THE OXFORD INSTITUTE FOR ENERGY STUDIES

Oil Price Signals: What Next for OPEC+?

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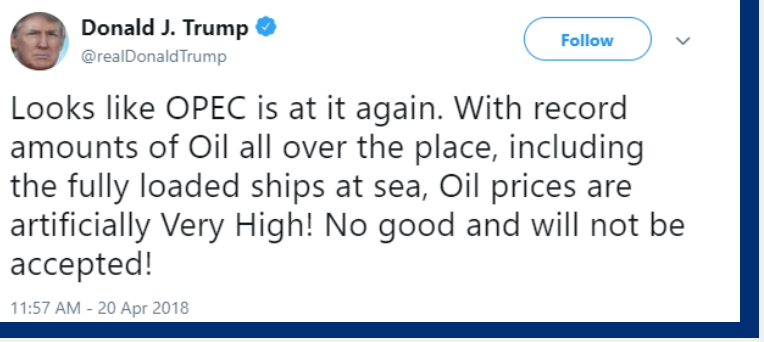
London UK, April 2018

#ArtificiallyVeryHigh @OPEC

The blame game

Oil prices in Q1 2018 rose on average by $32/b (or 89%) from the trough in Q1 2016, up from $35/b to $67/b, and are currently hovering around $75/b.

Largely supported by the strong cyclical performance of world economy, OPEC succeeded in accelerating the market rebalancing by its high compliance due to voluntary and involuntary cuts; albeit some are blaming OPEC for overtightening the market and pushing prices "artificially Very High".

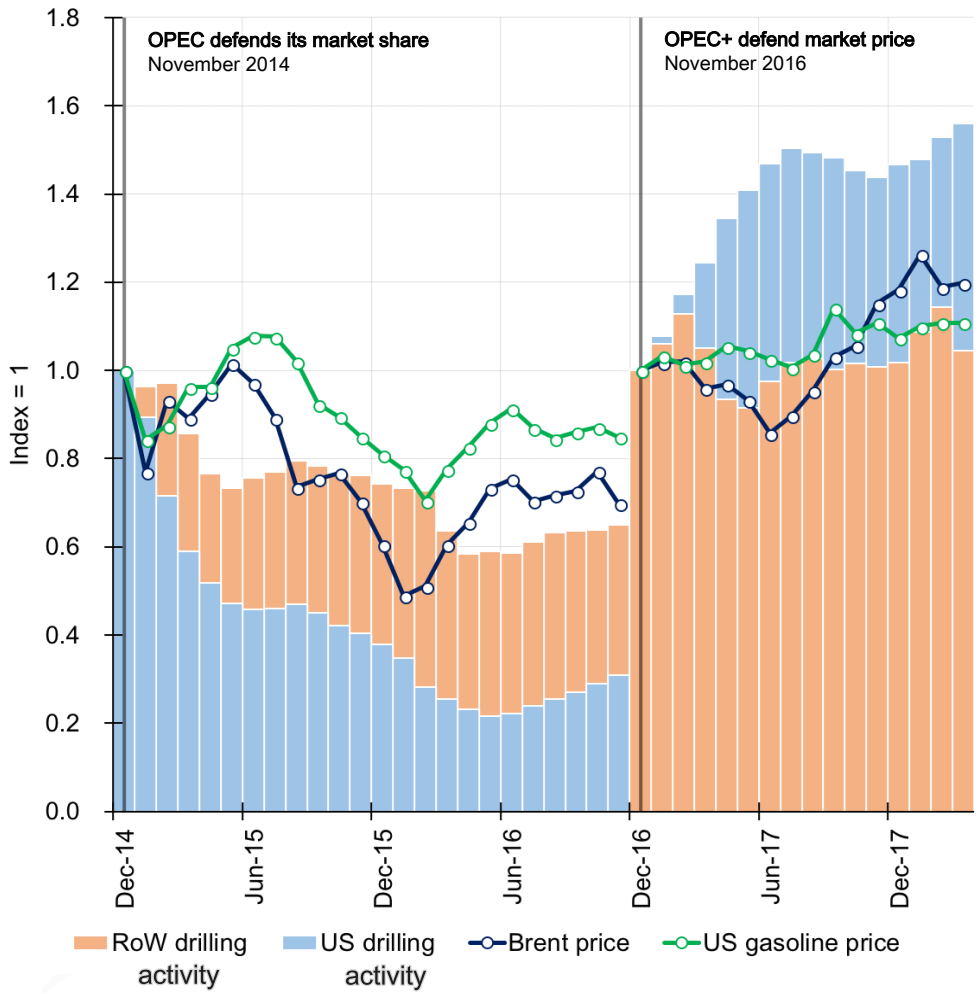


On the one hand, the US president puts forth the risks of higher prices at the pump affecting consumer spending, as well as the rising costs of oil-based raw materials.

