



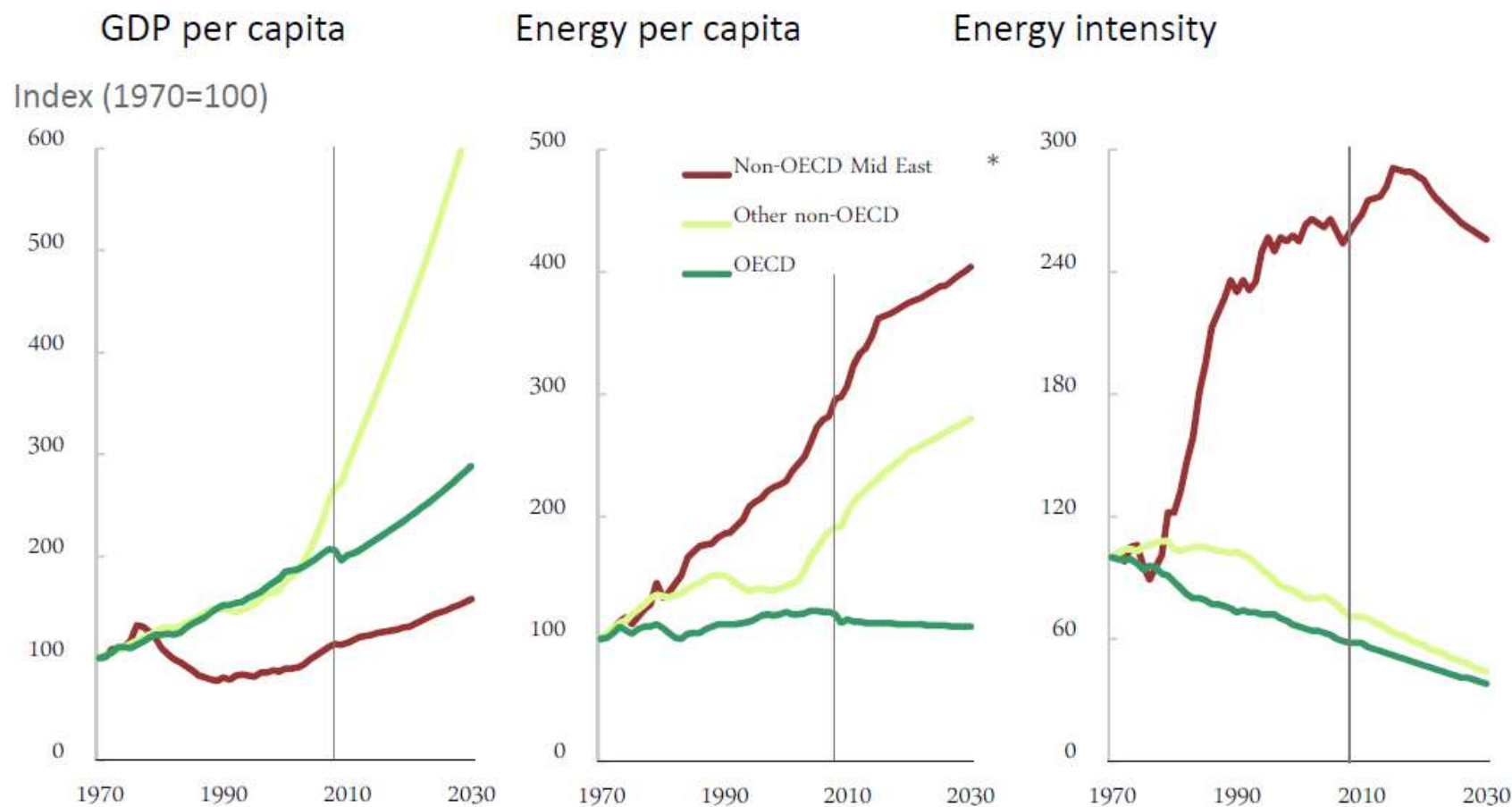
Middle East Oil Producers: Facing New realities

Dr. Carole Nakhle
CEO, Crystol Energy

Moscow, 23 March 2017



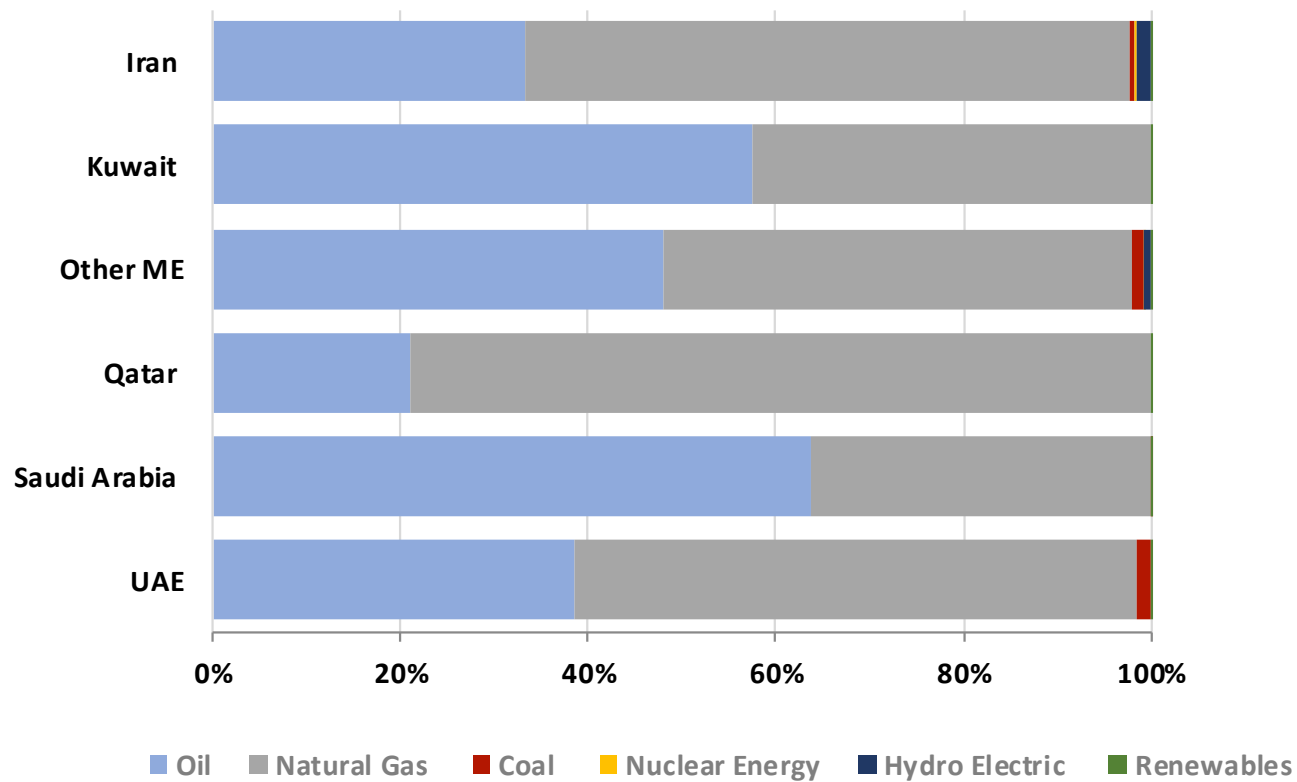
A region with a difference



*Non-OECD Middle East includes Arabian Peninsula, Iran, Iraq, Jordan, Lebanon, Syria

