

Oil Strategy: What Does Winning Look Like?

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RBC Capital Markets, LLC

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RBC Capital Markets

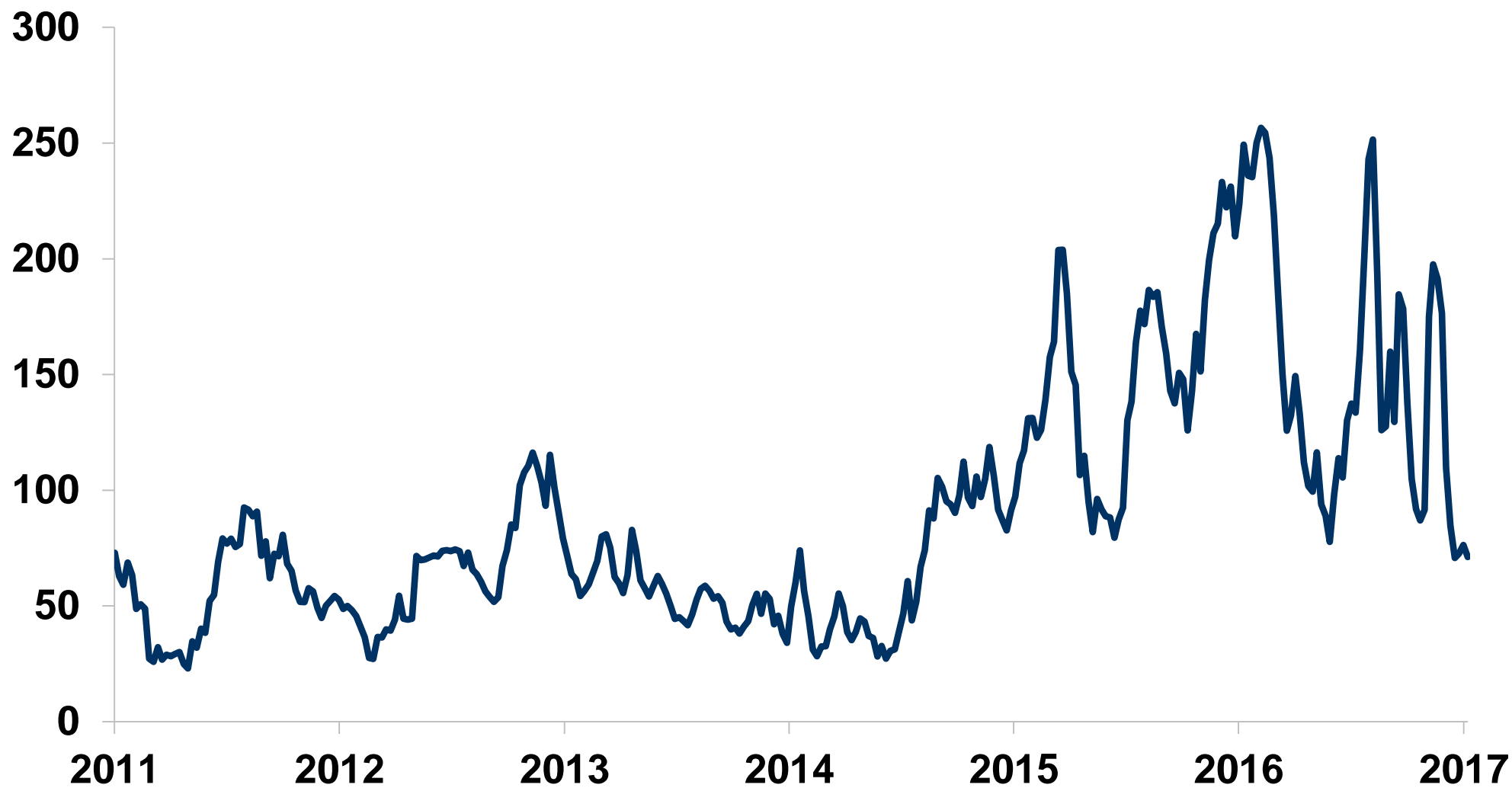
What's Next For Oil Markets?

- Signs of improving oil market fundamentals are apparent, but the market remains dogged by constant reminders that the rebalancing act is a lengthy and tumultuous process rather than a linear one. The \$50-\$55/bbl level in WTI will act as a short term ceiling over the coming months given increased producer hedging activity and elastic US production. We see longer term prices near \$65-70/bbl, but the recovery will be long and protracted.
- Returning the market to a long term equilibrium price level is a two tiered process. First, we must rid the market of the daily supply overhang, which is currently taking place. Second, the long road back to full market equilibrium entails returning global stocks to seasonally normal levels. This feat will remain elusive until late 2017 at best but looks more like a 2018 story.
- US production has become *anti-fragile* and recent hedging activity helps US producers become increasingly price agnostic as hedges are shored up. Other non-OPEC countries will be counted on to rebalance the market to a long term equilibrium level over the coming years.
- Despite the macro concerns surrounding China, Emerging Markets remain the key driver of demand growth. India will lead global oil demand growth for years to come. US gasoline demand is currently having its day in the sun, but aggregate OECD demand remains in structural decline.

Investor Beware – Choppy Markets Ahead

NYMEX & ICE Managed Money WTI Short Positioning

'000 contracts

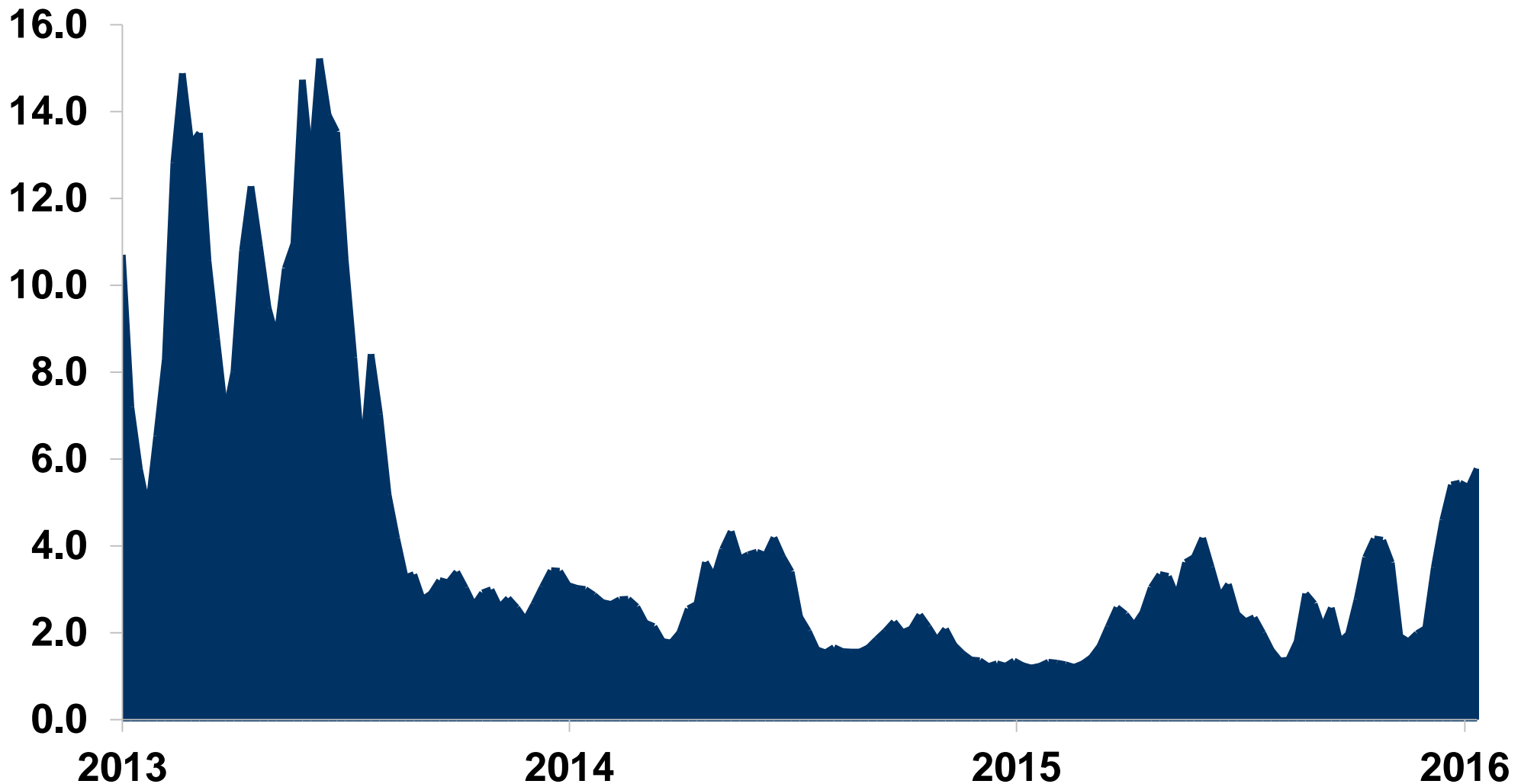


Source: RBC Capital Markets, CFTC

Positioning Looking Toppish or Will Fundamentals Drive New Length?