On the other hand, KSA expressed concerns that the pricing signals that come out of the recovery are so far not strong enough to stimulate global investment in upstream oil.

OPEC oil output policy will continue to be the key factor shaping expectations and influencing the price of oil in 2018.

OPEC signalling and selected oil market indicators



Data: US Energy Information Administration, Baker Hughes

Inventories in the eye of the beholder

OECD oil stocks are ineffective guide for OPEC policy

Although OPEC acknowledges that it is close to meeting its goal of returning OECD oil inventories to their 5-year average levels, KSA, Russia and the current President of the OPEC conference (UAE) have called this target ineffective on its own in guiding their output policy, though recognising that the market needs a simple, observable and measurable indicator.

Some of the problems are that this is not a well defined target in the sense that the 5-year average is a moving target, OECD oil stocks do not paint a clear global supply-demand picture, they are lagged and backward-looking indicators and don't filter outliers.

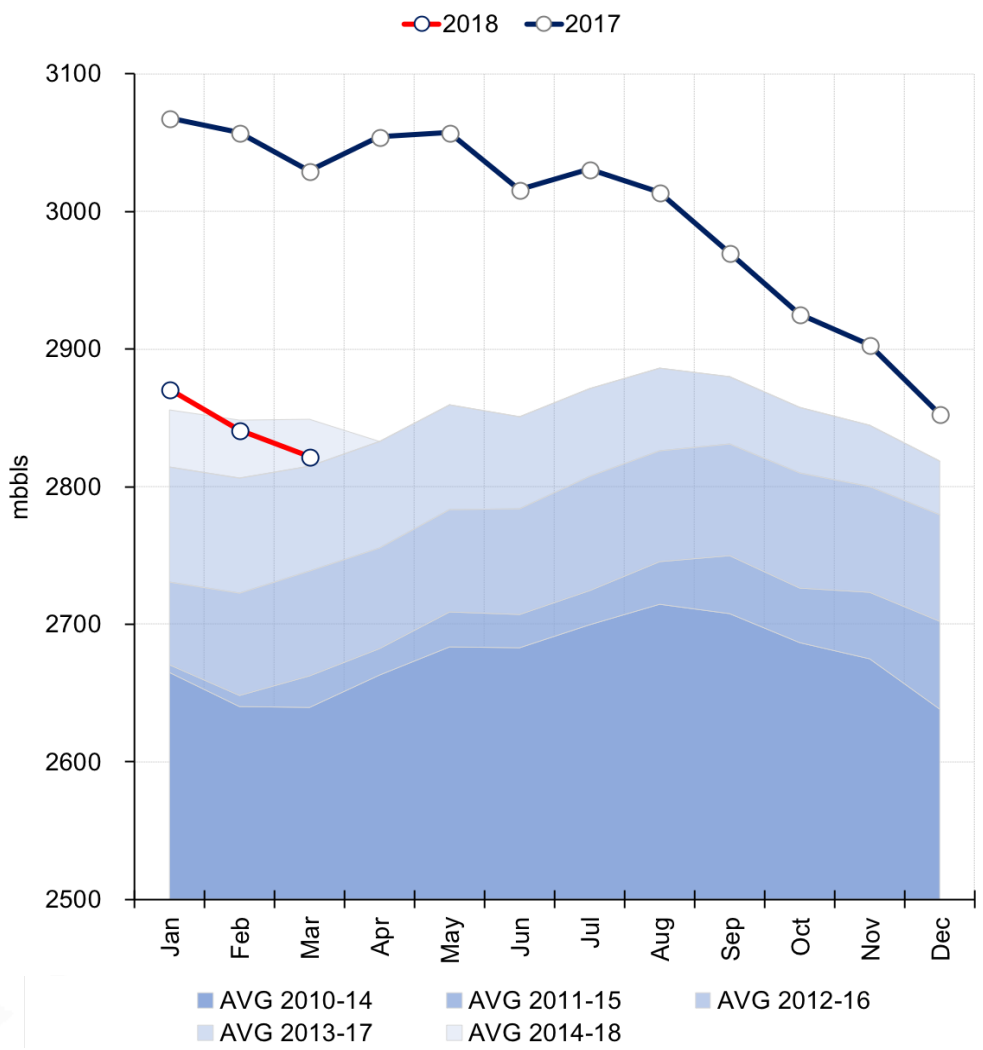
Most importantly, stock movements are best seen as merely symptoms of a number of underlying oil supply and oil demand shocks, for example:

- Assume that OPEC has reached its inventory target however measured, but expects demand to slowdown; should it exit the output cut deal ?
- Clearly the answer is "no" and hence, the level of inventories is a poor guide for OPEC policy decision in such situations.