Poor energy diversification

Primary Energy Consumption by Fuel

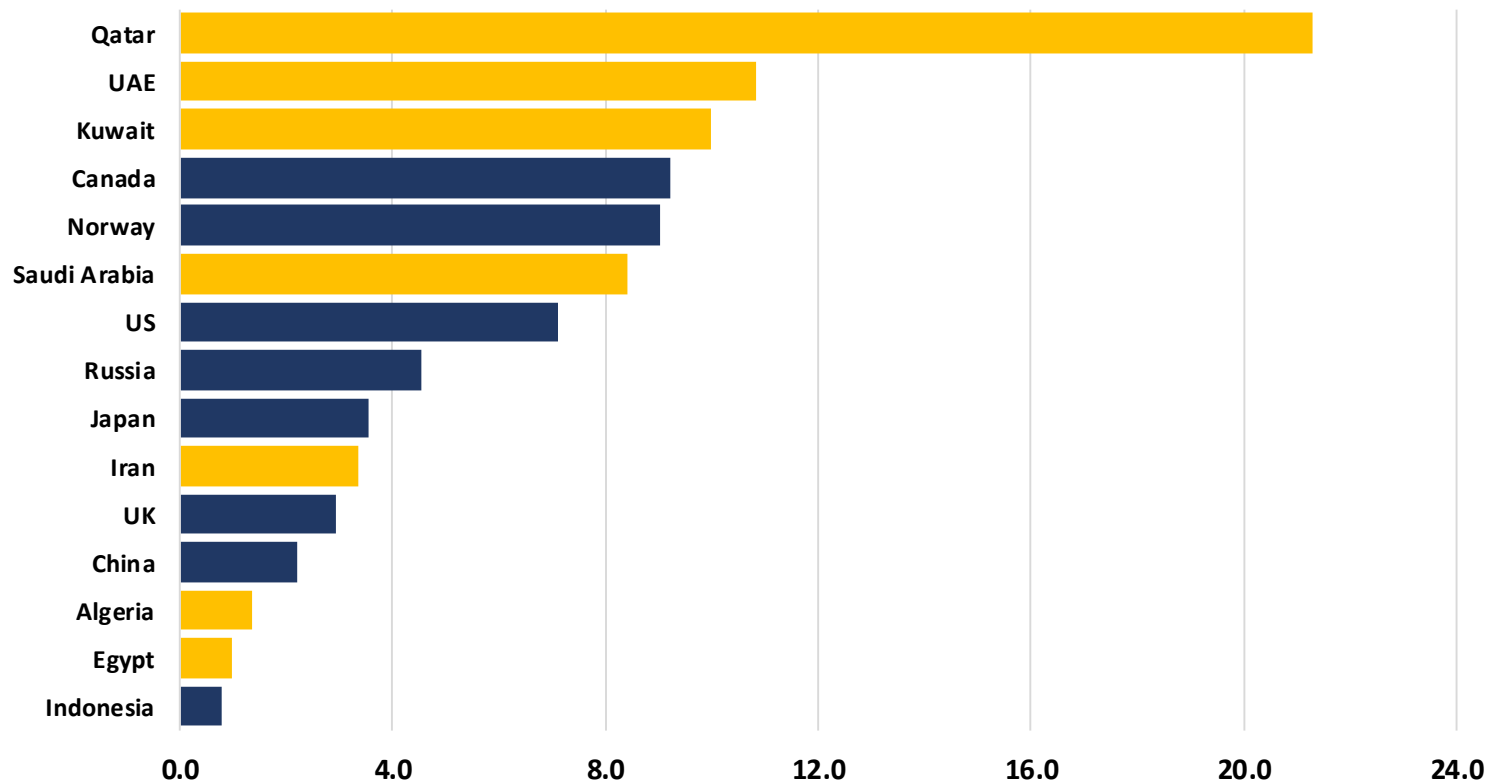


Source: BP Statistical Review

Heavy energy consumers

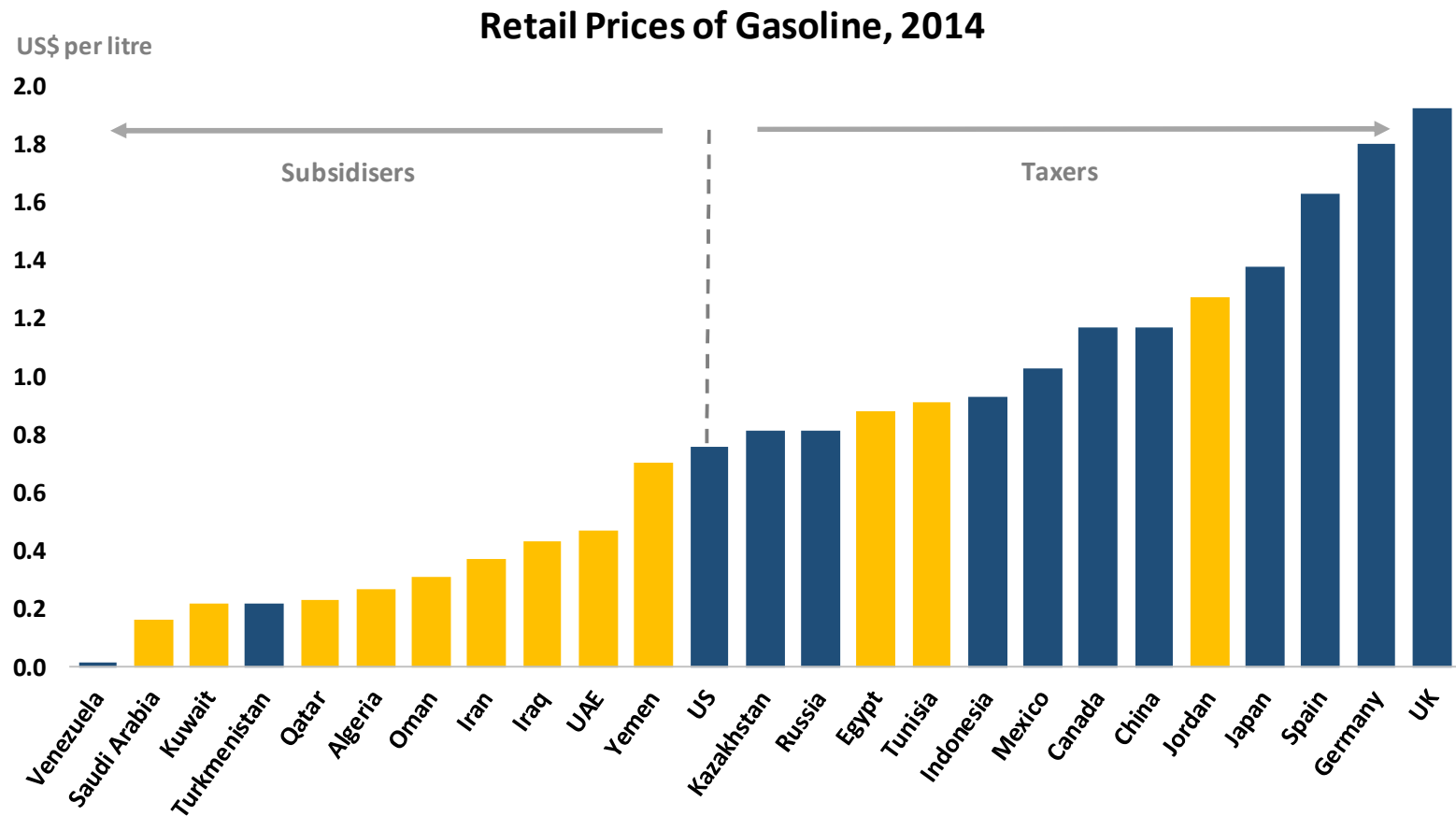
Primary Energy Consumption, 2015

tonnes of oil equivalent per person



Sources: BP Statistical Review of World Energy; IMF

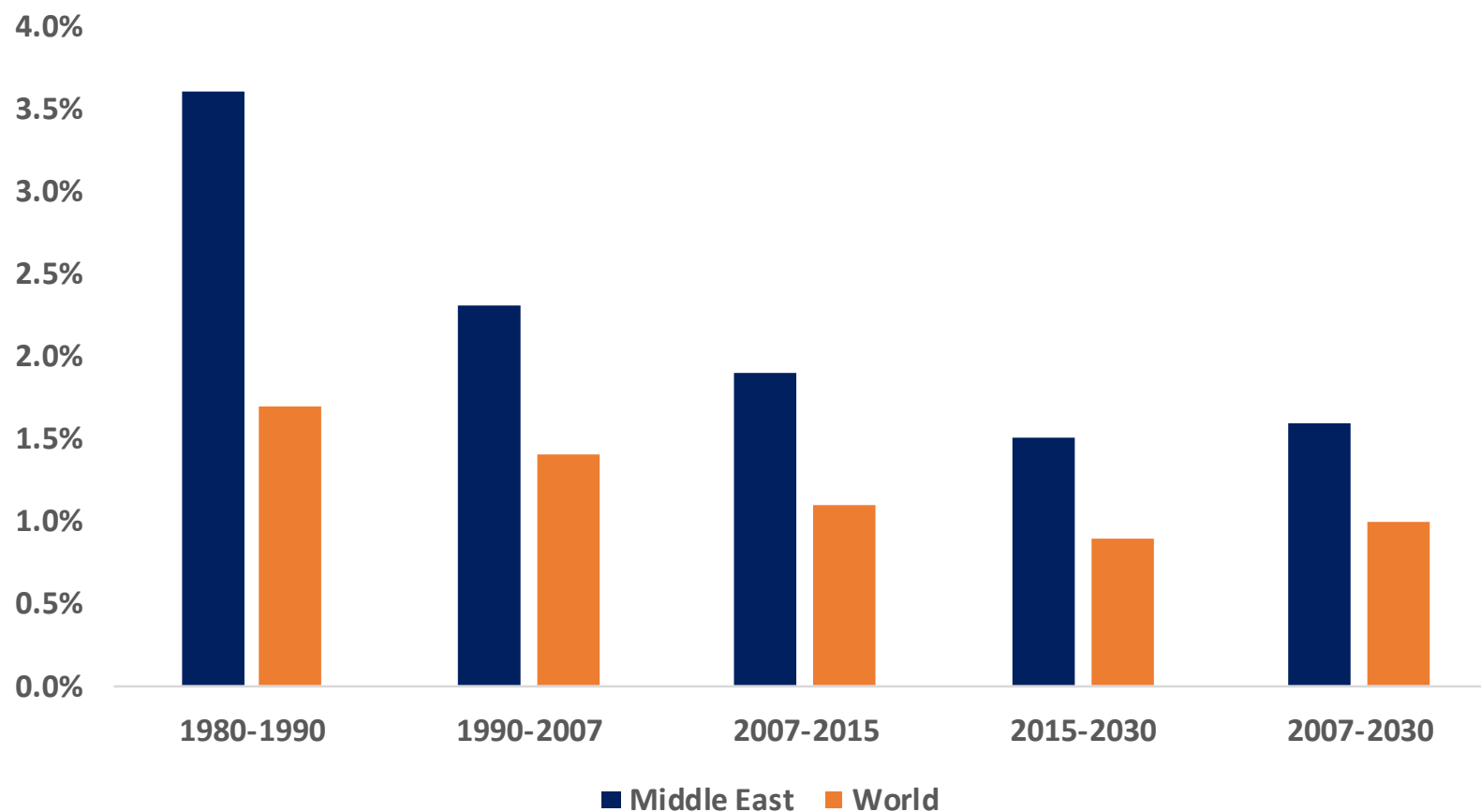
Energy highly subsidised



