

Macro Observations

Previously, Cornerstone Macro made the argument that the next large move in equities would be a rotation from defensive stocks to cyclicals or from growth to value. They thought this was likely in Q1 2020, when they expected to see global PMIs bottoming. Their timing was based on the assumption that there was no China / US trade deal. They also warned that the last leg down in the cyclical stocks could be the most painful. In early November, Cornerstone Macro pulled forward its estimation on timing and went overweight cyclicals partly in anticipation of the consummation of a trade deal or, at the very least, a trade truce. The widely anticipated rotation towards cyclicals is especially pertinent to energy stocks, as they are the most cyclical of any sector. In October, both the Caixin China Manufacturing PMI and the US Markit Manufacturing PMI recovered. Interest rates globally have dropped substantially at both the short and long ends. According to the IMF, the global economy will accelerate into 2020 and avoid a recession. The first phase of the China / US trade deal looks set to be signed in mid-month November. The energy stocks have been the most punished by the trade turmoil, so they have the most to gain. With a little luck, the dramatic move down in the energy equities in October was likely the last, painful, down move before a long and sustainable recovery. The weak oil demand witnessed in the first three quarters of 2019 should eventually be followed by a period of strong catch-up demand.

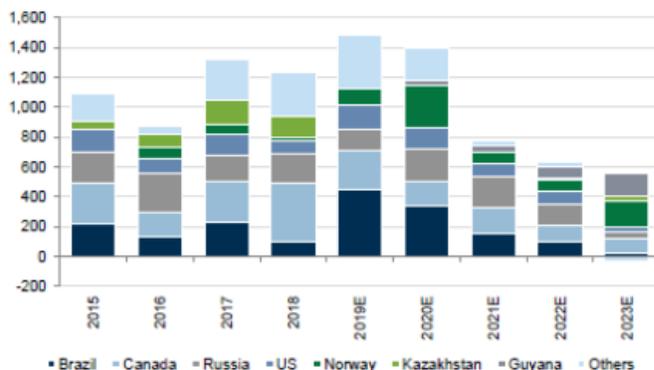
kb/d	2019 Q3	2019 Q4	United States Sequential Growth
EIA	19,630	20,750	1,120
IEA	17,090	17,690	600
OPEC	18,400	19,000	600

Source: EIA, IEA, OPEC. IEA excludes biofuels and processing gains. OPEC excludes processing gains.

A large downward revision for US liquids production growth is imminent and will show much tighter balances for the oil market in 2020. In the most recent October reports, the major forecasting bodies estimate a rapid acceleration of tight oil production from Q3 to Q4. The EIA, in particular, sees 1.1 mmb/d of growth, or the equivalent of total Libyan oil production added in the last quarter of the year. This unprecedented growth is expected to occur despite the fact that the frac spread count in the Permian is down 22% from the last week of July to early November, according to Primary Vision, and despite the fact that there has been minimal sequential growth in US production YTD, according to the EIA 914 monthly reports. The ostensible thesis for the large supply addition is that the new pipelines in the Permian will unleash new production, but this is not how the industry works. A new pipeline would steal share from trucking or rail, but it does not magically create oil. There are a lot of Drilled UnCompleted (DUC) wells in the Permian, but there are hardly any Drilled Completed wells. A Drilled Completed well is a waste of capital and not common practice. A DUC can only be turned into production with a completion, but the frac spread count has fallen dramatically. The sequential growth

rate for tight oil from Q3 into Q4 is likely no better than 200-300 kb/d. Sentiment towards oil should significantly improve once tight oil growth expectations are lowered.

Exhibit 36: ...Leading non-OPEC ex-US into decline in 2021-23
YoY oil production growth (kboe/d) from non-OPEC, excluding shale projects