NYMEX & ICE Managed Money WTI Ratio of Longs to Short Positioning

Long: Short Ratio



Source: RBC Capital Markets, CFTC

Fundamentals Point To Tighter Markets Ahead

Following several years of over supply, we expect the market to revert back to a position where daily supply and demand are balanced this quarter, followed by significant stock draws to come.

| Global Supply & Demand Balance | | | | | | | | | | | | |
|---------------------------------------|-------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|-------------|----------------|-------------|----------------|
| mb/d | Q1 | Q2 | 2016 Q3 | Q4 | YoY | Q1 | Q2 | 2017 Q3 | Q4 | YoY | 2018 Avg | YoY |
| Demand | | | | | | | | | | | | |
| OECD | 46.3 | 45.6 | 46.9 | 46.1 | 0.2 | 46.5 | 44.9 | 47.5 | 46.1 | 0.0 | 46.1 | -0.1 |
| Non-OECD | 48.7 | 49.8 | 49.8 | 50.5 | 1.2 | 48.7 | 51.2 | 51.3 | 52.5 | 1.2 | 52.2 | 1.2 |
| Total Demand | 95.0 | 95.4 | 96.7 | 96.6 | 1.4 | 95.2 | 96.1 | 98.8 | 98.6 | 1.2 | 98.3 | 1.1 |
| Supply | | | | | | | | | | | | |
| OPEC Crude | 33.3 | 33.1 | 33.3 | 33.9 | 1.0 | 32.5 | 32.4 | 33.6 | 33.8 | -0.3 | 33.4 | 0.3 |
| OPEC Other Liquids | 6.8 | 6.9 | 7.0 | 7.0 | 0.2 | 6.6 | 6.6 | 7.0 | 7.1 | -0.1 | 6.9 | 0.1 |
| Non-OPEC Crude & Biofuels & Proc Gain | 56.5 | 55.8 | 56.6 | 56.4 | -0.8 | 55.4 | 56.4 | 57.7 | 57.3 | 0.4 | 57.6 | 0.9 |
| Total Supply | 96.6 | 95.8 | 96.9 | 97.3 | 0.3 | 94.5 | 95.4 | 98.3 | 98.2 | -0.1 | 97.9 | 1.3 |
| Stock Change | 1.6 | 0.4 | 0.2 | 0.7 | | -0.7 | -0.8 | -0.5 | -0.4 | | -0.4 | |
| Call on OPEC | 31.7 | 32.7 | 33.2 | 33.3 | 2.0 | 33.3 | 33.2 | 34.1 | 34.2 | 1.0 | 34.2 | 0.5 |
| Price Forecast (\$/bbl) | | | | | | | | | | | | |
| | | | | | '16 Avg | | | | | '17 Avg | | '18 Avg |
| WTI | \$33.63 | \$45.64 | \$44.94 | \$49.29 | \$43.47 | \$54.25 | \$55.50 | \$59.00 | \$61.25 | \$57.50 | | \$63.38 |
| Brent | \$35.21 | \$47.03 | \$46.99 | \$49.29 | \$45.13 | \$56.50 | \$57.75 | \$62.00 | \$64.75 | \$60.25 | | \$65.88 |
| WTI-Brent Spread | -\$1.58 | -\$1.39 | -\$2.05 | \$49.29 | -\$1.66 | -\$2.25 | -\$2.25 | -\$3.00 | -\$3.50 | -\$2.75 | | -\$2.50 |

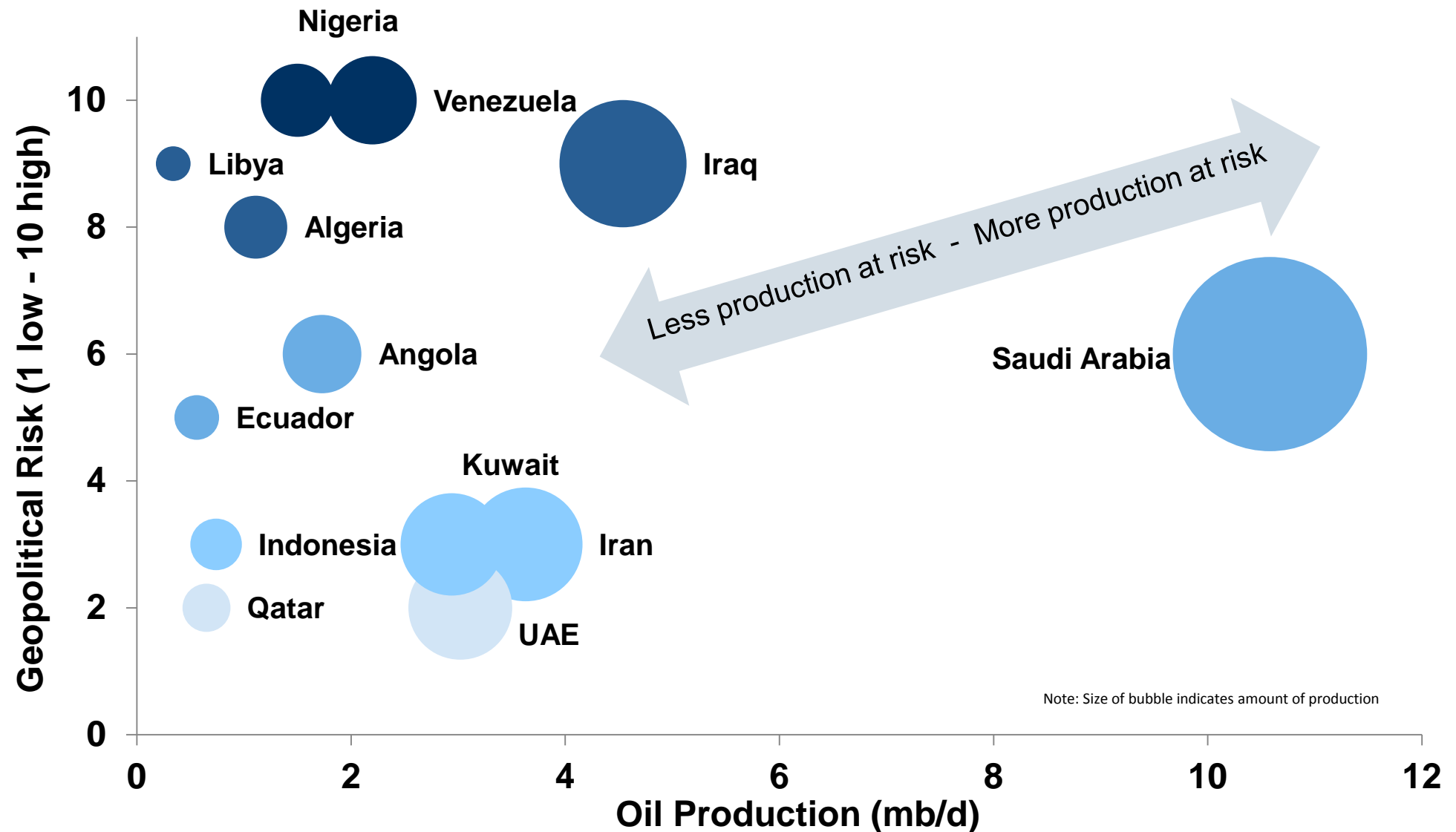
Source: RBC Capital Markets, Petro-Logistics SA, IEA, EIA, company and government sources

OPEC - What Does Winning Look Like?

- Slow and steady wins the sustainable recovery but the \$50/bbl mark only buys breathing room for some sovereign producers. OPEC is a low cost marginal producer, but fiscal break evens remain much higher. Most OPEC nations are heavily reliant on energy revenue to fund social programs and military campaigns. As such, much higher oil prices are required.
- Ongoing and potential forthcoming supply outages in key geopolitical hotspots are a key reminder that many oil producing countries remain in fiscally precarious situations, even as prices inch higher.
- In the context of many pegging OPEC's recent decision to cut production as a watershed moment, in our view, Saudi Arabia shifted gears and abandoned the strategy of prioritizing market share simply because it proved ineffective. Simply put, the Saudis had a difficult time increasing market share in any of the key demand centers.
- While some suggest that the market share battle has ended, we argue that such battles never die, instead they evolve. The now defunct policy centered on competing on price and volume, but going forward, countries will prioritize captivity over competition.

Many OPEC Members Remain On The Hot Seat Even at \$50/bbl

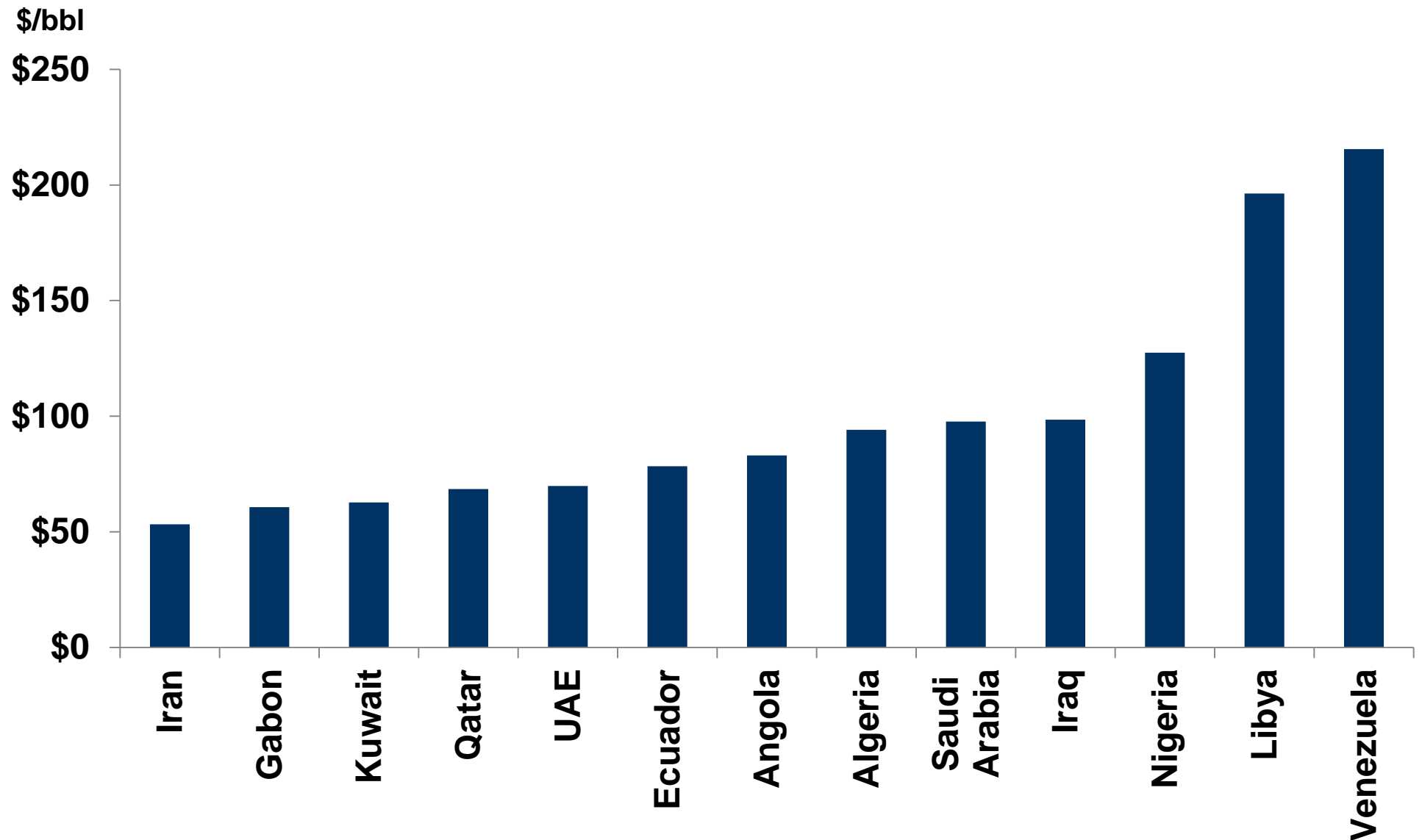
Geopolitical Risk Ranking vs Oil Production