Source: World Bank

Challenging demographics

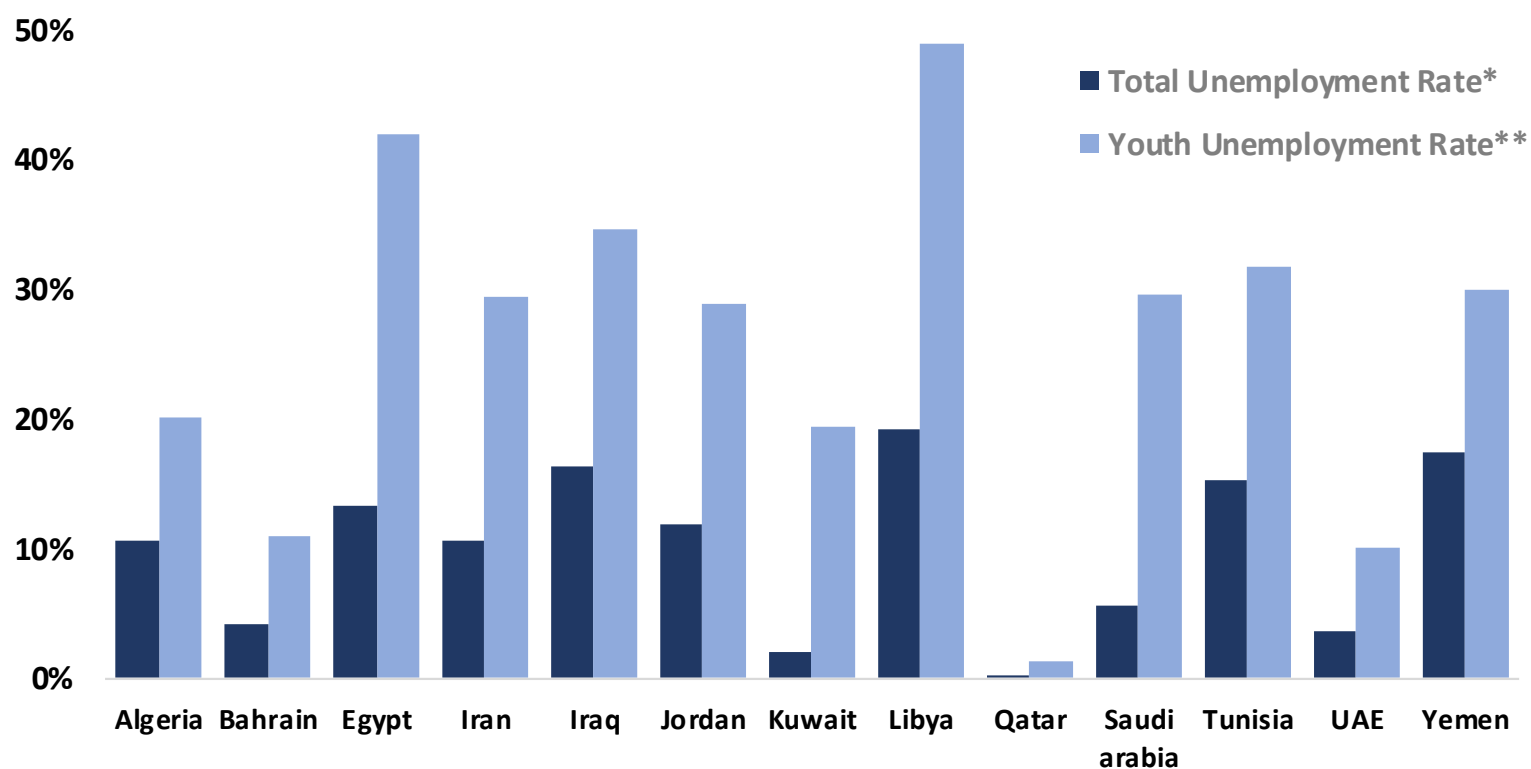
Population Growth, Middle East vs. World Average



Source: IEA

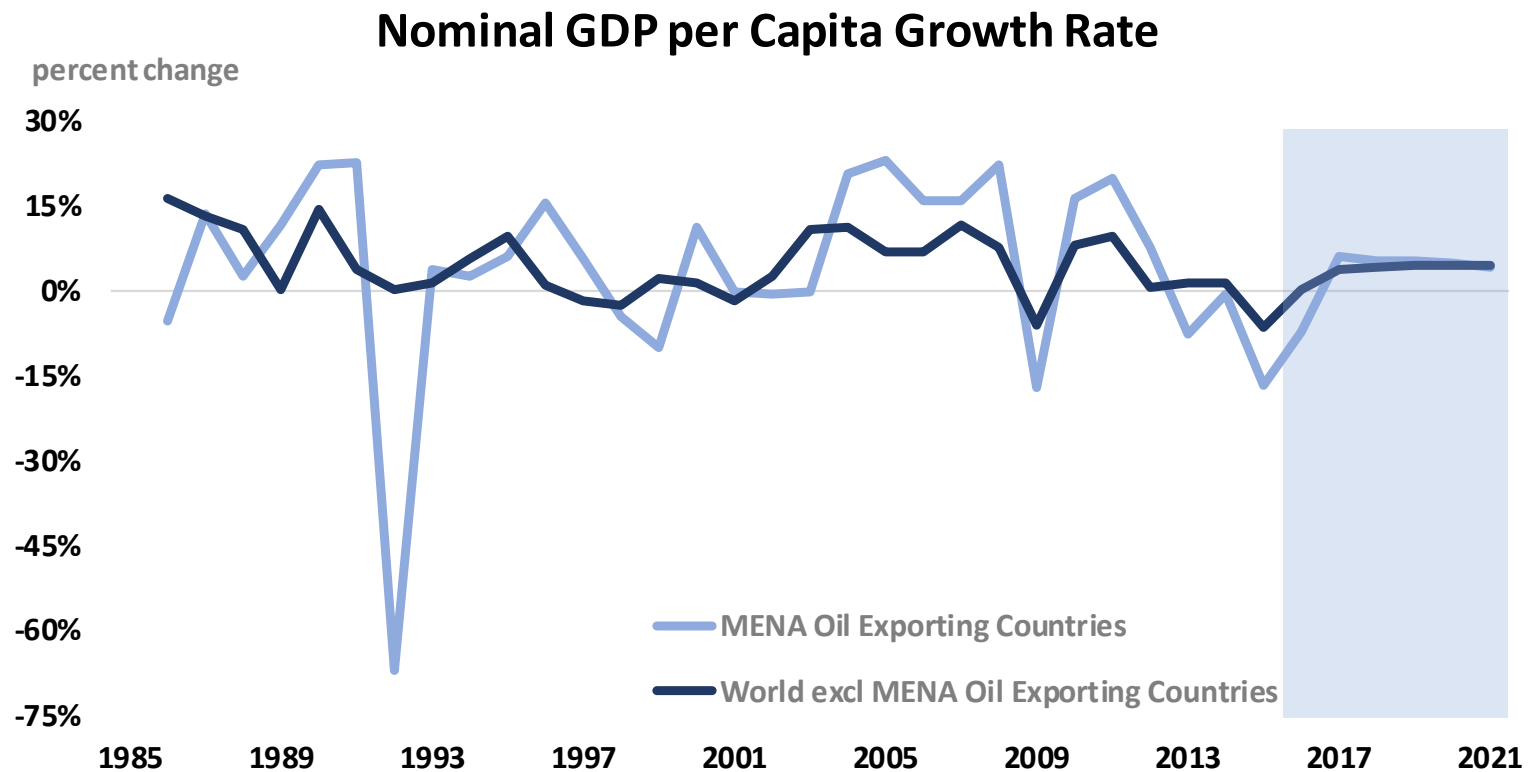
Unemployment epidemic especially among the youths

Unemployment Rate in the MENA region, 2014



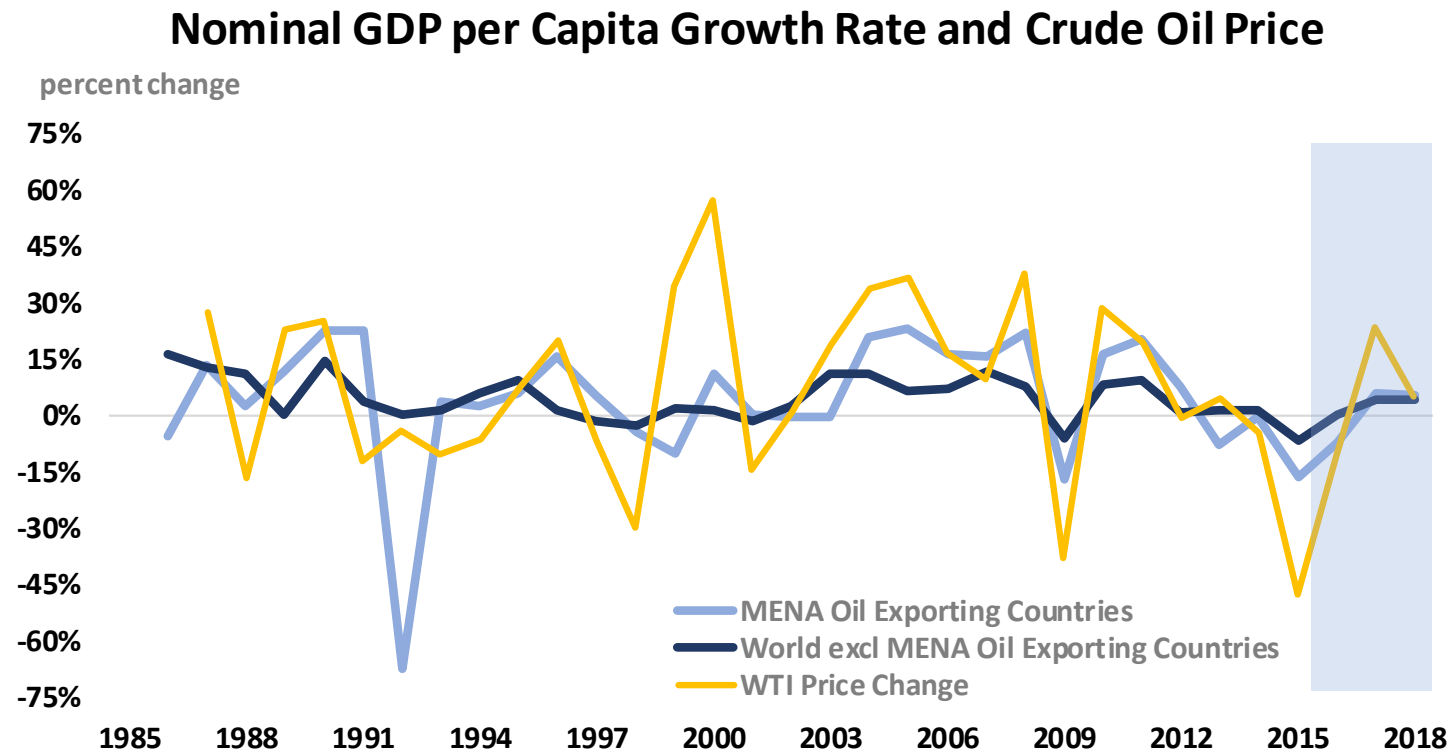
Notes: *percent of total labor force; **percent of total labor force ages 15-24

