



Are oil markets better off with OPEC cuts?

Summary

- OPEC's decision to announce, but not to implement, a cut in production immediately sent Brent oil prices up 6 percent at the end of September. Prices were further supported by statements from Russia expressing its readiness to cooperate in order to limit oil output.
- OPEC plans on meeting in November, when the extent of OPEC cuts and individual country quotas are to be decided.
- Whilst the deal to cut remains fragile and fraught with numerous obstacles, as a result of the financial difficulty faced by a number of OPEC member economies, most notably Venezuela, Nigeria and Libya, there will be immense pressure to ensure some sort of deal is reached in November.
- In this context, we see the most likely outcome being an agreement to cut production, but only by a small amount, more akin to a production 'freeze' rather than an outright cut. Such an agreement would underline OPEC's intention to limit further rises in production and help stabilize oil prices at current levels (around \$50 pb).
- At this price level, OPEC members facing more acute financial pressure would be provided some relief, but, at the same time, prices would not be high enough to encourage too strong a supply response from US shale oil.
- Any agreement by OPEC, if reached, will of course need to be acted upon with discipline by all members for it to be effective, and this is where the real risk lies. Any large increases in output between now and November and/or after an agreement is finalized, would see the market losing faith in OPEC's ability to curb output, which would ultimately result in oil prices declining.

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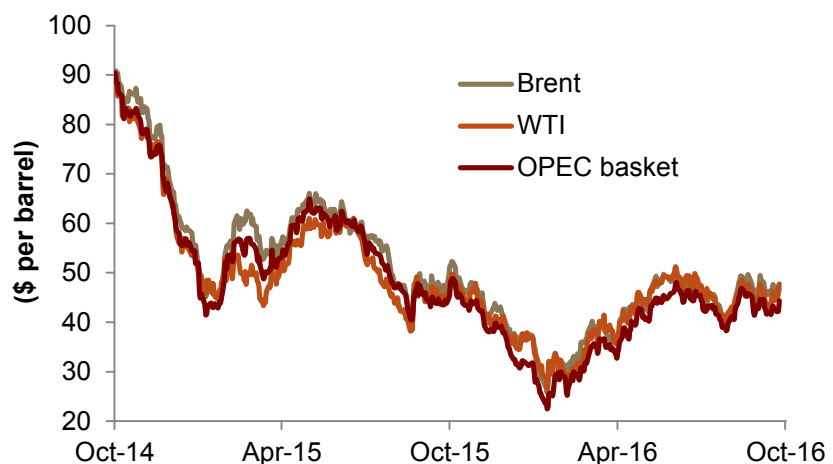
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Figure 1: Oil prices trading around \$50 per barrel currently





Overview

Brent oil prices were virtually unchanged in Q3 2016, quarter on quarter...

...despite rising sharply after OPEC announced, at the end of September, it would cut production.

Growth in global demand in 2016 is expected to remain below recent historical levels...

...with even lower growth expected in 2017.

Provisional data for Q3 2016 shows record US demand for gasoline during the summer driving season.

Brent oil prices were virtually unchanged in Q3 2016, quarter on quarter, despite rising sharply after OPEC announced, at the end of September, it would cut production. Although oil prices were volatile during Q3 2016, they showed little change from the previous quarter, at \$45 per barrel (pb) (Figure 1), as oil markets remained well supplied in the face of modest demand growth. OPEC's decision to announce, but not to implement, a cut in production immediately sent Brent oil prices up 6 percent. Despite the announcement, the deal remains fragile and is fraught with numerous obstacles prior to its final agreement in November. There is also the question of whether cutting production would actually be beneficial for OPEC producers, since, in our view, it could encourage a rise in production for other producers, none more so than in the US, where oil rig counts have rebounded and production forecasts have been revised upwards, even prior to OPEC's announcement.

Growth in oil demand to slow in 2016-17

Growth in global demand in 2016 is expected to remain below recent historical levels, with even lower growth expected in 2017. Latest OPEC data points to year-on-year oil demand growth of 1.3 million barrels per day (mbpd) in 2016 and 1.2 mbpd in 2017, both below the average of 1.4 mbpd in the five years between 2010-15 (Figure 2). More strikingly, US, India and China are expected to provide 63 percent of total oil demand growth in 2016, with their collective share declining to 50 percent in 2017 (Figure 3). Meanwhile, Asia-Pacific and Latin America regions are both expected to see a fall in yearly oil demand in 2016, with Asia-Pacific continuing to decline in 2017 due to falling Japanese oil demand.

