

## ***US Shale – OPEC’s “Headache” to Continue for Years to Come***

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After dismissing US shale as an “afterthought” years ago and underestimating the resolve of US operators to reduce costs and survive after the 2014 decision to give the go ahead to all producers globally to produce “full out”, OPEC has subsequently acknowledged US shale as a true competitor to its market share. For what was supposed to be a six-month “exercise” in order to balance global inventories, we are now almost five years along in this “exercise” and there has been several extensions and adjustments to agreements since then. With shale still posing as a formidable competitor and the largest contributor to Non-OPEC volumes, OPEC’s struggle to balance the market will be an exercise that will continue for a while.

### **Review of US Production Growth**

OPEC’s 2014 decision was to “punish” what they would characterize as “reckless” production growth by US shale after several years of oil prices in the \$80-\$110 level. In light of higher cost production compared to OPEC, they figured their decision would weed out those higher cost producers (which it did for some) and that the results would come quickly. They bet that the taps would just shut off. They were wrong. With the help of lowered service costs and hedging opportunities, US operators frantically reduced cap-ex in order to match lowered activity levels and put the emphasis on their “best” wells, which have lower break-evens. It was survival-mode for these operators, and it was a necessity, as oil traded as low as \$26 in early 2016. Figure 1 exhibits what happened to oil activity.

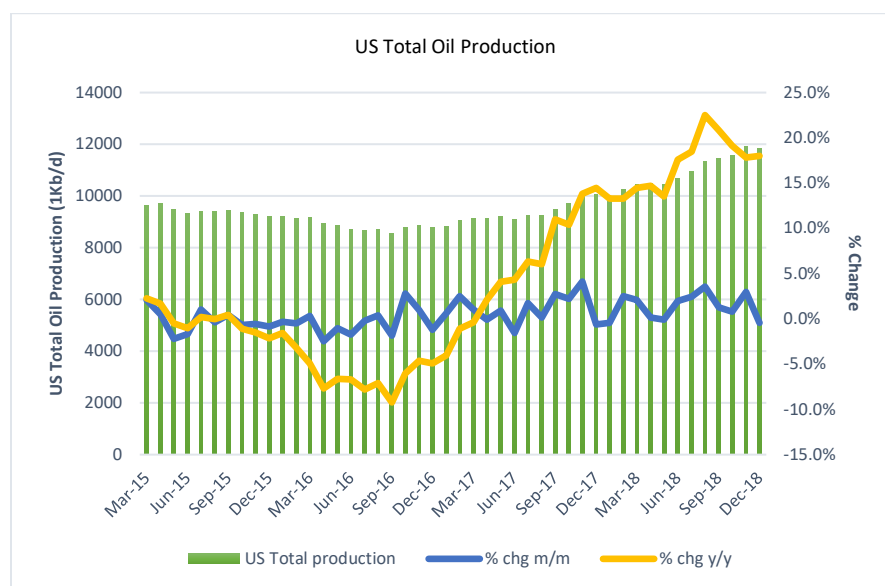
*Figure 1. US Oil Rig Count*



Source: Bloomberg

At the peak in late 2014, the oil rig count fell from the 1600 level to below 400 in early 2016. This 80% drop surpassed the 50% decline in the oil rig count during the Great Recession in 2008, when oil fell from the \$147 level to the low \$30s over a nine-month period from mid-June 2008 to March 2009. The oil rig count has recovered more than half of the decline since the peak, but it's not expected to reach prior highs as the industry is able to do more with less through efficiencies and the use of pad drilling. Here is a look at what US oil production has done since the prior “high” of 9.6M (million) barrels in April 2015. Production declined to a low of 8.5M barrels in Sept 2016 and it has been growing ever since.

Figure 2. US Total Oil Production



Source: US Energy Information & Administration (EIA) as of December 2018.

