Oil Market Weekly

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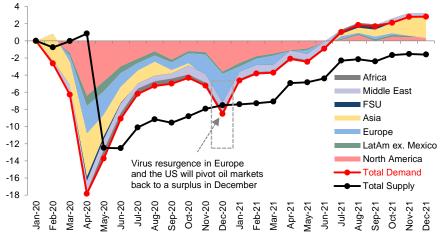
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12 November 2020

V(accine)-shaped recovery plays into our bullish oil conviction

- Vaccine news back in pole position with the start of the end of COVID-19 underway. Processing the US elections continues to be investors' primary focus. However, with markets all but pricing the implications of a Biden presidency, attention has swiftly turned back towards the COVID-19 vaccine and broader growth outlook. The announcement by Pfizer and partners which has led to a surge in Brent (up +10% since the communication) reinforces our bullish thesis that we had catalogued that vaccine optimism was underpriced and underappreciated (see here and here), even though broad investor expectations were fairly sanguine.
- Contextualising the impact on global oil demand stemming from the virus surge
 on both sides of the Atlantic. The resurgence of COVID-19 infections that is
 sweeping across Europe and parts of the US has alarmed markets by its sheer
 magnitude and intensity, renewing mobility restrictions and rapidly slowing
 growth. The accompanying hit to oil demand will disrupt the market rebalancing,
 although our expectations is that the impact will be significantly smaller than in
 Q2 2020 which witnessed widespread draconian lockdowns.
- Our bullish oil price thesis remains intact. The pulse of oil markets continues to remain wedged between the push-and-pull stemming from rising virus cases on both sides of the Atlantic on the one hand, and vaccine efficacy news, proposed US stimulus as well as a weakening US dollar on the other. Notwithstanding the uncertain path of the virus, our constructive oil price conviction remains intact for three key reasons. First, the oil market rebalancing continues with the move back to deficit throughout 2021 following the expected surplus in December. Second, the global economy will likely rebound quickly when the European lockdowns end and a host of vaccines become available at mass scale in H1 2021. Third, stern discipline by OPEC+ producers is likely to persist. As such, we continue to forecast Brent and WTI to end-2020 at USD48/b and USD45/b, respectively.

OIL MARKETS ARE EXPECTED TO PIVOT BACK TO A SURPLUS IN DECEMBER GLOBAL OIL DEMAND AND SUPPLY, CHANGE VS. JANUARY 2020 (M B/D)



Source: Bloomberg, EIA, IEA, OPEC, MUFG Research



V(accine)-shaped recovery plays into our bullish oil conviction

With the US elections over, attention turns to the vaccine

Cautious optimism surrounding the Pfizer and BioNTech vaccine

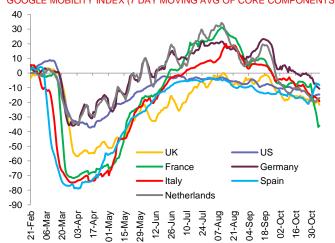
developments

Over the last two months, the US election and developments surrounding a COVID-19 vaccine were likely to be the two most important events driving oil markets. Processing the implications of the US election has, understandably, continued to be investors' primary focus. It would appear that the market – at least for risk assets (commodities, equities and volatility) as well as rates – have already moved a long way towards pricing the Democratic presidency/Republican Senate outcome that looks to be the likely end result. With that, attention has swiftly turned back towards the COVID-19 vaccine and broader growth outlook.

The announcement on 9 November that a vaccine being developed by Pfizer and BioNTech achieved 90+% efficacy in stage 3 trials – exceeding investor expectations of 40-60% as well as above the effectiveness of flu vaccines - has broad and immediate ramifications. A vaccine is more significant than fiscal stimulus (if effective), in that it should allow behaviour to normalise and the threat of lockdown to recede (with the added benefit of carrying a lower price tag). Though, it is not very easy to see how fiscal stimulus could get traction without a vaccine. Pfizer declared that they intend to apply to the US Food and Drug Administration (FDA) for emergency approval to use the vaccine by the end of this month with 50 million doses readily available by year-end and 1.3 billion doses in 2021. Critical unknowns over efficacy in subgroups and durability of protective immunity linger, as well as the resilience against new strains of the virus, in addition to significant logistical challenges of distributing this vaccine at scale globally (note the vaccine, labelled BNT162b2, requires storage at around -80°C, thus cold-chain shipping remains a core logistical hurdle). Promisingly, other major vaccine candidates are due to report in coming weeks (notably from AstraZeneca-University of Oxford and Moderna), therapeutic advances continue too, and the ability to develop such medical responses in short order increases the confidence to respond to new medical challenges. The announcement by Pfizer and partners – which has led to a surge in Brent (up 11+% since the communication) - reinforces our bullish thesis that we had catalogued that vaccine optimism was underpriced and underappreciated (see here and here), even though broad investor expectations were fairly sanguine.