Source: RBC Capital Markets, Petro-Logistics SA

The Spectrum of Pain For OPEC Countries Remain Wide

2017 Fiscal Breakeven Estimates

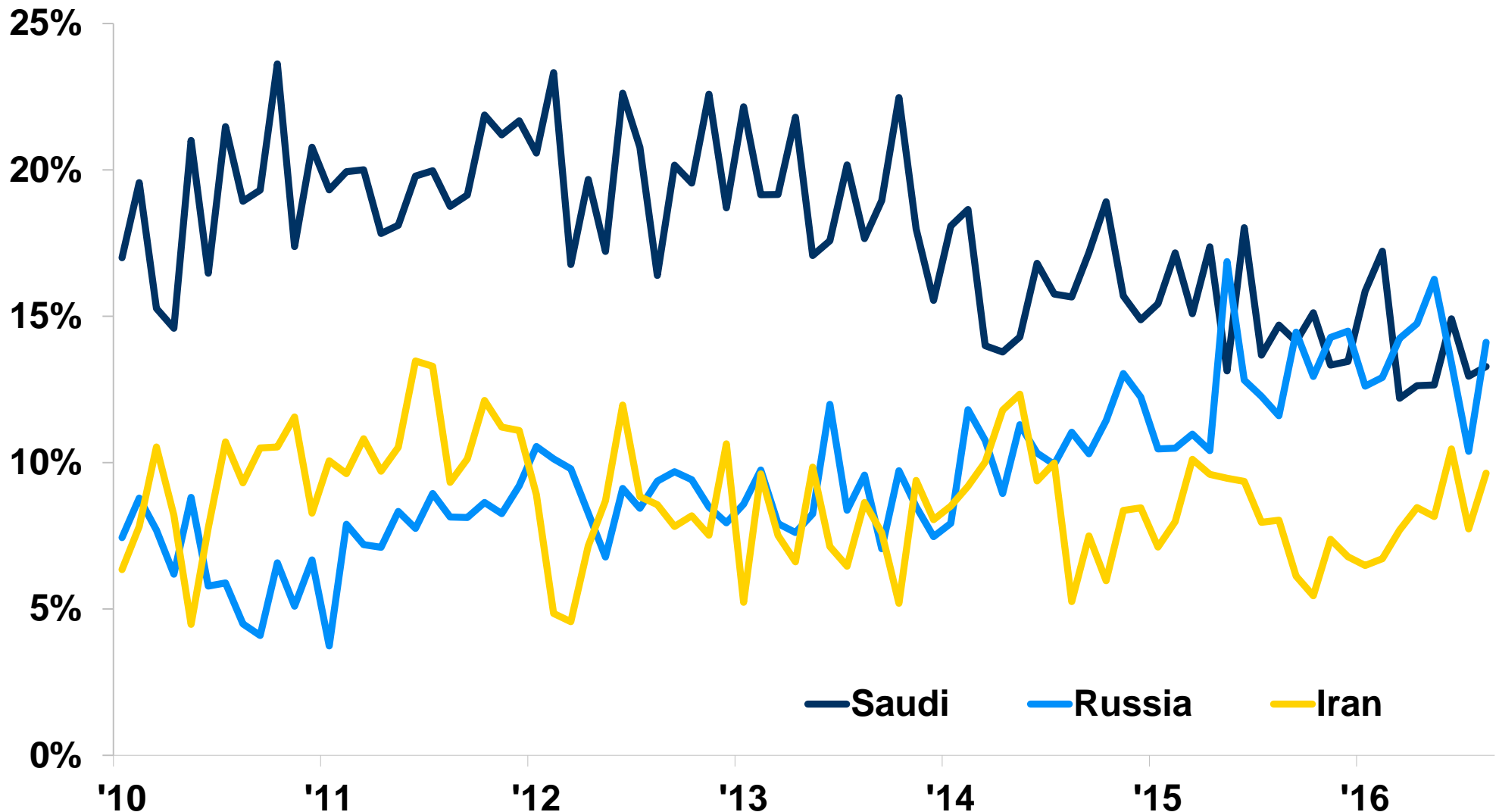


Source: RBC Capital Markets, IMF, government sources

Saudi Arabia's Market Share Strategy Proved Ineffective

Chinese Crude Imports By Key Region

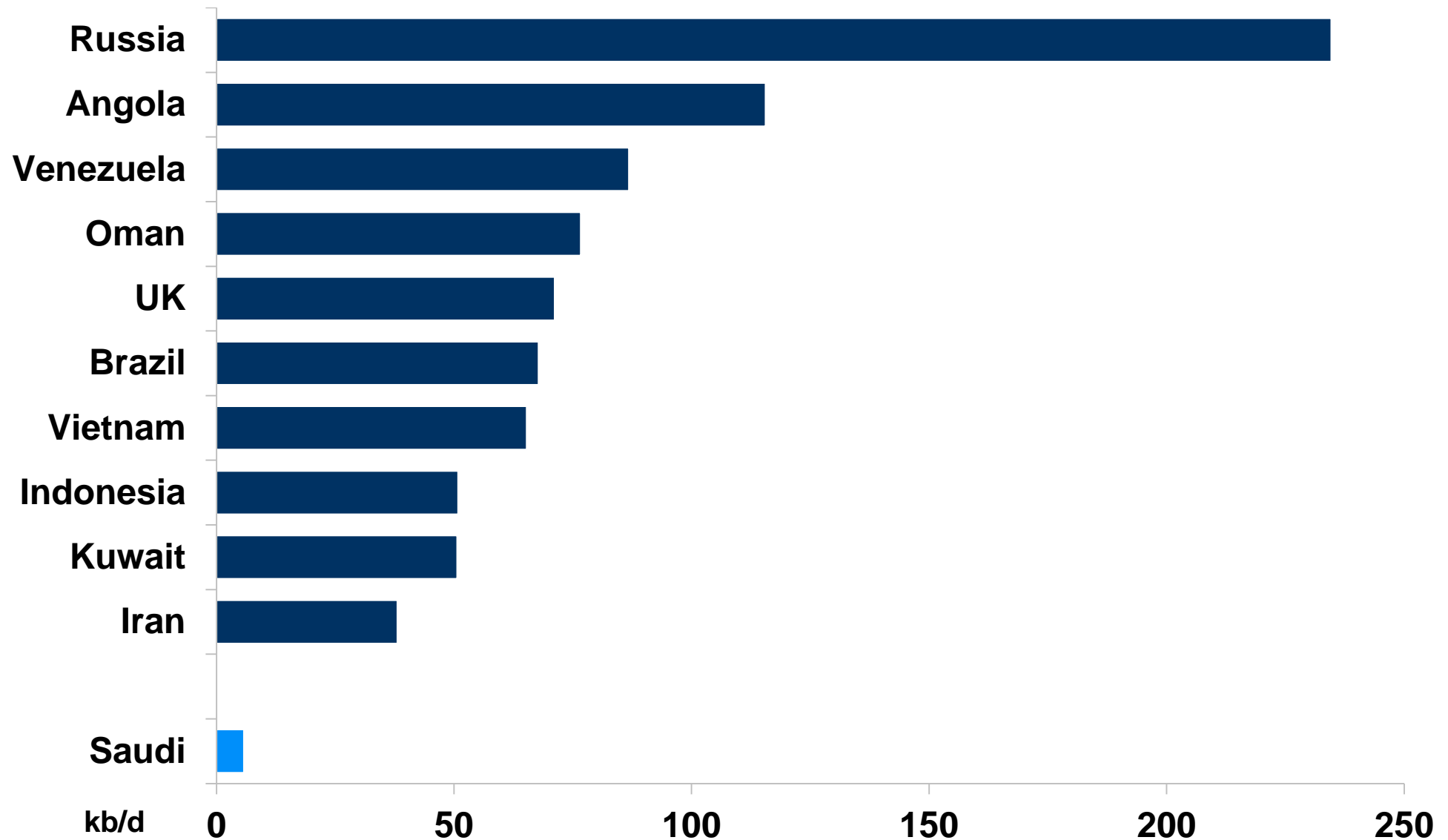
% of Chinese Imports



Source: RBC Capital Markets, Chinese Customs General Administration

Saudi Left Market Share On The Table In Targeted Growth Regions