The US is approaching (if not already surpassed) the 12M barrel mark. It's no wonder OPEC has had trouble in rebalancing the market as it has had to accommodate US production at the expense of its own market share. OPEC doesn't want to revisit a return to its 2014 “agenda” as its social/economic budget needs a higher price to balance, and it doesn't wish to be subject to an “Arab spring”. In light of this, it'll continue to accommodate US production for the foreseeable future.

### Factors in OPEC's favor

#### 1) OPEC---cooperation from Russia

Since there is no “central government” for oil production in the US as the companies are independent operators, OPEC had to resort to seek the cooperation of a past ally—Russia, in order to help balance the markets. The agreement between OPEC and Non-OPEC countries in 2016 was brokered in part between the Saudis and Russia. Having an agreement between two of the largest global producers,

OPEC was able to garner cooperation from the other members to join the agreement. Russia has cooperated with OPEC in the past so it wasn't too much of a surprise that they would agree to help out this time around. The lingering question regarding any OPEC agreement has centered on compliance. In the past as oil prices recovered, some OPEC members have cheated on their agreed quotas. This time around, the parties agreed to an oversight committee and held several meetings to ensure that members complied with the agreement. The Saudis and Russians have done the majority of the "heavy lifting", but compliance amongst members has been higher than prior agreements.

## 2) The Fragile Five

The "Fragile Five", known as the five members within OPEC who have struggled to grow production due to various reasons including sanctions, civil war, sabotage consists of Angola, Iran, Libya, Nigeria and Venezuela. With the struggles of these five members, it has inadvertently made the job to balance the market a bit easier for OPEC. In addition, both Libya and Nigeria are only slightly affected by the agreement currently. They were originally exempt from the first agreement. The "heavy lifting" in this regard is being carried by both Iran and Venezuela as they are being subject to US sanctions. As Bloomberg's Julian Lee has pointed out in a recent article, this Fragile Five can easily become the "Shaky Six" if you include Algeria, which has recently had violent unrest.

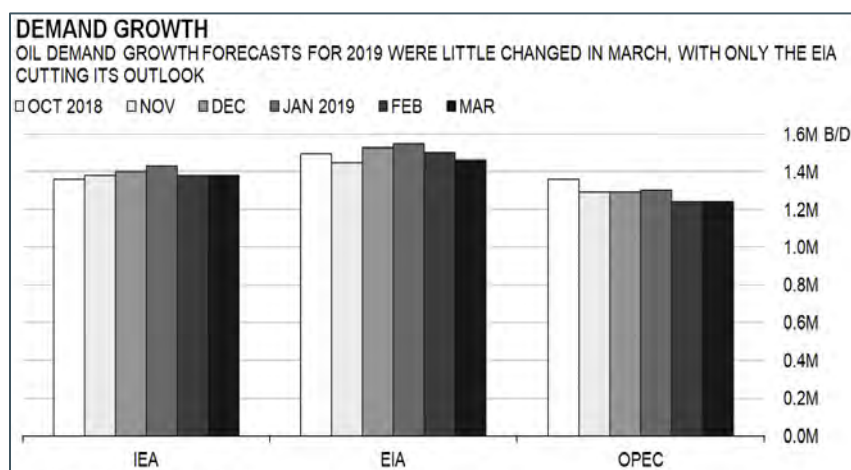
## 3) The renaissance of US operator capital discipline

The days of free-wheeling spending and chasing "growth for growth's sake" are over for US operators. The loud calls by investors for capital restraint/return of capital to shareholders is finally taking hold in the industry. For those companies who haven't heeded these calls, their stocks have been severely punished. Managements are being held accountable to spend within cash flow and not to chase growth even if commodity prices rise. For those companies that have heeded this mantra their stocks have outperformed those who haven't. As stated earlier, some of this is reflected in the decline in activity highlighted in the chart of the US oil rig count. Some companies have initiated stock buybacks and/or dividend initiations or increases to return capital to shareholders as opposed to increasing activity, which has been widely appreciated. With lower spending and lower activity over time, this should slow down US production growth, which would make OPEC's job in balancing the market much easier.