While the market still needs such a visible – albeit imperfect – indicator, OPEC should retain the flexibility of considering alternative metrics.

- Non-OECD oil stocks including oil stored at sea and in pipelines;
- 7- and 10-year average of oil stocks;
- Number of days of forward consumption; and
- Excluding the recent periods of high stock levels from the historical average.

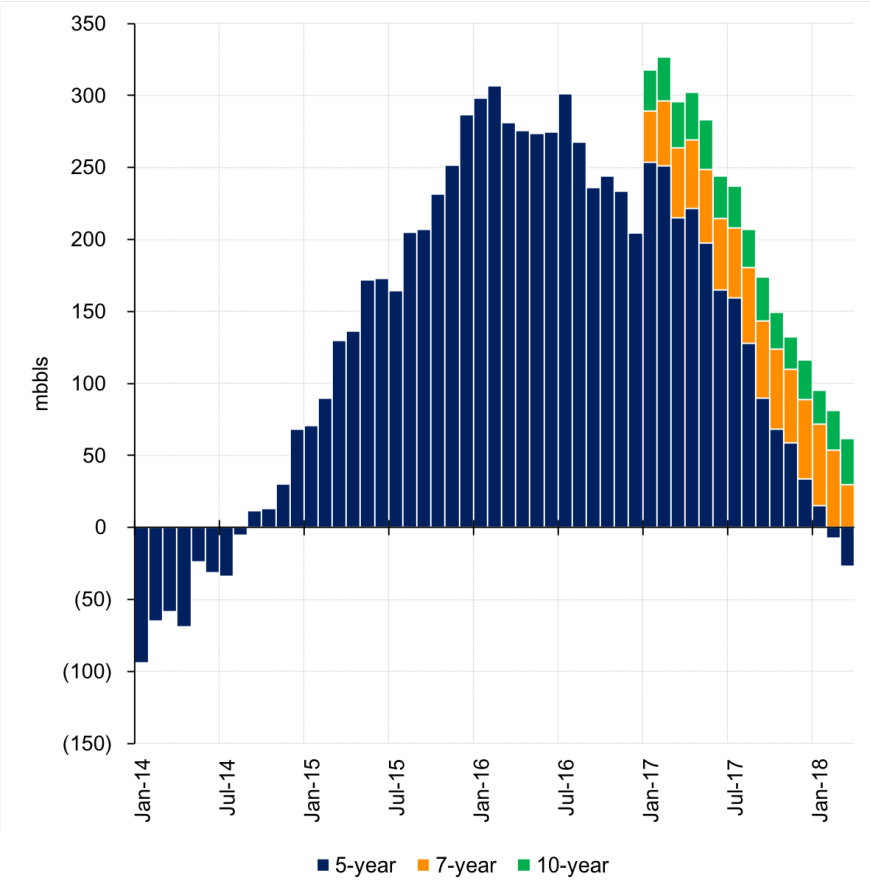
OECD commercial oil stocks vs. historical 5-year average