Spasmodic economic growth



Source: IMF

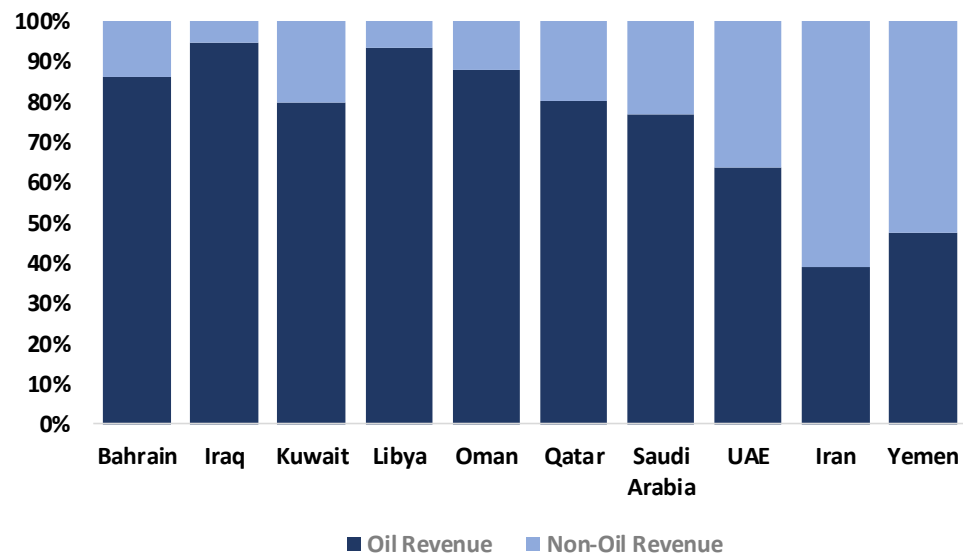
Economic growth: oil impact



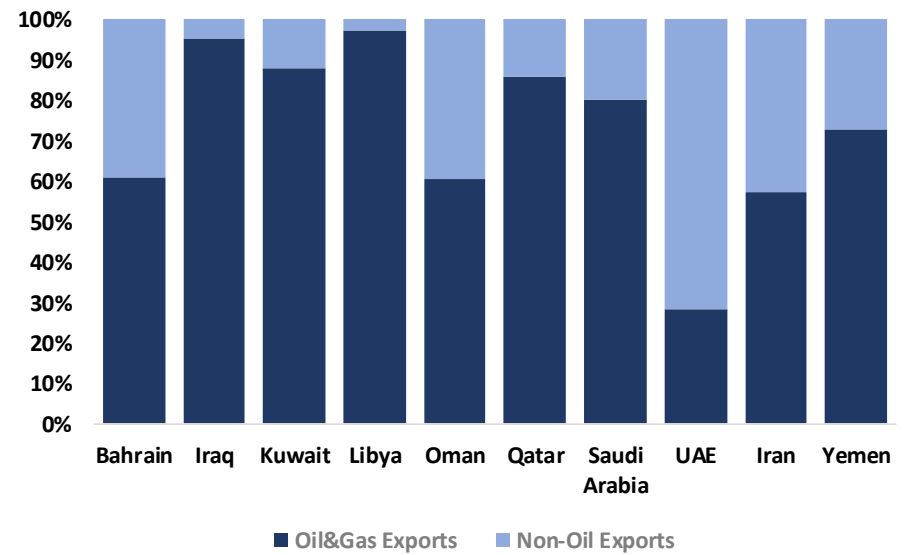
Sources: IMF, EIA

Oil dependence

Oil & Non-Oil Fiscal Revenue, 2014

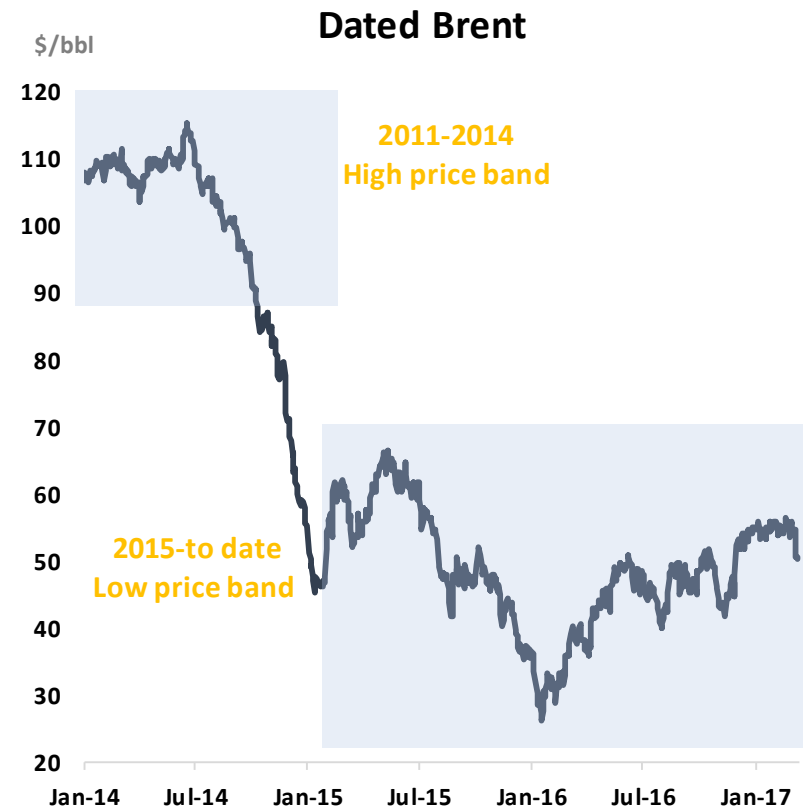
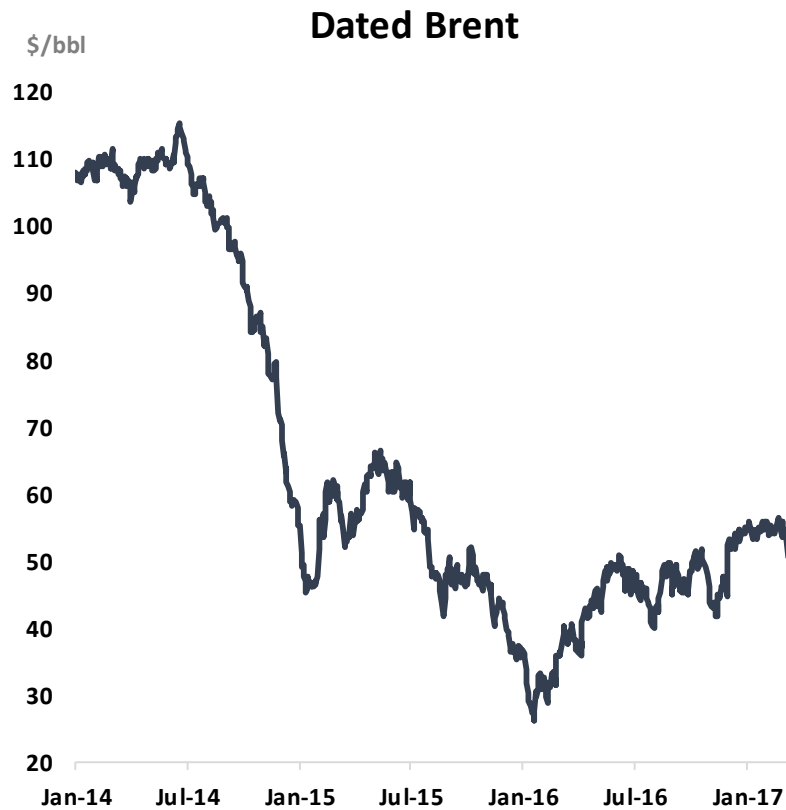


