OBSERVATION

TD Economics

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CRUDE OIL PRICES: LOWER FOR LONGER

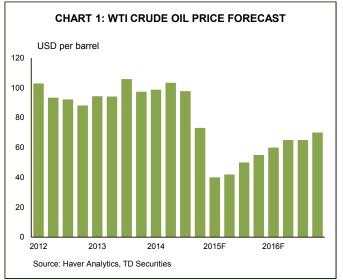
Highlights

- Crude oil prices have fallen further and faster than anyone would have predicted, and are now sitting below the US\$50 per barrel mark.
- As such, we have downgraded our WTI price forecast, and are now calling for a lower bottom, as well as a slow recovery. We expect oil prices to average US\$41 per barrel during the first half of this year, before rising to an average of US\$53 per barrel in the second half of 2015, and US\$65 per barrel in 2016.

Crude oil prices have fallen below the US\$50 per barrel mark, which is less than half of what prices were in mid-2014, and the lowest level seen since 2009. They have fallen further and faster than anyone would have predicted, begging the question of what is in store for prices going forward? We have downgraded our oil price forecast, and are now calling for a lower bottom, as well as a slower recovery than we had originally anticipated in December. This forecast is predicated on the fact that the market supply-demand imbalance is likely to get bigger in the near term, before improving during the second half of the year.

Oil prices have not seen a drop this steep since the Great Recession, when a contraction in global economic growth led to a decline in oil demand. Things are quite different now. While demand growth has softened to just over half the rate averaged over the last three years, it is still growing, up 0.8% in 2014. This time, it is the supply side that has arguably played a larger role in the price correction. Hence, any rebound in prices is going to depend on how producers respond to these lower prices. In the past,

OPEC has adjusted output to keep the market balanced. However, with the cartel indicating that it intends to fight for market share rather than maintaining a certain price level, the response from other producers - and thus prices - is challenging to predict. What we do know is that producers take time to adjust to a lower price environment, and that any cuts in production that do take place take time to filter through to the market. As such, oil prices are likely to remain subdued through the first half of the year, and follow more of a U-shaped recovery pattern rather than the V-shaped pattern that typically follows such sharp price declines. We suspect that more downside is in store for WTI prices in the near term, with prices averaging US\$41 per barrel during the first half of this year. Thereafter, prices are expected to begin to grind higher, averaging US\$ 53 per barrel in the second half of 2015, and US\$65 per barrel in 2016. Beyond 2016, prices are likely to settle in the US\$70-80 per barrel range (Chart 1).



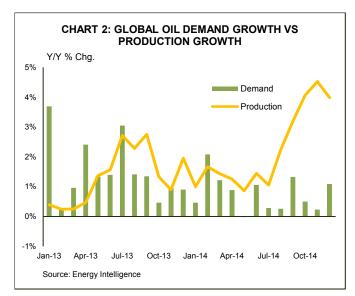
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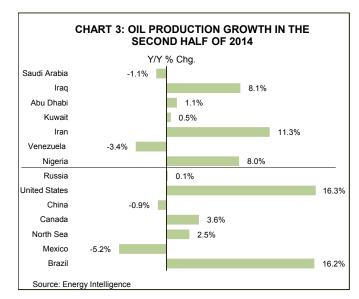
US shale oil in the spotlight

Global oil production grew at a healthy 2.2% clip in 2014, accelerating during the second half of the year and far outpacing the growth in demand (Chart 2). Several countries recorded an increase in output, but non-OPEC countries accounted for most of the growth (up 4% y/y during the second half of 2014), with a surge in U.S. production leading the way (Chart 3).

It's no secret that oil production in the U.S. has been on the rise. But, this is not a new phenomenon. While the U.S. accounted for roughly 60% of the total increase in global oil production last year, output in the country has grown by about 15% in each of the last 3 years, challenging Russia and Saudi Arabia for the top spot on the oil production leaderboard. Given that the U.S. is now not only among the top producers, but is accounting for the lion's share of global production growth, markets – and OPEC – will be particularly focused on how the U.S. oil industry responds to lower prices.

