Oil: piecing together the puzzle

- **In December, OPEC announced new cuts to its production in order to narrow the gap between supply and demand in the crude oil market. This has occurred, above all, due to a lower than expected increase in demand.**
- **Looking ahead into 2020, uncertainty surrounding economic growth coupled with the classic supply factors (OPEC cuts, geopolitical tensions and events in the shale industry) could introduce volatility into the oil market.**

In early December 2019, OPEC and its partners (OPEC+) decided to cut oil production even further. Specifically, they increased the cuts implemented in December 2018 by 0.5 million barrels a day (mb/d), bringing them to 1.7 mb/d compared to the levels of October of the same year. In doing so, **the cartel seeks to sustain the oil price slightly above the 60-dollar mark. Will it succeed?** Below, we will piece together the puzzle of what happened in 2019 and we will see whether the same pieces can be used to do the same for the puzzle of 2020.

2019: Brent oil fluctuates to the sound of demand...

Doubts over demand have determined the path of the oil price throughout 2019. Following an episode of major financial turbulence at the end of 2018 (stoked by fears of an abrupt slowdown in global economic activity), the dovish shift of the major central banks and a more constructive tone (apparently) in the trade dispute between the US and China in the early stages of 2019 eased the initial fears of economic weakness, giving rise to a **recovery in investor sentiment**. Thus, **the year began with a recovery in the outlook for demand and a sustained rally in the Brent oil price**, which rose by more than 20 dollars to reach 74 dollars a barrel. The rise in sentiment is well illustrated in the first chart, which shows how the price of a barrel of Brent oil mimicked the rise of the US stock market in the first half of 2019.[1]

However, in the lead up to summer, concerns over demand returned to the fore with the resurgence of the trade tensions between the US and China. **The renewed fears of an abrupt slowdown in global economic activity and the observation of a steady increase in crude oil inventories generated doubts over the steadiness of the demand for oil**. All this resulted in a reduction in the forecasts for oil demand over the following quarters. For instance, whereas in October 2018 OPEC anticipated an increase in demand of 1.4 mb/d in 2019, in its latest report (November 2019) the forecast has been reduced to 1.0 mb/d. The fact that this reduction in expectations can be explained by the slowdown in global GDP is well illustrated by a simple exercise: if we estimate the sensitivity of oil demand to changes in the economic growth of advanced and emerging economies, we obtain similar results. In particular, according to the economic growth we envisaged at the end of 2018, demand for oil should have increased in 2019 by 1.2 mb/d. However, our most recent GDP forecasts suggest that it will have only increase by 0.8 mb/d. Furthermore, the exercise indicates that the decline in the expected demand mainly occurred in OECD countries, since it was previously expected that they would increase their consumption by 0.15 mb/d, whereas the latest projections suggest that it will end up falling by 0.19 mb/d.

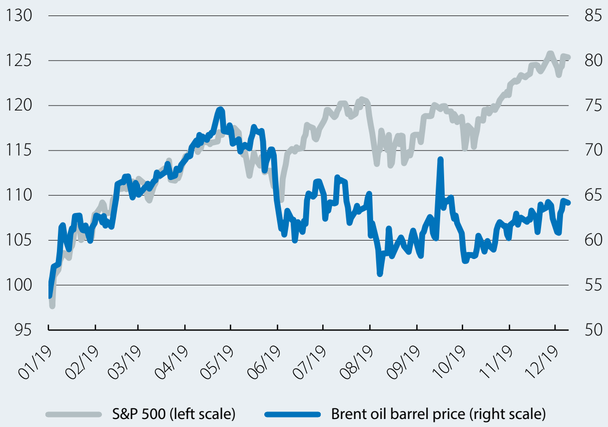
This trend can also be seen in the forecasts for 2020. Whereas at the end of 2018 we anticipated a demand of 101.9 mb/d in 2020, the historical sensitivity of economic growth and the demand for crude oil suggests that, in the end, it will only amount to 101.2 mb/d. This is equivalent to a year-on-year increase of 1.2 mb/d (as opposed to the 1.4 mb/d originally foreseen).

...in spite of geopolitical tensions

In the second part of the year, the price of a barrel of Brent oil proved much more stable and fluctuated around the 60-dollar mark. However, a turbulent episode at the end of September reminded us that **the geopolitical tensions in the Middle East can be disruptive for the oil market**. This time, in addition to acts of sabotage against merchant vessels around the Strait of Hormuz,[2] the market saw how it was possible to attack strategic infrastructure. Specifically, a Yemeni rebel group attacked the largest refinery in Saudi

US stock market and Brent oil

Index (100 = 1 January 2019) *(Dollars per barrel)*



Source: *CaixaBank Research, based on data from Bloomberg.*

1. In addition, some supply-side elements, such as production cuts by OPEC+ and bottlenecks in the infrastructure of the shale industry, supported this price surge. For further details, see «The oil price roller coaster: up, down and what next?» in the MR09/2019.
2. A strategic area in the Persian Gulf through which around 20% of the world's oil passes.