Data: International Energy Agency

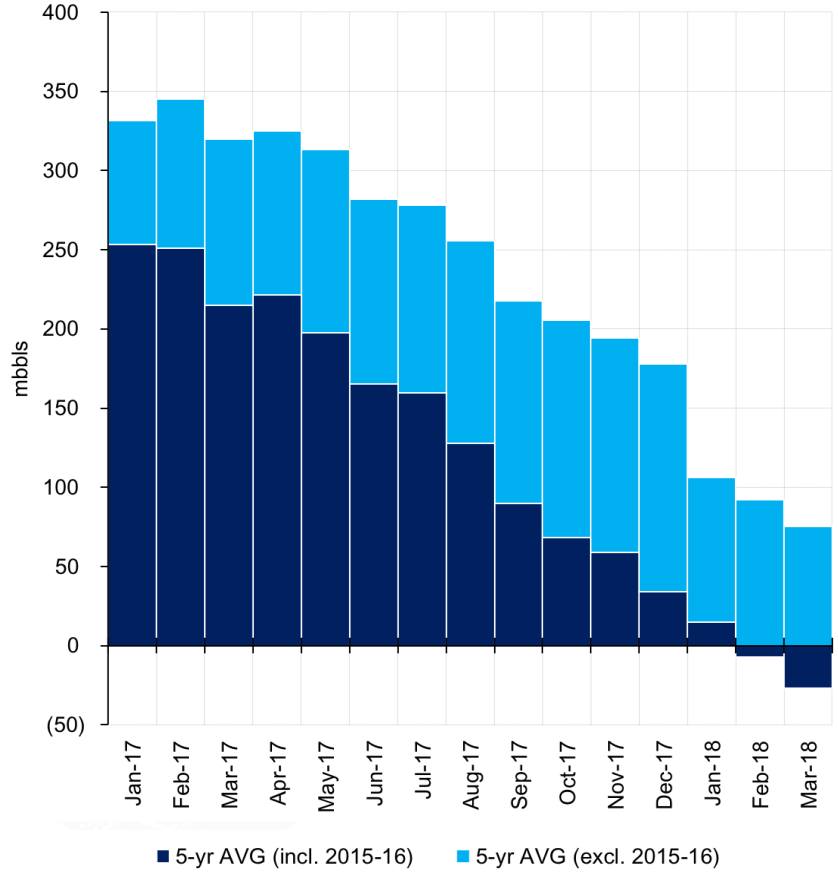
Filtering out the excess

OECD commercial stocks vs. the 5-,7- and 10-year averages



Even if OPEC decides to include the 7-year or 10-year averages to the stock-cut target, the differences from the 5-year average are negligible; oil stocks are ranging between 60-80 mbbls in excess.

OECD commercial stocks vs. 5-year average including/ excluding the period 2015-16

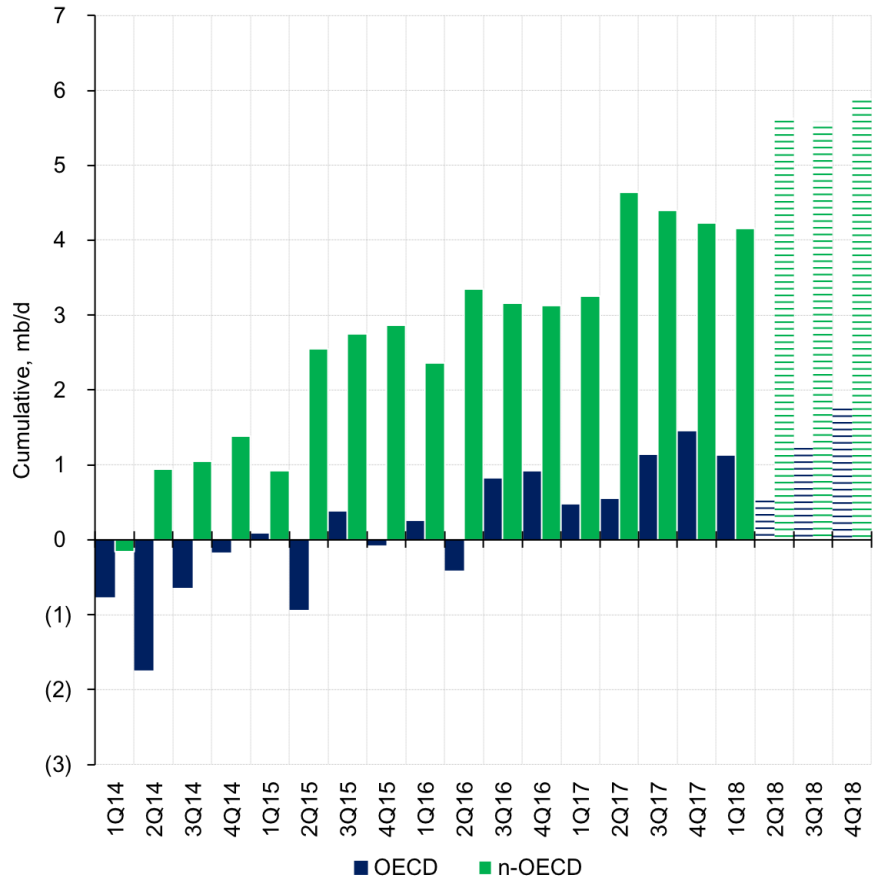


Excluding however periods of high stock levels from the 5-year average shows that stocks held are still relatively high. For March 2018, for e.g., excluding the 2015-16 period from the 5-year average raises the stocks overhang by 100 mbbls.

