SPECIAL REPORT

TD Economics

April 18, 2016

PATIENCE REQUIRED FOR HIGHER PRICES AS OIL GLUT PERSISTS

Highlights

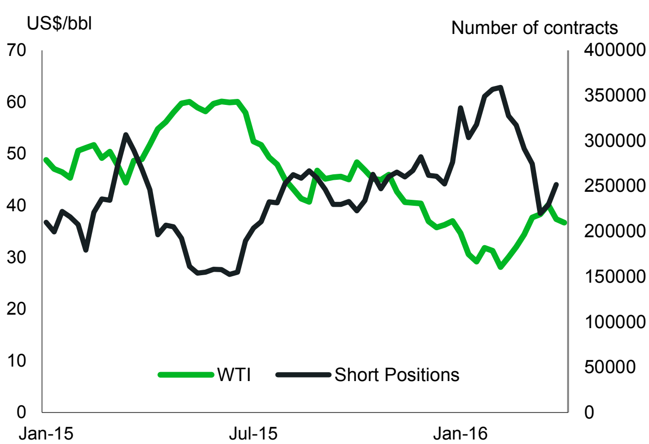
- Yesterday, the much-anticipated meeting between Russia, Saudi Arabia and some other OPEC producers ended in disappointment, as the group failed to come to any agreement to limit output levels. Oil prices have lost some ground this morning, but market reaction has been rather tepid.
- Crude oil prices have staged quite a comeback since hitting their lows early this year – a move that has been driven largely by an uptick in market sentiment, as the supply-demand balance has seen no fundamental improvement. As such, prices are likely to remain range-bound in the near term.
- While broader financial market conditions will certainly influence oil price movements going forward, a sustained rise in prices is unlikely to occur before a meaningful reduction in the net surplus of crude oil becomes evident. We suspect that progress in restoring balance to the market will show up late in the year, driving prices up to US$50 per barrel by year-end.

Yesterday, the much-anticipated meeting between Russia, Saudi Arabia and some other OPEC producers ended in disappointment, as the group failed to come to any agreement to limit output levels without Iran's participation. Iran – which is in the process of ramping up production since sanctions were lifted earlier this year – had made its stance clear before the meeting, but Saudi Arabia gave markets hope that a deal could be reached when it indicated that its decision would not rely on Iran. Given that markets had largely been pricing in a production freeze, it is not surprising to see oil prices losing ground this morning. That said, the response has been rather tepid, with other factors, such as a strike by oil industry workers in Kuwait, limiting the downside.

Indeed, at about US$39 per barrel, prices are well-above the 13-year low of US$26 per barrel reached early in the year. While further ground could be lost as the market digests this news, it is remarkable that prices managed to come off those lows without any fundamental strengthening in the global oil supply-demand balance, which remains stuck in a lofty surplus. A significant improvement in market sentiment has been a key driver behind the move higher, consistent with increased risk appetite in broader financial markets.

Much of oil's recent rise occurred in the late winter, before momentum tapered off as spring began, keeping crude prices largely hovering in the US$35-40 per barrel range. We believe that another leg up in prices will require improvements in general risk sentiment surrounding the global economy to ultimately be accommodated by a meaningful reduction in the net surplus of crude oil on world markets. We suspect that sufficient progress in restoring market balance will be recorded late in the year, driving prices up to the US$50 per barrel mark. In the meantime, oil prices are likely to remain range-bound, ebbing and flowing with market sentiment and movements in the greenback.

