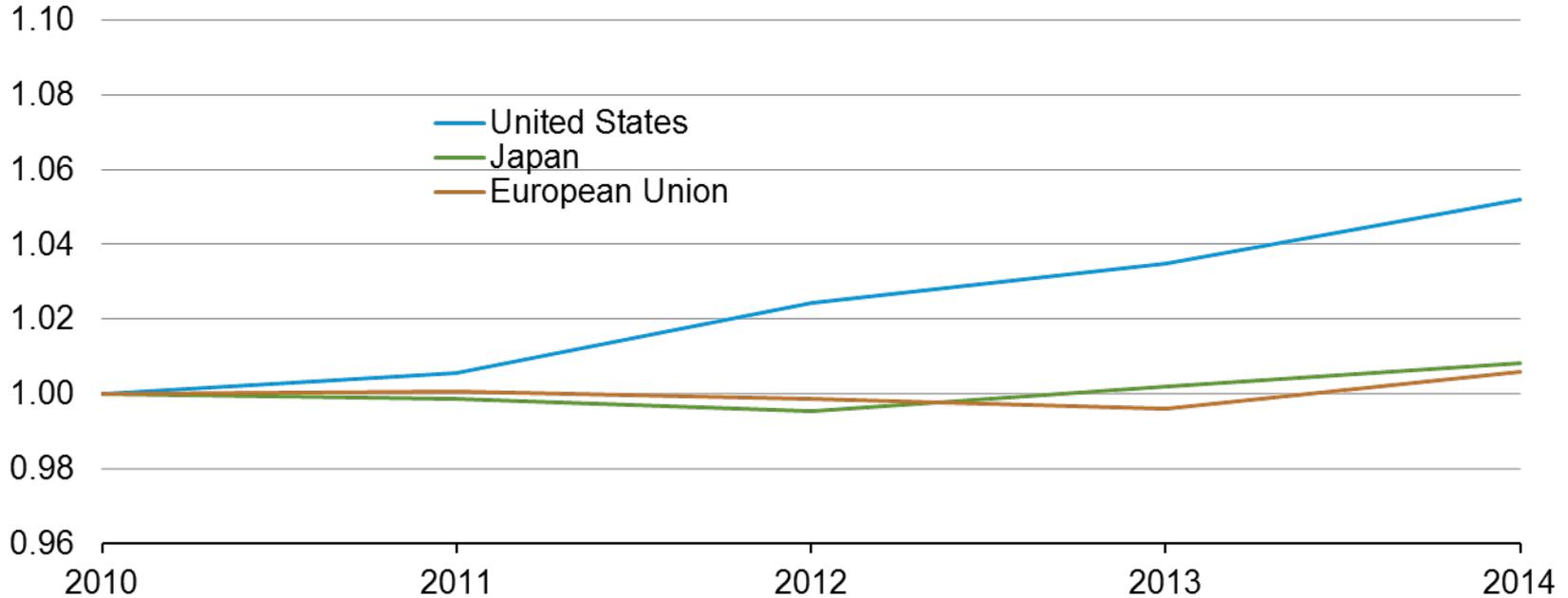
Note: Starting in January of each year, each line shows the expected forecast of GDP growth for the specified calendar year, which tends to move toward the actual realized growth outcome as the year progresses.

Source: Energy Information Administration, September 2015 Short-term Energy Outlook

Cyclical: Employment growth in OECD countries is another important contributing factor for gasoline consumption