Data: International Energy Agency

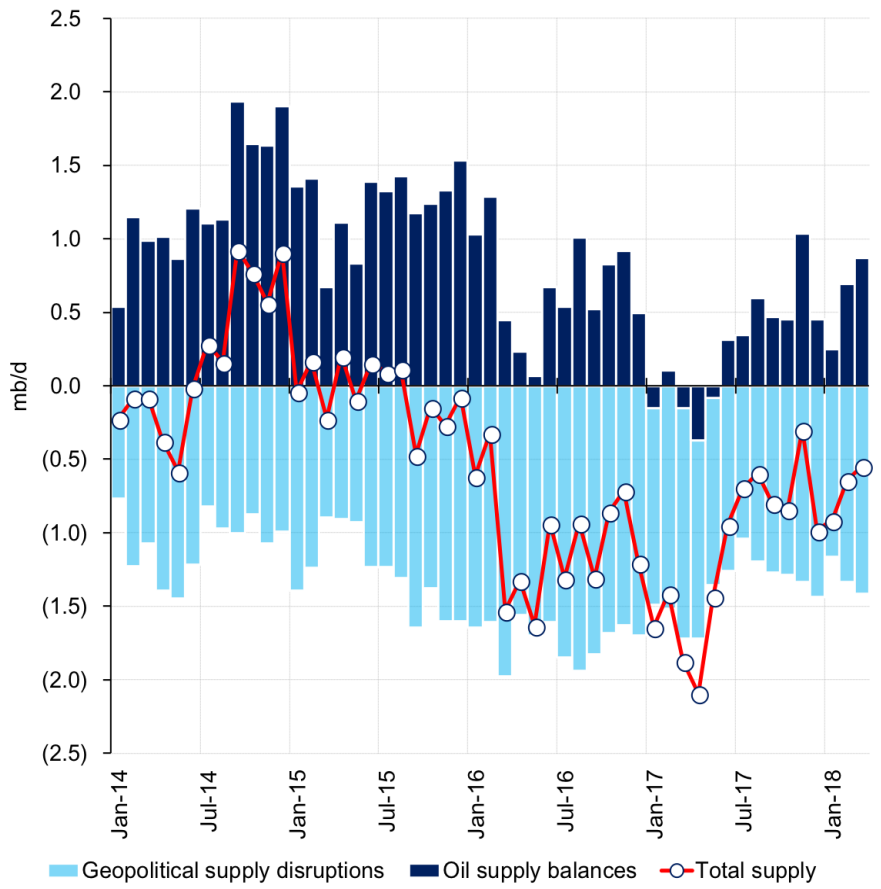
More than meets the eye

Global oil demand growth in OECD and non-OECD



OPEC's doubts about the ineffectiveness of the OECD oil stocks is validated when looking oil demand growth in non-OECD countries relative to the OECD. The former constituting 80% of global demand growth.

Index of total crude oil supply balances



The current market tightness is largely supported by geopolitical disruptions in crude oil supply. If the latter ease, the market will return to an oversupply state; albeit more than halved since 2014.

Data: International Energy Agency, OIES

Geopolitics and Oil Prices

Geopolitical risks begin to have an impact on prices

Our forecasts scenarios show that the latest $5/b oil price increase in April 2018 (as of the week-ending April 23, 2018) most likely reflected a geopolitical risk premium.

In fact, the baseline forecast projected that in the absence of any unexpected s-d shocks the price of oil would have fallen instead of increasing in April by $3/b, down to $63/b (from $66/b in March).