In the **US** (21 percent of global oil demand), record low retail pump prices have spurred gasoline demand, which makes up a major component of total US liquid consumption, at 48 percent. Provisional data for Q3 2016 shows record demand for gasoline during the summer driving season (Figure 4). Looking ahead into Q4 2016, gasoline demand will fall slightly, quarter-on-quarter, but remain higher than previous years. The US Energy Information Administration's (EIA) forecasts point to lower 2017 gasoline demand, but only marginally.

Figure 2: Global oil demand growth in 2016-17 lower than 2010-15 average (year-on-year)

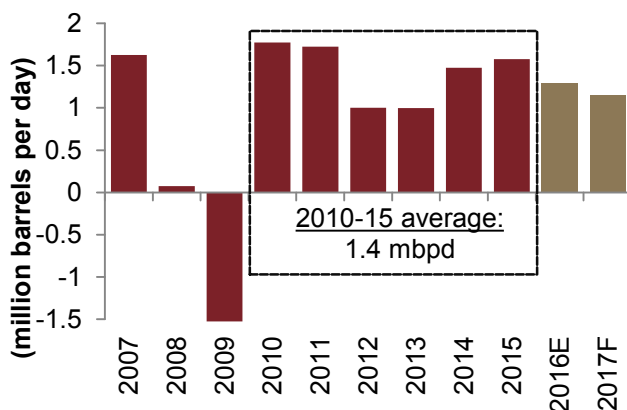
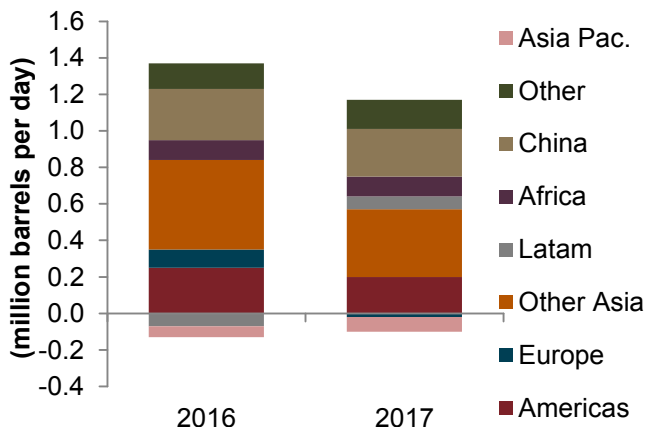


Figure 3: US (Americas), India (Other Asia) and China have largest yearly demand growth in 2016





Seasonal factors also helped push up Q3 2016 oil demand in Europe...

...but with Britain's formal exit from the EU beginning in Q1 2017, downward risks to Europe's oil demand remain.

Preliminary data for Q3 2016 shows that China imported 12 percent more crude oil than a year ago.

India's crude oil imports were up by 7 percent in Q3 2016 year-on-year...

...with further stockpiling of strategic crude oil to keep demand growth elevated in Q4 2016.

Japanese crude oil imports have been declining consistently, year-on-year, in the last two years.

Seasonal factors also helped push up Q3 2016 oil demand in **Europe** (15 percent of global oil demand). Higher consumption of road transportation fuels, notably diesel, and an improvement in vehicle sales resulted in higher year-on-year demand. Looking ahead, Q4 2016 demand is expected to hold up, but OPEC forecasts point to 2017 demand being marginally lower, year-on-year, due to higher oil taxation and fuel substitution.

So far, there seems to be no material effect on oil demand after the UK's decision to leave the European Union (EU), back in June. However, following the UK Prime Minister's recent announcement that Britain's formal exit from the EU will begin in Q1 2017, downward risks to Europe's oil demand remain, especially so if the region's economy is thrown into a recession as a consequence.

Preliminary data for Q3 2016 shows that **China** (12 percent of global oil demand) imported 12 percent more crude oil than a year ago. Although crude imports have been supported by lower retail pump prices, rising vehicle sales and higher demand from small, independent (teapot) refineries, they have also been boosted by ongoing efforts to raise strategic and commercial crude oil stocks. Current OPEC forecasts point to oil demand rising by 2.6 percent, year-on-year, in the final quarter of this year and 2.3 percent, year-on-year, in 2017 as a whole.