employment

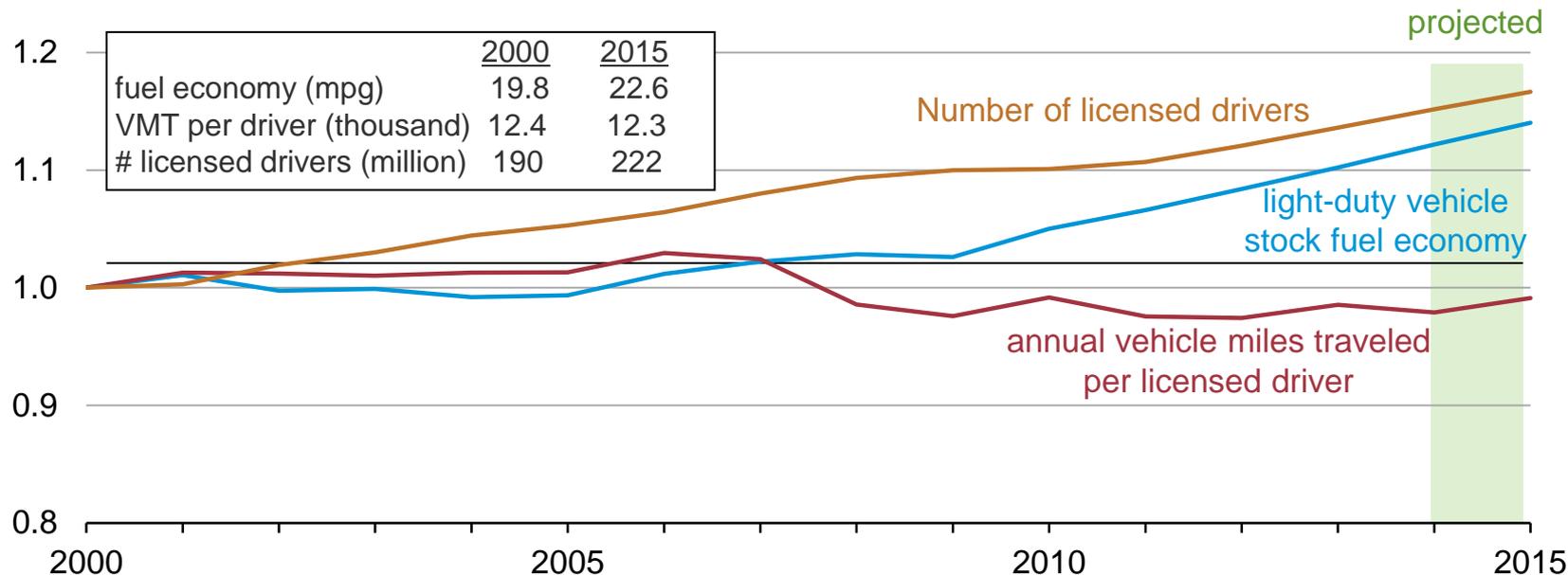
indexed to 2010



Source: IHS Global Insight

Structural: U.S. light-duty vehicle stock fuel economy continues to rise while annual vehicle miles per driver remain below 2000 levels despite rising number of licensed drivers

