

## Macro Observations

Currently, the discrepancy between bullish fundamentals and negative sentiment is beyond extreme. The oil market is very undersupplied and this is beginning to show up in inventories. The outlook for demand is sanguine with the 'Powell put' and US/China trade talks relieving macro concerns. Demand is understated given the size of the large 'miscellaneous to balance' (see below.) US production growth has slowed; conventional production is beginning to show signs of stress (Mexico in particular); compliance to the OPEC cuts is high; and production from the exempt OPEC members has plummeted. Were OPEC to reverse its cuts today inventories would drain by close to 1mmb/d assuming the sanctions remain on Iran and Venezuela. IMO 2020 is on track to have a large one time increase in oil demand later this year. Trump's incessant tweeting has had a profound negative shift on oil market sentiment. The perverse outcome of this manipulation of the oil market will likely be an oil price spike in time to hurt Trump's re-election campaign.

The oil market is very undersupplied and inventories are draining. In 2018, OECD inventories drained slightly with a decrease in 1H and a small build in 2H. In Q4 (before the OPEC+ cuts), OECD inventories drained slightly on an absolute basis and built by about 400 kb/d on a seasonally adjusted basis. In December, OPEC+ announced cuts of 1.2mmb/d which at the time was considered high and enough to balance the market. In February, the OPEC+ production ran at 2.34 mmb/d below the October baseline **or almost twice the level of cuts planned in December.** The reason for the discrepancy is production from Iran, Venezuela and Libya (all of which are exempt from the cuts) has plummeted by over 1.1 mmb/d. In addition to the OPEC+ cuts, Canadian production has fallen by over 250kb/d because of pipeline bottlenecks which now will only begin to be relieved in 2H 2020. Furthermore, these cuts are set to grow by 400 kb/d in March as Saudi has announced a production level of 9.8mmb/d and Venezuelan production drops by an incremental 200-250kbd (Venezuela has not been able to secure the needed diluent to blend with its heavy oil according to Energy Aspects.) **So basically, a production oversupply of 400 kb/d will be met with 'cuts' of 3.0 mmb/d in March. Amazingly, this shock and awe has caused the oil market to yawn.**

Inventories in the highly visible United States (which are reported weekly) have begun to drain in earnest. In the month of February, a number of US records were set: Saudi imports hit an all-time low; Venezuelan imports hit an all-time low; and US crude exports hit an all-time high. These trends look likely to continue. The last reported weekly inventory in February showed a total oil drain of 17.9mm barrels or the sixth largest oil drain in the data series going back to 1990. US inventories will fall below normal levels in the next few months (perhaps in the next few weeks if the current pace continues.) Currently, Asian and European inventories are below normal levels. US production growth has moderated. In December, on the monthly numbers, US production actually fell by 56kb/d driven by a sequential decline in the Gulf of Mexico. Tight oil sequential production growth has slowed to below 100,000 b/d per month. The E&P group reported lower than expected cap-ex and forecasted 2019 production. Furthermore, the longevity of US production growth was put into question by a number of operators and geologists. According to a SPE paper published in February by a Schlumberger reservoir engineer, 'parent / child' interference will require shale wells to be spaced more widely. This means that the size of the US resource along with peak US production will need to be adjusted downward. The

global oil market has a dangerous reliance on US production growth and a transition beyond US growth will likely prove to be impossible or, at the very least, extremely painful.

These bullish oil market dynamics are unfolding in the context of an oil market in which demand is understated. The IEA forecasts supply, demand and inventories but if these three do not reconcile they use a plug called the 'miscellaneous to balance.' Historically, a high 'miscellaneous to balance' has ultimately caused the IEA to revise demand upwards. Looking at the data series back to 1989 there are 116 readings of which the median miscellaneous to balance is 200k/bd. In its February report, the IEA reported a miscellaneous to balance of 1.3mmb/d for Q4 2018 which is 8<sup>th</sup> highest reading or in the top 10% of all readings. In 2018, on an annual basis, inventory drew slightly while the IEA claims that supply was 800 kb/d above demand. Typically, the inventory readings prove to be much more accurate than supply or demand. A large miscellaneous to balance suppresses the oil price as it suggests that supply is running above demand even though inventory is not building. The physical market is currently much tighter than the 'theoretical' market.

President Trump's tweets have also suppressed the oil price causing it to trade below where it would given current inventory levels and the inventory outlook. According to Cornerstone Analytics' MIKER model (which has an 80% R squared), the oil price should be \$10 higher today based on current OECD inventory. Back in October many market participants thought the oil price would hit triple digits on full Iranian sanctions. The irony is that today the aggregate March cuts will be close to twice the level of full Iranian sanctions and yet the market could not be more pessimistic. The pessimism has three main causes: concerns over demand, concerns over US supply, and concerns over Trump. The first two concerns have abated substantially leaving the market with the main fear of some sort of action from the US president. But what can Trump really do? It is clear that Saudi wants \$80+ oil more than it wants to appease its ally. The situation in Venezuela makes the Russians much more likely to support the Saudis as a high oil price is Maduro's best defense. Trump really only has three levers to lower the oil price: increase waivers on the Iranian sanctions, renege on the Venezuelan sanctions, or release of oil from the SPR. None of these seem very likely in the near term and certainly not with Brent below \$80. The most likely outcome of the Trump tweets is to cause the oil price to stay lower while inventory drains deeper causing a higher spike later.

If OPEC were to reverse its cuts fully at the June meeting (the April meeting is looking likely to be a nonevent) the market would still be draining substantially. The aggregate cuts from the exempt OPEC producers (Iran, Venezuela and Libya) is currently about 1.1mmb/d. While Libyan production is set to recover in March as the Sharara field restarts this will be offset by a step down in Venezuelan production. Additionally, production declines from Mexico and Canada total 400kb/d and will not recover in 2019. So basically, a full OPEC recovery would still leave the market with cuts of 1.5 mmb/d which is higher than the OPEC+ agreement in December. Moreover, in 2H 2019, the impact from IMO 2020 will begin to be felt which, as discussed before, is likely to be a one time step up in crude demand of over 1mmb/d. The current pessimism is irrational and, with time, will lead to an overreaction on the upside.