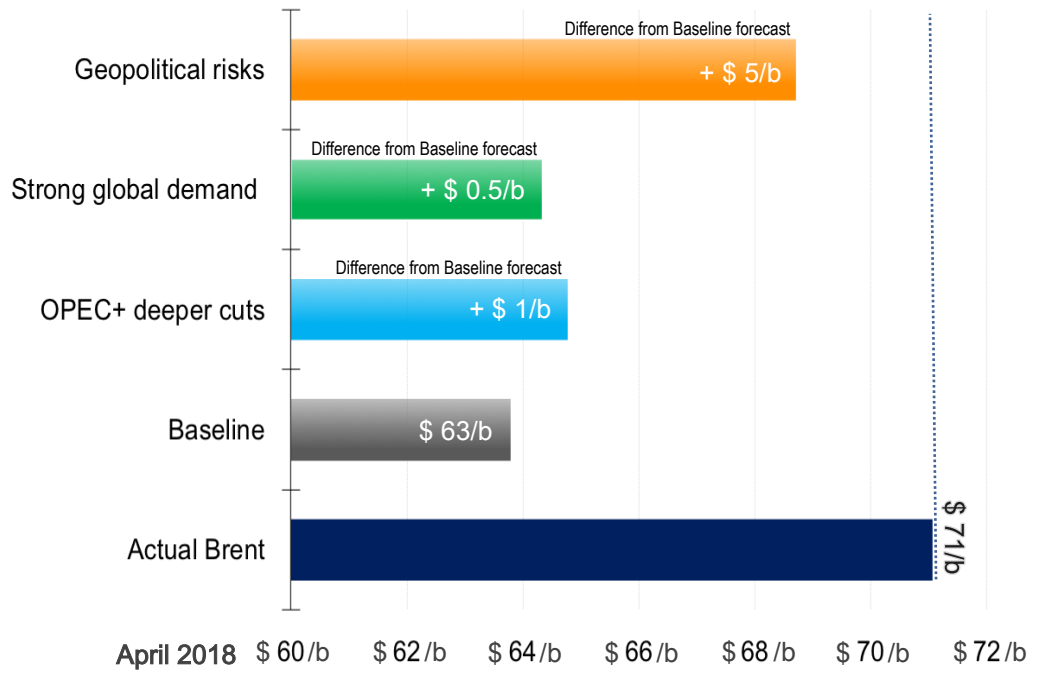
Simulating a number of different upside s-d shocks, all else remaining equal, the April price is more responsive to geopolitical risks in the form of either unexpected disruptions in crude oil production (possibly from Venezuela) and/or unexpected increases in the precautionary demand for oil triggered primarily by the US threats or renewed sanctions against Iran.

The latter shock is consistent with the heightened geopolitical uncertainty in the Middle East witnessed in April, following the US-led intervention in Syria and fears of spillover effects to the region, increased tensions between Saudi Arabia and the Houthi militias, as well as the US-threat to withdraw from the Iranian nuclear deal re-imposing sanctions that could lead to a loss between 0.2 – 0.4 mb/d of Iranian oil exports.

In a rising market, the impact of news about future supply disruptions on stock demand and oil prices is far more severe relative to a falling market.

This evidence underscores that the recent oil price increase did not only reflect a tightening of supply-demand balances with geopolitical risks having a bigger impact on prices in a tighter market.

Forecast scenarios of the Brent price for April 2018

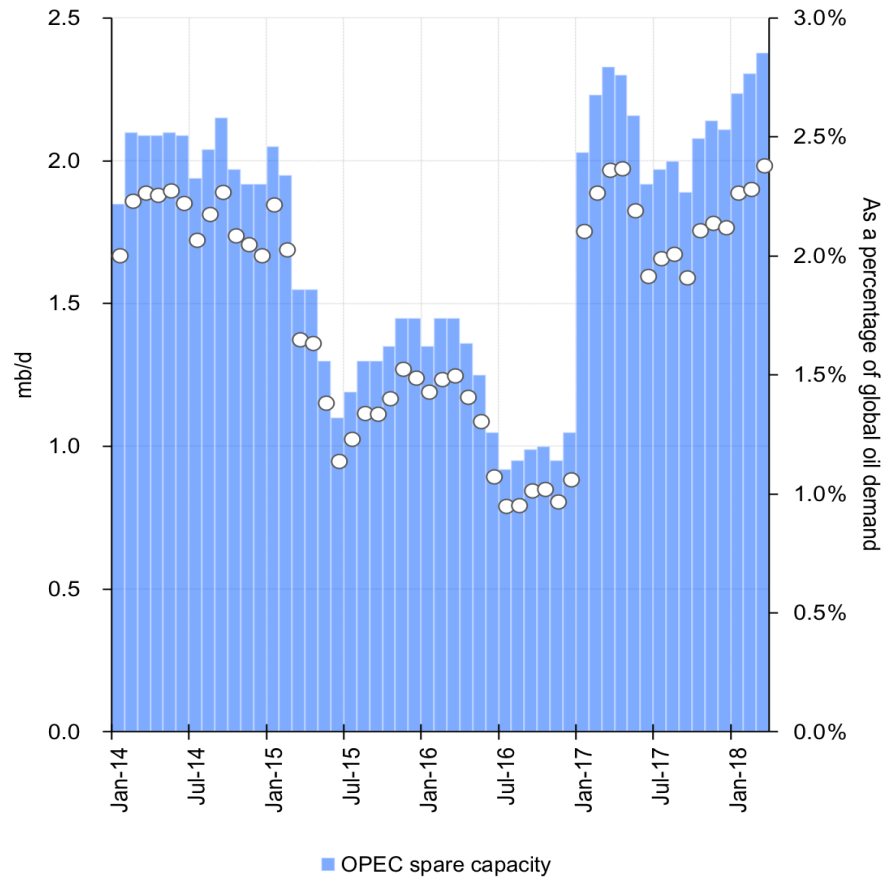


Forecast Scenarios	OPEC+ deeper cuts	Strong demand	Geopolitical risks
OPEC+ production (US shale: +0.1 mb/d)	- 0.2 mb/d	-	-
World liquids demand (m-o-m)	-	+1.5 mb/d	-
Supply disruptions: (Venezuela and/or Iran)	-	-	-0.3 mb/d