U.S. transportation indicators
indexed to 2000



Source: Annual Energy Outlook 2015, Reference case

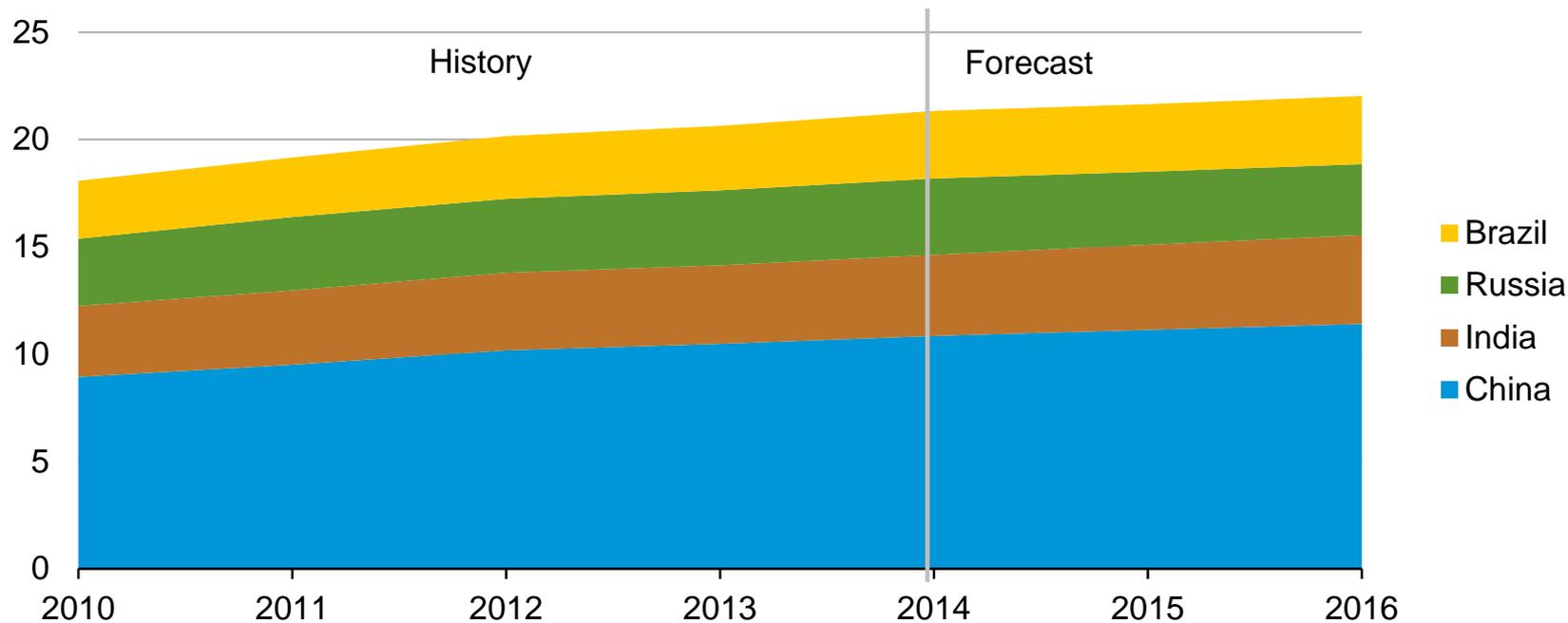
Structural: Policies have also had an impact on recent global oil demand growth

- Adoption and increases in CAFE standards
- European fuel tax and diesel-friendly policies
- Biofuel policies in the U.S. and Brazil

How is demand growth changing in developing countries?

Total oil consumption in Brazil, Russia, India, and China has grown steadily since 2010

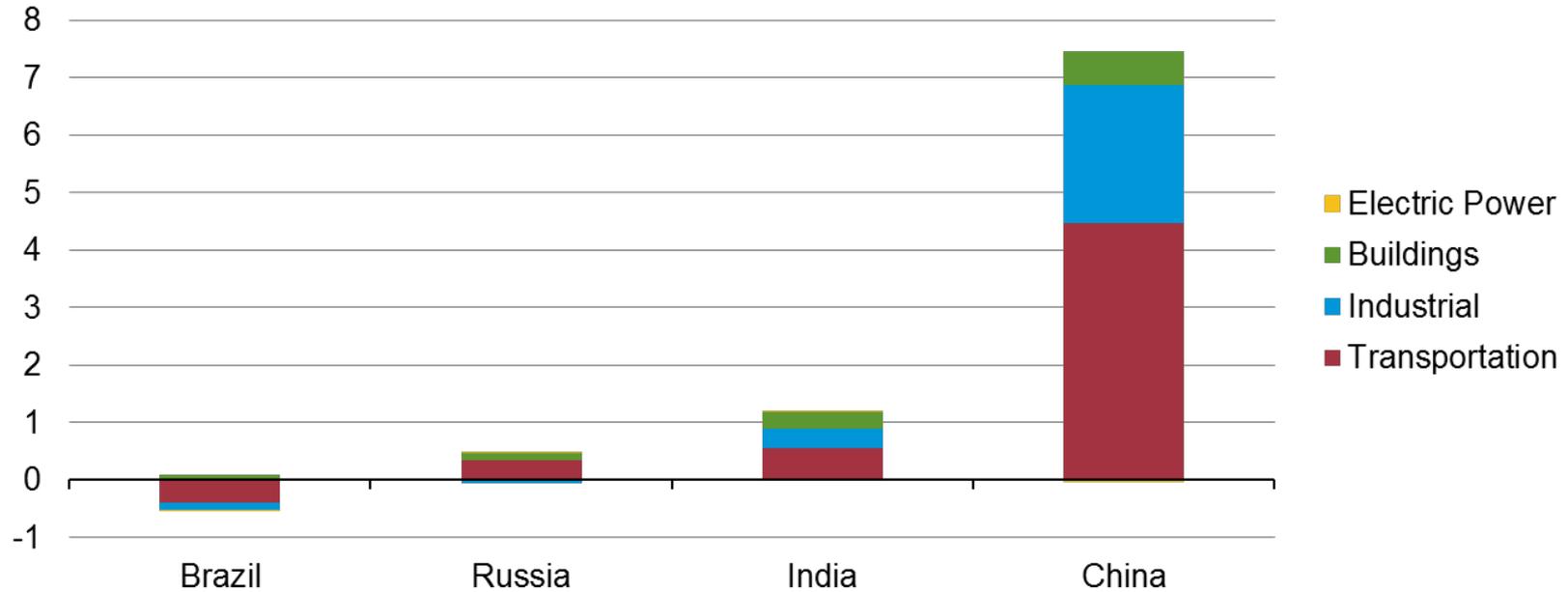
Brazil, China, India, and Russia liquid fuels consumption
million barrels per day