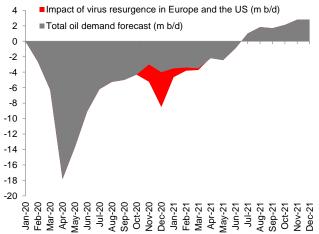
EUROPEAN AND US MOBILITY INDICATORS HAVE WANED OWING TO LOCKDOWN REIMPOSITIONS ...

GOOGLE MOBILITY INDEX (7 DAY MOVING AVG OF CORE COMPONENTS)



... WHICH WILL SHAVE 2.4M B/D IN GLOBAL OIL DEMAND BETWEEN NOVEMBER AND DECEMBER

GLOBAL OIL DEMAND, CHANGE VS. JANUARY 2020 (M B/D)



Source: Bloomberg, IEA, MUFG Research



Source: Google, MUFG Research

The surge in virus cases in Europe are alarming

Against the backdrop of this vaccine optimism, the second wave of COVID-19 infections that is sweeping across Europe and parts of the US has alarmed markets by its sheer magnitude and intensity, renewing mobility restrictions and rapidly slowing growth. The mood in the region is understandably gloomy, the prospect of cooler temperatures was already being met by weaker activity data, with mobility numbers and the PMIs softening since the summer.

The hit to global oil demand will be materially less than in the second quarter

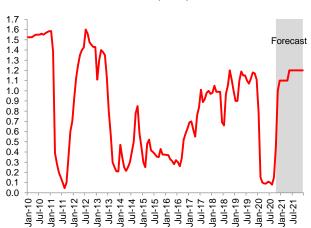
The accompanying hit to oil demand from the virus resurgence will disrupt the market rebalancing, although our expectations is that the impact will be significantly smaller than in Q2 2020 which witnessed widespread draconian lockdowns. Facing the same epidemiological problem as in Q2 2020, we apply a bottom-up country-by-country model to parameterise the impact of monthly oil demand stemming from the new virus wave. Our results signal that the pace of global oil demand will slow by 2.4m b/d between November and December to end 2020 at 92.3m b/d (-7.5% y/y), with the hit to transportation demand in Europe and the US, being offset by the ongoing recovery in transportation demand in Asia and Latin America, as well as from the boost to higher-than-normal global heating demand (given work-from-home patterns) and higher seasonal jet fuel demand. Succinctly put, we anticipate the current virus wave across both sides of the Atlantic to delay and not derail the oil market rebalancing that we have been advocating in recent months (see here and here and <a href=here and <a href=here.

Mixed supply developments

On the supply-side of the oil equation, headwinds are hampering the market rebalancing efforts, primarily led from the astonishing bounce back in Libyan production reaching ~1m b/d (more than 2x as fast as our expectations). While there remains significant uncertainty on the sustainability of such a ramp-up due to the lack of resolution to the ongoing Libyan conflict, we prudently price that production will continue to recover, averaging 1.0-1.2m b/d in Q1 2021 (0.5-0.7m b/d above our prior expectations - see here). Separately, hurricanes have materially interrupted US offshore output, the guidance from US shale players during the recent third quarter earnings seasons imply that onshore production will stabilise at a moderately higher level than previously anticipated. Importantly, this does not reflect a higher than expected activity response to USD40/b oil prices, with producers still guiding for stable production, but rather efficiency gains at the trough of the oil service cycle. Finally, attention is turning to OPEC+ and its upcoming ministerial meeting on 30 November. With the predicted market surplus in December, alongside the return to mobility restrictions in Europe and parts of the US, we expect the group will rollover its current production cuts by three months until April 2021.

RAPID PHOENIX-LIKE BOUNCE BACK IN LIBYAN CRUDE PRODUCTION \dots

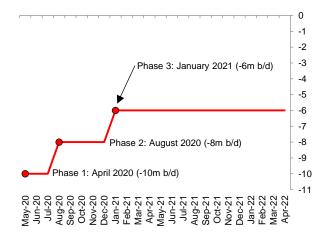
LIBYAN CRUDE OIL PRODUCTION (M B/D)



Source: Google, MUFG Research

... WHICH PUTS OPEC+ IN A SPOT OF BOTHER WHEN IT MEETS ON 30 NOVEMBER

LEVEL OF OPEC+ CRUDE REMOVED FROM OIL MARKETS (M B/D)



Source: Bloomberg, OPEC, MUFG Research



Market rebalancing to take a pause in December but continue from January

From an overall market fundamentals perspective, when factoring in the phoenix-like resurgence in Libyan oil production to ~1m b/d (more than 2x as fast as our expectations), we now forecast that after a 0.4m b/d November deficit, the market will in fact pivot to a 0.7m b/d surplus in December, and thereafter return back to a deficit from January 2021 onwards and remain in a mild deficit entirely next year.