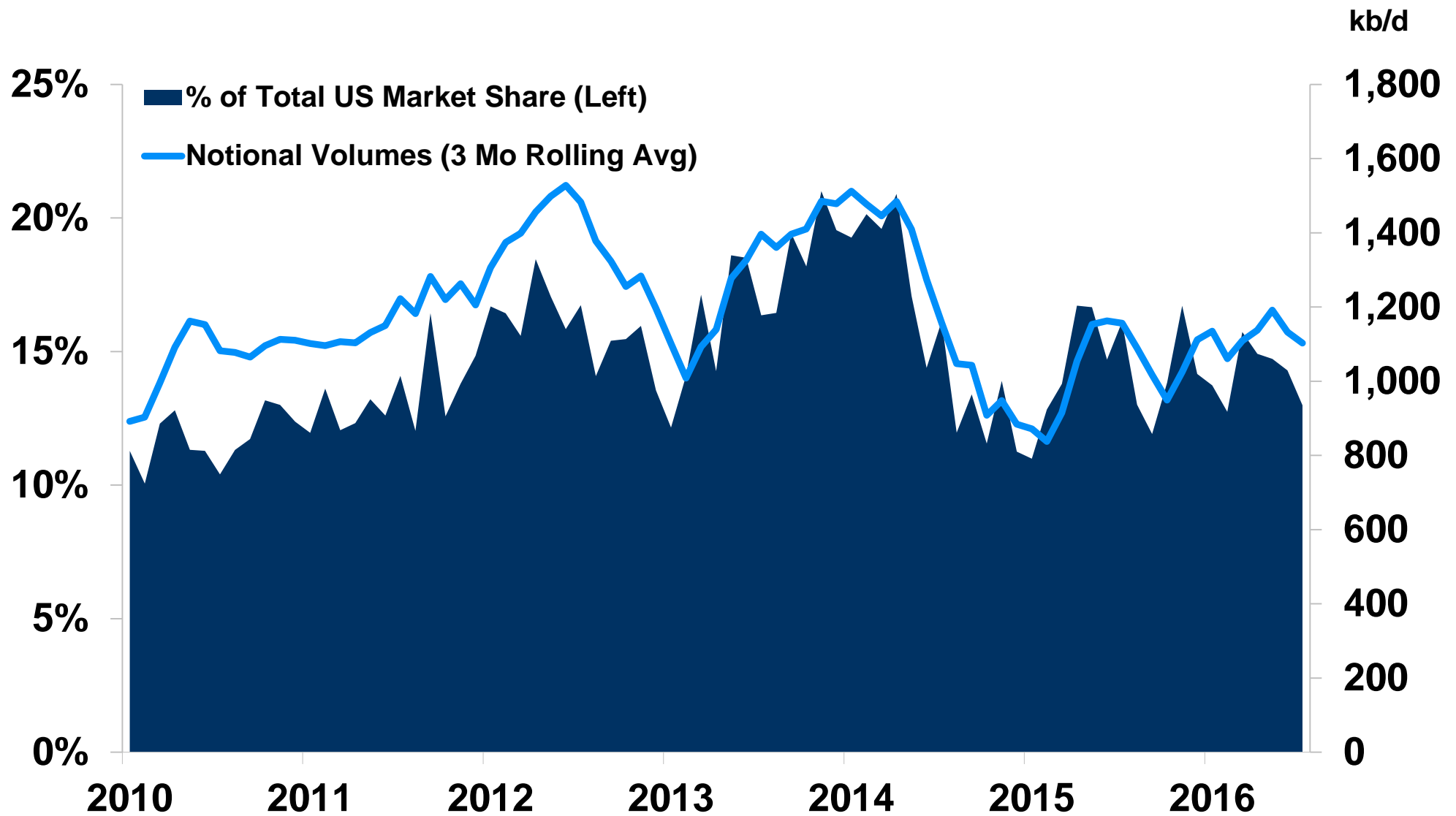
Chinese Crude Import Growth By Region, YoY Chg



Source: RBC Capital Markets, Chinese Customs General Administration

Saudi Market Share Slides In The US

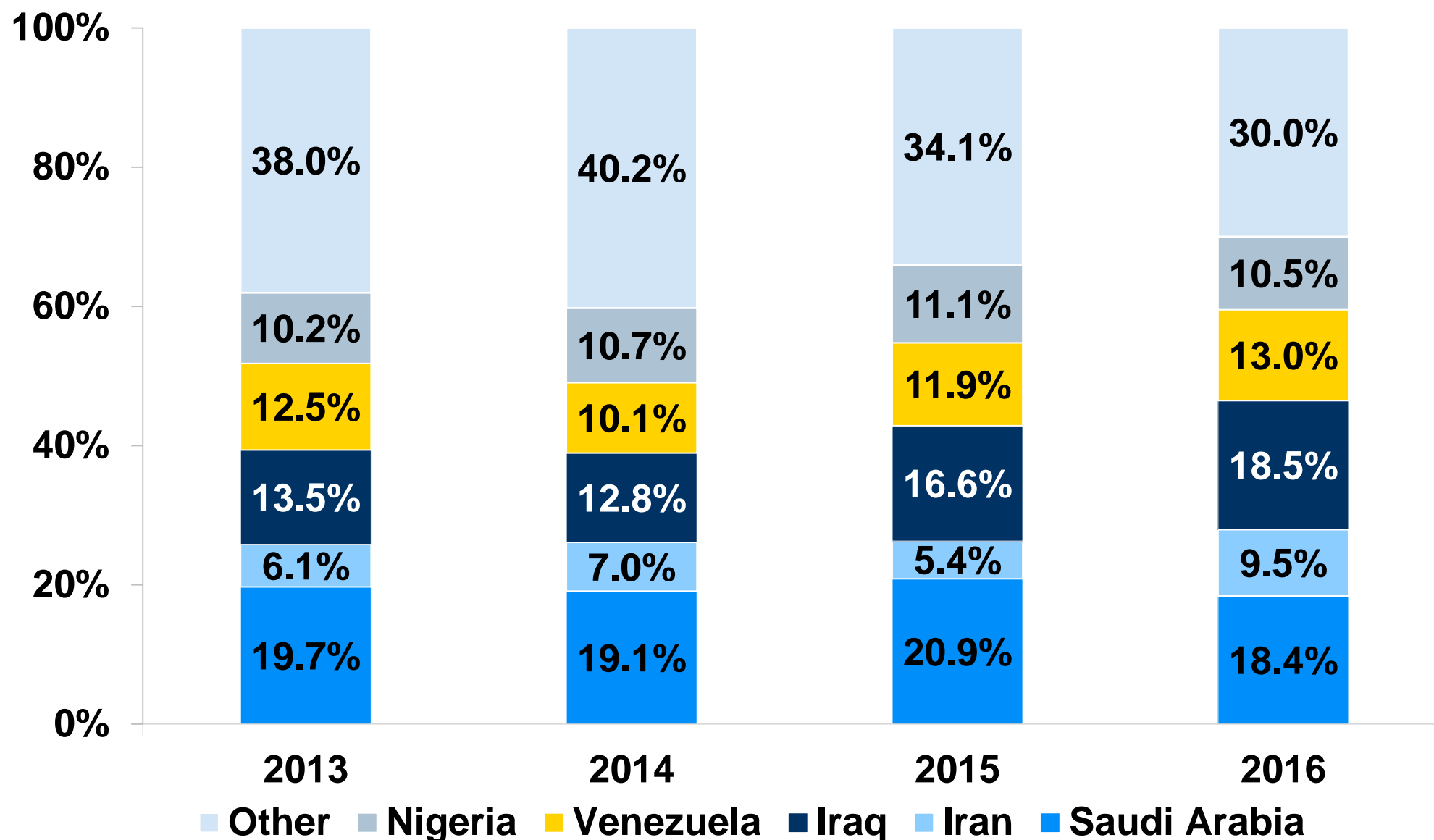
Saudi Arabian Market Share (Notional & Percentage of Total)



Source: RBC Capital Markets, EIA, country and government sources

Saudi Market Share Wanes In India

Percentage of Indian Crude Imports By Key Country



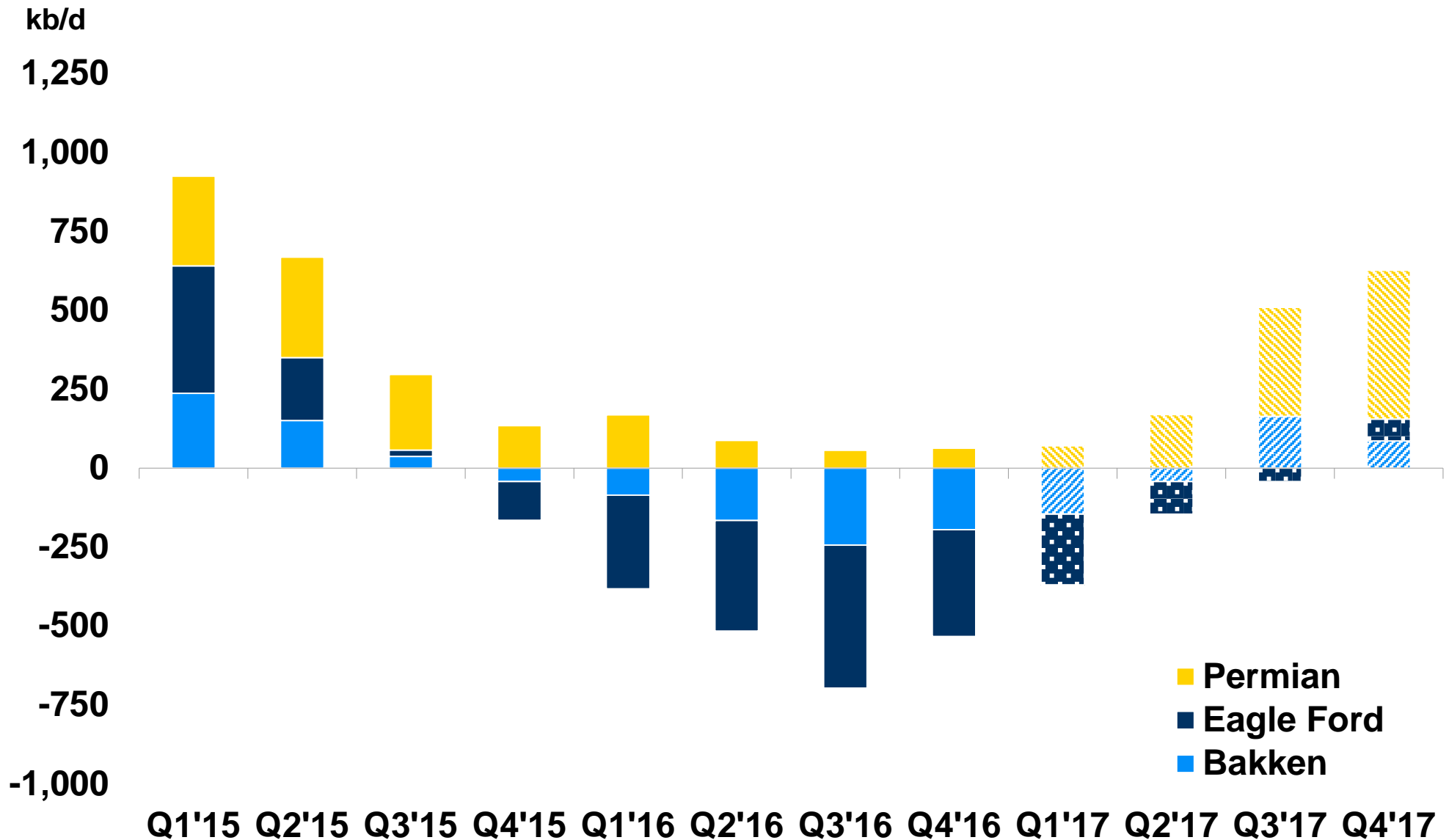
Source: RBC Capital Markets, country and government sources

