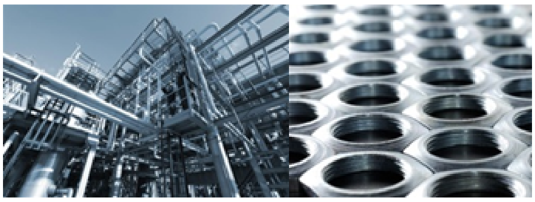
COMMODITIES REPORT

30 January 2017



RISKS TO OIL IN 2017

The OPEC & non-OPEC compromise last year was a landmark decision and accelerated the market towards a balancing of supply and demand.

However, with indications from productivity data and upstream projects, the outlook for US supply is optimistic and points towards an unprecedented return of US oil.

At the same time, any compromise on the OPEC agreement could prolong the rebalancing of the market.

In this report, we have examined the major risks to the oil market.

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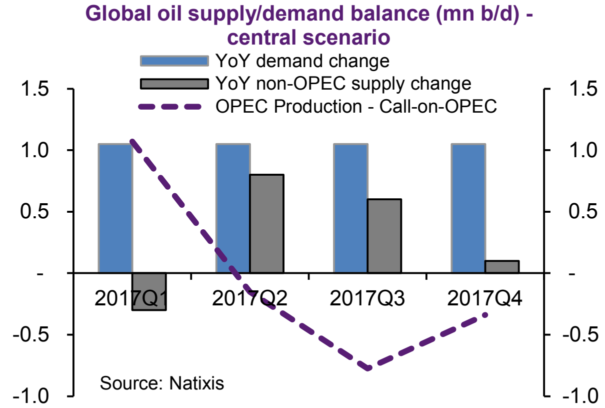
ECONOMIC RESEARCH

In our central scenario, we expect markets to go into withdrawals towards 2017Q2. However, the withdrawals are very strongly pivoted on two main factors: our current assumption of around 80% compliance from the OPEC & non-OPEC deal (**OPEC to reduce production by 1.2mn b/d to 31.96mn b/d with certain non-OPEC to join in reducing output by 558,000 b/d for first six months of 2017**, refer to our OPEC deal article) and **a modest return of 250,000 b/d of US oil on average** compared to previous year. Our central scenario already assumes an increase in OPEC supply in 2017H1 i.e. the deal only lasting for 6 months for now. However the risk of OPEC & non-OPEC compliance being far less than 80% and US oil production rising aggressively could tip the balance once again towards sustained stock builds in 2017 despite growing demand.



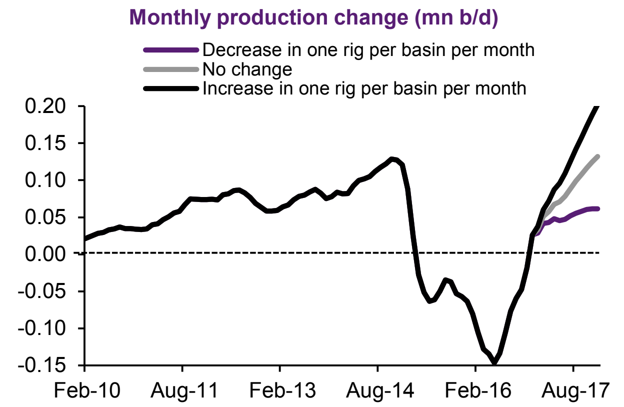
The US supply source has the flexibility of a short investment cycle and many plays display strong productivity gains recently. Developments in the Gulf of Mexico with the continued resilience in NGL production are some of the other sources of growth in US supply. In addition, the increase in hedging activity during the December rally, as seen in the backwardation towards the end of 2017, highlights the potential for companies to boost production, even in a challenging market. Hence, an unprecedented return of US oil has the potential to push back the sustained balancing of the markets into 2018. The extent of this is significant. A lack of compliance on the back of return of US oil, possibly if OPEC sees their market share diminishing, is an extreme oversupply scenario.