Rising car sales and new road construction, at a rate of 20 kilometers per day currently, is boosting both diesel and gasoline consumption in **India** (5 percent of global oil demand). As a consequence, preliminary data shows that crude oil imports were up by 7 percent in Q3 2016 year-on-year. We expect the above factors and further stockpiling of strategic crude oil to keep demand growth elevated in Q4 2016. Structural changes to the economy, such as plans to increase the share of manufacturing in GDP from 16 to 25 percent in six years, will help keep demand strong in 2017, which is forecast to grow by 3.5 percent year-on-year, compared to 6.9 percent in 2016.

Japanese (3 percent of global oil demand) crude oil imports have been declining consistently, year-on-year, in the last two years. Preliminary data shows Q3 2016 oil imports were down 6 percent, year-on-year. The economy is still not showing any improvement and

Figure 4: US gasoline demand at record levels in 2016

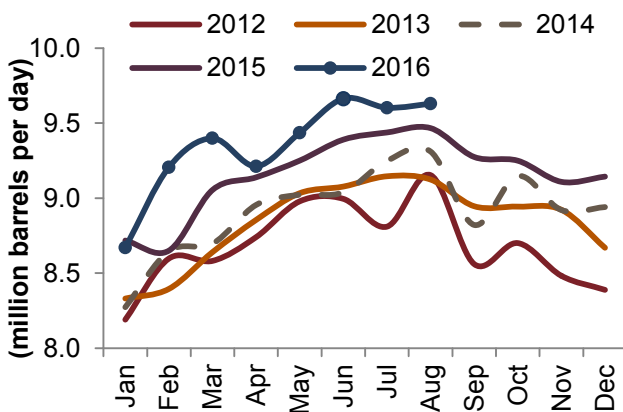
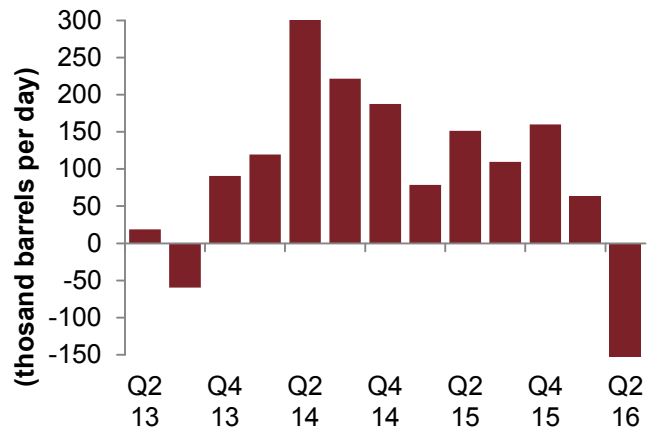


Figure 5: Sizable decline in Saudi liquid demand in Q2 2016... (year-on-year)





Latest available data shows that year-to-July Saudi Arabia's total demand declined by 2 percent, year-on-year...

...we believe this was due to higher domestic prices, weaker activity in the non-oil economy and higher gas usage in electricity generation.

Saudi oil production hit record levels during Q3 2016, at 10.6 mbpd...

... as a result of this large increase, we have updated our full year 2016 Saudi crude oil production average to 10.3 mbpd, up from 10.2 mbpd.

a steady closure of some refinery capacity will keep crude oil demand in the negative territory in Q4 2016 and year-on-year in 2017, with further downward pressure on demand if anymore nuclear reactors are restarted.

Latest available data shows that year-to-July **Saudi Arabia's** (3 percent of global oil demand) total crude and refined product demand declined by 2 percent, year-on-year (Figure 5). We believe this was due to, firstly, higher domestic prices across all energy products (and electricity tariffs) since the beginning of the year, and secondly, due to weaker activity in the non-oil economy (for more on this topic please refer to our recently published report [Quarterly GDP Update: Q2 2016](#)). In the case of crude oil, new gas supplies contributed to pushing demand down by 5 percent year-on-year. According to Saudi Aramco, the Wasit gas plant, supplied by the Hasbah-Arabiya gas fields, recently added 2.5 billion cubic feet per day (bcf/d) of raw non-associated gas (1.7 bcf/d of sales gas). The Hasbah-Arabiya fields were commissioned as recently as Q1 2016 and the impact on crude oil demand has been immediate. Latest available data shows that the seasonally observed rise in crude oil for electricity generation during the initial summer months of 2016 has been lower than in recent years (Figure 6), thereby freeing up more crude oil to be used to increase crude oil exports and higher valued refined oil products (see Box 1).