Source: Energy Information Administration, September 2015 Short Term Energy Outlook

The majority of recent growth in liquids consumption from the BRIC countries is from the transportation sector

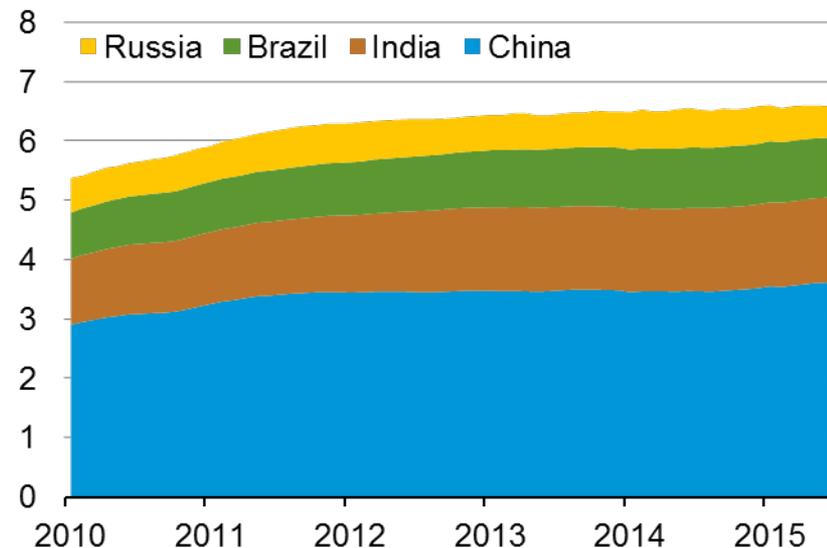
BRIC change in liquid fuels consumption, 2010-2015
quadrillion Btu



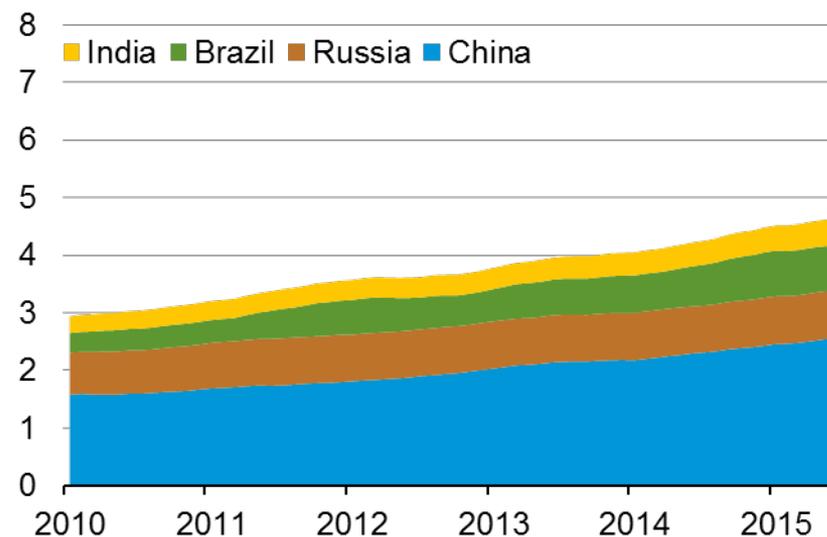
Source: Energy Information Administration, preliminary analysis