Push-and-pull for oil prices

From an oil price perspective, the pulse of oil markets continues to remain wedged between the push-and-pull stemming from rising virus cases on both sides of the Atlantic on the one hand, and vaccine efficacy news, proposed US stimulus as well as a weakening US dollar on the other. We still believe that there remains no case for above USD50/b (yet), but also no case lower at USD30/b.

Our constructive oil price conviction remains intact

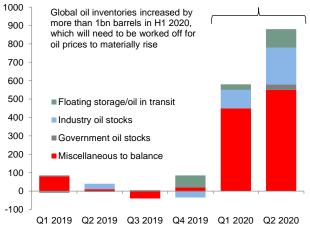
Notwithstanding the uncertain path of the virus, our constructive oil price conviction remains intact for three key reasons. First, the oil market rebalancing continues with the move back to deficit throughout 2021 following the expected surplus in December. Second, just as the global economy rebound quickly (albeit partially) from the lockdowns in the spring, we expect the current weakness to give way to much stronger growth when the European lockdowns end and a host of vaccines become available at mass scale in H1 2021. Third, stern discipline by OPEC+ producers is likely to persist with our expectation that the group will delay its third phase of tapering by three months its January production ramp-up when it convenes on 30 November. As such, we continue to forecast Brent and WTI to end-2020 at USD48/b and USD45/b, respectively. For 2021, we project Brent and WTI averaging USD57/b and USD53/b, respectively, with a large inflection higher from Q3 2021, as oil markets transition from the cyclical tightening phase to the structural repricing stage which by then we are likely to see oil demand breaching the pre-virus run rate of 100m b/d and the requirement for higher upstream capex investment (see here).

Next leg up in oil prices will require time and patience

In the more near-term, given oil inventories remain elevated, the next leg up in oil prices will require time and patience – whilst USD20/b to USD40-45/b between April to June was a sprint, USD40-45/b to USD60/b will be a marathon (see here). Indeed, the dizzying risk-on momentum this week is pricing in future hope, but not the immediate practicalities and realities of a worsening virus surge on both sides of the Atlantic. As such, immediate bearish risks abound. Virus uncertainty, mobility restrictions, low trading volumes, a still high level of inventories, ambiguities on the

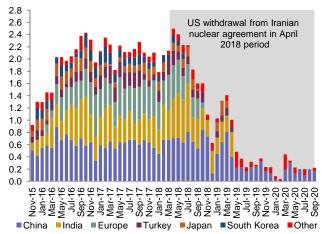
THE OIL INVENTORY OVERHANG REQUIRING TIME AND PATIENCE TO CLEAR ...

LEVEL OF OPEC+ CRUDE REMOVED FROM OIL MARKETS (M B/D)



Source: IEA, MUFG Research

... WITH PROSPECTS OF IRANIAN OIL EXPORTS BEING A KEY WILD CARD FOR GLOBAL OIL MARKETS IN 2021 IRAN OIL EXPORTS BY DESTINATION (M B/D)



Source: Bloomberg, OPEC, MUFG Research



OPEC+ strategy, as well as the repercussions of the US election, all signal further price volatility until year-end with downside risks to oil prices.

Virus developments will be pivotal

On the whole, there is much about the virus that we can't be sure of and iterative virus waves certainly cannot be ruled out. The primary public health strategy throughout this year has been to suppress the infection curve. Reducing human-tohuman contacts via stricter physical distancing and/or lockdown has worked to reduce infections and thus to control the mortality risk. However, this approach has proven to be costly. With this in mind, we believe that lockdowns as a core policy to prevent the spread of the virus will ebb next year owing to their austere economic burden, rising public stress on stomaching physical distancing and fiscal budget shortcomings. Indeed, we view that with the improvement in treatments and growing public preparedness, the health strategy could pivot from infection control to medical treatment. That is, managing R≤1 under sensible physical distancing levels and medical treatment to shorten the recovery period (to less than 14 days) could become the new normal. This will ultimately accelerate the global recovery and with it oil demand, in our view. We currently price in global oil demand breaching the previrus run-rate of 100m b/d in Q3 2021 (and averaging 98.6m b/d in 2021), but risks are skewed to a faster demand recovery.

Ranges and outlook for the week ahead

BRENT - NETURAL BIAS - (41.00-48.00)

WTI - NETURAL BIAS - (38.00-46.00)

Quarter End	Spot close 11.11.20	Q4 2020	Q1 2021	Q2 2021	Q3 2021
Brent	41.23	43.95	49.20	54.60	57.80
NYMEX	39.15	41.66	45.20	50.30	53.60
		Range	Range	Range	Range
Brent		33.90-59.10	41.70-64.20	43.10-66.10	45.30-66.30
NYMEX		31.20-55.60	38.60-61.80	40.80-63.80	42.10-64.10



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