Box 1: Saudi oil production

Saudi oil production hit record levels during Q3 2016, with the Kingdom's average output for the quarter at 10.6 mbpd despite a fall in domestic demand. We see this rise coming about due to higher year-on-year crude oil and refined product exports as Saudi Arabia bids to maintain global market share. As a result of the large increase in production in Q3 2016, we have updated our full year 2016 Saudi crude oil production average to 10.3 mbpd, slightly up from our previous forecast of 10.2 mbpd.

Figure 6: ...with new gas supplies lowering crude oil usage in electricity generation during summer

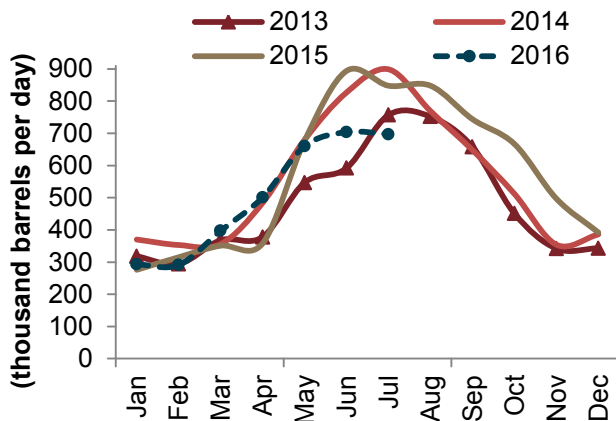
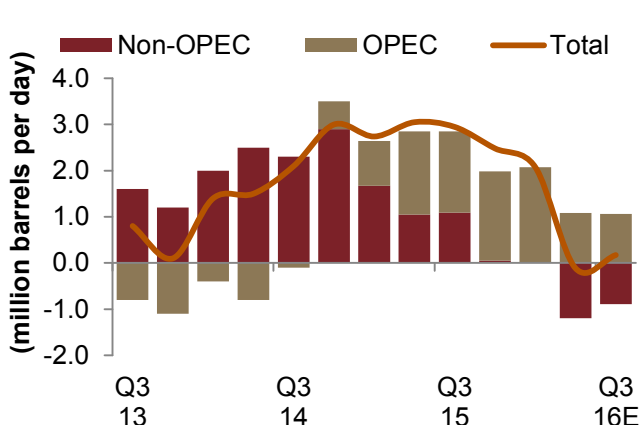


Figure 7: Non-OPEC supply decline compensated by OPEC growth (year-on-year)





OPEC production cuts

OPEC supply growth is less clear in the months ahead as it aims to reduce output to a range of 32.5- 33 mbpd.

OPEC's decision to announce a cut in production, at the end of September, immediately sent Brent oil prices up 6 percent.

Details for individual countries quotas will be decided in a formal OPEC meeting in November.

The deal remains fragile and is fraught with numerous obstacles.

If OPEC cuts production to 32.5 mbpd, and assuming all other things held constant, oil markets would tighten more quickly.

OPEC data shows that non-OPEC supply dropped by 890 thousand barrels per day (tbpd) in Q3 2016 year-on-year, but this drop was less than the rise in OPEC supplies, which increased by 1.1 mbpd, over the same period (Figure 7). Further declines are expected in non-OPEC supply in Q4 2016, by around 750 tbpd, but 2017 will see an annual increase of 390 tbpd. OPEC supply growth is less clear, with the organization recently stating that it will aim to reduce output to a range of 32.5 to 33 mbpd (vs. September secondary sources output at 33.4 mbpd), with detailed individual countries quotas being decided in a formal OPEC meeting in November.

OPEC's decision to announce, but not to implement, a cut in production, at the end of September, immediately sent Brent oil prices up 6 percent. The main points to emerge from an informal meeting in Algeria include:

- First time since 2008 OPEC agreed to reduce output.
- OPEC agreed to reduce output to a range of 32.5 to 33 mbpd (vs. September secondary sources output at 33.4 mbpd).
- Details for individual countries quotas will be decided in a formal OPEC meeting in November.
- Libya, Iran and Nigeria could be excluded from reduction in output, although this is not certain.
- Russia has expressed its readiness to cooperate in order to limit oil output, potentially raising the level of overall cuts.