Diesel consumption in Brazil, Russia, India, and China has averaged 6.5 million b/d in the last couple of years, while gasoline consumption has grown to over 4.5 million b/d so far in 2015

Brazil, China, India, and Russia diesel consumption million barrels per day, 12 month moving average



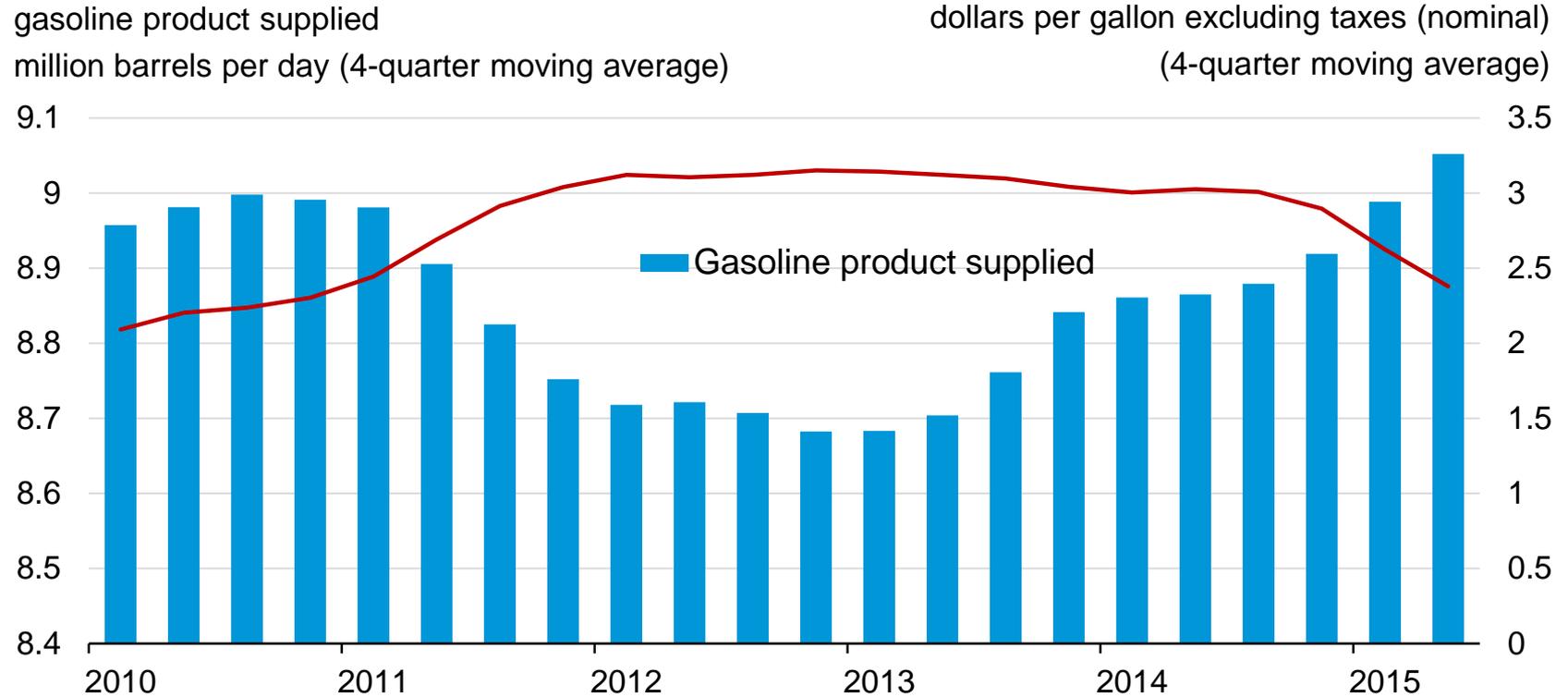
Brazil, China, India, and Russia gasoline consumption million barrels per day, 12 month moving average