Annual US shale oil production and (average growth) from 7 basins (mn b/d)

	No rig change since Dec16	Increase in rigs by one per month since Dec16	Decrease in rigs by one per month since Dec16
2016	4.88	4.88	4.88
2017	5.17 (+0.28)	5.32 (+0.44)	5.01 (+0.13)

Source: Natixis

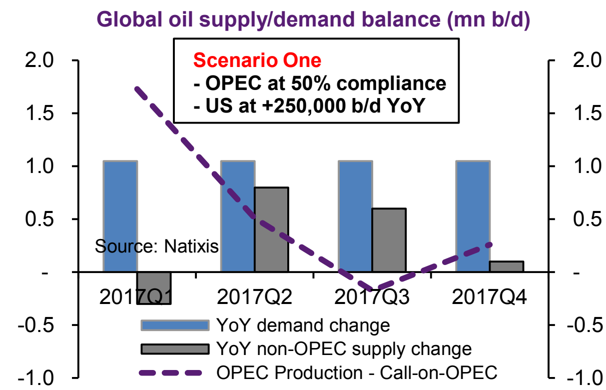
Note: Shale basins used in the calculation were Bakken, EagleFord, Permian, Niobrara, Utica, Marcellus, Haynesville



A stringent compliance (close to 100%) of the 30 November agreement for the full year (2017) could help mitigate some of this resurgence and maintain a stable price recovery towards $60/bbl by 2018. Therefore, we argue that, on the balance of a larger than anticipated US oil production and the absence of upside factors, OPEC is required to maintain discipline in compliance and enforcing this for the year as a whole and perhaps even into 2018H1 if required.

Major Downside Risk Scenarios

1) OPEC-non-OPEC Compliance at 50%

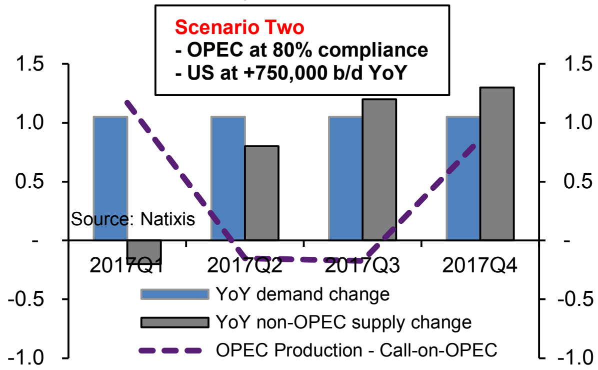


In the case of 50% compliance scenario from the agreed adjustments followed by further OPEC gains in 2017H2, we expect to see stock builds again in 2017Q4 and 2018Q1. This also accounts for a partial recovery in Nigerian and Libyan production. We assume a 250,000 b/d yoy increase (annual average) in US oil output in 2017 in this scenario (as in our central scenario).

2) US Production Revival

This assumes OPEC production as in our central scenario i.e. 80% compliance in 2017H1 and a small increase in 2017H2.

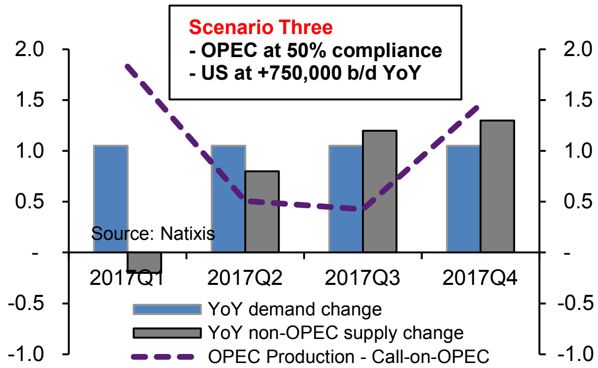
Global oil supply/demand balance (mn b/d)



Assuming an aggressive increase in US production growth (+750,000 b/d yoy average) in 2017, this will lead to an overall year-on-year non-OPEC production growth of 810,000 b/d. Whilst this scenario continues to maintain an overall stock build for 2017 year-on-year, the tightness of the fundamentals compared to 2016 and the drawdowns in the middle of the year should limited any substantial price collapse.

3) A Fight for Market Share

Global oil supply/demand balance (mn b/d)



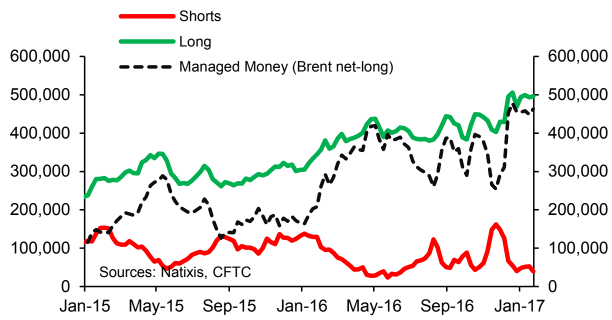
Where both of the above events occur, we estimate a stock build of 1mn b/d. Of course, some of the US output gain would be limited due to a price reaction. This would be extremely volatile for prices with a potential price drop in 2017 followed by a much more aggressive price recovery in the latter half of 2018.