We view the announcement as a positive development since it shows that communication amongst OPEC producers is increasing, but the deal remains fragile and is fraught with numerous obstacles. An agreement could, in theory, bring about market re-balancing much quicker. Currently, market rebalancing is expected in H2 2017, with a risk of it being pushed back to 2018. If OPEC cuts production to 32.5 mbpd, and assuming all other things held constant, oil markets would tighten more quickly and considerably (Figure 8). In reality, the issue is complicated, with a number of risks, not only of a lack of an agreement in the November meeting, but also to implementing the cuts, if agreed.

Figure 8: OPEC cuts could, in theory, help re-balance oil markets quicker (year-on-year)

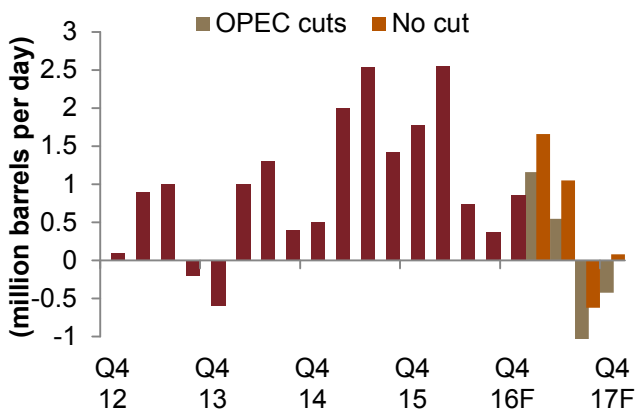
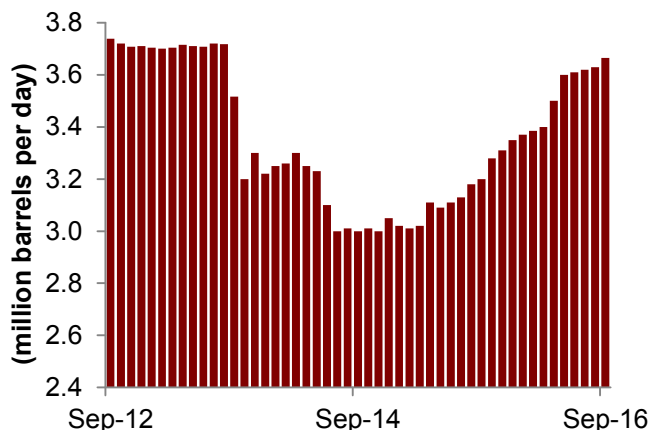


Figure 9: Iranian production close to pre-sanctions levels





One of the main issues will be which countries to exclude, if any, from production cuts...

...with Nigeria, Libya and Iran all pushing for exemptions.

OPEC could choose to upwardly adjust the targeted ceiling cut to account all three countries...

...but this would lessen the market impact of the proposed cuts.

Another potential problem relates to which production statistics to use when applying cuts...

...for example there is a large difference between Iraq's direct communication and secondary sources data.

There are a multitude of issues that will have to be resolved in order for OPEC to implement cuts in its November meeting. One of the main issues will be which countries to exclude, if any, from production cuts. Nigeria, Libya and Iran have all pushed for exemptions. **Libya** has had ongoing civil strife since 2011, which has depressed crude output, with year-to-date average of 341 tbpd compared to 2012 average of 1.5 mbpd and Libya's National Oil Corp. will be pushing for exemptions from cuts until 2012 levels have been reached again. **Nigeria** is another producer who will be seeking exemptions. The country has seen a number of militant attacks on crude oil and gas pipelines in the last few months, with September's output 381 tbpd lower than its 2015 average of 1.76 mbpd. Meanwhile, whilst **Iran** is close to reaching pre-sanctions output (Figure 9), it is still 370 tbpd lower than the National Iranian Oil Co.s (NIOC) stated output target of 4 mbpd, which it expects to reach by March 2017.

Any exemptions for these countries will need an equivalent or higher cut in production from other OPEC members, which presents another challenge to the deal. Alternatively, OPEC could choose to simply adjust the targeted ceiling of the cut (between 32.5 to 33 mbpd) upwards in to order account for additional output from all three countries, but this would lessen the market impact of the proposed cuts.

Even if there is agreement on exemptions for certain member countries, another potential problem relates to which production statistics to use when applying cuts. OPEC has two reporting formats in the publication of member's output. One is called direct communication, which is the official production statistics provided by OPEC members, and the other is secondary sources, which is provided by independent global oil agencies. For certain OPEC members, the difference between the two data sets is sizable. For example, there is an average of 337 tbpd difference between **Iraq's** year-to-date direct communication and secondary sources data (Figure 10). The Iraqi oil minister has expressed concern over OPEC's intended use of secondary sources data for production cuts, with this issue likely to remain a point of contention at the November meeting.