Data: OIES

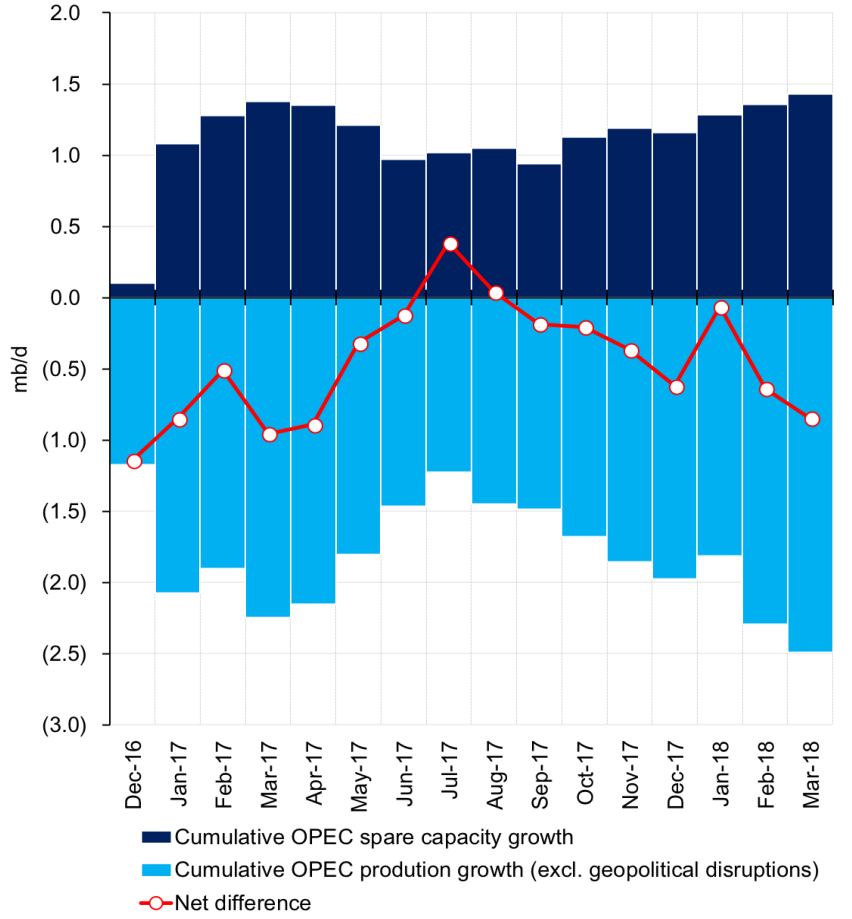
The spare capacity "cushion"

OPEC spare capacity



Although the OPEC output cuts restored most of the lost spare capacity of 2015-16, the spare capacity buffer remains significantly low in historical terms as the oil market grows larger.

Net differences between OPEC spare capacity and production growth since December 2016



Absent new upstream capacity additions, OPEC output cuts do not translate into proportional growth of its spare capacity as part of the withheld output will not be available to the market.

Data: US Energy Information Administration, OIES

Hard choices for OPEC

Heightened uncertainty complicates OPEC's policy choices

The heightened market uncertainty brought about largely by the potential of a renewal of US sanctions against Iran and an escalation of the trade tensions between the US and China, increase the range of uncertainties facing OPEC.