## 4) Stable demand growth

Despite the economic headwinds of a global growth slowdown, timing issues regarding conclusion of trade negotiations between the US and China, the prolonged saga of Brexit, the release of the Mueller report (since resolved), oil demand growth for 2019 has been relatively steady amongst the IEA, EIA, and OPEC<sup>1</sup>. The recent changes in forecasts amongst the trio are depicted below.

Figure 3. Recent Changes in Forecasts amongst the IEA, EIA, & OPEC



Source: Bloomberg, EIA, IEA, OPEC

Note: Y/Y change in global oil demand: 2019 vs. 2018

Outside of any negative economic event, global oil demand is expected to be stable for the near future. The IEA expects oil demand to grow at an average annual rate of 1.2MB/D through 2023.

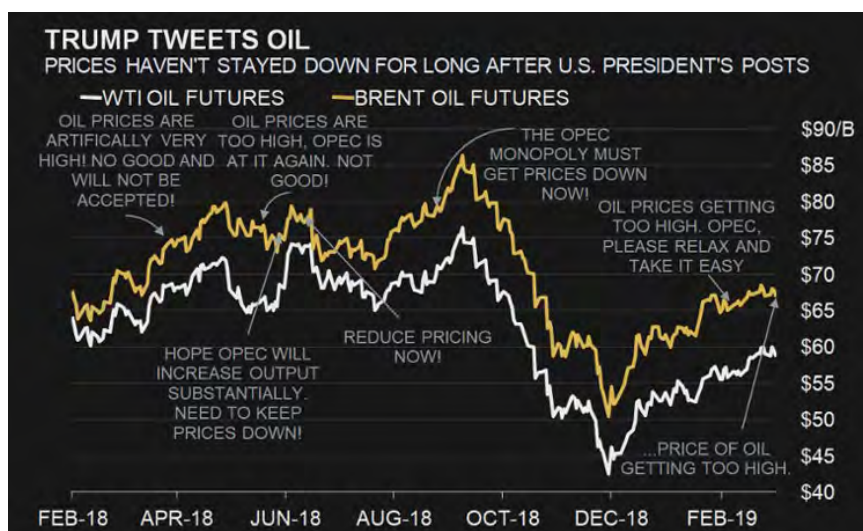
### Headwinds for OPEC

#### 1) President Trump

When oil prices continue to rise to a level that the US President deems “too high” one can expect to see a tweet from Trump chiding OPEC that they should “take it easy” and that they should “raise production”.

Figure 4 highlights the various Trump tweets regarding oil prices over the last year.