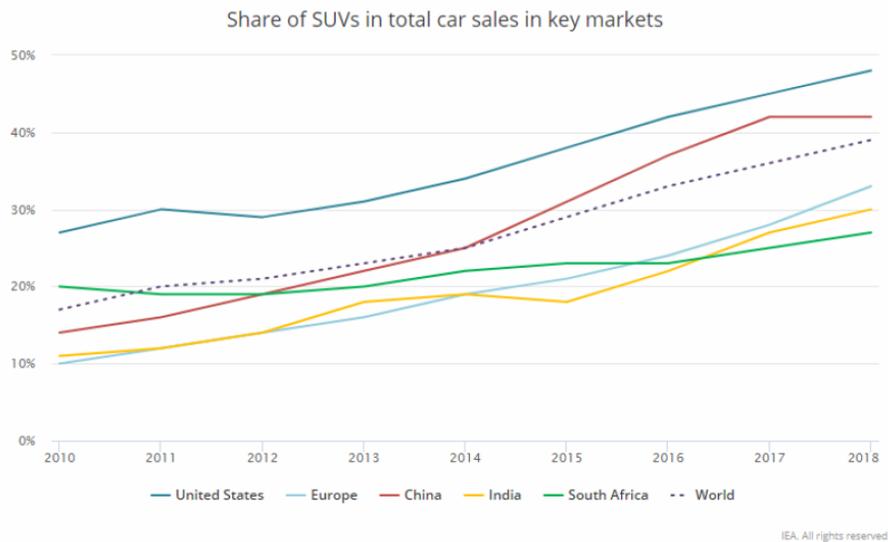


Source: Goldman Sachs Global Investment Research

In October, Goldman Sachs published a significant piece of research that forecasted the end of non-OPEC oil production growth starting in 2021. They lowered their tight oil growth assumptions going forward and combined this with their assumption that conventional oil will start to decline after the last few large projects sanctioned in \$100 oil world come to market (in particular, projects in Brazil and Norway.) While the piece was very balanced and methodical, the conclusion is quite extreme. Effectively, Goldman is calling for a peak in global production capacity just 15 months hence. Although the unsanctioned OPEC+ members have about 1.5mmb/d of spare capacity, they have not been growing their production capacity. Iran adds another 1.5mmb/d of potential capacity in the unlikely event that the political situation there is resolved. At best, the market has two years of capacity that can be added to meet demand once non-OPEC production goes ex-growth. Substantially higher oil prices will be the outcome of the absence of non-OPEC production growth, and reports like the piece from Goldman will help the market recognize the inevitable. Subsequent to the Goldman report, Energy Aspects also put out a piece which reached a similar conclusion. The complacency in the oil market is still at an extreme mostly because the market is negative on demand growth. Nevertheless, a historic inflection point, only 15 months away, will begin to be discounted as more participants turn their eyes to the future.

In Q3, global Electric Vehicle (EV) growth went negative and lost share to the Internal Combustion Engine (ICE). The Chinese market has a little over half of total EV sales, and in September, Chinese EV sales were down 34% y/y. This followed Chinese EV sales in July and August, which were down 5% and 16% y/y, respectively. The Chinese cut subsidies by half in June causing the slowdown. In 2020, Chinese

subsidies go to zero, which will continue to pressure EV sales for at least another year. In the US, EV sales were down y/y for July, August, and September by 10%, 24% and 26%, respectively. The California market accounts for 47% of US EV sales, and the recurring power blackouts there will likely weaken sales. Only Europe, with its government regulations and high gasoline prices, continues to show strong EV growth but not enough to turn global EV sales positive in Q3. Globally, EVs sales grew by 63% y/y in Q1 and fell by high single digits y/y in Q3. With lower subsidies, EVs have a questionable appeal: they are more expensive, lack refueling infrastructure, have a lower range, take a long time to recharge, and depreciate much more quickly than ICE vehicles. The slowing momentum in EV sales will put into question any near-term peak oil demand growth scenario.



In a preview of its annual report, the IEA sees robust oil demand growth well into the future, driven by SUV sales. From 2010 to 2018, SUV sales went from 17% of light vehicle sales to 38%. Since 2010, 165mm SUVs have been added, compared to just 3mm EVs. The shift towards SUVs has completely overwhelmed any efficiency savings from EVs. Looking forward over the decade from 2020 to 2030 and assuming SUVs go to 50% of the sales mix, we will add close to 390mm SUVs, which use 25% more fuel than regular ICE vehicles. This will more than offset the 60-90mm EVs which could potentially be added over the same period. EVs, however, will suffer from constraints and could come in at the low end of sales estimates. Cobalt is an essential mineral for batteries but only has a 42-year reserve life. Cobalt is a byproduct of nickel or copper mining and is not explored for on its own. If EV sales grow to 8mm vehicles (or 10% of light vehicle sales), we will only have a 20-year reserve life for cobalt, which will put at risk the hand held device and computer markets. Furthermore, 71% of cobalt is currently mined in the Democratic Republic of Congo, which hardly makes for security of supply. As long as the trend towards SUVs continues, it is hard to see gasoline demand (which is 27% of oil demand) slowing substantially. The current weakness in oil demand growth is cyclical and not structural.

The oil market is about to transition from a period of perceived abundance to a period of scarcity. The perception of abundance was caused by tight oil and the fear of EVs. Going forward, tight oil is about to grow at a much lower rate as the industry focuses on free cash flow and absorbs the reality of a smaller tight oil resource base. Mark Papa, founder of the tight oil behemoth EOG and chairman of Schlumberger, now only sees 400kb/d per year of oil growth from the United States starting in 2020. EV sales have slowed dramatically and are only sustainable at a mass level with government subsidies. As the IEA makes clear, the trend towards SUVs will likely offset the growth of EVs over the next decade. The difference in the coming period of scarcity versus the period of scarcity from 2007 to 2014 is the inadequate warning this time around. As the oil market changes its outlook from one of abundance to one of scarcity, multiples and prices should rise.