Supply Will Rebalance The Market...With Non-OPEC In Focus

- Global balances have achieved a delicate state of equilibrium but the market remains in a fragile state in which minor changes at the margin could tip balances in either direction, resulting in large asymmetric shifts in both sentiment and price.
- We remain in a supply driven market. Falling US supply kicks off the rebalancing act but won't finish it. Recent hedging activity helps US producers become increasingly price agnostic as hedges are shored up. Other non-OPEC countries will be counted on to rebalance the market to a long term equilibrium level over the coming years.
- The over arching theme of slowing investment in costly multi-year cycle projects have planted the seeds for a sustainable push higher given that the commissioning of short cycle, steep decline projects will be insufficient to offset supply disruptions alongside natural declines.
- The lack of commissioning of additional high cost, low decline projects like the oil sands or deepwater projects will steepen the treadmill of global decline rates as the market moves towards a supply gap later in the decade.

US Production Has Become The Anti-Fragile

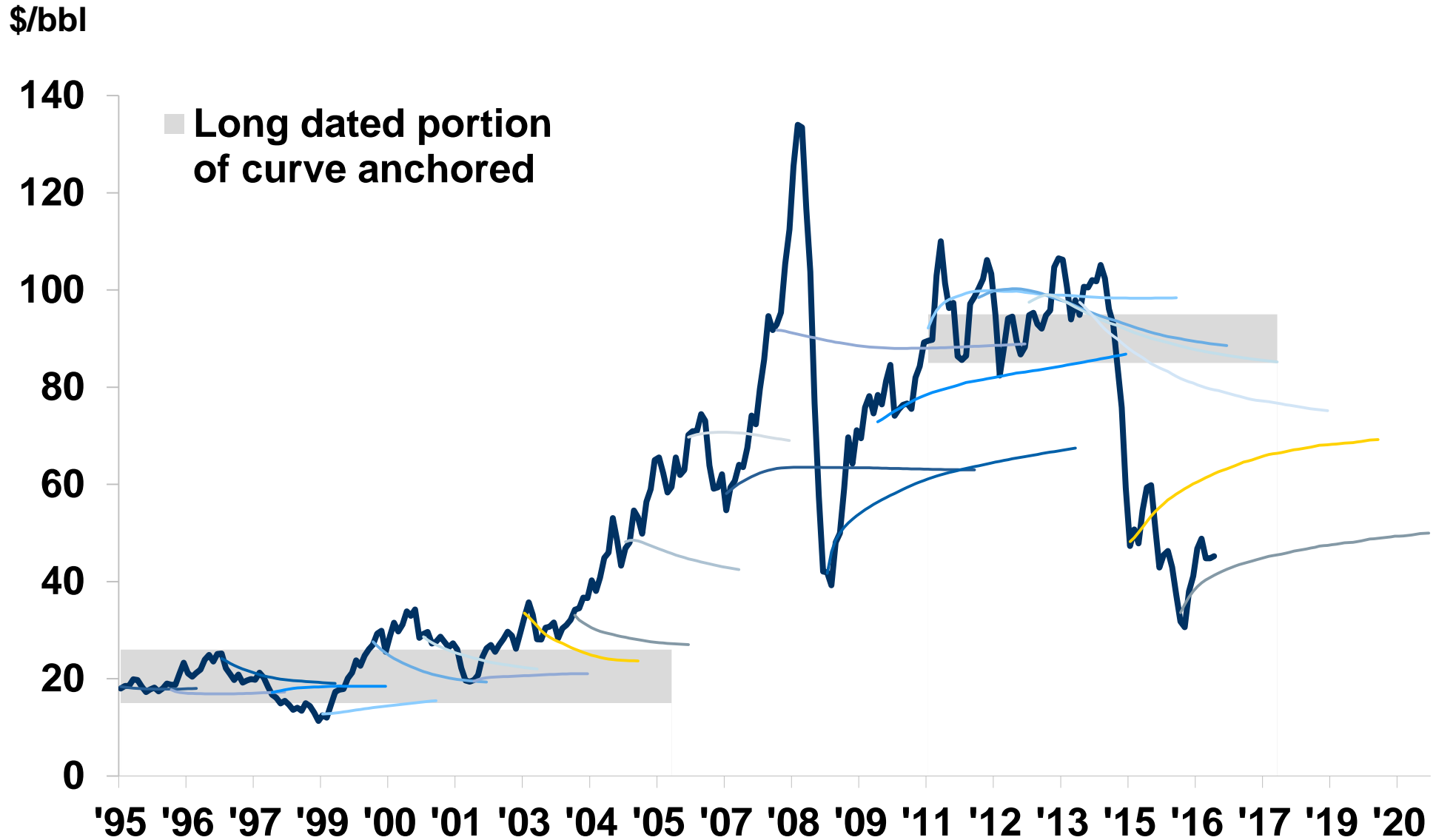
US Crude Growth/Decline By Key US Region, YoY Chg



Source: RBC Capital Markets, EIA

Long Dated Portion of Curve Anchors at the Marginal Cost Barrel

WTI Spot Price & Forward Curve*



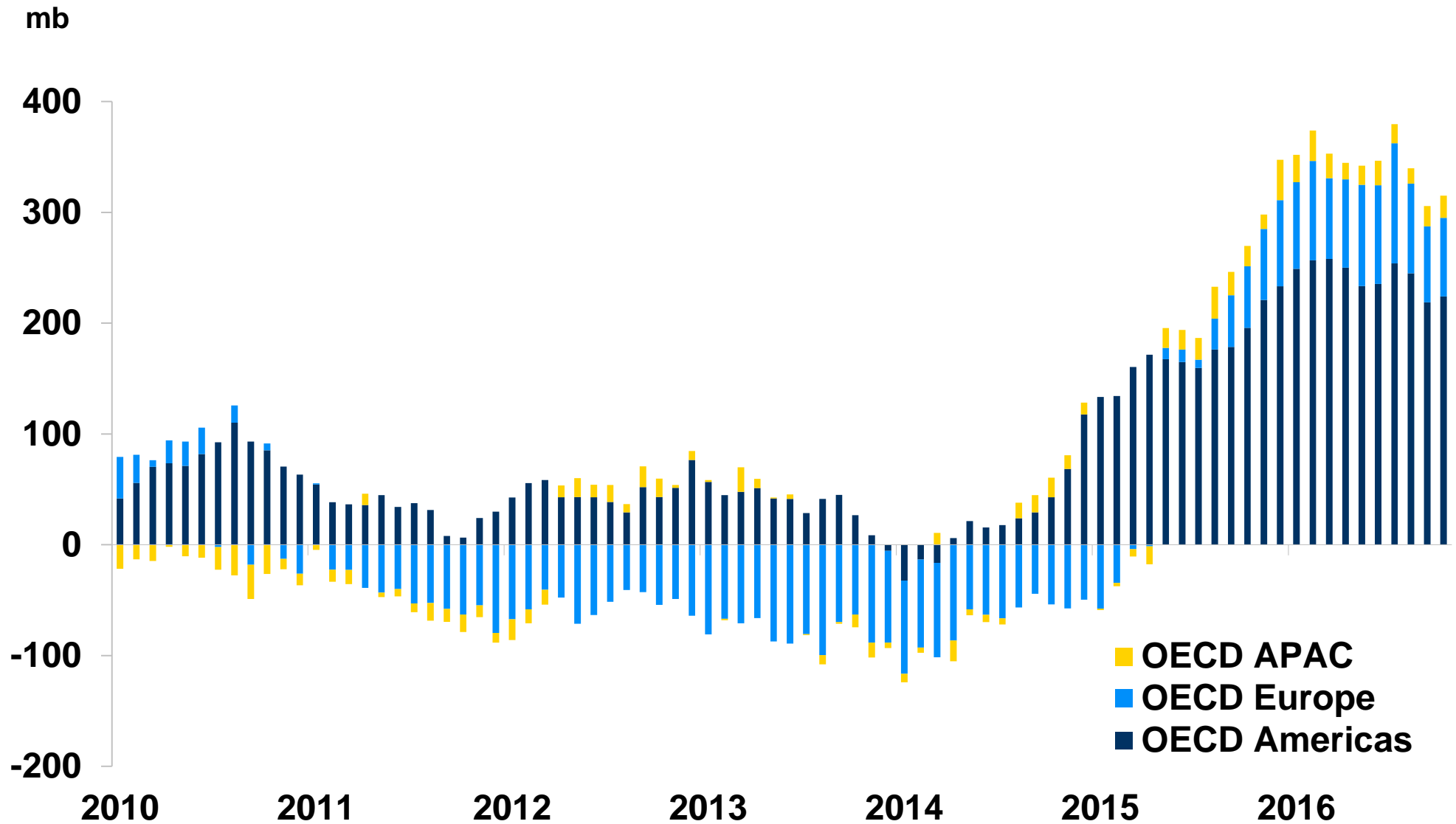
Source: RBC Capital Markets *Forward strip as of Jan 1 of each year

Recency and Locational Biases Muddle Global Storage Picture

- Returning the market to a long term equilibrium price level is a two tiered process. First we must rid the market of the daily supply overhang, which is happening now. Second, the long road back to full market equilibrium entails returning global stocks to seasonally normal levels. This feat will remain elusive until late 2017 at best but looks more like a 2018 story.
- Stocks have started drawing in several other key parts of the world, but US inventories remain elevated. As such, recency and locational bias often lead industry participants to draw false parallels, particularly if the abundance of US oil data and ensuing media coverage is being extrapolated and used to draw similarities to the rest of the world, where data is often lagged or less visible.
- The market fixation on US oil data is innate since the US government and other third party sources provide the most prolific reporting schedule, ranging from rigs to storage to estimates on production. Simply put, US data is the most frequent and transparent data source.