Arabia, damaging nearly half of the country's productive capacity, which is equivalent to 5% of global production. The impact of this shock on the oil price was by no means negligible,[3] but it only lasted a few days: the inventories of crude oil accumulated over the past few years were able to dampen what could have been a much more serious supply shock in other periods with a more saturated oil market.

What might happen in 2020?

The consensus of analysts is that, in 2020, **the price of a barrel of Brent oil will remain stable between 60 and 65 dollars**, a view that we share. On the one hand, **shale production acts as a brake for rising oil prices**. Since the breakeven price of the shale industry is somewhat higher than that of other production sources,[4] if the price of a barrel of Brent were to increase a lot, one would expect a rebound in the supply of shale from wells that require higher prices in order to be profitable. This reaction makes sustained deviations above 70 dollars per barrel less likely.

On the other hand, with its latest decision, OPEC has shifted its strategy somewhat. In particular, at this meeting the cartel increased the scale of the cuts but did not extend them beyond March. In doing so, OPEC is able to drive up the spot price of crude oil without having an excessive impact on futures contracts (see last chart). As we have discussed in the past,[5] **the fact is that OPEC feels more comfortable with the oil market in backwardation** (i.e. with a spot price higher than the future price), since such a situation is less favourable for shale producers, whose productive model depends more on future prices. Nevertheless, the cuts announced by OPEC and its partners are not a guarantee of supply stability: in fact, the countries involved have steadily deviated from the agreement (cutting production by more in the case of OPEC and by less in the case of non-OPEC).

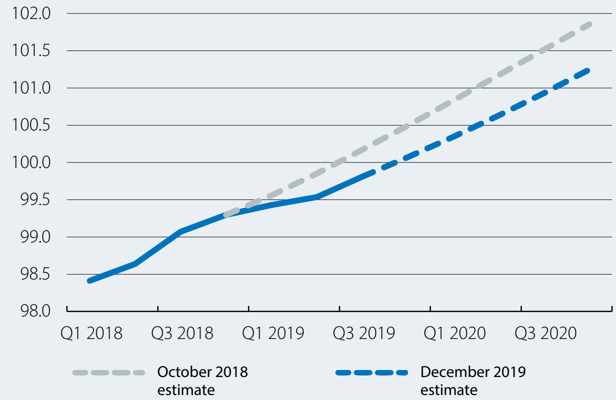
Finally, what happens to the demand for oil will play a key role. We have seen how in 2019 demand was the key factor in determining the movements in the price of a barrel of Brent oil. In 2020, global economic activity is expected to be somewhat more buoyant. This is a reflection of a gentle slowdown in economies such as the US and China, the continuity of moderate growth in the euro area and the recovery of emerging economies that had a worse than expected performance in 2019. This should support the demand for oil and drive the price up to the aforementioned levels. Nevertheless, as the experience of 2019 shows, **uncertainty surrounding the expectations for economic growth could, once again, inject volatility into the oil market**.

All in all, it seems clear that **the main pieces of the puzzle of 2019 will remain present in 2020** (OPEC, geopolitical tensions, economic growth and the shale industry). As is tradition in the oil market, these pieces could end up fitting together in multiple configurations. Furthermore, new pieces, such as stricter environmental regulations on carbon emissions or on the consumption of single-use plastic, could gain prominence over the coming years.

Ricard Murillo Gili

Global demand for oil

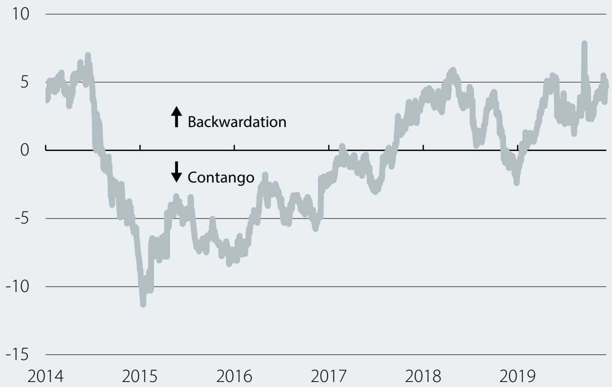
Million barrels a day (mb/d)



Note: *Four-quarter moving average.*
Source: *CaixaBank Research, based on data from the International Energy Agency.*

Difference between the spot price and the 12-month future price of a barrel of Brent oil

(Dollars)



Source: *CaixaBank Research, based on data from Bloomberg.*

3. The price of a barrel of Brent oil surged by over 15% in a single session, representing the biggest daily increase since the outbreak of the Gulf War in 1990.
4. On average, the West Texas barrel price (slightly lower than the Brent price in recent years) from which a well in the US shale industry becomes profitable is 50 dollars, while in Saudi Arabia the breakeven price is less than 10 dollars.
5. For further details, see «OPEC's dilemma and an end to the contango structure in the crude oil market» in the MR09/2017.