Exports of Goods and Services, 2014



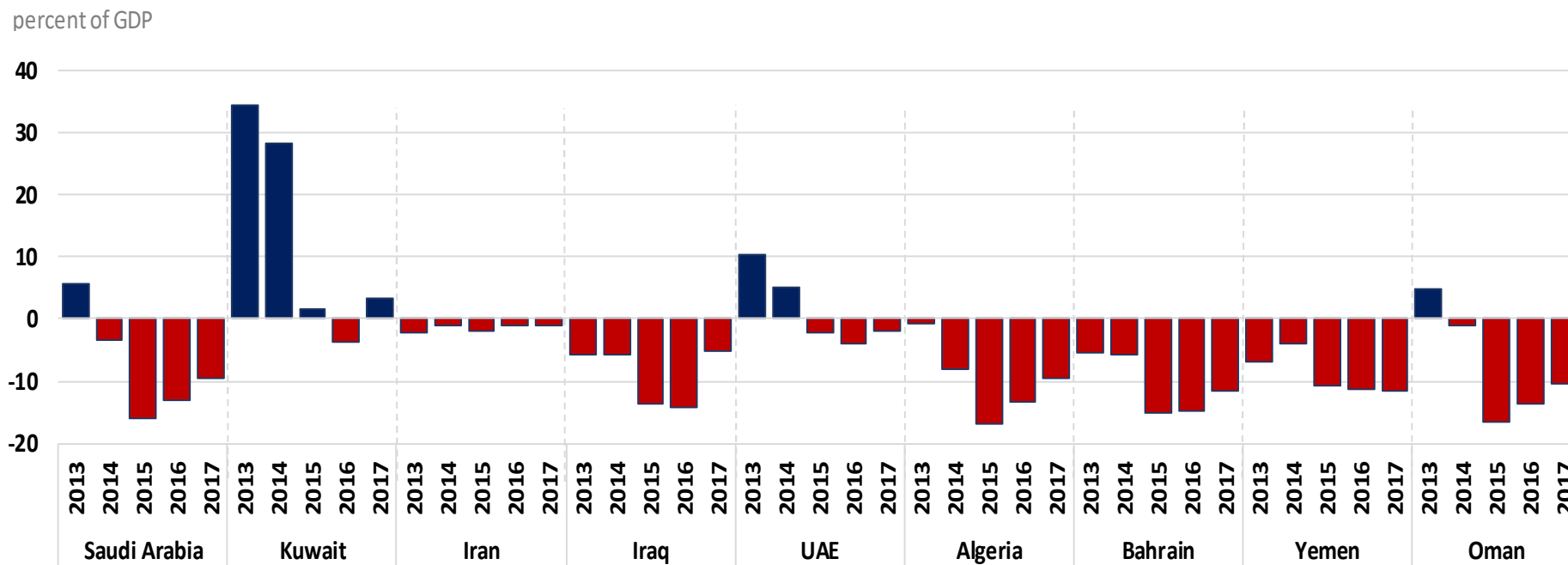
Source: IMF

The oil market has entered a new phase



Budgets in the red

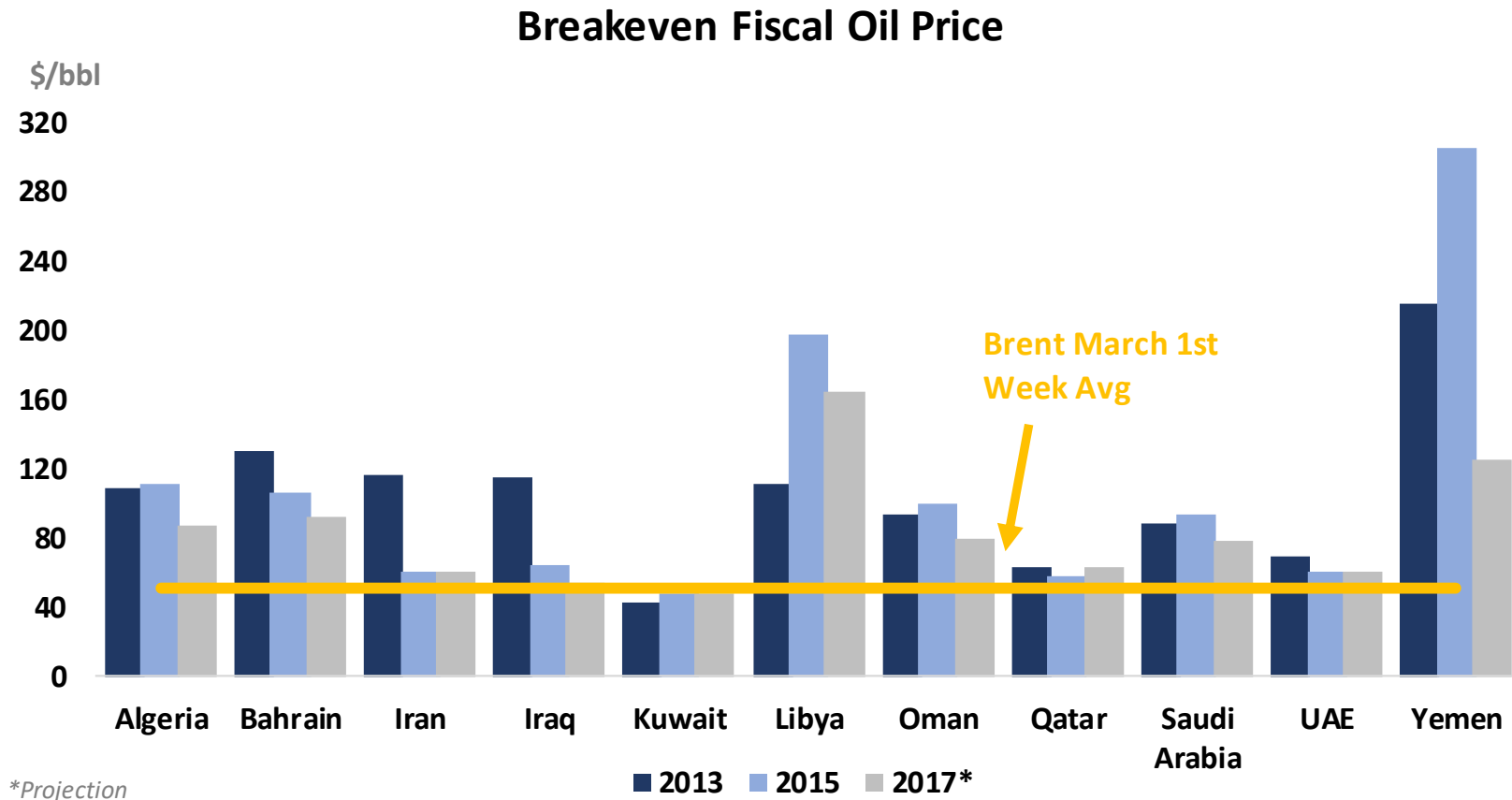
General Government Fiscal Balance in MENA Oil & Gas Producers*



*2016&2017 projection

Source: IMF MENAP 2016

A long way to go to balance the budget



Source: IMF, Bloomberg

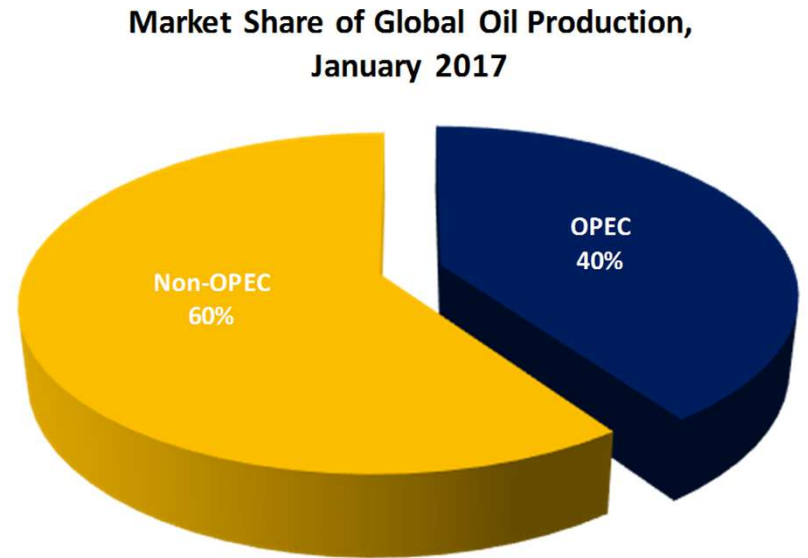
Major economic reforms announced...

- World's largest SWF
- Saudi Aramco IPO
- VAT, income tax, sin tax
- Saudi oil Minister, Al Falih (March 2016):
 - Saudi Arabia might benefit from oil below \$30/bl. It could help to speed up reform and restructure the economy, and move Saudi Arabia to a smaller and more effective government and unleash its private sector
- **Nonetheless...**

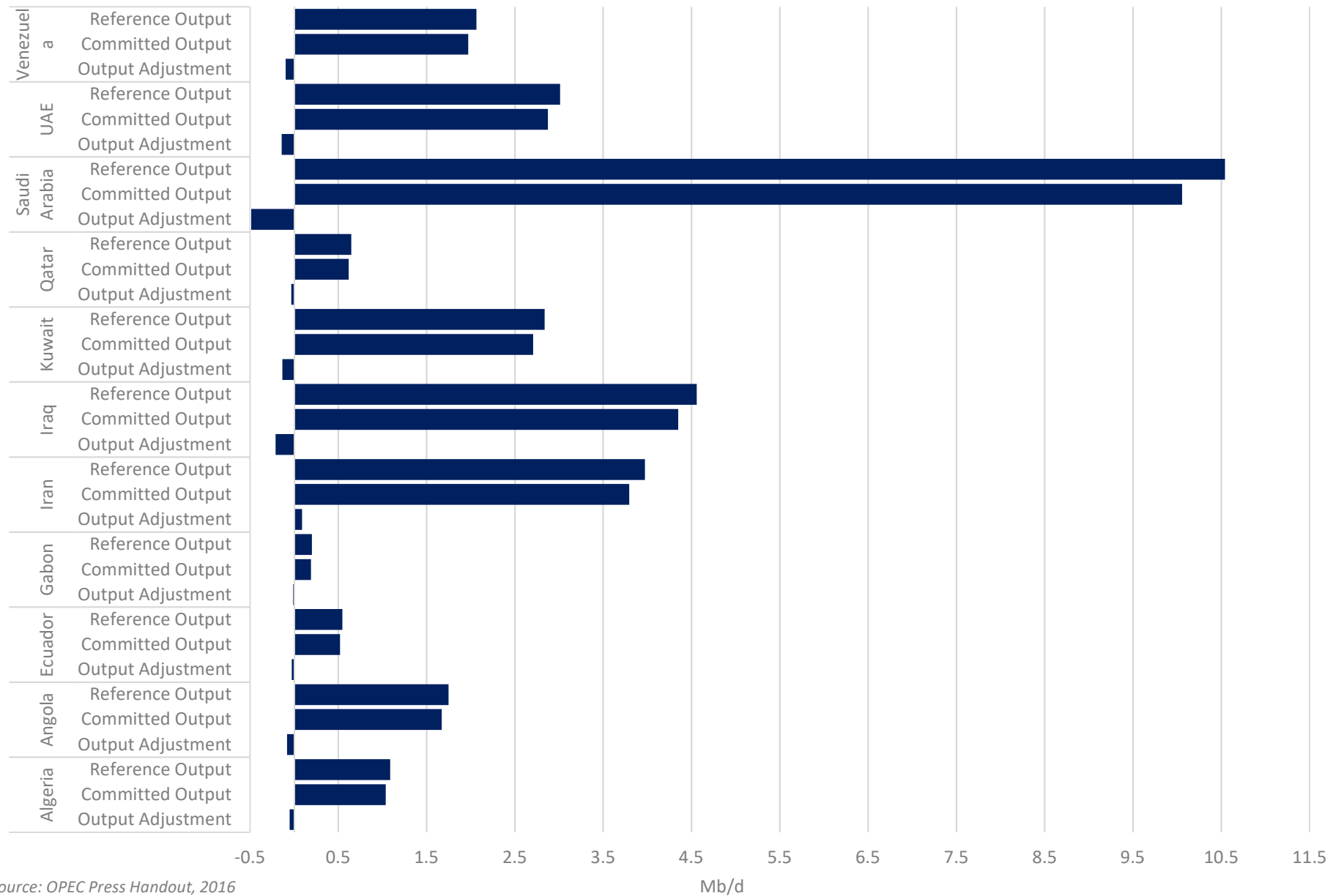


OPEC deal, 30 Nov 2016

- First production cut since 2008
 - OPEC (- 1.2Mb/d)
 - Non-OPEC (-600,000 b/d)
 - Almost 2% of global production
- Special treatment for Libya, Nigeria and Iran
- First production quota for Iraq since 1990s



OPEC agreed output allocations



Reputational gain

JUL 26, 2016 3

English

The Death of OPEC

IRVING, TEXAS – The Organization of the Petroleum Exporting Countries is dead. Saudi Arabia killed it. Now, OPEC is just a toothless zombie, attracting attention, but without having any impact on the living.


