

Macro Observations

In December, the energy equities finally began to perform as the macro outlook improved substantially. The two main causes of the improved outlook were the supportive OPEC+ meeting and the resolution of a phase one trade deal between China and the US. The OPEC+ meeting saw the group agree to an incremental 500,000 b/d production cut, but equally important, Saudi Arabia agreed to hold its production 400,000 b/d below its new quota. This means that real barrels will be coming off the market rather than a non-impactful redistribution of quotas as some had feared. Already in December, tanker tracking data show Saudi exports had dropped to the lowest level of the year. The new quotas will be held until a meeting in March, when OPEC+ will re-evaluate. The clear message was that OPEC+ does not want to see the oil price fall. Separately, the US and China appeared to reach a phase one trade deal, which reportedly will be signed in the middle of January. Some tariffs will be removed, but critically there will be no escalation of the tensions. Furthermore, President Trump sounds eager to potentially pursue a phase two deal before the US election. With a resolution of the trade war and low global interest rates, oil demand could be set for an acceleration.

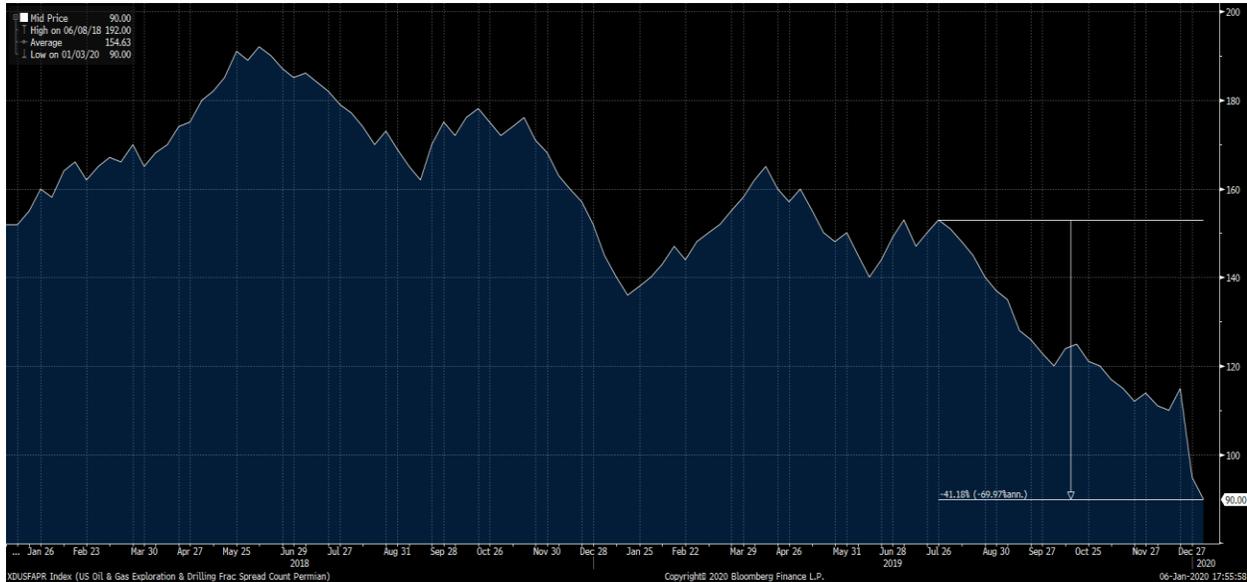
| Call on OPEC (from December reports) mmb/d | | | | | |
|-----------------------------------------------------------|------|------|------|------|------|
| | Q1 | Q2 | Q3 | Q4 | 2020 |
| IEA | 28.5 | 28.3 | 29.2 | 29.7 | 29.0 |
| OPEC | 29.1 | 28.9 | 30.5 | 29.8 | 29.6 |

Based on the official oil market reports from the IEA and OPEC, the market will be loose for 1H 2020 before it begins to tighten in 2H 2020. Depending on compliance, OPEC production will drop to about 29.2 mmb/d in 1H 2020. This makes the market oversupplied by 200,000 b/d according to OPEC or by 800,000 b/d according to the IEA. Normal seasonal inventory gains are about 300,000 b/d, so OPEC has a normally supplied market and the IEA has it oversupplied by 500,000 b/d. However, from Q4 to Q1, the IEA sees demand fall by 1.3mmb/d and OPEC sees demand fall by 1.2mmb/d while a normal seasonal drop is 0.5mmb/d. The current forecasts were made before the US / China trade deal and are likely much too bearish. Furthermore, for 2020, IEA sees 1.1mmb/d and OPEC sees 1.5mmb/d of US supply growth. This number likely comes in below 0.8mmb/d. Both agencies are also likely to be too high on Brazil by 0.2mmb/d based on recent Petrobras guidance. Accordingly, there is room for the oil market to surprise to the tight side in 1H. By 2H, the market will be undersupplied and OPEC will have to put oil back on the market. Beyond 2H the under-supply increases as conventional production stops growing. It is just a matter of getting through 1H, and if demand ends up showing a normal seasonal pattern, even 1H will be tight.

In the beginning of 2020, Middle East political tensions increased dramatically. President Trump ordered the assassination by drone of General Soleimani, arguably the second most powerful Iranian after the Ayatollah. In response, Iran unfurled their highly symbolic red flag and swore vengeance against the Americans. President Trump then further raised the stakes by warning of a 'disproportionate' response if Iran strikes US targets. While the unprecedented September attacks on the Saudi Abqaiq facility had only a temporary impact on oil price, the current oil market is meaningfully

tighter and the forward outlook much improved; a new supply disruption could have a greater impact than the earlier one. Although it is not clear if Iran will strike US targets or oil facilities or anything of significance, it is likely that the fear of some sort of escalation keeps a bid in the market. The market only needs a bridge from the looser 1H to the tighter 2H, and it is quite possible that the heightened political risk provides that bridge.

Permian Frac Spread Count



Data: Bloomberg, Primary Vision

US oil production continues to slow but it has yet to cause a major revision to official forecasts. From December 2018 to October 2019, US oil production has grown by only 617,000 b/d. This compares to 1,658,000 b/d over the same period in the previous year. Perhaps more important, the Permian frack spread count is now down 41% from July levels, suggesting no sequential production growth in Q1. Much of this drop happened in the last two weeks of December, possibly driven by budget exhaustion. The frack spread count could have a sharp rebound in January, but that rebound would be from very low levels. It is fairly clear the US E&P industry is exhibiting changed behaviour. Their new-found discipline will only be fully appreciated by the market once the oil price increases and industry returns fewer than expected rigs to work.

Electric vehicle sales are continuing to disappoint. In November, global electric vehicle sales were down by 26% y/y driven by Chinese sales, which plummeted 42% y/y. An annual survey by Columbia University's Center on Global Energy Policy found that two thirds of more than a dozen EV forecasting bodies have lowered their projections for EV sales in both the short and long term. Furthermore, the surveys were less optimistic about battery cost declines. Initially, battery cost improvements were rapid, causing some to anticipate that the battery industry would follow Moore's Law. The problem with this analogy is that batteries are not semi-conductors and are limited by their physicality. Like all energy technology, improvements are subject to diminishing returns. Batteries are still 75-100% too

expensive to make EVs competitive with regular cars. Additionally, EVs suffer from limited range, refuelling infrastructure issues, and rapid depreciation. Despite all of the new EV model introductions, sales disappointments could continue into 2020 given the subsidy cuts in China, the US, and elsewhere. The oil demand weakness in 2019 was cyclical and driven by the trade war. Concerns over peak oil demand, for the time being, look greatly exaggerated.