



Supply factors weigh heavily on oil

Summary

- Brent oil prices are trading above \$80 per barrel (pb), the highest level since early November 2014, on the back of concerns over oil supply. Provisional OPEC secondary sources data for Q3 2018 shows that Iranian oil output declined by nearly 250 thousand barrels per day (tbpd) quarter-on-quarter.
- Looking ahead, as US sanctions on Iranian oil formally commence in November, even more oil is expected to come off-line. In fact, the National Iranian Oil Company (NOIC) itself has estimated that crude oil exports could drop by an additional 500 tbpd when sanctions come into full effect.
- Saudi Arabia is the only producer with enough immediate spare export capacity, across all oil grade types, that can bring additional oil in response to short term market fluctuations.
- Based on US Energy Information Administration's (EIA) estimates, the Kingdom has around 1.6 million barrels per day (mbpd) of spare capacity, effectively 100 percent of OPEC spare capacity. As such, we expect Saudi Arabia to make up some portion of loss in output from expected outages going forward.
- Despite the risks related to continued trade disputes between two of the largest economies, US and China, we see the main factor influencing prices in the last quarter of this year and in 2019 as being related to developments over Iranian sanctions. Bearing this in mind, we have revised our Brent price forecast to \$73 pb in 2018, and \$75 pb in 2019, up from \$68 pb previously for both years.

For comments and queries please contact:

Fahad M. Alturki
Chief Economist and Head of Research
falturki@jadwa.com

Asad Khan
Director
rkhan@jadwa.com

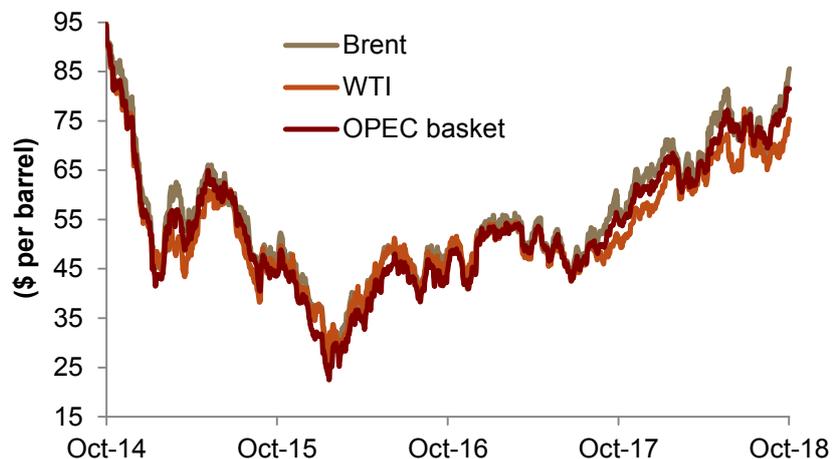
Head office:

Phone +966 11 279-1111
Fax +966 11 279-1571
P.O. Box 60677, Riyadh 11555
Kingdom of Saudi Arabia
www.jadwa.com

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Figure 1: Brent oil prices are currently trading above \$80 pb





According to the latest OPEC monthly report, global oil demand growth of 1.62 mbpd in 2018.

China and India to remain the main contributors to yearly oil demand growth.

Preliminary data from the EIA shows that overall US liquid consumption rose by 3 percent year-on-year in Q3 2018.

US liquid demand should be supported by the economic growth, in particular through industrial and transportation sectors.

China's crude oil imports continued to rise higher to record levels according to provisional Q3 2018 data.

Oil demand growth downgraded:

According to the latest OPEC monthly report, global oil demand will grow of 1.62 million barrels per day (mbpd) in 2018. That said, the September report downgraded demand growth for second consecutive time for the current year (Figure 2). The downgrade in demand, by 30 tbpd over two months, was attributed to weaker-than-expected demand from the Middle East and Latin America, primarily as a result of fuel substitution and subsidy reduction policies. Meanwhile, OPEC expects US, China and India to remain the main contributors to yearly oil demand growth during Q4 2018. The above three countries are expected to contribute 64 percent of this rise. Meanwhile, OPEC expects lower oil demand growth in 2019, to around 1.41 mbpd (versus 1.43 mbpd previously). Again, the above three countries, are expected to make up a bulk of demand growth, but at a slightly lesser total of 54 percent in 2019.