Figure 4. Trump Tweets Oil



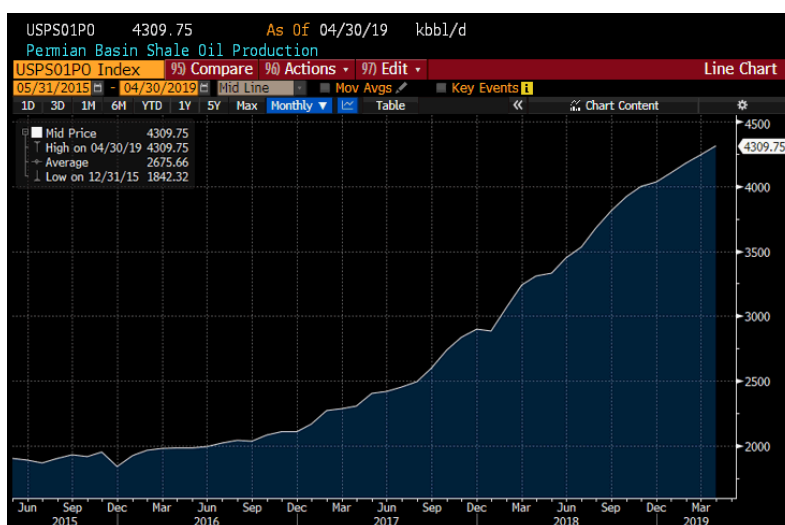
Source: Bloomberg, ICE

As shown, Trump has periodically tweeted regarding what he deemed as “too high” oil prices. It’s likely the tweets will continue should prices continue to move higher, but their effect has lessened over time. In addition, Trump has something else in his back pocket should he deem it necessary to use. Iran oil sanction waivers expired on May 2nd, but if oil prices continue to move higher, Trump could repeat the “playbook” from last October and allow some waivers to be extended. This is one of the reasons that prompted the fall in prices back in October. It’s a new wrench for Trump to ratchet further pressure on OPEC should he see it fit to utilize, although there’s uncertainty he will do it since the intended goal of the sanctions is to eventually get Iranian oil exports to zero.

## 2) The influence of the Majors in the Permian

Both Chevron and Exxon have been involved in the Permian for a long time. The area has not been a large focus for either company until only recently. The area has been mainly exploited by the Independent oil and gas companies, which are much smaller in size compared to the former. But just because of their size it doesn’t mean that they haven’t had a small influence on the growth of shale oil production in the Permian basin. Figure 5 on the next page shows the estimated crude oil production in the Permian basin since mid-2015 by Rystad Energy.

Figure 5. Crude Oil Production in the Permian Basin

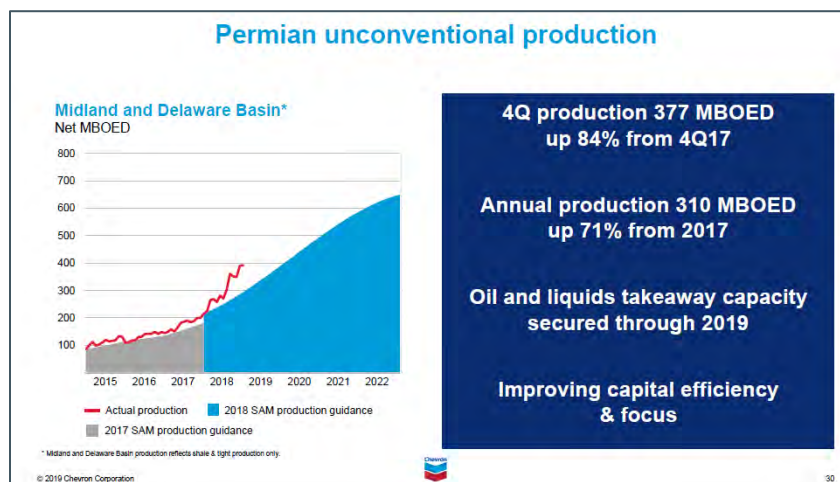


Source: Bloomberg

Since oil bottomed in early 2016, oil production in the Permian has been off to the races and is estimated to top 4.3 million barrels in April 2019. Now enter the big boys. Chevron has heeded the calls for capital discipline and has focused the majority of its upstream expenditures on shorter-cycle projects with the Permian being its main focal point. With greater than 80% of its Permian acreage with either no or low royalties, the company has an advantage over some of its peers due to this lower cost position. To give

an idea of the growth outlook for the company's production in the Permian, the company released a slide from its recent analyst day presentation.

Figure 6. Chevron Permian Unconventional Production



Source: Chevron 2019 Investor Presentation (February 2019)<sup>2</sup>

The company is planning on more than doubling its production from 2018 to year end 2022 (310 million barrels of oil equivalent to 650MBOED). Not to slight the company, but this pales into comparison to what Exxon is planning on doing in the Permian.

Exxon, being the largest Major oil company in the US, has its own plans to boost production in the Permian. Here is a chart from their recent investor day presentation that highlights their outlook (updated from the 2018 analyst day).