So far, output has been quite resilient – even with a 50% drop in prices. But production is not adjusted immediately. Indeed, producers wait to see if the drop is temporary and to see if they expect prices to remain at an economical level before making any big decisions which are usually longer term in nature. Moreover, it is not typically current production that gets curbed, but investment in future production. Producers are unlikely to halt production based on short-term fluctuations, as operating costs of producing wells are much lower than the often cited break-even costs, and it is extremely expensive to restart previously shuttered operations. Instead, the initial impact of lower oil prices is to





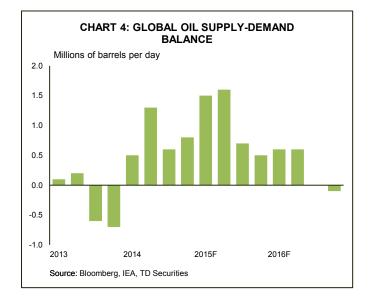
reduce capital spending, which influences future production. Without investment, growth in production slows, and current production eventually falls as producing wells supply less oil each cycle. This however, takes time to filter through to the market, typically about two quarters, suggesting that production will likely continue to rise in the near-term, before falling in the latter part of 2015.

Rig counts in the U.S. have fallen steadily over the past six weeks, suggesting that the low price environment has already triggered some response from producers. However, they are still roughly four times higher than that seen during the pre-recession years. What's more, given the efficiencies gained in recent years, the drop in rig counts does not have the same impact that it once did. In order to have a material impact on output, these rig counts would likely have to fall by at least half. Indeed, despite the recent drop in rig counts, production was still up in December. With output in some other countries on the rise as well, including Russia and Iraq, the current imbalance in the market is likely to persist for some time before showing any signs of improvement.

Where to from here?

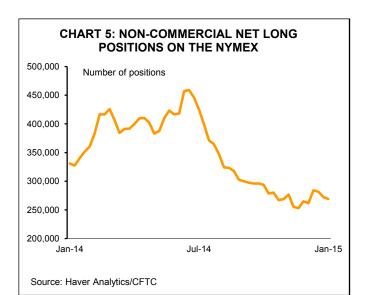
Overall, we expect production growth to continue to exceed demand growth through the first half of the year, leading to an even larger imbalance in the market (Chart 4). However, in the second half of the year, production numbers should start to show some improvement, as producer actions translate into lower output. Moreover, towards the end of this year and into next, the global economy is expected to pick up some steam, which, in addition to lower oil prices, should bode well for oil demand. These factors combined should slowly help to bring the oil market back into a more





balanced position. Prices should follow suit, with WTI bottoming out in the first half of the year, quite possibly below the US\$40 per barrel mark. As such, we expect oil prices to average US\$41 per barrel in the first half of the year and US\$53 per barrel over the second half of 2015. Next year, we forecast WTI prices to continue their grind higher, averaging US\$65 per barrel over the year as a whole and reaching US\$70 per barrel by year-end (Chart 1).

While that is our base case scenario, there are a couple of wild cards that can have a significant impact on oil prices. One is financial demand. In fact, financial plays likely helped to drive prices down over the last six months, as the supply-demand imbalance alone does not justify such a sharp drop. Markets do tend to overshoot on both the upside and the downside, driven by bullish or bearish sentiment. After reaching a record high in June, non-commercial net long positions on the NYMEX – the best indication for financial demand – plunged by roughly 45%, before stabilizing in December (Chart 5). The fact that the NYMEX net



long positions appear to have stabilized is a positive sign for prices. However, market sentiment is very unpredictable, and can drive prices up or down. In the near term, the risk from investment demand appears to be tilted more toward the downside.

Another wild card is geopolitical tensions. Case in point is the price premium that was built into oil prices during the first half of 2014, as conflicts in the Middle East and between Russia and Ukraine triggered fears of supply disruptions. Given that the market is abundantly supplied, the risk of geopolitical tensions driving prices materially higher in the near term is quite low. However, over the course of our forecast period, any geopolitical issues – which are inherently unpredictable – could have some impact on prices.

Our revised forecast will certainly have an impact on economic growth and financial markets, and we have updated our forecasts accordingly. The revised outlooks will be available on our website early next week.

Dina Ignjatovic, Economist 416-982-2555

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