Assumptions	Reference (OPEC+ exit)	Reference (No exit)	Exit + Bear demand	Exit + No Geopolitical
OPEC+ production (as of July 2018)	+ 1.8 mb/d	-	+ 1.8 mb/d	+ 1.8 mb/d
US Shale production (year-end)	+ 1.5 mb/d	+ 1.5 mb/d	+ 1.5 mb/d	+ 1.5 mb/d
World liquids demand (y-o-y)	+ 1.5 mb/d	+ 1.5 mb/d	+1.0 mb/d	+ 1.5 mb/d
Supply disruptions: VEN: 0.2 mb/d / IRN: 0.3 mb/d	- 0.5 mb/d	- 0.5 mb/d	- 0.5 mb/d	-

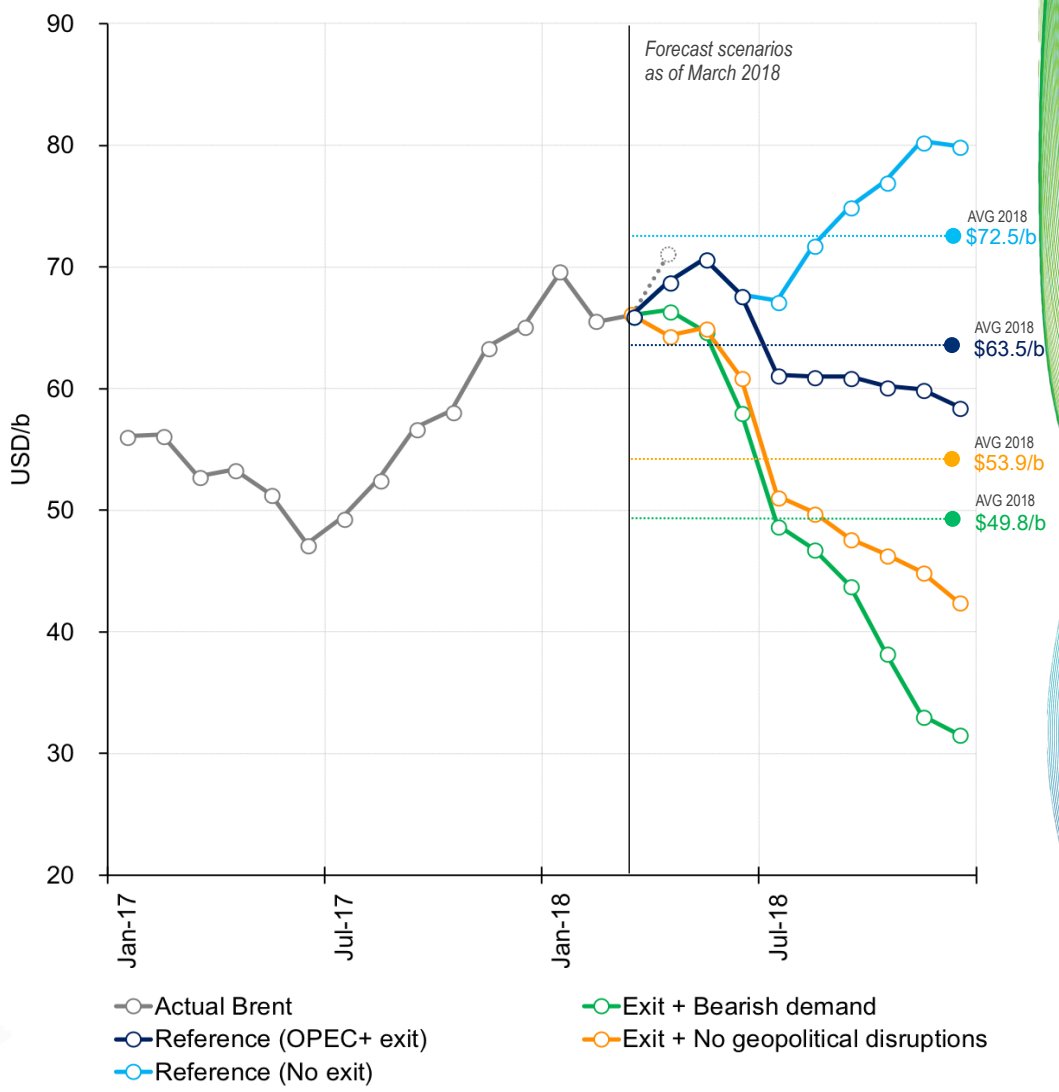
$63.5/b The oil price will average in 2018, if the OPEC+ exit is supported by strong demand amid the further deterioration of the geopolitical context.

$31.6/b The oil price is projected to fall to year-end, if the OPEC+ exit is met by weaker-than-expected global demand, despite higher geopolitical tensions.

-$9.62/b Will be the annual oil price loss in 2018 relative to the reference exit case, if OPEC+ were to exit the deal but geopolitical disruptions eased.

$80/b Unless OPEC deepens its cuts, the potential of renewed US sanctions to Iran is the most visible upside risk for an $80/b oil price year-end.

Price impact of the OPEC+ exit under alternative scenarios



Data: OIES

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April 2018

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