US, China and India oil demand stable:

Preliminary data from the EIA shows that overall US liquid consumption rose by 3 percent year-on-year in Q3 2018. That said, gasoline consumption, which constitutes roughly half of all US liquid consumption, was flat on a year-on-year basis, but in line with recent highs. Rising WTI prices, strong demand and depleting oil stocks have all pressured pump prices. The average price for US regular gasoline is expected to average \$2.84 per gallon in Q3 2018, the highest since Q3 2014, when it hit \$3.50 per gallon. Looking ahead, according to current forecasts, the EIA is still expecting overall liquid consumption to rise by an average of 2 percent year-on-year in Q4 2018. In 2019, US liquid demand should be supported by the economic growth, in particular through industrial and transportation sectors, but liquid consumption will rise by a modest 1 percent year-on-year. That said, continued rises in pump prices will lead near zero rises in gasoline consumption in 2019 (Figure 3).

China's crude oil imports continued to rise higher to record levels according to provisional Q3 2018 data, averaging 8.8 mbpd during the quarter, up 6 percent year-on-year. Chinese imports have been partly supported by a decline in domestic crude oil production in the last three years. In Q3 2015, Chinese crude oil production averaged 4.3 mbpd, but has dropped by 11 percent since, to around 3.8 mbpd in Q3 2018 (Figure 4). The declines have come about due to China's

Figure 2: OPEC's second consecutive downward revision in oil demand growth for 2018

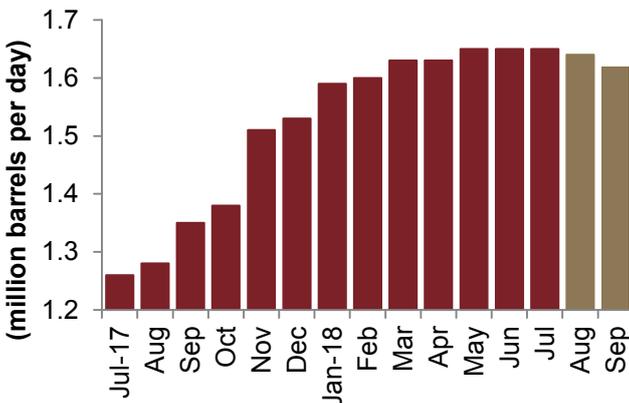
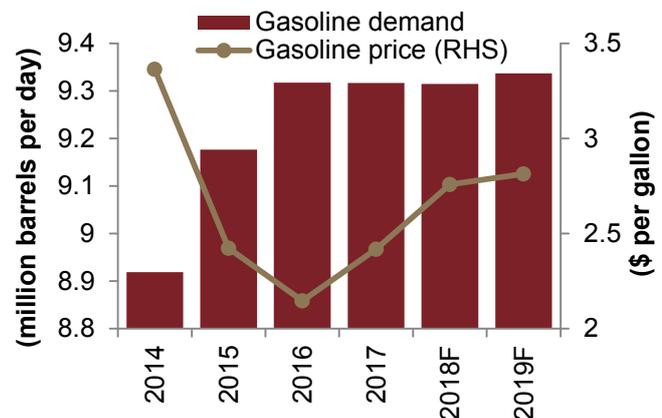


Figure 3: US gasoline prices and demand





OPEC is forecasting Chinese oil demand growth at 3 percent, due to demand from industrial sectors and rising passenger car sales.

That said, with the recent downward trend in domestic oil output, an increasing portion of this annual rise is expected to come from higher oil imports.

Provisional Q3 2018 data shows that Indian oil imports were up by 407 tbpd or 9 percent year-on-year.

Looking ahead, whilst overall Indian oil consumption is expected to rise by 3.4 percent year-on-year in 2019, the current level of taxation, if maintained, could result in lower than forecasted consumption.

Provisional data for Q3 2018 shows that crude oil production from OPEC is expected to average 32.4 mbpd in Q3 2018.

large state-owned national oil companies (NOCs) struggling with low oil prices, putting them under financial pressure and forcing cost cuts, particularly in new oil projects. For example, listed Chinese NOCs spent circa \$70 billion investing in domestic and international upstream portfolios in 2014; but this declined to \$13.2 billion in H1 2018. Whilst recent higher oil prices have made it more economical for Chinese NOCs to look into exploring and developing domestic oil fields, no major decisions for new fields have been announced. Currently, OPEC expects Chinese oil demand to stay robust, with around 3 percent growth in the Q4 2018 similar to levels of growth in 2018 as a whole. The outlook for 2019 is the same, with OPEC forecasting oil demand growth at 3 percent as well, due to demand from industrial sectors and rising passenger car sales. That said, with the recent downward trend in domestic oil output, an increasing portion of this annual rise is expected to come from higher oil imports.