Elevated Storage Levels Act as De Facto Spare Capacity

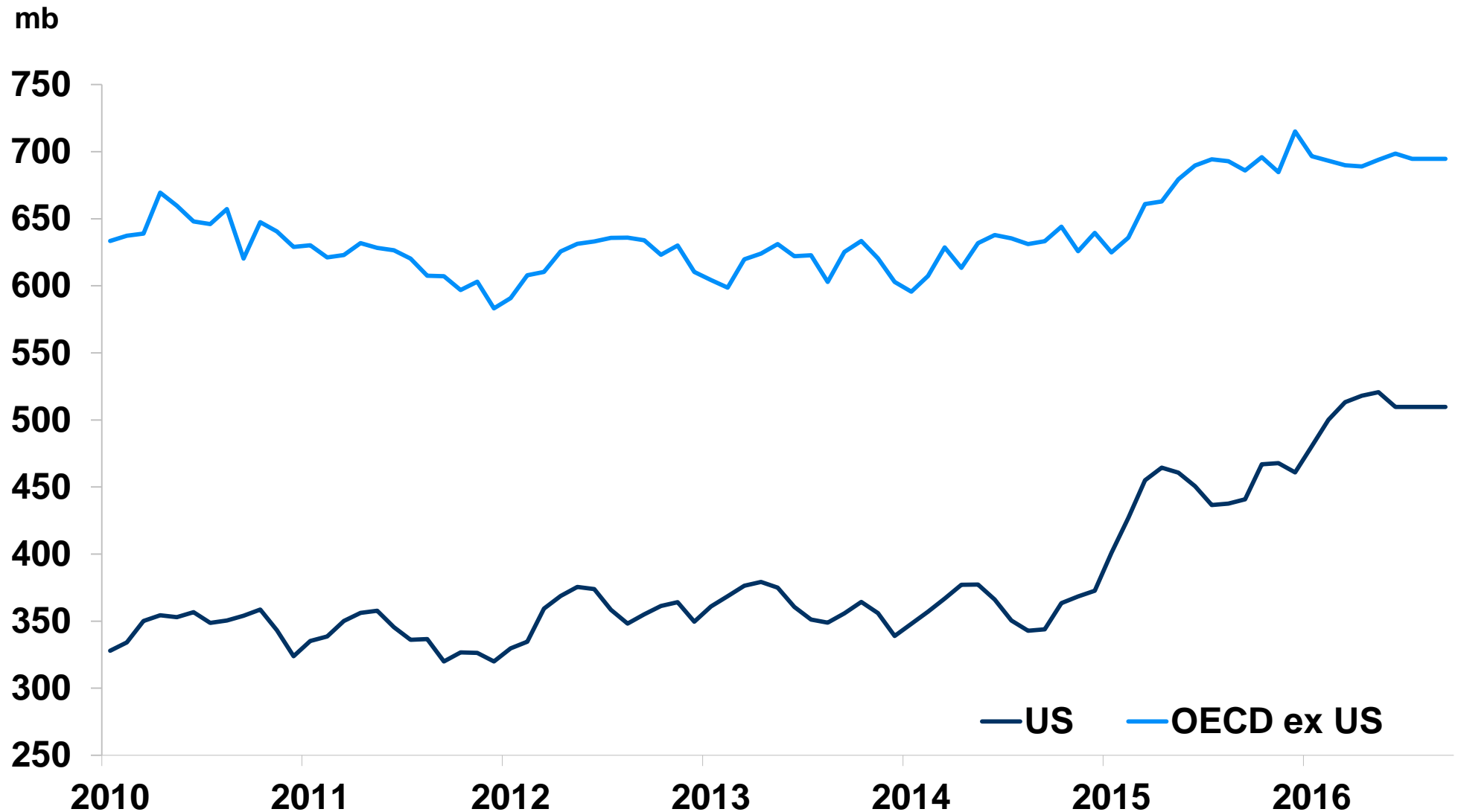
OECD Commercial Oil Stocks – Surplus/Deficit to Five Year Average



Source: RBC Capital Markets, EIA, IEA, Euroilstock, PAJ, country and government sources

OECD Storage Glut Predominately Concentrated in US

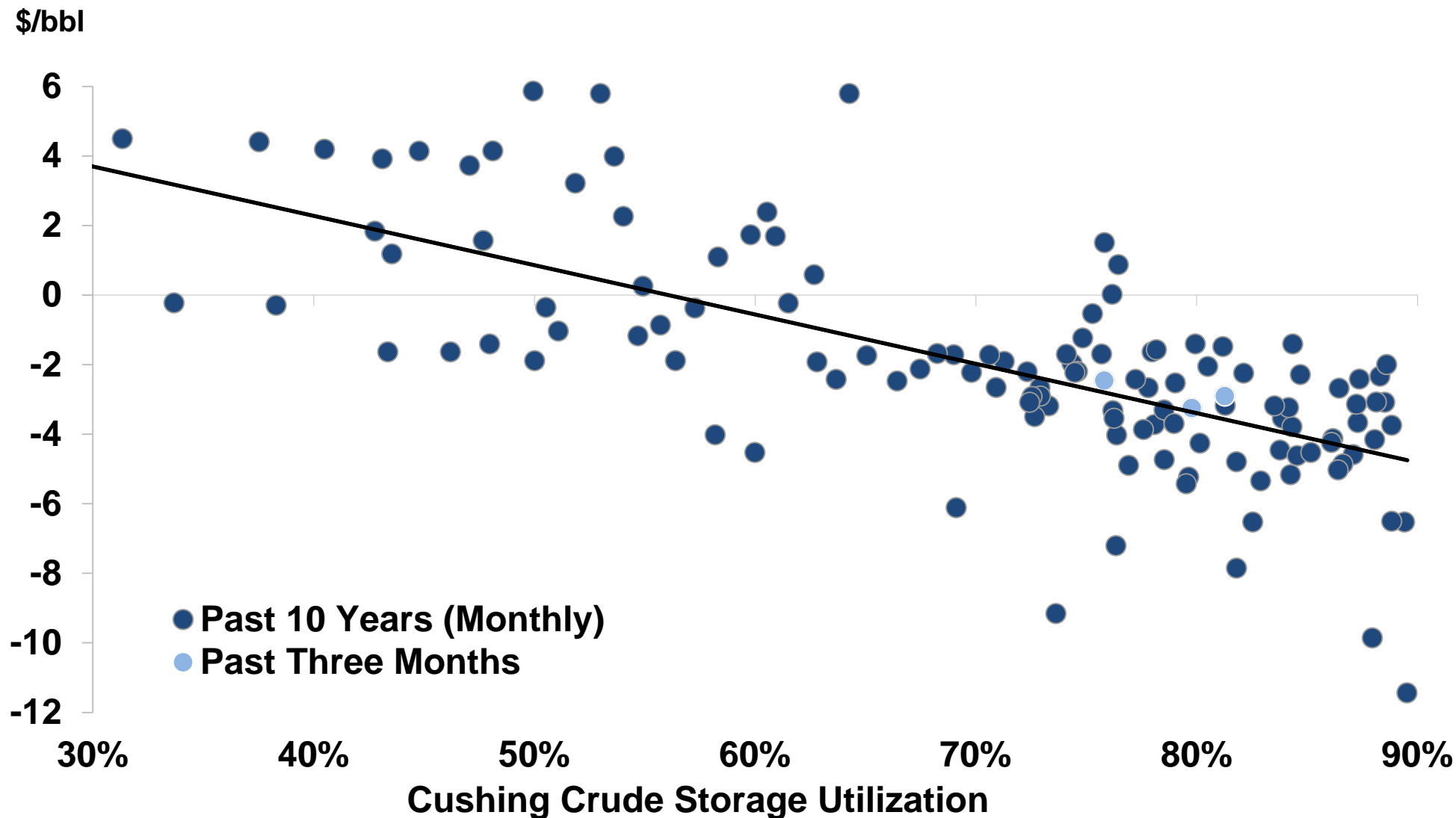
OECD Crude Oil Inventories



Source: RBC Capital Markets, EIA, IEA, Euroilstock, PAJ, country and government sources

Backwardation on Hold Until Further Stockdraws Emerge

Cushing Storage Utilization vs WTI Spread (1 vs 6 Mo)