CHART 1: OIL PRICES DRIVEN BY SENTIMENT



Source: Haver Analytics/CFTC

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Risk-on sentiment lifting prices

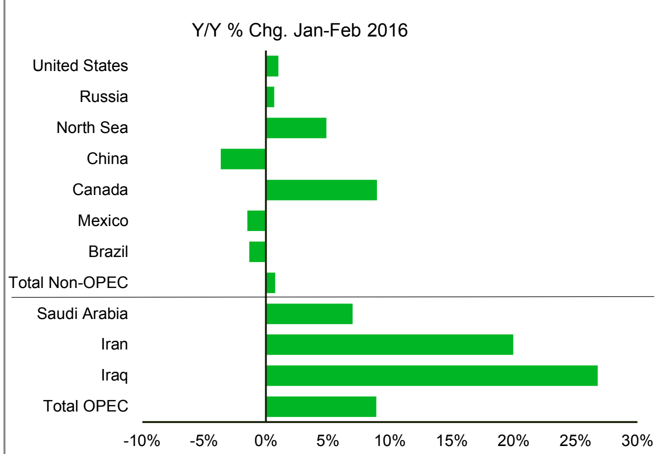
Oil hit its lows at the depths of market pessimism early in the year and have since improved alongside a general uptick in risk sentiment. This improvement was driven by better news in emerging market economies, further central bank easing around the globe, and a more dovish tone from the Federal Reserve. As a result, the US dollar depreciated, which combined with the increased risk appetite, led to an uptick in several financial market variables, including oil prices.

Indeed, oil is now as much a financial instrument as it is a commodity, as a massive unwinding in investor short positions underpinned the jump in prices in February and March (Chart 1). While the broader risk-on sentiment in financial markets certainly played a role, there were other oil market-specific factors also at play.

Ongoing declines in rig counts in the U.S. have many believing that production the country will soon follow suit. So far, production declines have been modest. But, the change in direction has given hope to many that larger declines are on the way.

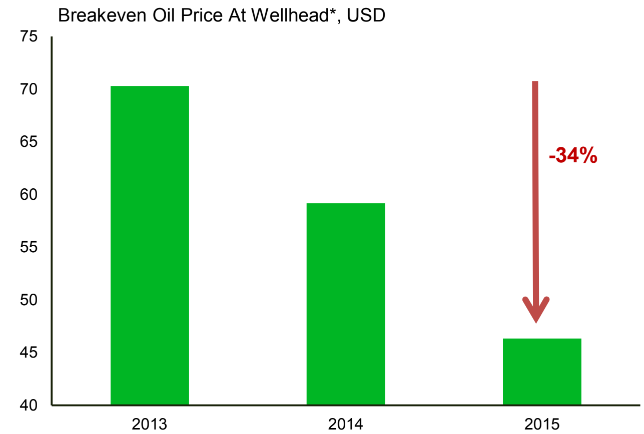
Perhaps even more impactful was the proposed agreement between Saudi Arabia and Russia to freeze production. While these key producers failed to come to an agreement, freezing production at current levels would have had little impact on the supply-demand balance, as production gains continue to outpace growth in demand, adding to already bloated inventories. Indeed, during the first two months of this year, production was up relative to year-ago levels nearly across the board, with significant gains in OPEC output (Chart 2).

CHART 2: CRUDE OIL PRODUCTION



Source: Energy Intelligence

CHART 3: COST OF U.S. SHALE PRODUCTION



Source: Rystad Energy. *Average of Permian Midland Tight, Eagle Ford Shale, Permian Delaware Tight, Niobrara Shale and Bakken Shale.

Outlook fraught with uncertainty

Oil prices have faced resistance around the US$40 per barrel mark, suggesting that investors are in a wait and see mode, not only with respect to the global economy and emerging markets, but with a number of market specific factors that have given them pause. That said, the outlook is particularly murky given that the oil industry is in uncharted territory, thanks to three key developments.

First is the emergence of the U.S. shale revolution, which drove the U.S. to be among the top three oil producers in the world. Given that it is a relatively new development, the industry has gained considerable efficiencies in recent years, possibly with more still to come. As a result, the cost of production has also come down, and it is unclear what price would trigger further investment and development in the shale industry (Chart 3).

Even outside of shale, the cost of production has moved down significantly since the oil price collapse, and the breakeven price of oil that will draw new investment to the sector is a moving target.