Provisional Q3 2018 data shows that Indian oil imports were up by 407 tbpd or 9 percent year-on-year. This growth was seen as a result of a rise in refined product consumption, especially LPGs, which was driven by increased residential consumption. Although India is expected to see continued rise in imports during Q4 2018, pressure is building over the level of state taxes on domestic fuel products. Currently, gasoline prices have risen 14 percent and diesel prices have risen 21 percent, since the start of the year. Federal and state taxes are estimated to account for around half of the gasoline price and just above a third of diesel prices. Looking ahead, whilst overall oil consumption is expected to rise by 3.4 percent year-on-year in 2019, the current level of taxation, if maintained, could result in lower than forecasted consumption.

Sanctions looming:

Provisional data for Q3 2018 shows that crude oil production from OPEC members is expected to have averaged 32.4 mbpd in Q3 2018, up by a marginal 1 percent quarter-on-quarter. Ongoing problems associated with outages (Libyan) and declining investment (Venezuela) meant both countries saw continued sizable quarterly declines in Q3 2018. Despite US sanctions not coming formally into effect until November 4th, the largest decline in output came from Iran. OPEC secondary sources data shows that Iranian oil output declined by nearly 250 tbpd between May and August 2018 (Figure

Figure 4: Chinese oil imports and domestic production

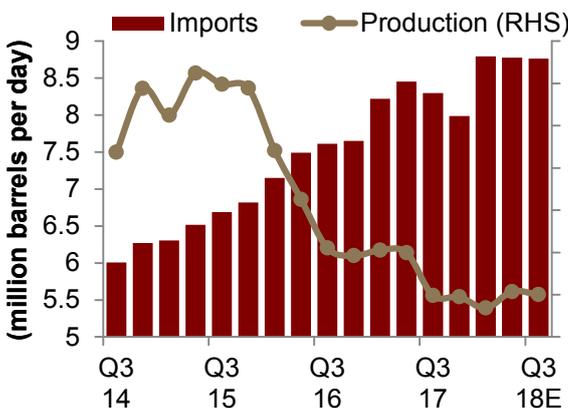
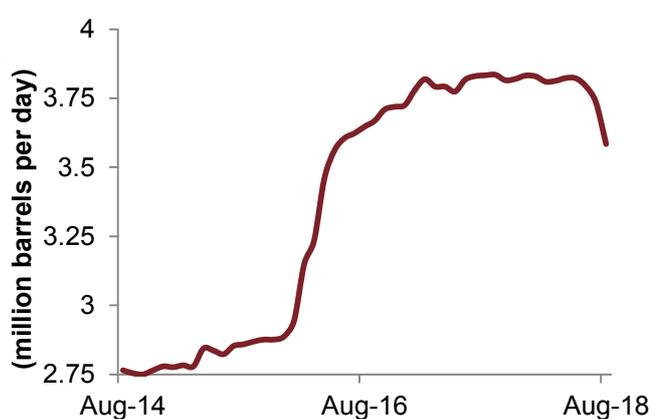


Figure 5: Iranian crude oil production down... (OPEC secondary sources)





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...and further declines in crude oil output and exports are expected going forward.

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...as such, we expect Saudi Arabia to make up a large portion of loss in output from expected outages.

Other rises in output could also come from Russia, but only over the medium term.

5). The decline was bought about by a reduction in imports from some of Iran's customers. Although some declines were registered from India and Japan, South Korea led the way in cutting purchases to zero, in line with the US's request (Figure 6). Further declines in crude oil output and exports are expected going forward. In fact, Iran's NOIC itself has estimated that crude oil exports could drop by an additional 500 tbpd when sanctions come into full effect in November.

Who will fill the void?

Only very few countries have the capacity to raise output consistently to make-up for the shortfall in output from Iran. Saudi Arabia, however, is the only producer with enough immediate spare export capacity, across all oil grade types, that can bring additional oil in response to short term market fluctuations. Based on EIA estimates of Saudi crude oil capacity and August's oil production, the Kingdom has around 1.6 mbpd of spare capacity, effectively 100 percent of total OPEC spare capacity. Looking ahead, therefore, as oil markets tighten following Iranian sanctions, and oil outages most likely to continue from OPEC members such as Libya and Venezuela, we expect Saudi Arabia to make up a large portion of loss in output from expected outages.