Source: Bloomberg L.P., FACTS, JODI Data, India Petroleum Planning and Analysis Cell
Note: Data is through June 2015. China data is apparent consumption.

To what extent will a prolonged period of low oil prices result in a return to higher demand growth?

The direct price effects can raise gasoline demand---as occurred recently in the United States

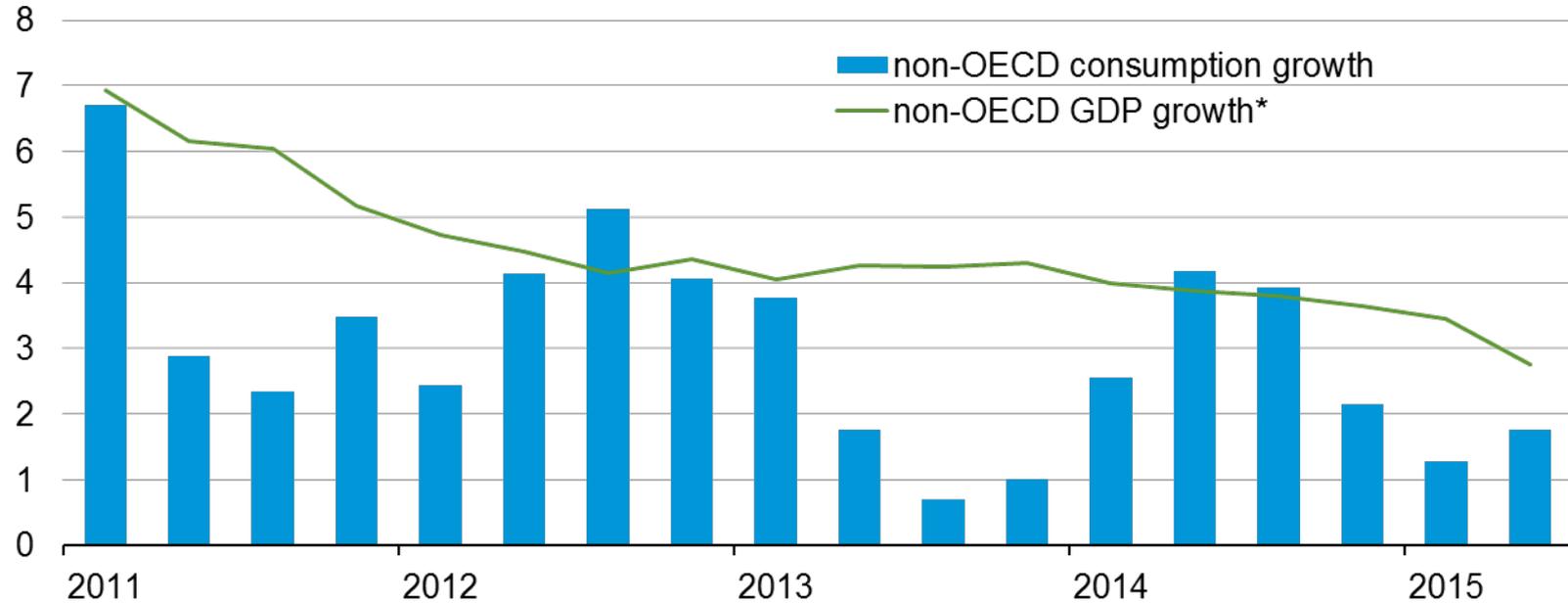


Source: Energy Information Administration, Petroleum Supply Monthly and Petroleum Marketing Monthly (as of September 2015)