Figure 7. Exxon Upstream Permian Production



Source: ExxonMobil 2019 Investor Day (March 2019)<sup>3</sup>

From its investor day in 2018 it was planning on growing its Permian production to 600KBOED in 2025. Move forward a year, and now it is planning on growing it to more than 1MBOED a year sooner. The rig count in the Permian in years past has been dominated by the smaller Independent oil and gas producers. With Exxon's plans moving forward, it is now the largest rig operator in the Permian and is likely to remain there.

With both Chevron and Exxon boosting their plans in the Permian, it is likely that output in the basin will be more stable going forward even if commodity prices waiver. With being much larger and owning stronger balance sheets, these companies will be able to withstand a decline in oil prices much longer than its smaller counterparts, likely leading to a smaller than otherwise expected overall decline in Permian output even as smaller players adjust to the lower price environment.

With the Majors now dominating the most prolific growth area in US shale, this will make OPEC's job much tougher to influence behavior via price changes despite capital discipline. In turn, this will also make it harder for smaller operators to compete. This will likely lead to needed consolidation in the Permian amongst these smaller players and opportunities for larger players to expand their footprints.

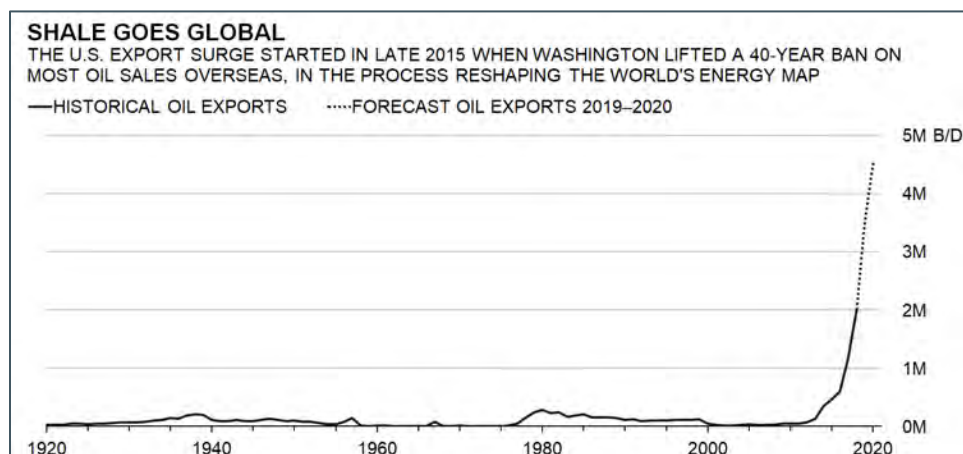
## **Conclusion**

With both favorable conditions and headwinds, OPEC's job of balancing the market isn't any easier than it was prior to their 2014 decision to punish US shale and weed out higher cost production. After five years along this path, they are still struggling to bring supply/demand into balance. OPEC was to have a ministerial meeting in April, but it was recently postponed to its regular time in June as they needed more time to assess whether the extension of their production cuts back in November was having an effect on balances. With the Majors dominating the Permian, this will make their job that much harder.

To put the 2015 decision to remove the restriction of US oil exports into perspective, recently the US has averaged more than 3 million barrels per day of exports, which is more than what OPEC member Kuwait sells. Something to ponder is the following chart from a recent Bloomberg article that forecasts where US oil exports could go by the end of 2020.



Figure 8. Shale Goes Global



Source: Bloomberg, EIA, IHS Markit

By late 2020, it is believed by oil traders and shale executives that US oil exports could be as high as 5 million barrels per day. Should the US hit that target then on a gross basis it will be exporting more oil than every country in OPEC except Saudi Arabia. Again, this puts undue pressure on OPEC to either accommodate US volumes and lower the call on their own oil or revert back to a “free for all” again. A return to its 2014 plan is something the cartel doesn’t wish to revisit, so OPEC should carry a healthy dose of aspirin as US volumes aren’t going away anytime soon.

<sup>1</sup>EIA-US Energy Information Administration; IEA-International Energy Agency; OPEC-Organization of the Petroleum Exporting Countries

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