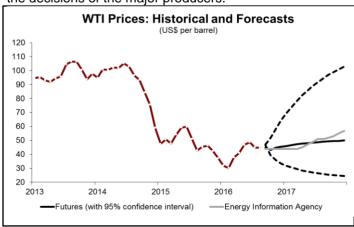


## Author: Paolo Zanghieri

- During the last couple of months the recovery in oil price has stalled, with the WTI fluctuating around 45 US\$/ barrel.
- The tentative agreement on production cuts reached by OPEC on September 28 has lifted prices, but the final impact hinges on a binding agreement on how the cuts will be shared across member countries.
- From a fundamental point of view see a further trend increase in oil prices. While the slowdown in demand from China and high inventories (projected to increase until mid-2017) would cap any rise, the cuts in investment by US shale producers will likely further reduce supply in addition to the effects of the possible OPEC agreement.
- Futures are currently pricing WTI to reach 52 US\$/barrel by the end of next year, which is the lower bound of our own expectations of a 10% to 15% increase.

The large plunge in oil prices came to a halt in mid-February, when the WTI prices bottomed out at around 26 US\$ per barrel. It then recovered quickly peaking at just above 50 US\$ at the beginning of June, but since then it has being hovering around 45 US\$. The draft agreement OPEC members reached on September 28<sup>th</sup> to cut production have lifted temporarily prices, but the bump would fade if the next official meeting in November fails to deliver any binding commitment. According to futures, the WTI will end this year at just below 48 US\$/barrel, before climbing to 52 US\$ by December 2017. This is the lower bound of our expectations, as we see a 10% to 15% increase in prices, as we expect a slightly faster reduction in supply. Despite the prospects of a mild acceleration in demand. the outlook and risks for prices remain largely driven by the decisions of the major producers.



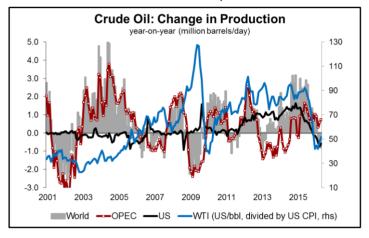
## US shale producers key for price dynamics

The gradual increase in US oil output gathered speed in mid-2014, when the shale extraction technology began to be applied extensively. The reaction of the other main producers (chiefly OPEC) was aimed at keeping market shares and, by lowering prices beyond the extraction costs of the highly leveraged shale producers, driving them out of the market. The result was the biggest and more persistent increase in global oil supply in a decade. This and the slowdown in the energy-intensive emerging market economies brought oil prices (in real terms) to levels not seen since the global financial crisis. We estimate that around one half of the drop in prices between 2014 and 2015 was due to oversupply.

The US shale sector has so far proved more resilient than expected; bond defaults and loan delinquencies have increased but not turned into a generalized crisis. Between June 2014 and February 2016 the S&P small cap energy lost nearly 80% but has since recovered 45%. Meanwhile, the US oil industry has significantly cut investment, leading to a sizeable reduction in production (down by 11.4% since mid-2015 according to the U.S. Department of Energy).

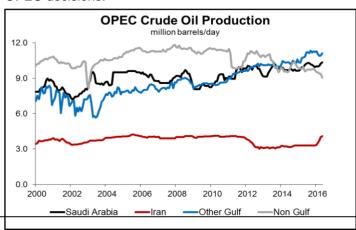
The fracking used by US shale producers involves drilling multiple wells using the same piece of machinery (rig). This makes the process more akin to a standardized manufacturing process rather than a large scale one-off conventional extraction project. US producers can then switch quickly off or on production in reaction to price changes. The number of active rigs peaked at just below 1600 in November 2014 and by February 2016 it had been cut to 300, before climbing back to 400 by the end of the summer

as prices recovered. This flexibility, together with their non-negligible market share (at the peak of production in Q2 2015, the US accounted for 12% of world output), allows the shale sector to challenge Saudi Arabia for the role of swing producer. The breakeven price of the industry (estimated at around 45-60 US\$/barrel) is now the threshold above which a surge in shale oil supply would be triggered, and has therefore become the reference point for the industry worldwide. Technological improvements and the productivity gains accruing from the standardized and repeated production process will lead to a gradual decrease in costs and the breakeven price.



## Political factors may hinder an OPEC reaction

Nimble technology and relatively low financial constraints allow US shale producers to adjust production in order to maximize short/medium term profits. Most of other producers do not enjoy this luxury. As a consequence, the reaction by non-US producers has been slow and this has prolonged the downward pressure on prices. On top of it, conflicting foreign politics' objectives are standing in the way of any coordinated action aimed at freezing or reducing supply. This is clear in the recent behavior of OPEC, which account for around 40% of global output and whose production remains at a 15-year high. After six failed attempts, on September 28th member countries eventually reached a tentative compromise to cut production by around 1 million barrels per day, to 33 million. However, the lack of any firm agreement on how the supply reduction would be shared between countries casts doubts on the actual implementation of the deal. The OPEC directorate has set up a committee to decide on the burden sharing, which will present a proposal at the next meeting, in November. The key issue is the reflection of the geopolitical tensions between Saudi Arabia and Iran on the OPEC decisions.