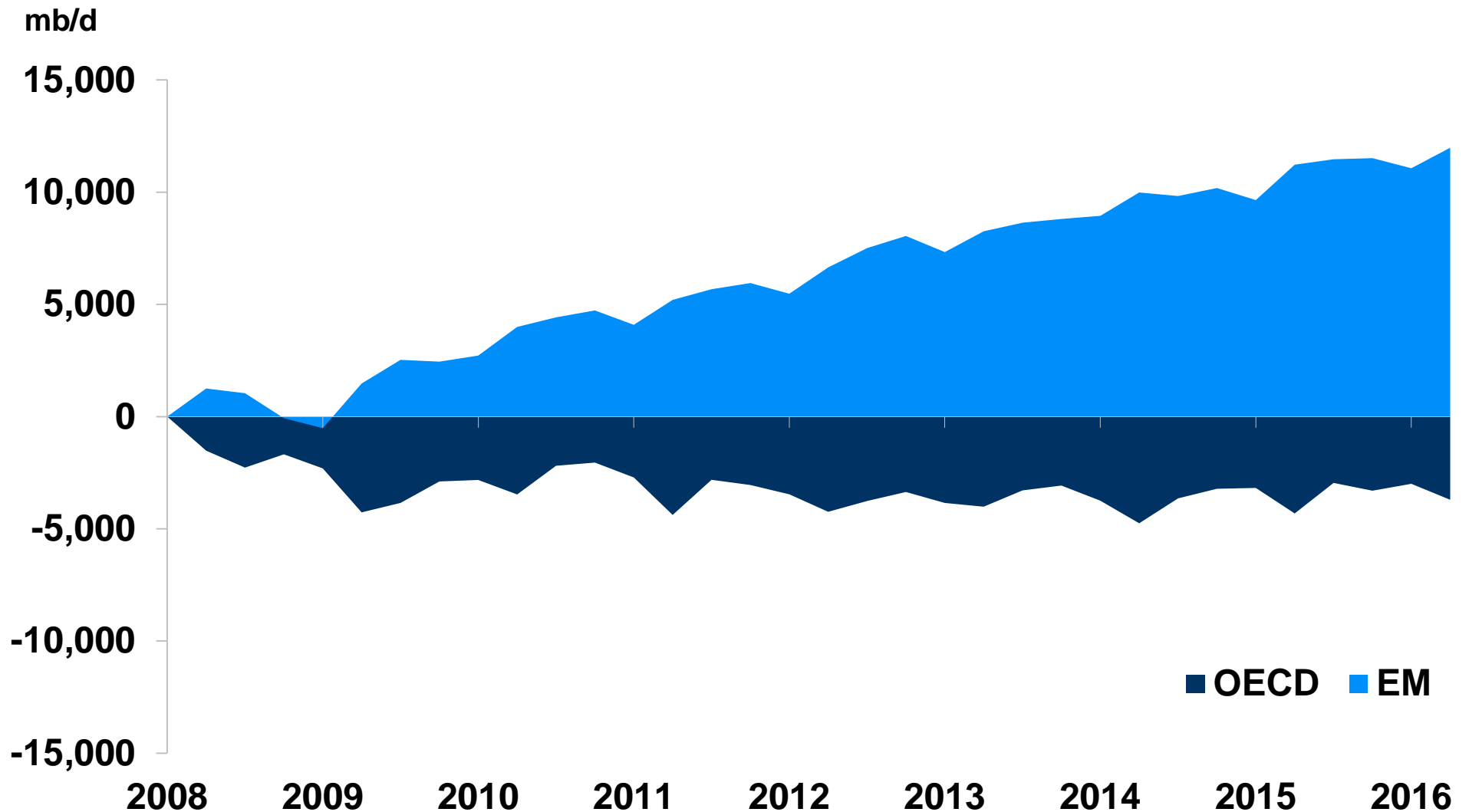
Source: RBC Capital Markets, EIA

Global Demand Outlook Steady...Rather Than Slow or Spectacular

- Global oil demand growth has been status quo strong. Low oil prices are stimulating demand and OECD growth has resurfaced. Looking forward, global demand will likely remain steady rather than spectacular or slow. With the exception of the past two years, OECD demand peaked before the recession and has been trending lower in the years since. We remain much more concerned with peak demand over the coming years rather than the peak supply fears of last decade.
- Aside from 2015, Emerging markets have singlehandedly carried global oil demand growth since the recession. In fact, Emerging Asia alone has accounted for between 60-70% of total global oil demand growth over the past several years. Concentration risk is rarely a friend of Wall Street.
- We remain cautiously optimistic on Chinese oil demand. The days where YoY demand grew by 800+ kb/d are likely in the rear view mirror, but China will remain strong as it transitions towards a consumer based economy. Demand for distillate has waned over recent years, but gasoline demand has taken the reins. India has been strong and will be the main driver of global oil demand growth for years to come.