Either of the above mentioned downside scenarios would lead towards a shift to our lower case scenario as set out in our weekly Oil and Compliance report published on 20 January.

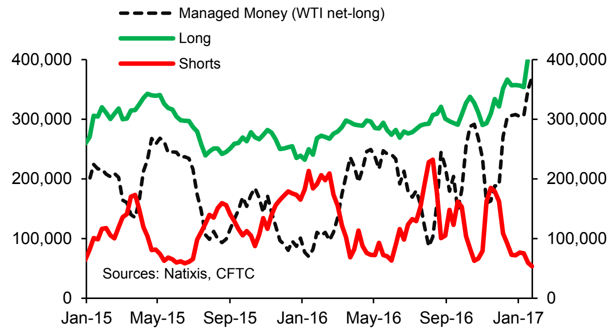
4) Financial Markets

Managed money net longs at historic high. While this may increase if oil markets were to balance, the limited returns and any hope of front end of the curve flipping into backwardation would diminish on the back of the risks mentioned above. This could lead to a massive off-loading of these positions. Hence, downside risk from investor sell-off cannot be ignored.

BRENT: Total net-long managed Money (Futures & Options)



WTI: Total net-long managed money (Futures & Options)



Upside Risk Scenarios

However, along with the downside risks, there are some support levels we would also like to identify.

Supply Decline

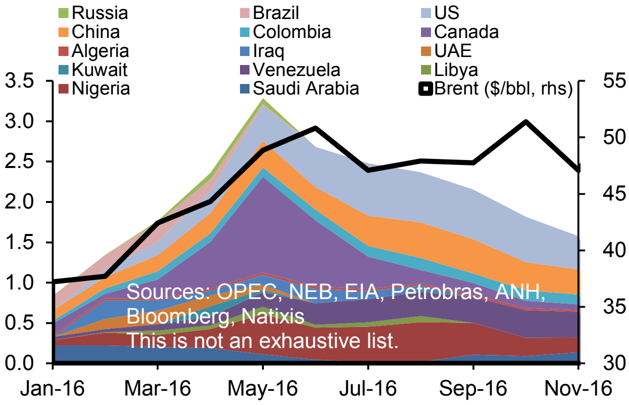
A significant support to a cap on US oil output will come from inflationary pressures. For example, with a 25% rise in service costs, around 200,000 b/d of new 2017 oil production will be out of money at $55/bbl according to Wood Mackenzie. So a rise in oil prices will have to reconcile with a rise in costs as service companies have cut back costs significantly in the past. At a flat cost structure, 700-800,000 b/d breaks even at <$55/bbl with 10% IRR (internal rate of return). US producers had concentrated their efforts on the low cost spots in the last two years. With the price recovery as the operators move to peripheral spots, it will push up the average cost. Also, a consequence of the US hedging behaviour is that it will limit capital for near term upstream expansion plans.

The Trump administration, upon taking the office, has signed executive actions to advance the fiercely disputed pipelines projects (Dakota Access and Keystone XL). The president has also instructed the Secretary of Commerce to develop a plan that would require any company that builds a pipeline within US borders to use American-made materials. This is likely to support further cost inflation for US producers.

Other Supply Decline

Nigeria and Libya's recent return of oil production is equally susceptible to being taken offline immediately, thereby tightening markets very quickly, even more so in 2017-18. In our central scenario we have taken an increase of 0.4mn b/d YoY overall from the two countries. Meanwhile, non-OPEC supply from countries such as China and Mexico could decline even more than our assumptions from the lack of investments and momentum set by shutting down of fields in the past two years. Additionally, geopolitical risks could become a key support to oil prices in 2017.

Notable recent cyclical, planned and unplanned outages from oil producers (mn b/d, lhs)



CAPEX Reductions

Particularly with natural decline from on-stream fields in non-OPEC, reduced capital investments in the last two years (-$400bn in the last two years) and potentially third year of lower CAPEX budget plans will exacerbate the reversal of the supply/demand balance. The supply gap is projected to be close to 8mn b/d by Wood Mackenzie. This is something that we have anticipated for some time.

Demand Growth

There are clear upside potential with the pressures on prices. Strong growth in demand could continue for another year at 1.2-1.3mn b/d (as opposed to our central scenario at 1.05mn b/d) due to strong growth in GDP globally and price elasticity effects to persevere. This could occur in OECD economies in particular. China's demand for crude oil remains high as China continues to expedite plans for its SPR builds.

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