Figure 10: Marked difference between direct and secondary sources data on Iraqi crude oil output

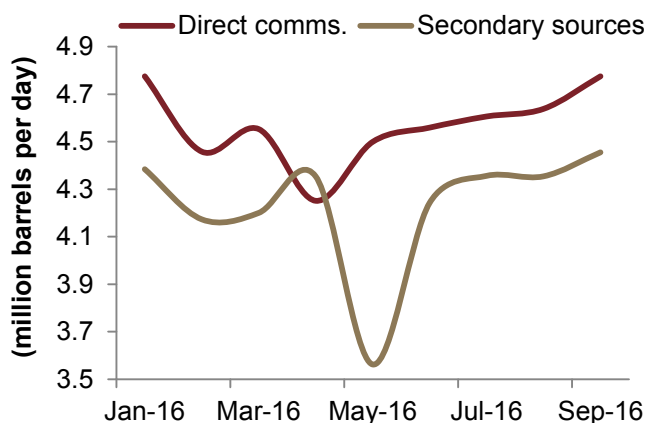
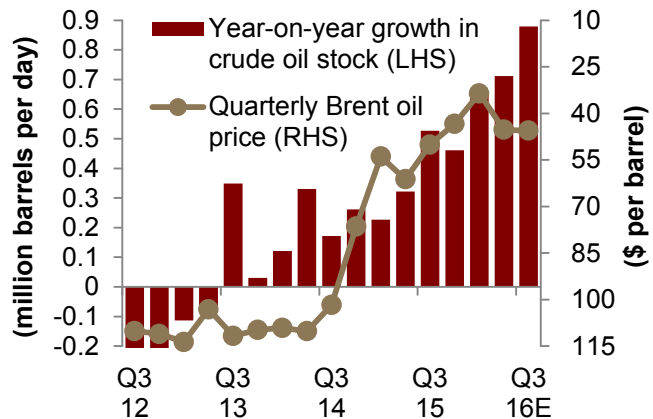


Figure 11: Net additions/withdrawals in Chinese crude oil stocks and Brent oil prices (inverted)





There is also the question of whether cutting production would actually be beneficial for OPEC producers.

Any sharp upward movement in oil prices could negatively affect overall Chinese oil demand growth...

...and encourage US shale companies to take out new hedges, lock-in higher prices and raise their oil output above current forecasts.

Despite Brent oil prices breaking through the \$50 pb barrier recently, current year-to-date prices still only average \$42 pb.

Putting all these issues aside, there is also the question of whether cutting production would actually be beneficial for OPEC producers, since, in our view, the subsequent rise in price from OPEC cuts could result in both lower demand growth, particularly from China, and higher supply for non-OPEC producers, specifically from US shale oil.

Figure 11 shows that as global oil prices have dropped in the last two years, the level of oil demanded for commercial or strategic stocks by China has increased. Rising oil stocks as a result of lower oil prices, rather than any sustained lift in domestic fuel consumption, would suggest any sharp upward movement in oil prices could negatively affect overall Chinese oil demand growth. As for supply, although **US** oil production saw year-on-year declines in Q3 2016, with a drop in shale oil specifically contributing to this decline, the outlook for US production has improved in the last few months. According to EIA's data, US production will continue to decline throughout the remainder of Q4 2016 and 2017, but at a less steep rate than before (Figure 12). This is because oil prices at around \$45 pb cover well-head (or half cycle) operating costs of the three of the major shale basins, thereby giving many shale oil producers the opportunity to limit year-on-year production declines. If OPEC implements the largest possible cut in production (to 32.5 mbpd) with discipline, we would expect Brent oil prices to rise even further than the current spot price (at around \$50 pb). This would, in our view, encourage US shale companies to take out new hedges, lock-in higher prices and, as a result, raise their oil output above current forecasts (for more on this topic please refer to our recently published report [Recovery in Oil Prices: Rebound in US Shale Oil?](#)).