Vienna deal shows Opec is back


Jamie Webster

December 1, 2016 Updated: December 1, 2016 06:08 PM



Related

 Brent crude oil prices – graph

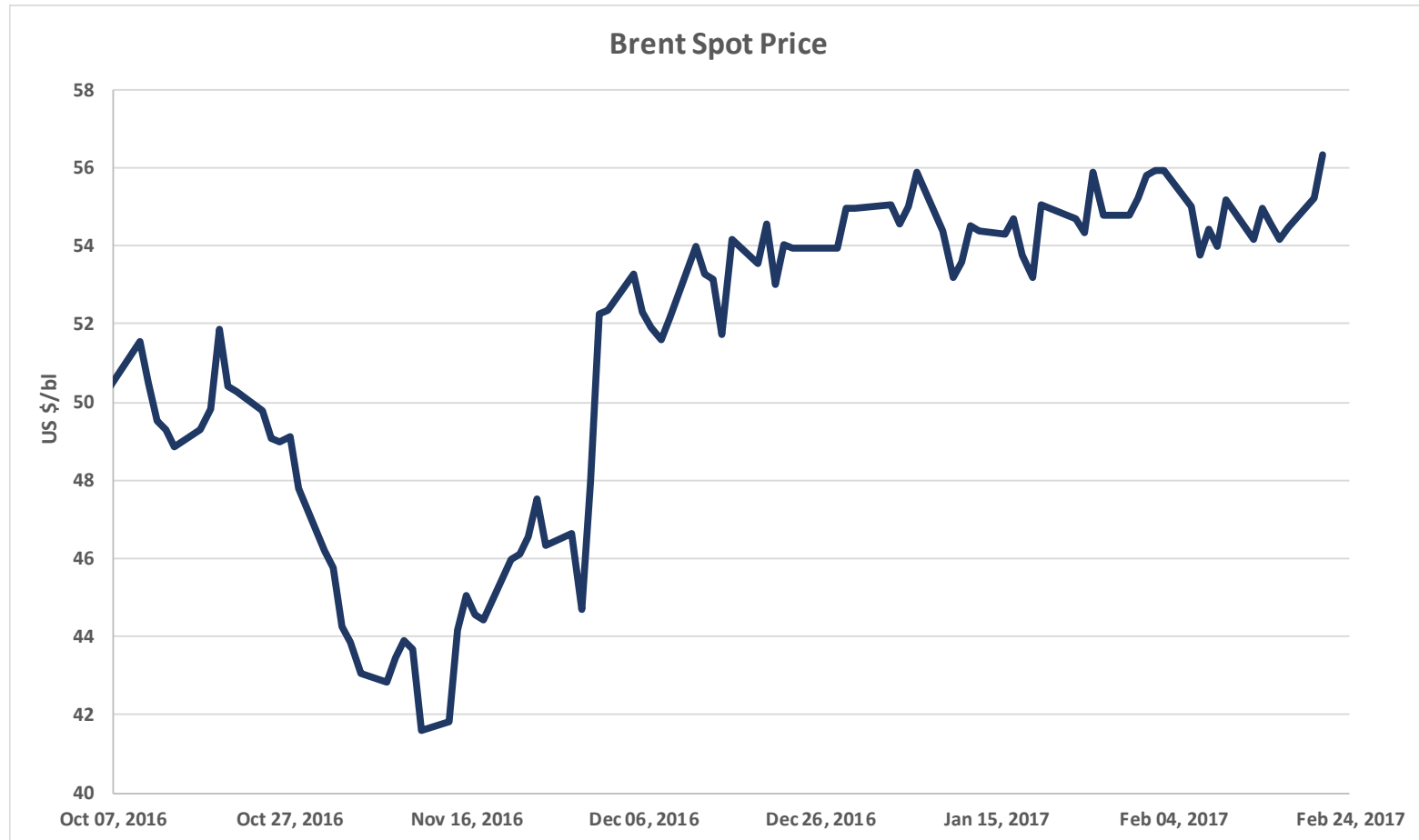
 The worst is over: Opec deal marks a turning point

Opec's back.

Since Opec chose not to cut production and let oil prices collapse two years ago, the death of the producers' group has been proclaimed many times over. Yet on Wednesday, Opec seemed to breathe new life, agreeing to cut output, sending oil prices up and smashing volume records in Brent crude trading.