Moreover, OPEC's decision in November 2014 to no longer act as the swing producer to keep global markets in balance was a game changer. Indeed, predicting global production has become much more difficult with this change in stance. Whether the group sees this plan through, or gives up before obtaining the desired results, the impact on the market will continue to be significant.

These forces will remain a key driver of oil prices going forward. And since all are unfamiliar to the industry, there is a lot of uncertainty regarding future oil prices. Still, there is reason to believe that prices will grind higher over the course of the year.

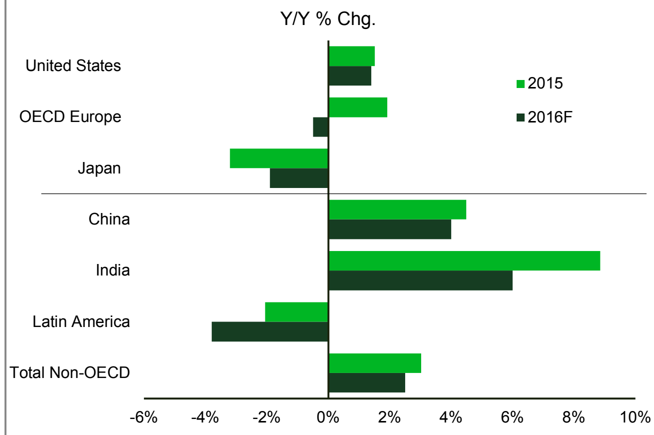
Rising demand to eat up some oversupply

The factors mentioned above that underpinned the increase in risk appetite over the last couple of months are generally expected to remain intact. However, there is a risk that bad news will trigger periodic flight-to-safety flows, dampening oil prices. We expect that the global economy will strengthen throughout this year and next (see QEF). We also forecast the U.S. dollar to continue its gradual trend down, helping to lift demand for assets priced in that currency, including oil. While both these factors will be supportive for oil prices, a significant tightening in the supply-demand balance will ultimately be needed to push prices above the US$35-40 per barrel range on a sustained basis. In our view, this is likely to happen in the latter part of this year.

A large chunk of this rebalancing will come from the demand side, as prices remain low and economic growth in several key consuming countries remains healthy. An increase of roughly 1.2 million barrels per day is expected in 2016, which is less than the 1.8 million barrels per day increase recorded last year. The expected deceleration in consumption growth in 2016 has already begun to materialize during the first two months. Global demand growth slowed to about 1% versus year-ago levels from the average 2% pace seen last year. While the U.S. – the world's largest consumer – is expected to record an increase in oil consumption this year similar to that of last year, lower demand in OECD Europe and Japan (which together account for roughly 18% of global demand) will provide some offset. In China, the world's second largest consumer at 11%, growth is expected to remain largely in line with the 4% pace seen in 2015. However, consumption growth in other emerging markets is expected to ease up somewhat, particularly in struggling Latin American economies (7% of global demand), which are likely to record an even larger drop in consumption than that seen last year (Chart 4).

There is some risk to this demand outlook, including an economic slowdown in key consuming countries, as well as a return to more normal demand following outsized gains prompted by low prices. Indeed, there has been some talk that demand has been propped up by some countries buying oil to build up their strategic reserves. If strategic buying slows dramatically, demand could be weaker than expected. Moreover, some countries have already lowered energy subsidies, and further adjustments could be in store, limiting the impact of lower prices on demand for consumers in these regions. While there are some upside risks as well – including better-than-expected performance on the global economic front, or severe weather conditions that trigger increased consumption, the risks for oil demand lie largely to the downside. Notwithstanding, we expect demand to remain relatively healthy in this low price environment.

