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ETF Securities Commodity Research:

Oil: Impacts of lifting US export ban and Iranian sanctions

Summary

- A longstanding ban on the export of most crude oil from the US was lifted on December 18th 2015.
- On January 16th 2016, sanctions placed on Iranian oil exports were lifted after the International Atomic Energy Agency found the country to be compliant with its nuclear deal.
- Neither event is likely to drive global oil supply up in the near term mainly due to the lack of infrastructure and currently depressed prices. The sharp negative oil price reaction to Iranian sanction lift is therefore likely to reverse.
- The price wedge between the international Brent crude benchmark and the US domestic West Texas Intermediate (WTI) benchmark diminished in reaction to the lifting of the US oil export ban. We optimistic that the US will be able to build the necessary infrastructure to export its oil over coming years, relieving the pressure on domestic storage and refinery and therefore the spread between Brent and WTI should be durably lower.
- In contrast Iran is unlikely to be able to ramp up production and exports in the timeline it has guided markets. Oil prices should rise as production disappointments come to the fore.
- We are likely to end 2016 in a supply deficit despite the increase in Iranian oil as demand is growing strongly and upstream capex cuts start to bite.

US export ban removed

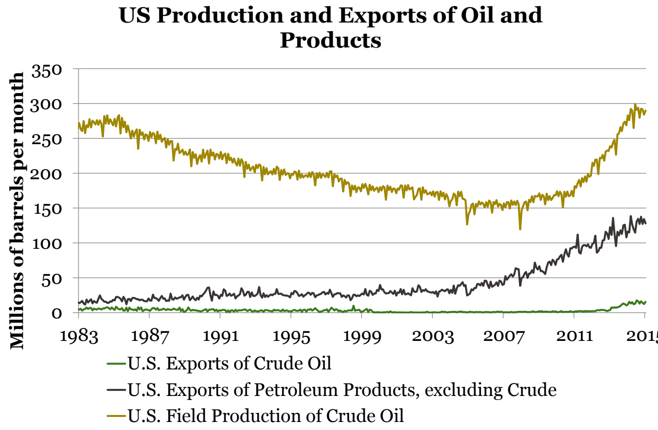
On December 18th 2015, Congress voted to remove the restrictions on oil exports from the US that were put in place during the 1970s. While the prior restrictions were not a complete ban on crude exports (some exports to Canada and Mexico were permitted and gas condensates with very similar attributes to crude were also permitted) exports of crude from the US were negligible.

Export restrictions previously have not included refined petroleum products. So while the new domestic oil production from LTO sources have displaced imports of crude from elsewhere, domestic crude that was processed into refined products and exported was unaffected. Between October 2008 and October 2015, exports of refined petroleum products grew by 256%.

LTO (light tight oil) revolution changed US oil dynamics

Since 2008, the US had ramped up domestic production of crude oil from an average of 152mn barrels per month to an average of 287mn barrels in 2015, reversing the prior four decades of production decline.

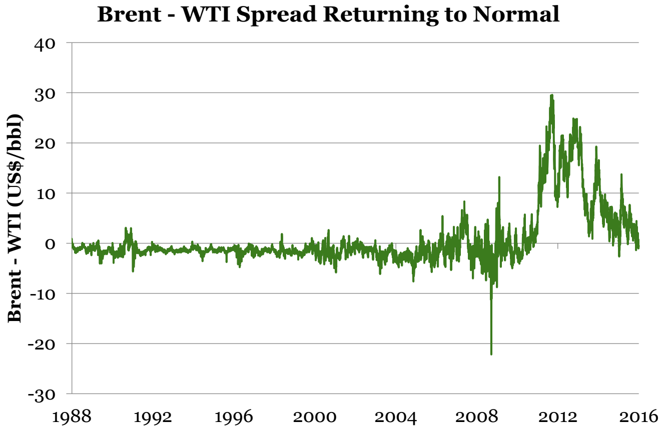
Refiners and pipeline infrastructure operators were largely unprepared for the sudden change in US oil output. Most of the growth in US production was of light, tight oil (LTO or shale).



Source: EIA, ETF Securities

Brent-WTI spread is returning to normal

While new LTO sources of oil easily displaced imports from Africa (which produces light, sweet oil), many US refiners were setup for heavy, sour crudes. That led to an excess supply of crude in the US and the WTI benchmark began to trade at a large discount to the international Brent benchmark, a significant reversal of the historical norm. At its peak, the premium of Brent over WTI was close to US$30/bbl in 2011. The reconfiguration of existing pipelines and the building of new ones allowed some of the glut in oil to reach refining facilities equipped to process the oil and the spread steadily declined after 2011.