Other rises in output could also come from Russia, but only over the medium term. Preliminary data shows Russian crude oil production is expected to have risen close to record highs in Q3 2018. According to the Russian Ministry of Energy, crude oil production rose to 11.21 mbpd in July and August 2018, just shy of record highs of 11.24 mbpd seen in October 2016. At this rate, Russia's oil production is 260 tbpd higher than 2016 OPEC/non-OPEC agreed output of 10.95 mbpd (Figure 7). The recent rise in oil output has come mainly from newly launched fields, whilst mature fields, which were shut-in to comply with the October 2016 agreement, have not been restored, meaning that further sizable rises in oil production are not expected in Q4 2018. Looking ahead to 2019, according to OPEC, Russian oil production is expected to rise by a modest 20 tbpd. That said, recent statements from the Russian energy minister stress that oil production could rise by 300 tbpd in 2019, but only if the market needs it. The minister added that additional output would only occur after consultation with other OPEC/non-OPEC countries involved in the production agreement.

Figure 6: ...with South Korea recently cutting Iranian oil imports to zero

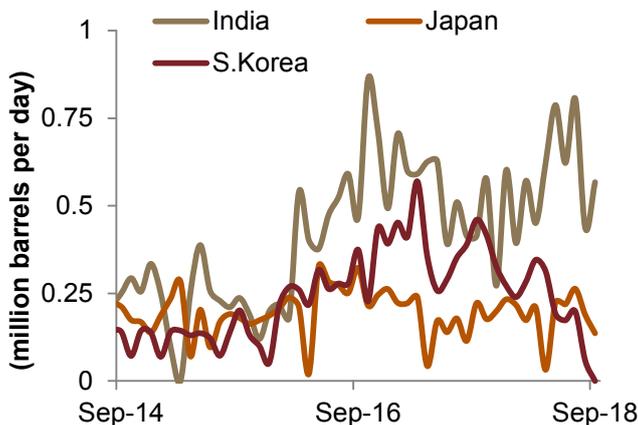
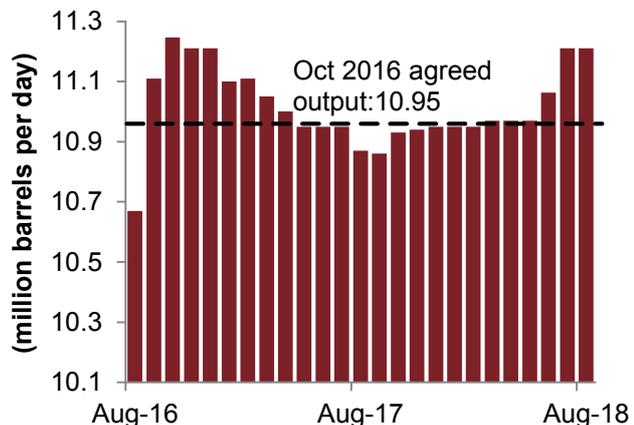


Figure 7: Russian crude oil production rising





The latest EIA monthly report shows that US oil supply is expected to grow by 14 percent in 2018 and 8 percent in 2019, year-on-year .

That said, the most recent EIA forecast has been downgraded versus the previous month.

Brent oil prices averaged \$75 pb in Q3 2018, with no changes on quarterly basis.

Despite the risks related to continued trade disputes between two of the largest economies, US and China...

...we see the main factor influencing prices in the last quarter of this year and in 2019 as being related to developments over Iranian sanctions...

Slower growth in US oil output:

The latest EIA monthly report shows that US oil supply has been accelerating in recent months, with production expected to average around 10.8 mbpd in Q3 2018, up 16 percent year-on-year. Whilst Q4 2018 is forecast to see slightly slower growth, of around 11 percent, average annual growth will nevertheless come in at 14 percent for the whole of 2018. It comes as no surprise that unconventional (or shale oil) has been behind the rise in US crude oil production. In fact, the Permian shale play has contributed 55 percent of year-to-August growth in total US oil output alone (Figure 8). Looking into 2019, the EIA expects total US oil output to rise by 840 tbpd or, 8 percent, year-on-year, to 11.5 mbpd, with Permian expected to constitute an even larger portion of this growth, at around 70 percent. That said, the most recent EIA forecast has downgraded US oil production growth, with September’s edition of short-term energy outlook (STEO) showing a downgrade of 20 tbpd versus the previous month (Figure 9).