CHART 4: CRUDE OIL DEMAND



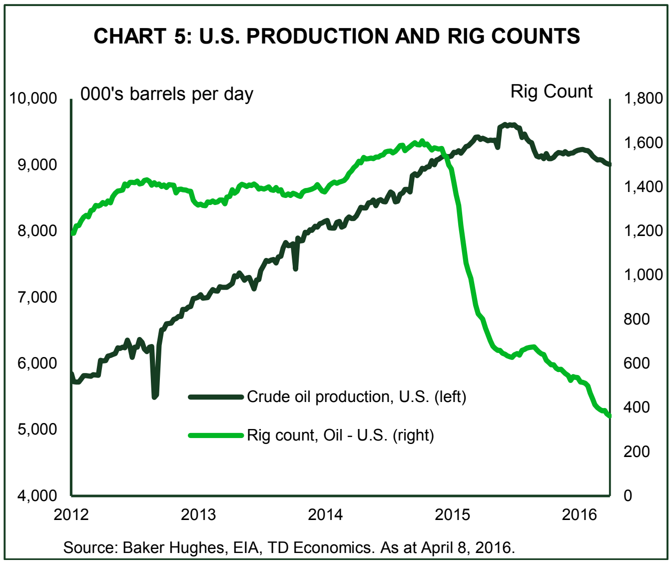
Source: Energy Intelligence

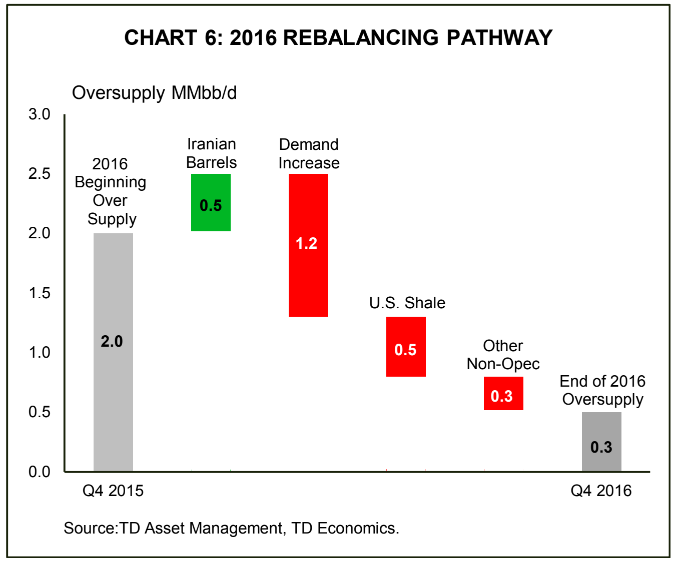
Production declines to be driven by U.S. shale

The supply side is where the bigger question lies. The market needs an outright cut in production to balance the market, and for OPEC, that is not in the cards – at least not until significantly lower production is seen elsewhere, particularly in the U.S. shale industry. Indeed, we suspect that OPEC will not abandon its strategy this late in the game, and yesterday's non-decision reinforces this view. And, with Iran pushing to get production back to pre-sanction levels – an estimated 0.5 million barrel per day increase from current levels – total OPEC output is likely to rise this year. Therefore, a drawdown in the supply glut will rely on a cut in non-OPEC production. On that front, with Russia's output expected to hold relatively flat this year, the largest drop is expected to be in the U.S., although the timing is difficult to pin down.

U.S. production has remained much more resilient than many would have thought, with output averaging 9.4 million barrels per day last year. Many producers were hedged throughout most of 2015, so the level of prices had little influence on production. Moreover, some producers were still able to turn a profit, while others kept pumping out oil in order to have some cash flow and make debt payments.

Still, production has fallen from its April 2015 peak of 9.6 million barrels per day to just over 9 million barrels per

