



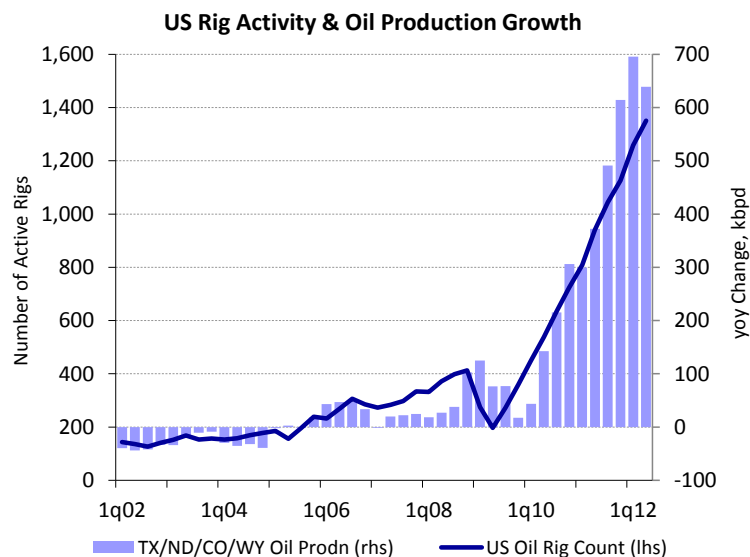
## US Refiners Finally Reducing Crude Inventories

**US Crude stocks declining despite higher domestic production**

According to monthly data and weekly estimates from the Energy Information Administration (EIA), US domestic crude production continues to surge higher on increasing drilling activity. Meanwhile, US refiners are finally beginning to draw their crude stocks lower, from multi-year peaks, on higher crude runs and moderately-lower crude imports. This continuing dynamic would imply sharply lower crude imports for the remainder of 2012, to levels not seen since 1997.

Unattractive natural gas prices have shifted exploration towards wet gas and shale oil, and the surge in the oil rig count has driven an exponential rise in tight oil production. As shown in the chart below, crude oil production has jumped massively in four states that could serve as a proxy for tight oil production -- North Dakota (Bakken), Colorado/Wyoming (Niobrara) and onshore Texas (Eagle Ford, Austin Chalk).

**Massive shift in rig activity to oil is driving surge in shale oil output**



Sources: EIA, Poten

**US crude production gains nearing 700 kbpd**

The movement in crude production has shown a strong correlation to rig activity, and given the time lags between exploration and production, these year-over-year (yoy) gains should continue into late-2012 and 2013, before stabilising, consistent with EIA forecasts. Crude oil output during 1q12 was 683 kbpd higher yoy and combined monthly and weekly data suggest that 2q12 production should be 630 kbpd above 2011 levels. Still, with weekly estimates having understated monthly data by 5% during 2012,

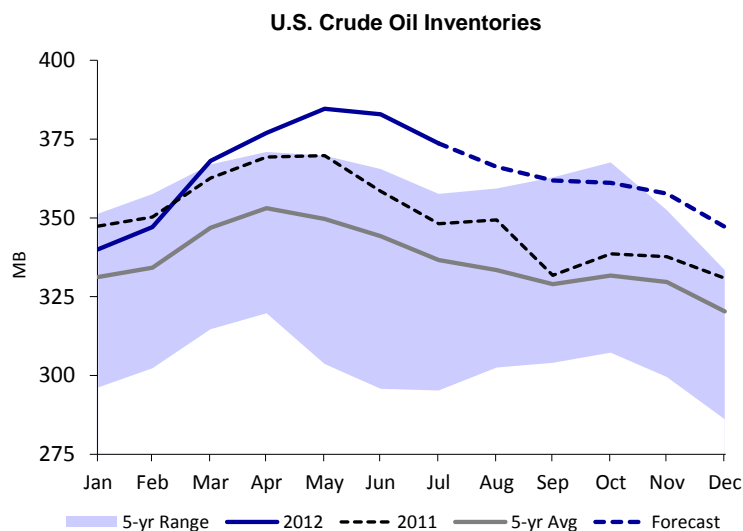
**Recent rig activity suggests additional rises in crude production**

subsequent data revisions by the EIA could show higher productions. Also with the national oil rig count rising to 1,429 this week, according to Baker Hughes – versus the 1,368 rig second quarter average shown in the chart – production numbers should continue to rise. Poten estimates that US crude production should hit 6.33 mbpd in 3q12, followed by 6.58 mbpd in 4q12, yoy increases of 728 kbpd and 563 kbpd, respectively, and just above EIA forecasts. Meanwhile, US natural gas liquids production (NGL) has risen by 300 kbpd yoy during the first five months of 2012, adding to the liquids balance.