Supply factors weigh more heavily on oil price outlook:

Brent oil prices averaged \$75 pb in Q3 2018, with no changes on quarterly basis. This is somewhat surprising considering the third quarter saw a considerable amount of financial volatility in a number of emerging markets (EM). It seems concerns over forthcoming Iranian sanctions have eclipsed any developments related to the possibility of an EM contagion.

Meanwhile, other macro risks are building, namely, the risks related to continued trade disputes between two of the largest economies, and oil consumers, in the world. Whilst the second round of US tariffs on Chinese products came into effect in late August, the US is imposing further tariffs on \$200 billion of imports from China. Further, the US government stated that if China retaliated to the latest round of measures, tariffs could be imposed on an additional \$267 billion of imports. Whilst the latest OPEC forecasts do not assume any further significant rises in trade tariffs, the organization has laid out varying scenarios and their impact on oil demand. The scenarios range from a mild reduction in demand, of about 10-20 tbpd in 2018 & 2019, to severe, around 100-300 tbpd in 2018 & 2019. Given this variation, it is quite clear that ongoing trade tensions between China and US are going to be crucial, yet unpredictable, factor in overall demand

Figure 8: US crude oil production boosted by Permian...

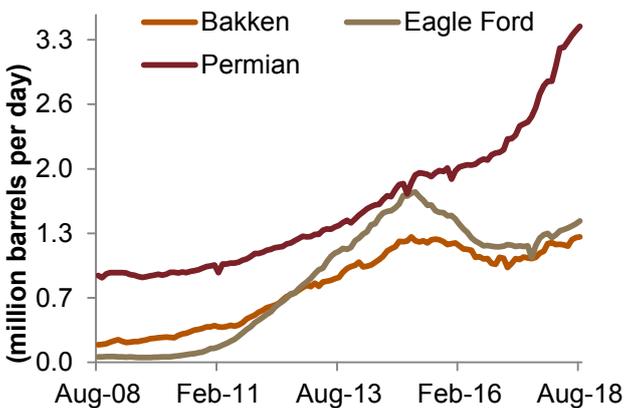
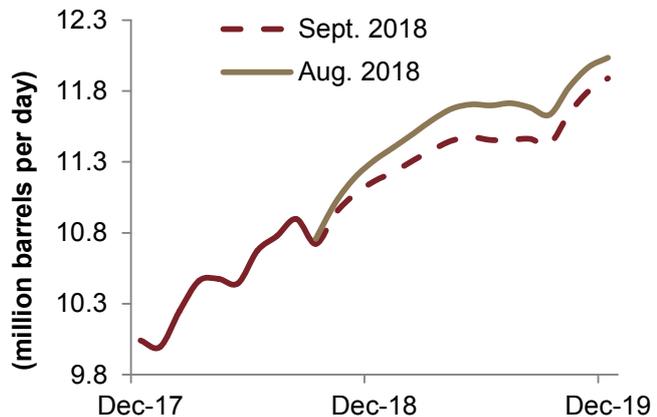


Figure 9: ...although overall growth in 2019 has been revised downwards



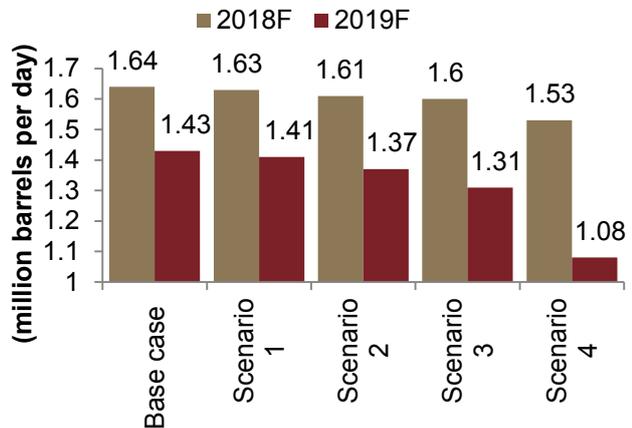


...bearing this in mind, we have revised our Brent price forecast to \$73 pb in 2018, and \$75 pb in 2019, up from \$68 pb previously for both years.

growth going forward (Figure 10).

That said, we see the main factor influencing prices in the last quarter of this year, and in 2019, as being related to developments over Iranian sanctions, and, to what extent other oil producers can make up for the expected declines. Bearing this in mind, and with Brent oil prices currently trading above \$80 pb, we have revised our Brent price forecast to \$73 pb in 2018, and \$75 pb in 2019, up from \$68 pb previously for both years.

Figure 10: OPEC scenarios on the effects of US China trade dispute on oil demand growth





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