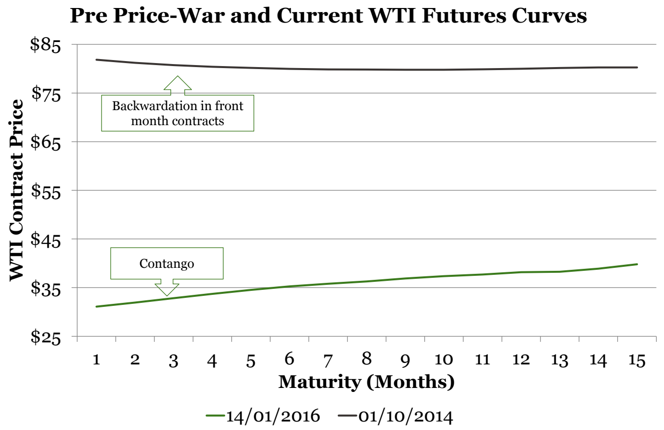


Source: EIA, ETF Securities

The lifting of the export ban has driven WTI to trade at a premium to Brent, which was normal prior to the LTO boom.

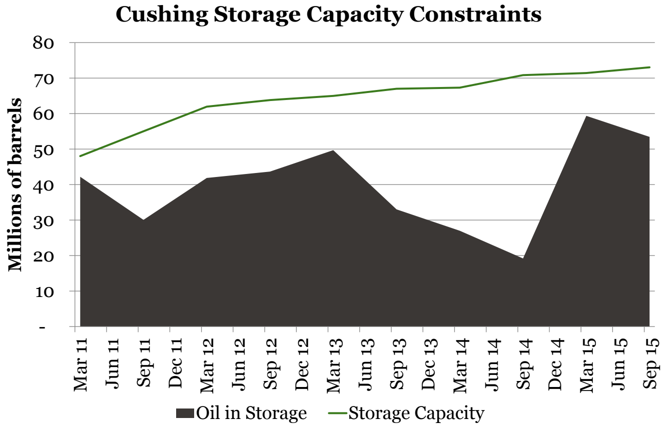
Storage demand elevated

Since November 2014 the WTI futures curve has been in contango, amid falling global oil prices. That has driven up the demand for oil storage facilities (holding onto cheap oil and selling at higher prices in the future makes commercial sense).



Source: Bloomberg, ETF Securities

However, the US has limited storage capacity. In March 2015, storage capacity utilisation in the US hit 63% (from 56% a year earlier) as crude oil production continued to grow despite the sharp fall in price and rigs in operation. Moreover, the country-wide figure masks the constraints in key operational points. In Cushing, Oklahoma, the delivery point for the WTI contact, capacity utilisation hit 81% in March 2015.

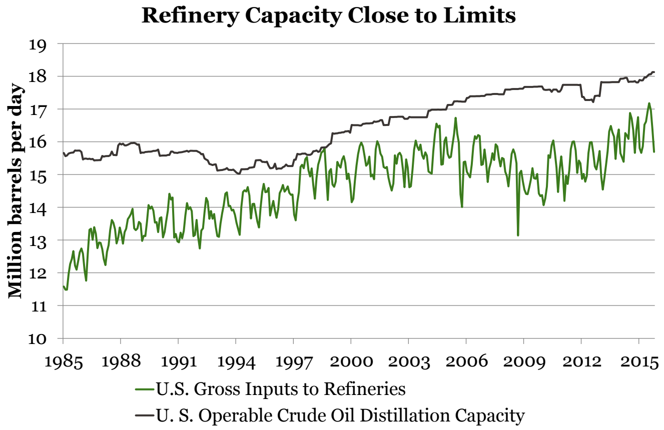


Source: EIA, ETF Securities

The threat of storage space running out has led some commentators to speculate oil prices could fall as low as US$10/bbl. The ability to export oil now can help alleviate the pressure on US domestic storage and limit the downside risk on WTI benchmark prices. Countries like China have been aggressively building storage capacity in the past year.

Refinery capacity also limited

Although refinery capacity utilisation has been higher in the past, at close to 90% in September 2015, it is clear that to process significantly greater amounts of oil, capital expenditure would be needed in refining capacity. The ability to export oil to countries with refining capacity better equipped to deal with light oils, also means that the urgency to make these investments falls away.