**Crude stocks hit 22-year highs in June**

This surge in US production has been the driver behind rapidly-rising US crude inventories, as US refiners have sustained crude imports and as infrastructure constraints have trapped rising production in the Midwest PADD2 region. US commercial crude stocks hit 387.3 MB in mid-June, the highest level since 1990 and 39.9 MB, or 11.5%, above seasonal averages. Motiva’s crude build in anticipation of its 325 kbpd Port Arthur expansion also contributed, as stocks hit 25.6 days of crude runs in June, significantly above the five-year average of 23.4 days for the month.

**And have declined in seasonal pattern on higher crude runs**



**Refinery utilisations hit 92.3% in July, while crude imports fell 410 kbpd yoy**

As shown in the chart above, crude stocks have begun to recede from these levels, dropping to 373.6 MB last week. A jump in US crude runs, with utilisations hitting 92.3% during July, have helped draw stocks, along with a counter seasonal decline in crude imports to 8.90 mbpd in July, representing a 410 kbpd yoy drop. Motiva’s need to eliminate imports for its damaged unit is contributing the import decline. Moreover, the mid-May start-up of the 150 kbpd reversal of the Seaway pipeline may have allowed an outlet for PADD2 crude, as Cushing stocks have declined by 3MB since end-May.

**Inventories still too high**

Still, last week’s inventory levels are 4.5% above the five-year maximums and are 9.8% above seasonal averages. With the Motiva re-start now months away and the Iranian situation generating less stock-building anxiety, refiners should begin to reduce stocks

**Forecast for crude stocks to stay 8.4% above historical averages**

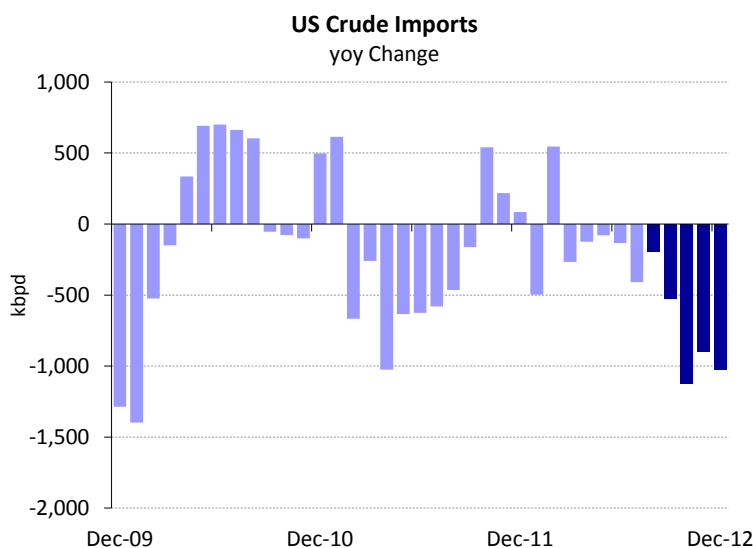
**Yet crude imports would need to plunge by 1 mbpd yoy in 4q12**

**Inventory adjustment would accelerate in 4q12**

**Delay of crude import adjustment may be painful**

to more historically-consistent levels. The above chart also illustrates our forecast for US crude stocks to decline to 347 MB, or 23.4 days' supply, which is consistent with the EIA short-term outlook. Still, this does not return total US crude stocks to normal levels, and represents crude inventory levels 8.4% above the five-year average and higher than the five-year average of 21.8 days of supply.

The impact on crude imports could be dramatic under a moderate refining environment. Refinery utilisation forecasts of 91.7% in 3q12 and 86.9% during 4q12 would represent a 1.3 percentage point yoy improvement in utilisations during 2h12 and are close to EIA estimates. This outlook would keep crude runs flat with last year, while transport fuel demand is likely to be 110 kbpd lower yoy during 2h12. Under this environment, US refiners would need to cut crude imports to 8.34 mbpd during 2h12, which would represent a 645 kbpd yoy plunge. Under normal seasonal patterns, this would imply a drop in imports to 7.84 mbpd in 4q12, representing a 1,016 kbpd yoy decline, as shown in the chart below.



Sources: EIA, Poten

As the tanker market continues to focus on significant rise in shale oil production, the truth is that the sector has yet to face the full impact of this phenomenon. US crude imports only declined by 92 kbpd yoy during 1h12, while crude production surged by 683 kbpd yoy. Delaying equilibrium until late-2012 may prove to be painful.

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