The macro impacts are also important---Non-OECD oil consumption growth declined recently as GDP growth slowed

oil consumption

percent change (year-on-year)



Source: Energy Information Administration, IHS Global Insight (as of September 2015)

* Oil consumption weighted GDP

Prices and economic growth are important, but policy, preferences, and technology may have a bigger long-term impact

- What types of consumption and pricing policies will be enacted across the world?
 - Fuel subsidies
 - Environmental policies
 - Domestic security policies
- What will light-duty vehicle trends look like?
 - Ownership rates
 - Efficiency and emissions standards
 - Technology/alternative fuels
- Where will goods be produced and how will they be moved?
- Will there be major industrial sector efficiency improvements or fuel switching?

How is the landscape of oil trading changing with the decreasing presence of key financial institutions?

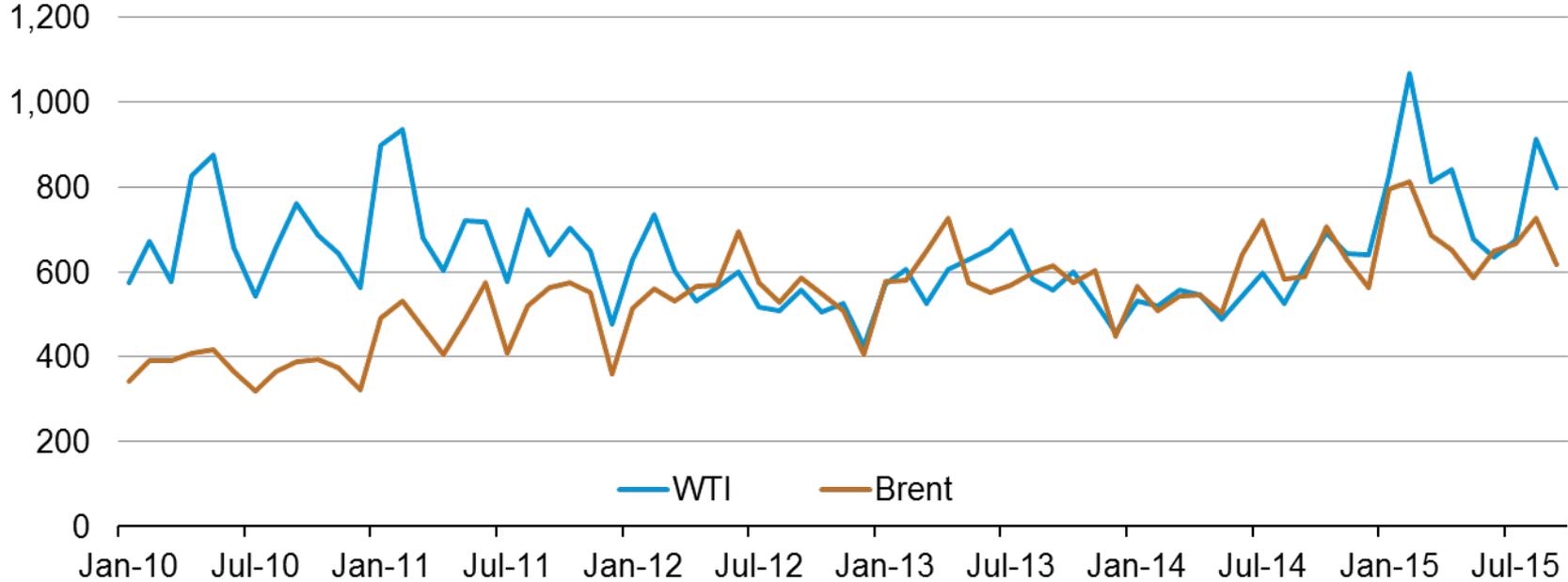
Several financial institutions either sold or reduced their physical oil and commodities trading businesses