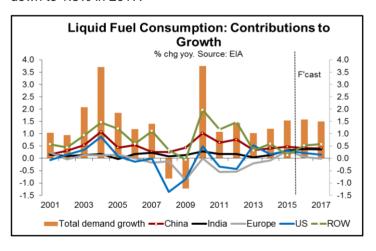
On top of that, there is Iran's key objective to bring back production and share in OPEC's production to their presanction levels. Since the lifting of the sanctions at the beginning of 2016, output has rapidly risen back to 80% of the past level, but the poor state of the equipment and the constraints to foreign financing still in place rule out any significant further expansion in the short term.

The increase in Iranian production has more than offset the drag from Libya and Nigeria, due to political tensions. Outside OPEC, Russia (the world's largest producer) has kept increasing production and stated that it would agree with OPEC only on a freeze in production at the current levels. However, a further expansion in supply is unlikely, as sanctions are drastically reducing access to the technology and financing needed to run existing wells and undertake new drillings.

If OPEC fails to cut output, the odds are for a mild increase in production: after the 2.5% increase in 2015, the US government's Energy Information Agency (EIA) sees global output up by 0.5% this year and 0.6% in 2017.

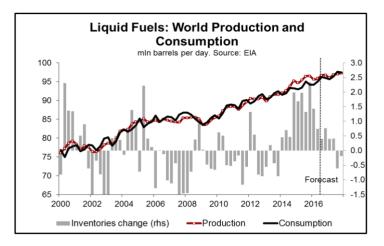
## Demand to pick up moderately

In 2015 world liquid fuels demand was up by 1.5% yoy, the largest gain in five years. The bulk of the increase in consumption was related to gasoline, as low fuel prices increased vehicle usage and biased purchases towards bigger cars, especially in the US and China. All in all the main economic regions gave a roughly equivalent contribution to consumption growth. According to the EIA, demand is set to accelerate slightly this year, to 1.6% before slowing down to 1.5% in 2017.



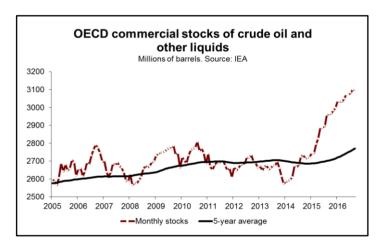
The regional pattern is expected to change. Fuel demand in China, India and other emerging economies should continue at a sustained pace, as retail consumption offset the slowdown in industrial usage (especially in China). In OECD economies, the fading of the boon from low oil price will cap the rise in consumers' demand, leading consumption to increase only marginally.

The pick-up in consumption will not be enough to reduce rapidly the supply glut. The EIA expects supply to continue outstripping consumption until the second half of 2017. Therefore, the pace of inventory accumulation will decline from the record high levels seen in 2015, but will not turn quickly into a decumulation.



The effect of lower net supply on prices will be dampened in the short term by the high level of stocks. Reliable data are available just for OECD countries, which accounted in 2015 for 45% of global consumption.

They show that stocks of crude oil and liquid fuels have rapidly increased to 20% above the 2005-2014 average. In the US the recent months saw a reduction in the inventories of crude oil, which was nevertheless matched by an unprecedented increase in stocks of petroleum products, which may compress demand by refineries, contributing to keep stocks high.



#### Risks to prices are tilted to the upside

The latest OPEC move has tilted risks to the upside, especially if the agreement is implemented and Russia joins in. Another risk factor is a stronger than expected impact of the cutback in US production. Q2 data show that capex in the extraction industry is still receding, and might be further hit by a delayed increase in financial distress of shale producers. This would further cut output.

Even if the OPEC fails again to find an agreement, we do not expect a repeat of a surge in production capable of bringing oil prices back to 30 US\$ per barrel or below. The slump in oil revenues has caused sustained economic and fiscal damages to the basically undiversified economies of OPEC members. With the oil price well below the level needed to balance the government budget, several governments have started to slash public expenditure and are now targeting structural reforms. This has already been very costly in terms of consensus and further such moves to compensate for a drop in oil revenue would hardly be feasible politically.

#### **Fiscal Breakeven Oil Prices**

Prices at which the fiscal balance is zero.

US\$/barrel

	2014	2015	2016*	2017*
Saudi Arabia	105.7	94.8	66.7	70.2
Iran	100.0	84.0	61.5	55.8
Iraq	113.2	62.6	59.7	59.4
Kuwait	55.8	49.2	52.1	52.8
UAE	79.0	69.1	71.8	71.7

Source: IMF \*Projected

A more significant downward risk to prices is a pronounced slowdown in China and/or other large emerging economies (which is not our baseline forecast). According to recent IMF estimates, a 1 percentage point reduction in Chinese GDP growth knocks off oil prices by around 3%.

Summing up, the mild upward trend we see in prices going in forward comes from a reduction in oversupply whose pace will be nevertheless slowed down by the high level of inventories. The OPEC tentative decision could speed up the recovery in prices, which will be nevertheless be contained by the reaction of the increasingly important US shale industry.

# **Imprint**

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