Emerging Markets Have Carried Global Demand Since The Recession

Demand Change Since 2008

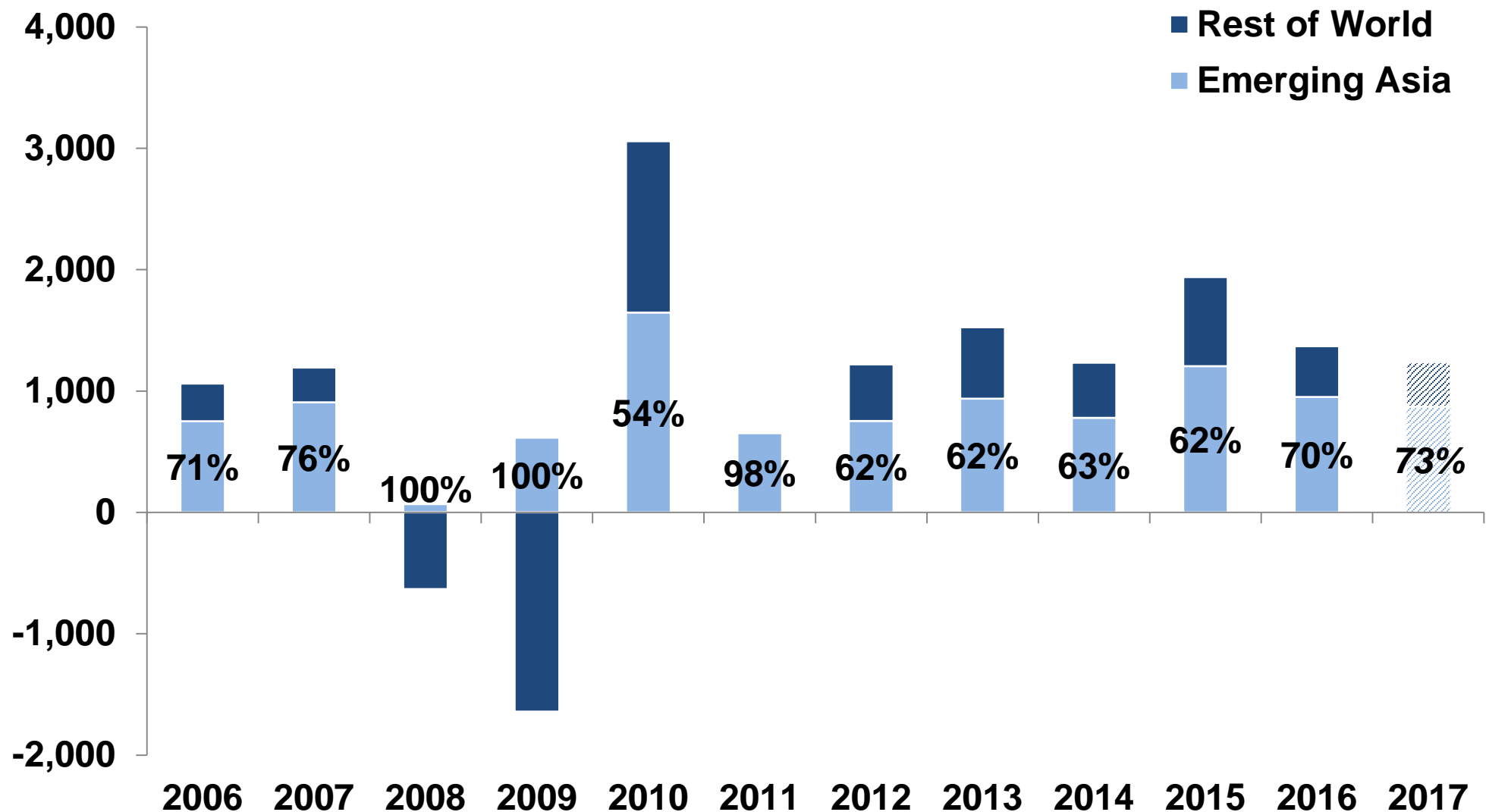


Source: RBC Capital Markets, EIA, IEA, company and government sources

Global Demand Has Been Steady...But Concentration Risk Remains

Global Oil Demand Growth By Region

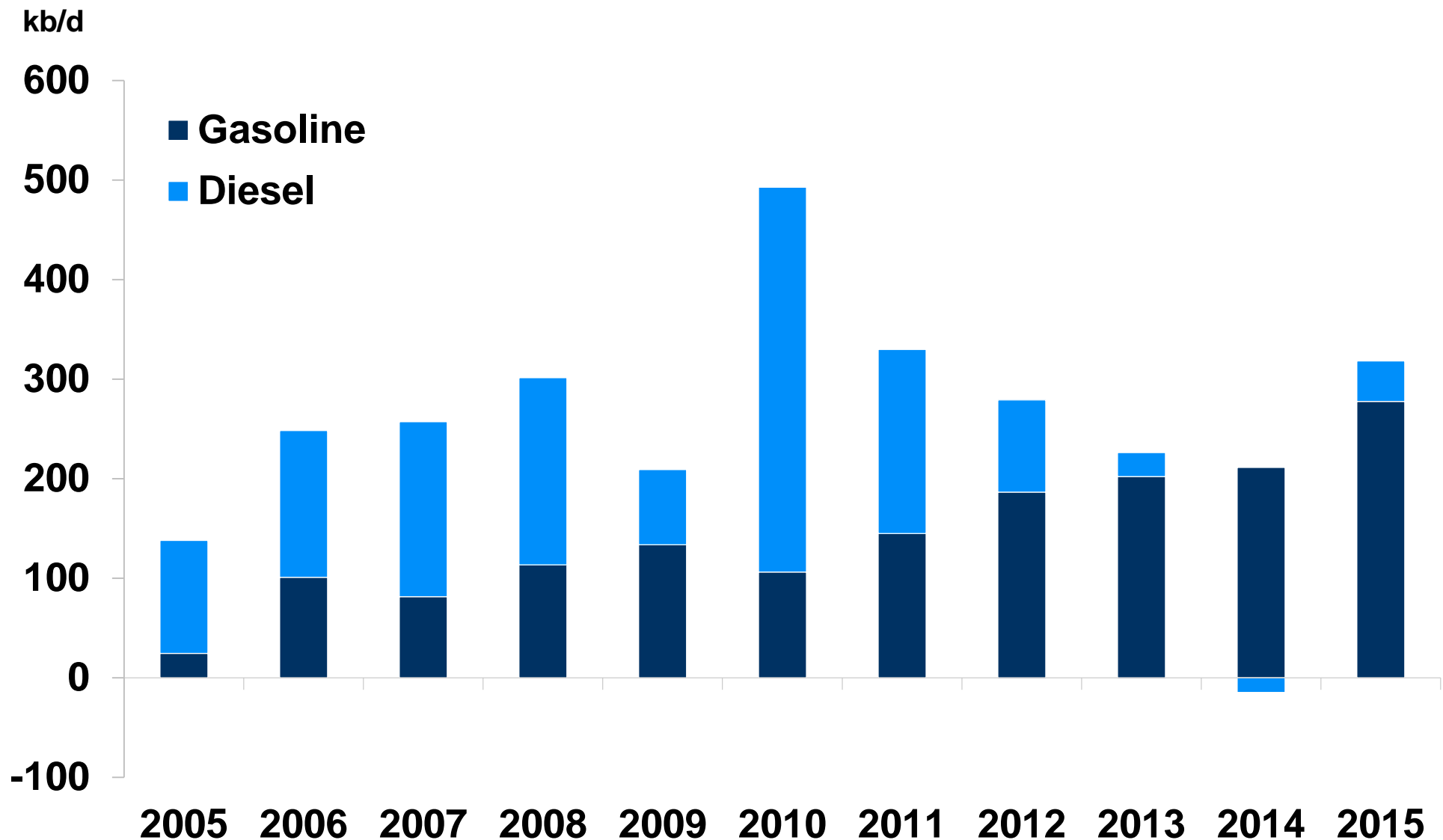
kb/d



Source: RBC Capital Markets, EIA, IEA, JODI, company and government sources

Gasoline Carries Chinese Demand While Diesel Growth Slows

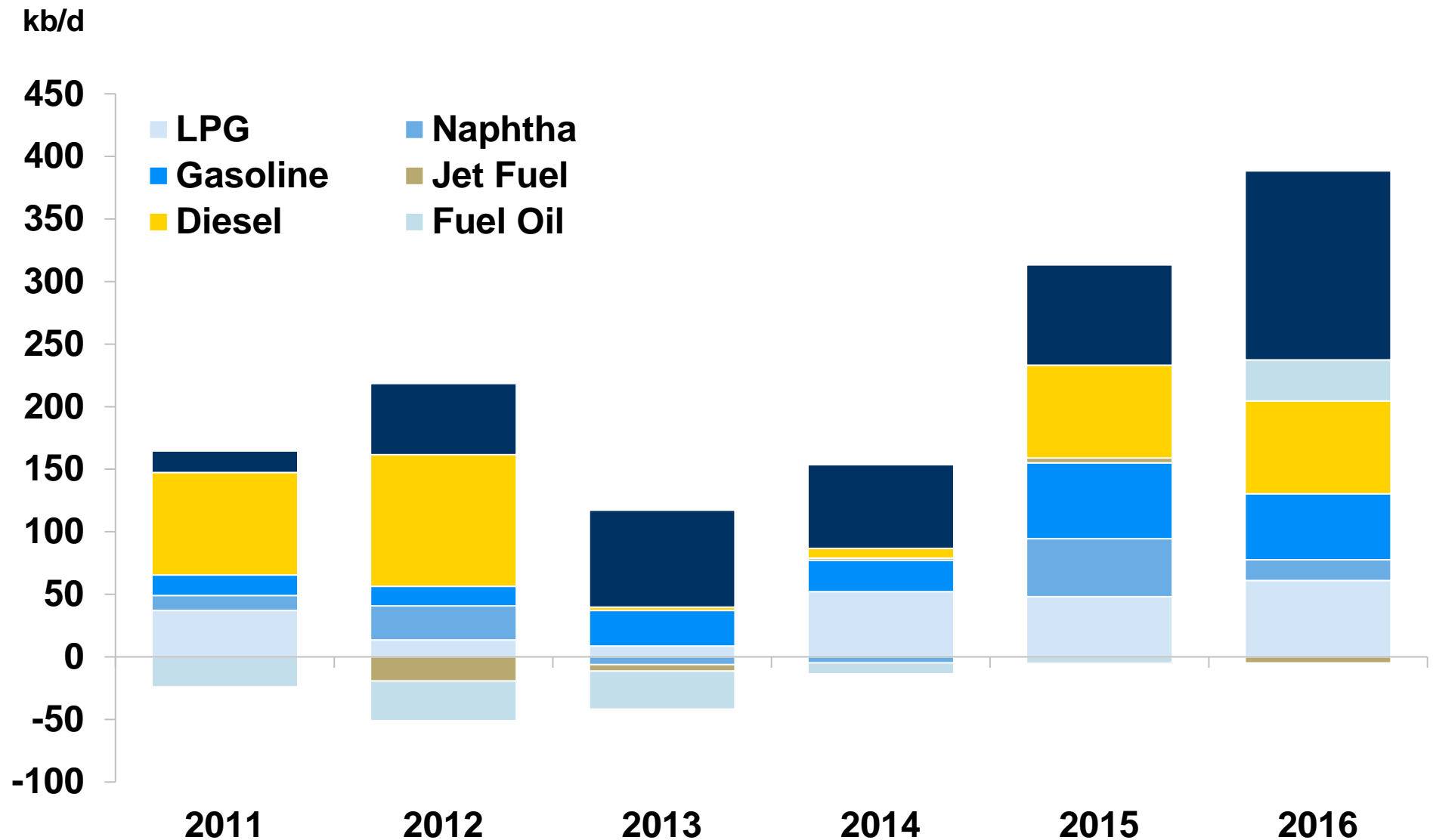
Chinese Demand Growth By Key Refined Product, YoY



Source: RBC Capital Markets, Chinese Customs General Administration

India Will Be The Key Demand Growth Center of The Future

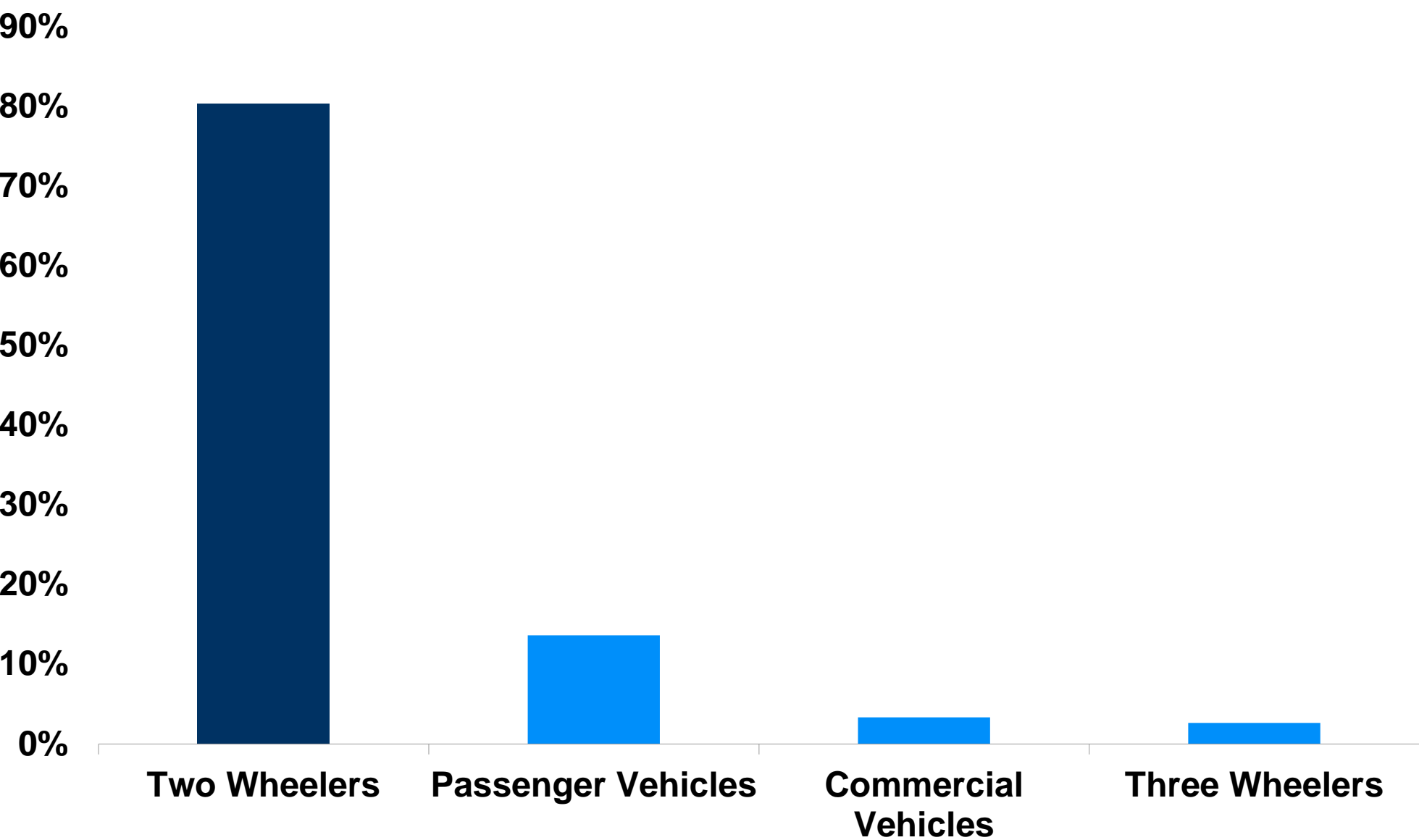
Indian Oil Demand By Product, YoY Chg



Source: RBC Capital Markets, India PPAC

Indian Vehicle Penetration Potential Remains Tremendous

Composition of New Vehicle Sales, India 2015



Source: RBC Capital Markets, Indian Automobile Manufacturers

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