Higher oil prices expected, not guaranteed

Despite Brent oil prices breaking through the \$50 pb barrier recently, current year-to-date prices still only average \$42 pb. We see the next major movement in oil prices being determined by the outcome of the OPEC meeting in November, with the worst case for prices being no clear agreement on cuts in production. In such a situation the downward pressure on prices would be immediate, quite possibly pushing Brent towards \$40 pb. Conversely, a more positive outcome

Figure 12: Upward revision in US oil production seen in recent months

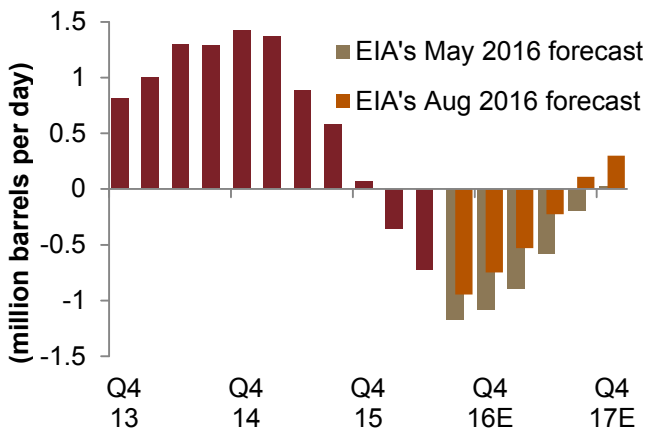
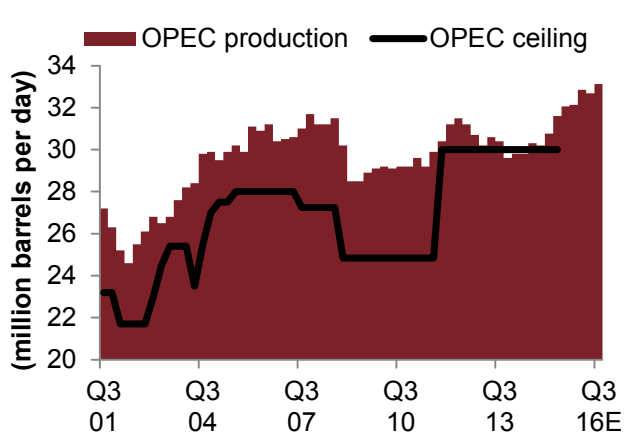


Figure 13: OPEC production versus OPEC production ceiling since 2001





We see oil prices in the next two quarters or so, being determined by the outcome of the OPEC meeting in November.

Due to financial pressures on some OPEC members there will be immense pressure for a deal in November.

We see the most likely outcome being an agreement to cut production, but only by a small amount...

...and this would be sufficient to sustain oil prices at current levels (around \$50 pb).

Any agreement by OPEC will need to be acted upon with discipline by all members for it to be effective...

...but historically, OPEC has a poor record in complying with its own targets.

for prices would be an agreement to cut by the maximum amount (to 32.5 mbpd) followed by disciplined implementation of cuts in the immediate months after the meeting. This, we believe, could push Brent oil prices up to \$60 pb, but, as mentioned previously, it could also result in demand declining and US shale oil rebounding.

Due to financial pressures being faced by a number of OPEC member economies, most notably Venezuela, Nigeria, and Libya (for more on this topic please refer to our previous Q2 2016 Oil Update [Temporary Outages Helping Balance Oil Markets](#)), there will be immense pressure to ensure some sort of deal is reached in November. In this context, we see the most likely outcome being an agreement to cut production, but only by a small amount, more akin to a production 'freeze' rather than an outright cut. Such an agreement would underline OPEC's intention to limit further rises in production, which has increased by 2.5 mbpd since mid-2014, and this would, in our view, be sufficient to sustain oil prices at current levels (around \$50 pb). At these price levels, OPEC members who are facing more acute financial pressure would be provided some relief, but, at the same time, prices would not be high enough to encourage too strong a supply response from US shale oil. Furthermore, an agreement in itself, however small, would signal an increased willingness by OPEC members to cooperate, thereby raising the chances of stronger coordinated action later in 2017-18, if needed.

Any agreement by OPEC will of course also need to be acted upon with discipline by all members for it to be effective, and this is where the real risk lies. Historically, OPEC has a poor record in complying with its own targets. Looking back at OPEC production data since 2001, there has been limited compliance with the organizations targets, with total production consistently exceeding production ceilings (Figure 13). With Q3 2016 OPEC production at record levels, any large increases in output between now and November and/or after an agreement is finalized, would see the market losing faith in OPEC's ability to curb output, which would ultimately result in oil prices declining.

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