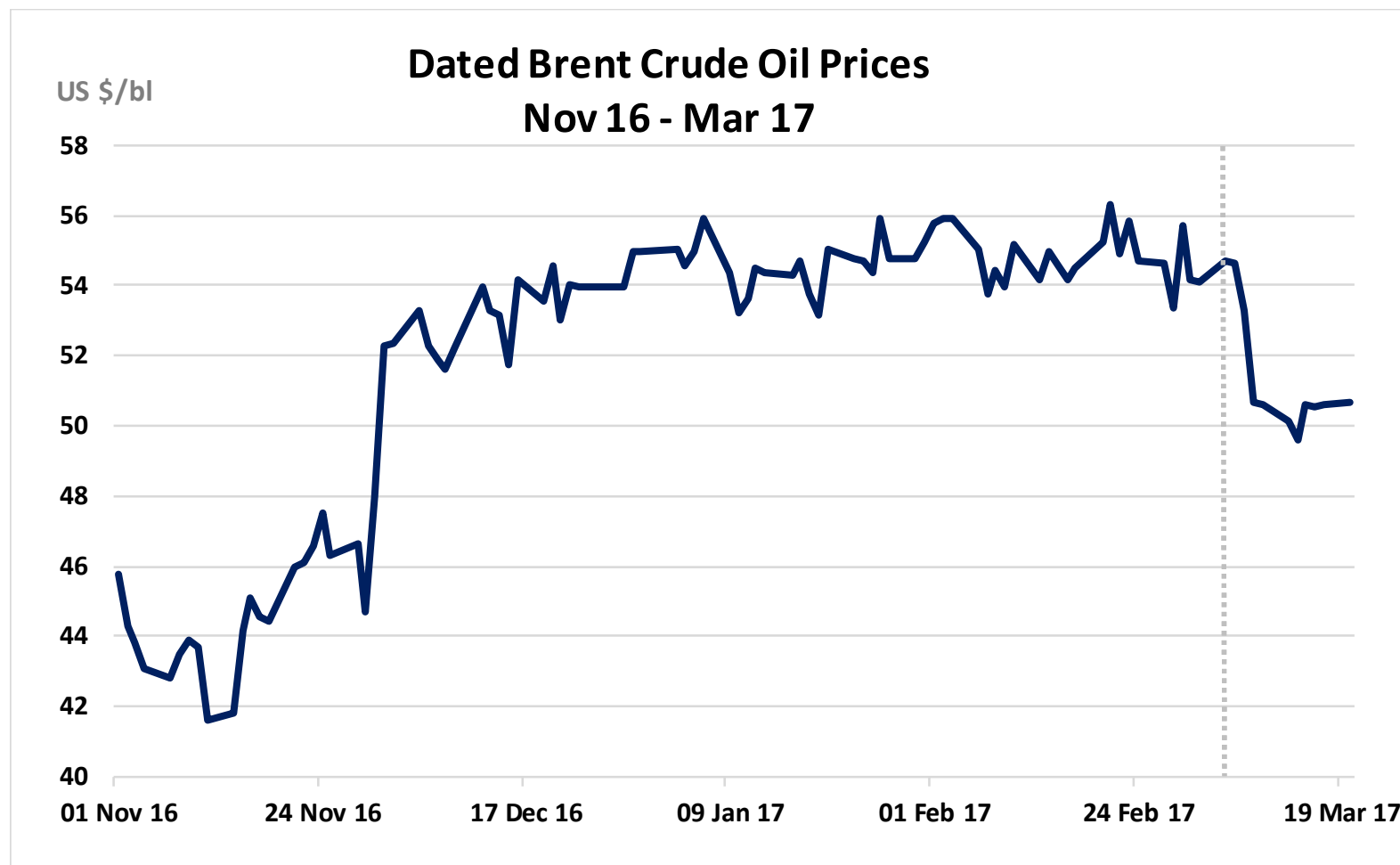
Price response

Oil price Oct 2016 – Feb 2017

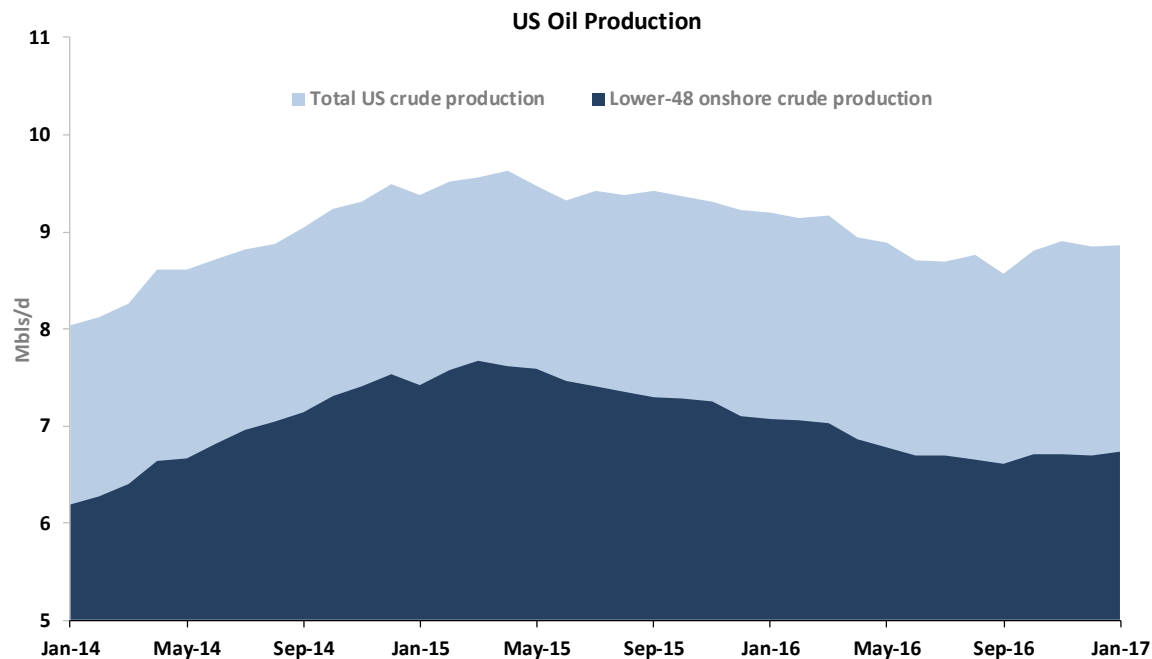


Source: EIA

Strong forces still at work



The Battle Continues



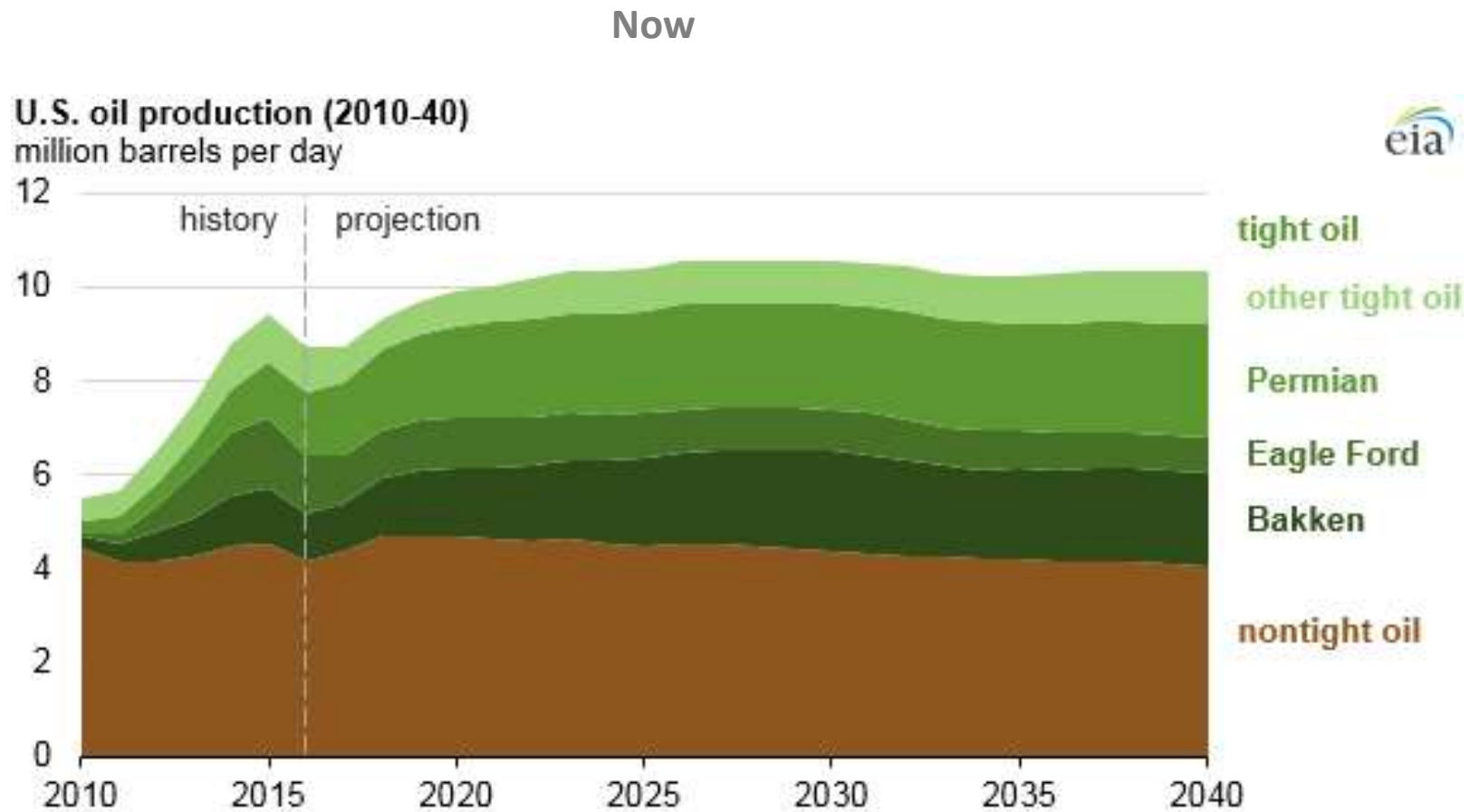
Source: EIA

Sheikhs vs Shale (The Economist, 6 Dec 2014)



Expectations then and now...

- Then (2008-2012): shale oil and gas “overhyped”, “expensive”, “short-lived”