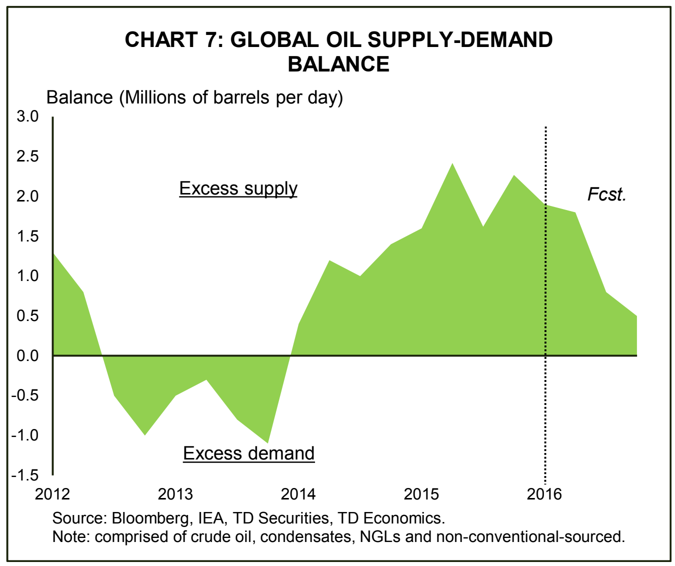




day in March (Chart 5). Going forward, we expect U.S. production to fall to an average of 8.8 million barrels per day this year, with the bulk of the declines showing up in the latter part of the year. Indeed, despite the sharp drop in rig counts, there is still a large backlog of wells that have been drilled but not yet fracked. Some producers have said that if prices rise to the mid-US$40 per barrel range, they will hook these wells up. While this would provide only a short term boost until the backlog is depleted, it has the potential to keep output in the U.S. resilient for longer than many might think. Moreover, the recent uptick in prices led to a pick-up in hedging activity, which could also keep output going strong. That said, producers typically need credit to do so, and borrowing conditions have tightened dramatically for oil producers. Hence, hedging will likely play a smaller role in keeping output elevated going forward.

Outside of U.S. shale, non-OPEC production is expected to hold up relatively well with some new projects slated to start up in the coming years. Even within the U.S., new production in the Gulf of Mexico will provide some offset to the declines in shale. In Canada, while conventional oil production has fallen sharply, new oil sands projects set to come online over the next two years will drive overall output higher through 2018. That said, investment in Canada had begun to slow prior to the price collapse. Given the relatively high cost of production of oil sands projects, investment is unlikely to pick-up over our forecast horizon, limiting production in the longer term. Elsewhere, output in Brazil is expected to rise modestly, while production in Mexico and China will continue to decline.

Overall, we expect non-OPEC production numbers – led by the U.S. – to begin to fall meaningfully in the latter part of the year and into 2017. This, coupled with the expecta-



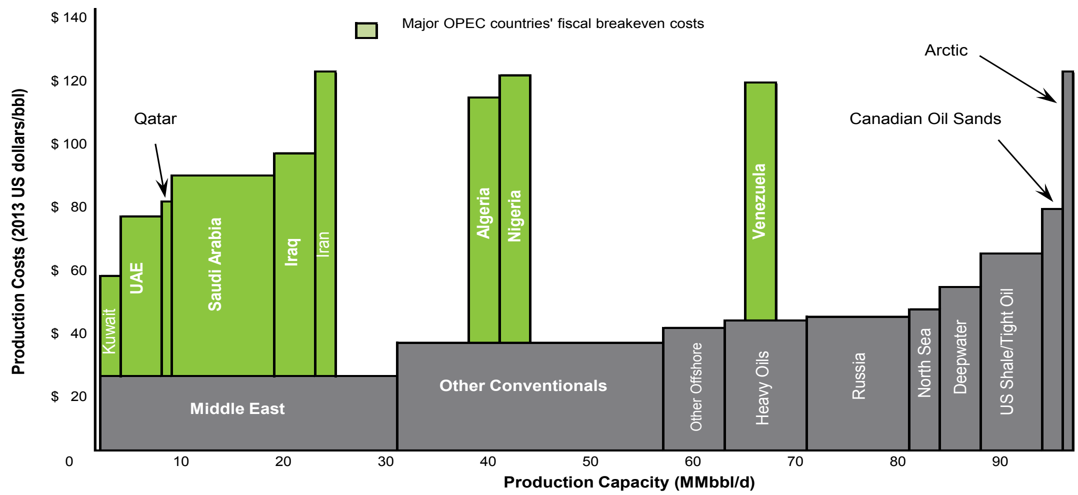
tion for an increase in demand, should lead to a substantial improvement in the supply-demand balance, helping to drive prices up to US$50 per barrel by the end of this year and US$55 per barrel by the end of 2017. If supply remains resilient for longer than we expect, however, prices will likely be range-bound for longer.