Source: EIA, ETF Securities

More infrastructure needed

Over the past two weeks oil has already started shipping from the US. Nonetheless, for the spread between Brent and WTI to remain sustainably low, the theoretical ability to export oil needs to be tested in sizable volumes.

For now, with global oil prices so low, the demand for US oil abroad is likely to be very small after factoring in shipping costs, which are likely to be higher than that of similar light oils from Norway or Africa. It will therefore be difficult to test the US's capacity to export in the near future.

We believe that for the spread between Brent and WTI to remain sustainably lower, the US as an exporter, will need to build more pipeline and export terminals and receiving countries will need to have the appropriate refineries to process LTO. Otherwise the same operational bottlenecks that have driven the wedge between the two benchmarks in the US will still exist.

However, we believe that the current era of low oil prices will give way to substantially higher oil prices when OPEC feels it has destroyed enough of the production growth in high-cost countries. At that point, the US could become a serious exporter of oil (the US is already the largest exporter of refined products). Despite all the capex cuts in the US energy sector, a number of companies have expressed interest in building infrastructure that will help boost exports. If this trend continues we would not bet on the Brent-WTI spread widening with WTI continuing to trade at a premium to Brent.

Company	Announcement
NuStar	Plans to boost oil-loading capacity in Texas by more than 40% to 575,000 barrels a day
Enbridge Inc.	Plans to spend US$5bn to build oil terminals between Houston and New Orleans to allow US and Canadian oil to reach the Gulf Coast
Enterprise Products Partners	After buying Oiltanking Partners for US$6bn it plans to expand loading capacity on the Houston Ship Channel

Market over-reacts to Iran sanctions lift

Sanctions placed on Iranian oil exports by the US and five other countries were lifted after the International Atomic Energy Agency found the country to be compliant with its nuclear agreement with the P5+1 (the permanent members of the United Nations Security Council–the United States, the United Kingdom, Russia, France, and China plus Germany), plus the European Union.

Unrealistic guidance

Iran expects to lift exports by 500,000 barrels immediately and plans to increase shipments by a further 500,000 barrels within months.

Despite Iran's ambitions (which we admit could lead the country to ignore oil economics in pursuit of winning market share), the country's dilapidated infrastructure is unlikely to support the export of more than 300,000 extra barrels of oil.

Iran does not have enough fields in operation. Bringing online fields that have been delayed since 2014 would at most allow for 400,000 additional barrels. Immediately injecting cash investments cannot bring that figure up without a very long delay (18 months at minimum and more likely 2-3 years to build new operational infrastructure).

Expanding Iranian production significantly will require the build-out of more infrastructure, which would require the assistance of international oil companies. In an era of low oil prices and global oil capex cuts, the appetite to get involved is likely to fall short of expectations.

Iranian oil still not freely tradable

Iran will encounter difficulty in marketing its oil. The sanction lift is limited, especially with regard to US corporate involvement. US companies, including banks, insurers, oil companies or any US national cannot be involved in the selling of Iranian oil or the procurement of infrastructure. Sales of Iranian oil cannot take place using US dollars. While European companies have more flexibility, their close ties with the US pose challenges. Had oil prices been higher, Iran's strategy would have been to offer deep discounts on price to sell to countries like India to compensate for the increased complexity of dealing with its oil. But with oil prices so low, there is little potential for discounting.

Any expansion on Iranian oil production as a result of the sanction lift will not be picked up in today's OPEC Monthly Oil Market Report and the earliest point in which we will have any concrete data on production and export increases will be on the 10 February report. We believe that the market will be disappointed with the outcome.

Global supply glut to give way to supply deficit in 2016

Saudi Arabia's strategy to increase market share by depressing oil prices is working, judging by the size of announced energy capex cuts in high-cost producing countries. We believe that by OPEC's 2nd June 2016 meeting, Saudi Arabia will soften its tone and prepare the market for lower production (although little agreement to cut OPEC production will take place at that meeting).

Demand has meanwhile been recovering strongly in an era of low prices. IEA expects oil demand to rise to 96.71 mb/d by Q4 2016 from 95.28mb/d in Q4 2015. As global capex cuts start to bite, non-OPEC oil production is likely to fall. Factoring in a generous 1mn barrel increase in Iranian exports, would still mean that the market is likely to be in a small deficit by the end of the year.

As the oil market moves back toward balance, prices will likely recover. But we believe that the disappointment around Iran's ability to ramp up exports will hit the market earlier and reverse the sharp decline we have seen in recent days.

The intelligent alternative

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