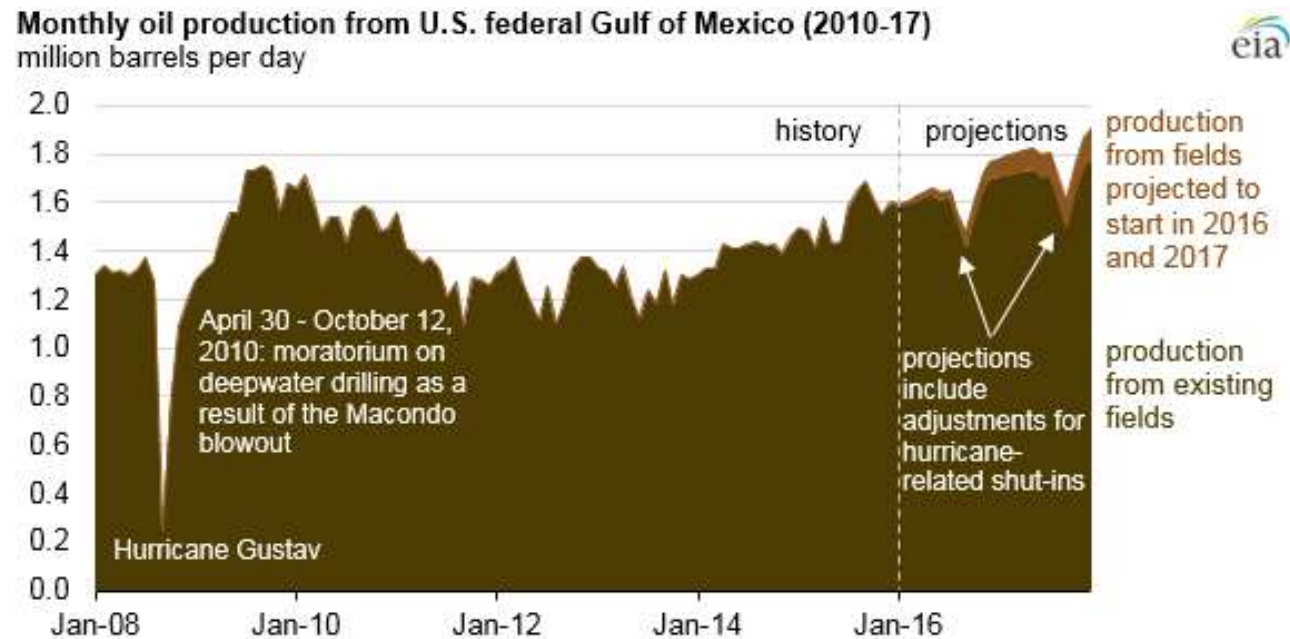


Source: EIA, 2017

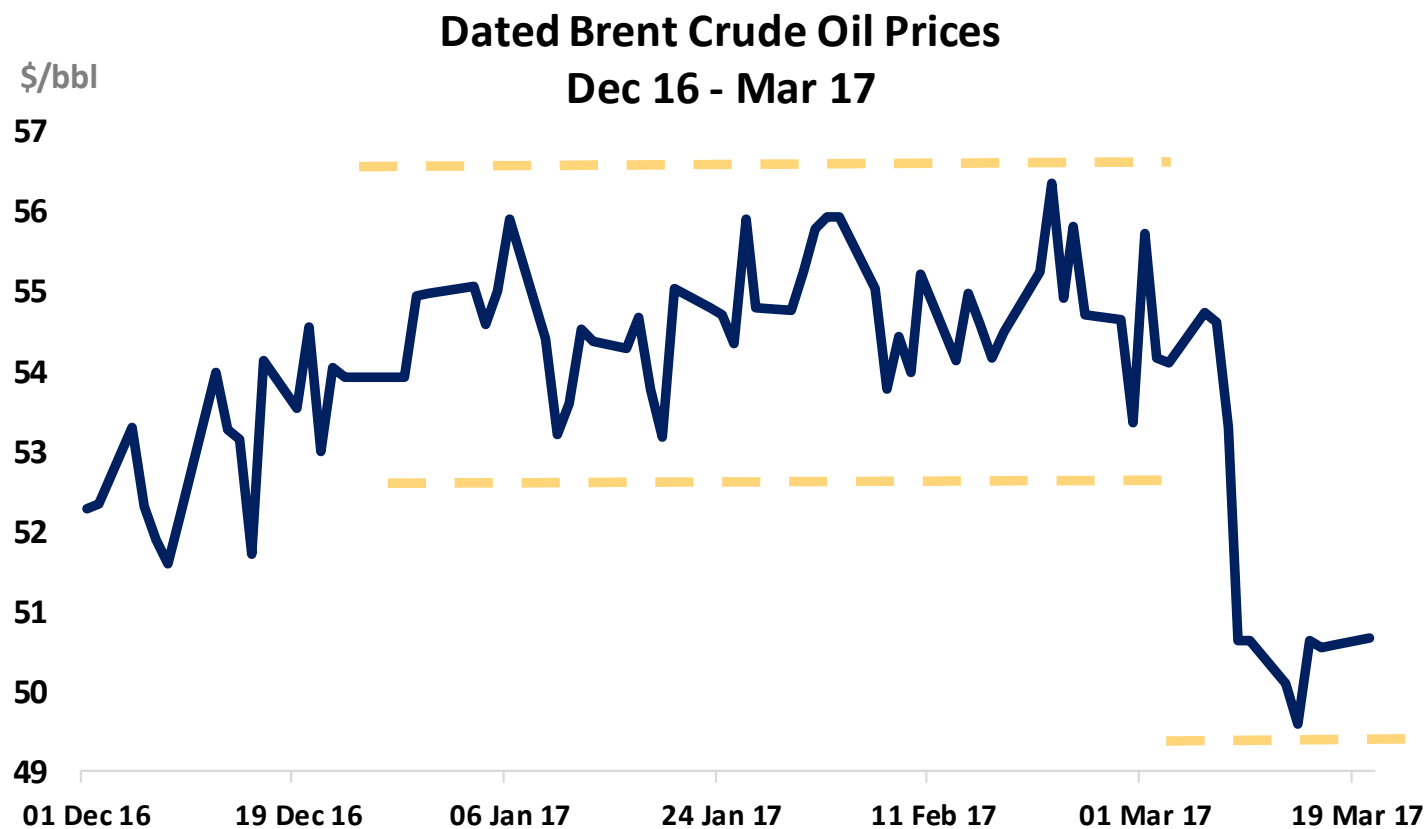
Conventional oil

- “2017-19 is likely to see the largest increase in mega projects' production in history, as the record 2011-13 capex commitment yields fruit”, Goldman Sachs, March 2017

- EIA (Feb, 2016): Oil production in federal Gulf of Mexico projected to reach record high in 2017

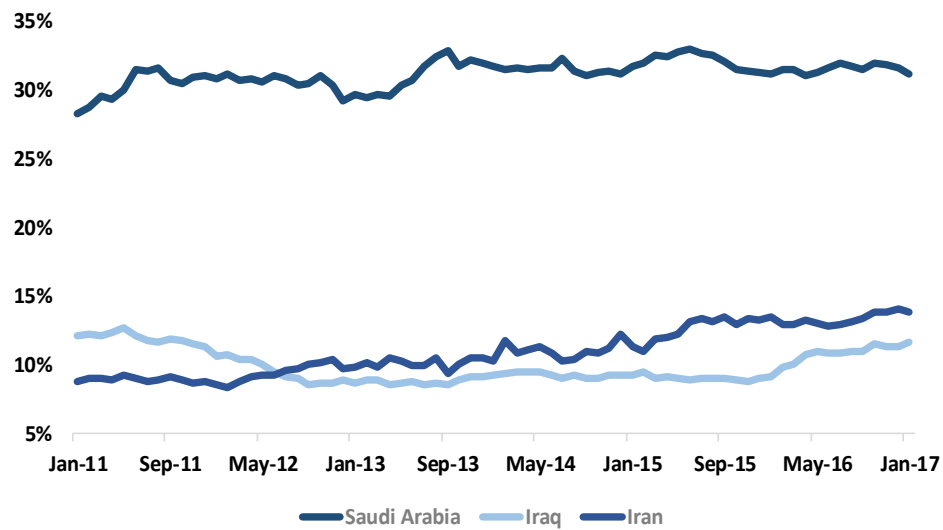


OPEC vs. Market: Floor & Ceiling

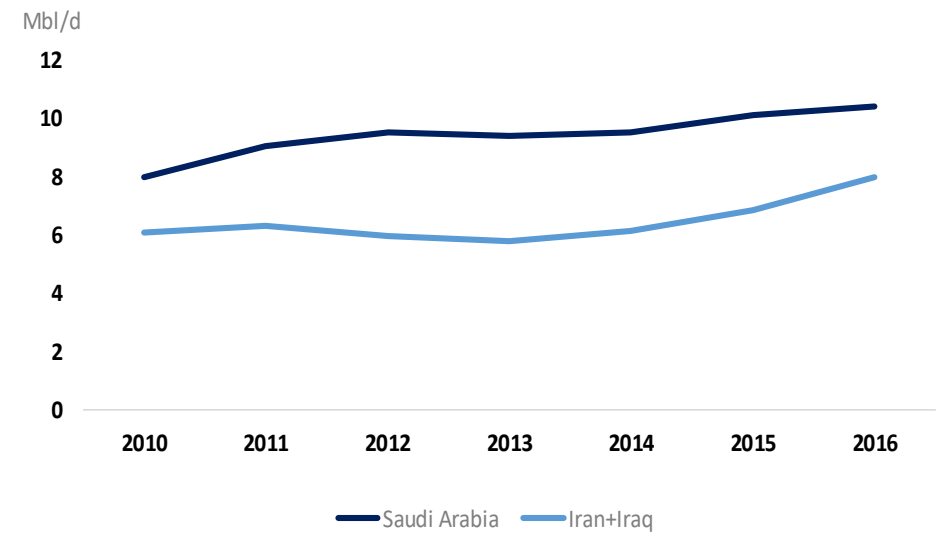


The battle within

Market Share of OPEC Crude Oil Production



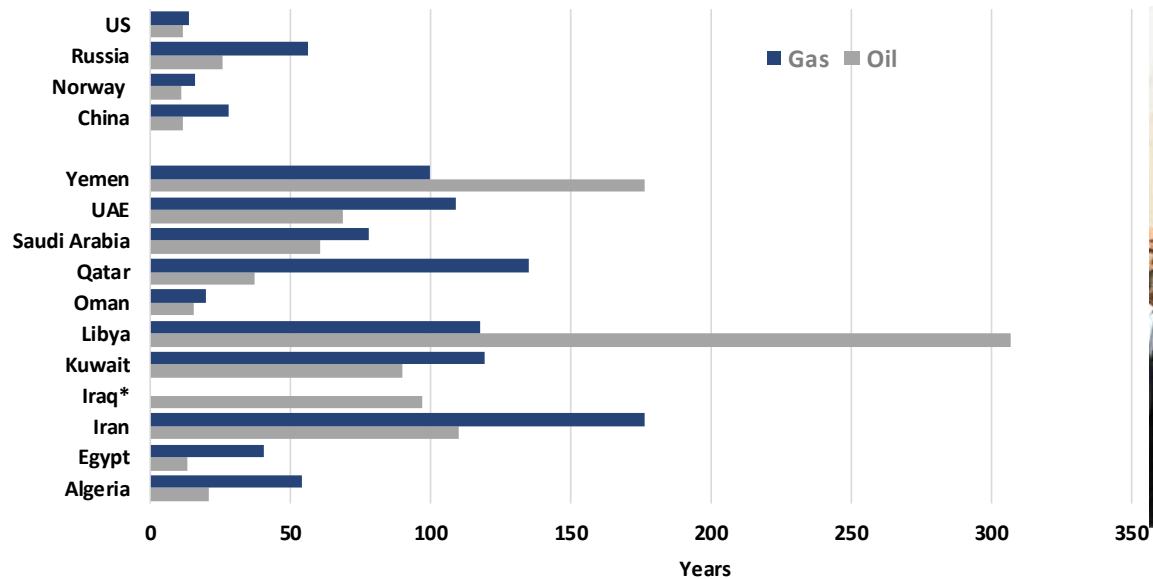
Saudi Arabian vs Iraqi+Iranian Crude Oil Production



Source: IEA

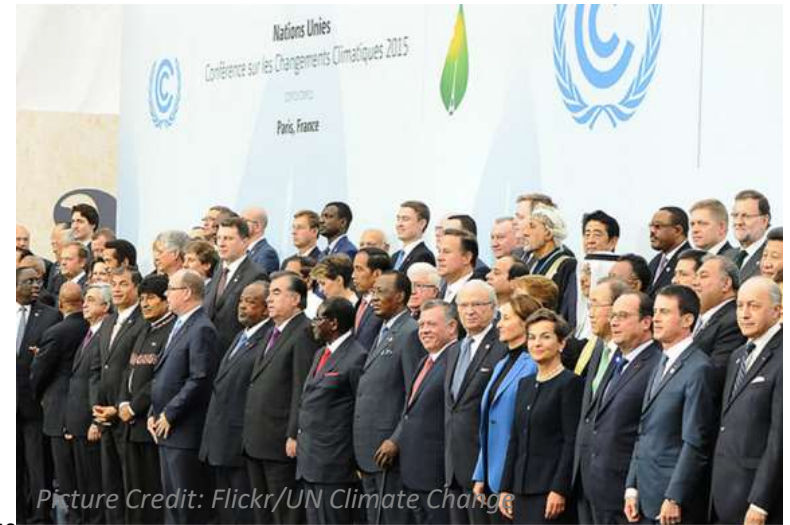
Longer term challenge

Remaining Years of Oil and Gas Production, 2015



Notes: Reserve life in years, calculated as reserves/annual production based on 2015 levels

*Gas reserve life more than 500 years



Inconvenient truth:

The long standing order and governance model not sustainable anymore

Thank you

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