The upside for prices is limited

While momentum could take prices higher than our forecast, they would not likely be sustained at higher levels. Even once supply and demand are moving more in line with each other, there is still an abundance of inventories that will need to be worked down. Markets will tend to focus on the balance rather than storage levels, but the bulging inventory overhang will likely put some limit on the upside for prices.

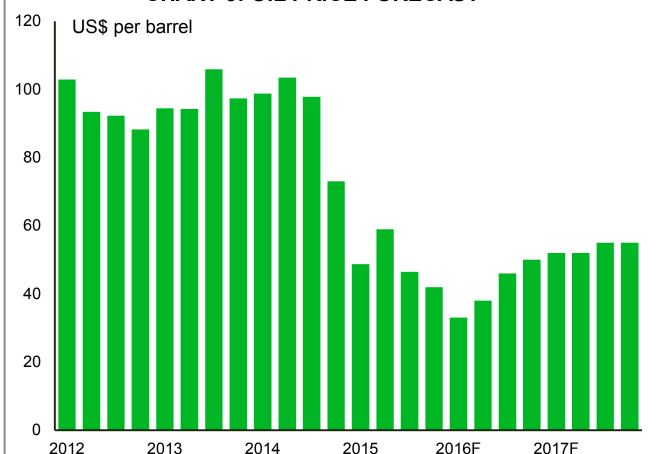
Moreover, both Russia and Saudi Arabia – which, in the

CHART 8: 2015 GLOBAL CRUDE BREAKEVEN COSTS



Source: Reuters, IMF, Deloitte MarktePoint Analysis, TD Securities.

CHART 9: OIL PRICE FORECAST



Source: Haver Analytics, TD Economics

past have required an oil price above US$100 per barrel to balance their fiscal books – have indicated that they will be basing their upcoming budgets on US$50 oil and are implementing some measures to offset lost oil revenues. This suggests that these major oil producers are planning for a prolonged period of low oil prices, and that they are unlikely to cut production to balance the market if prices are above these levels. Moreover, given that the breakeven costs are lower in Saudi Arabia than most other regions, the country could ramp up output if prices come close to the levels that would trigger investment in oil projects elsewhere, such as in the U.S. shale industry, which tends to have shorter lead times than some other types of production (Chart 8).

That said, the price at which shale investment will resume is unclear. While the average break-even cost for shale prior to the price slump was said to be around US$65-70 per barrel, that price has likely come down somewhat given the drop in operating costs. One company has said it would start exploring new projects if oil prices went back to US$55 per barrel. While not speaking for the industry, it does suggest that if prices were to reach that level or higher, production could be ramped up, driving prices down again.

Bottom line

Overall, the ongoing outperformance of supply relative to demand is expected to keep prices range bound in the coming months, before production declines – largely in the U.S. – help to lift prices toward the US$50 per barrel mark by the end of this year, and to US$55 per barrel by the end of 2017. There is a great deal of uncertainty surrounding this forecast, as the market is faced with unfamiliar circumstances, such as the emergence of shale oil production and OPEC's unwillingness to cut its own production to balance the market.

Still, lack of investment in oil around the world should ultimately lead to a pullback in production at the global level, helping to bring the market in to balance sometime next year. While this will be supportive for prices, a plethora of inventories, the unlikelihood that key producers will cut output to balance the market, and the potential for production to ramp back up at a lower price threshold than before, is likely to limit the upside on prices for the foreseeable future. That said, given the lead time of some projects, these significant cutbacks in investment could potentially plant the seed for an upcycle in prices a few years down the road.

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