- JP Morgan sells its physical commodities business to Mercuria (\$3.5 billion, announced March 2014)
- Morgan Stanley sells TransMontaigne, its petroleum distribution business, to NGL Energy partners (\$200 million, announced June 2014)
- Morgan Stanley sells its physical oil assets and trading business to Castleton Commodities (\$1 billion, announced May 2015)
- Barclays, Deutsche Bank, and UBS have all reduced or eliminated their commodity trading businesses in the past two years

Source: Evaluate Energy, Bloomberg L.P., Reuters

Trading volume for both WTI and Brent futures contracts is higher so far in 2015 compared to 2014

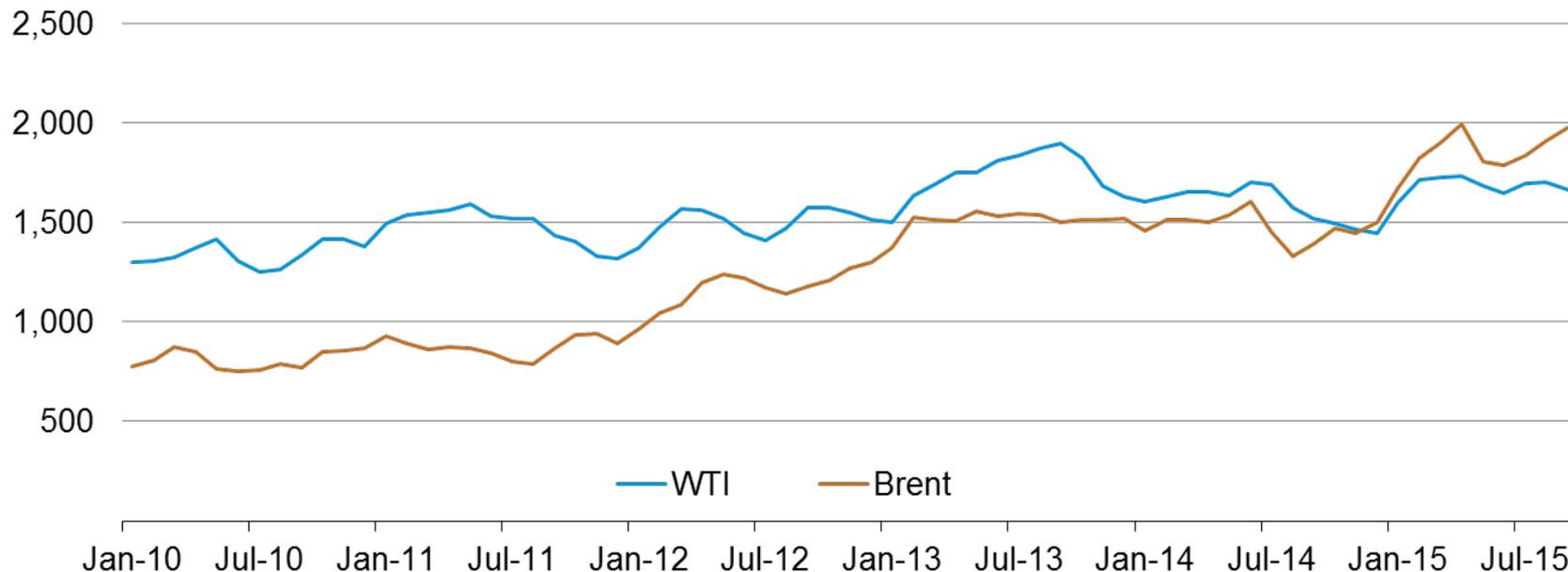
average daily trading volume
thousands of contracts, by month



Source: Bloomberg L.P., as of September 30, 2015

Open interest for both WTI and Brent are higher so far this year compared to 2014

average daily open interest
thousands of contracts, by month



Source: Bloomberg L.P., as of September 30, 2015

For more information

U.S. Energy Information Administration home page | www.eia.gov

Annual Energy Outlook | www.eia.gov/aeo

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

International Energy Outlook | www.eia.gov/ieo

Monthly Energy Review | www.eia.gov/mer

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