# Quarterly Energy Comment

By Bill O'Grady

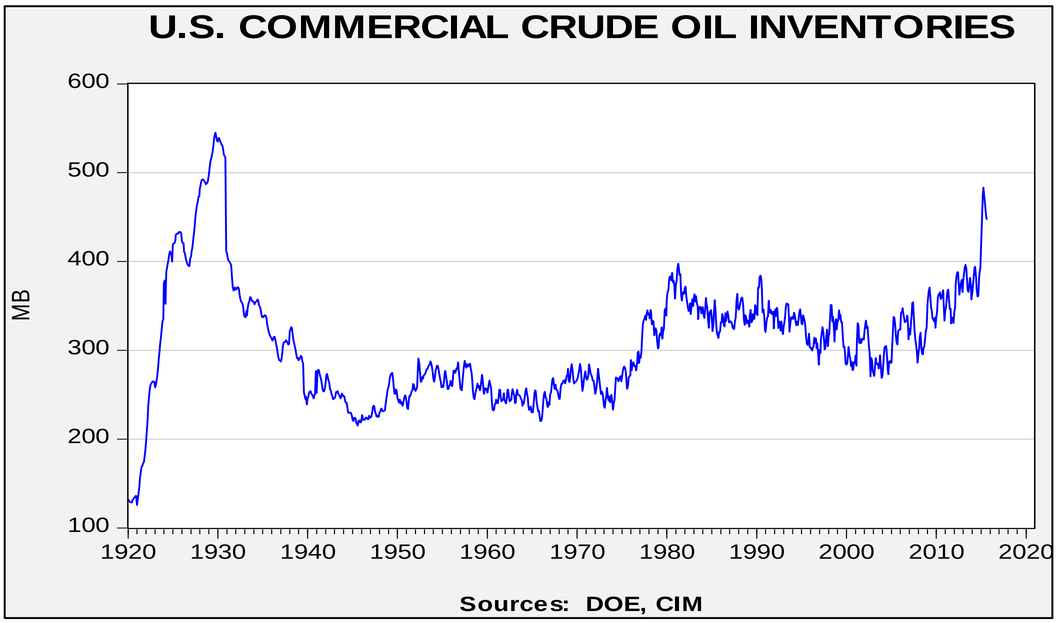
**September 3, 2015**

**The Market**
Over the past year, oil prices fell sharply into the first quarter, remained rangebound from January through March, rallied above $60 per barrel in the spring and early summer, and then slid to new lows in August. Recently, we have seen a sharp bounce in prices; in fact, it is the fastest recovery since August 1990, when Saddam Hussein invaded Kuwait.

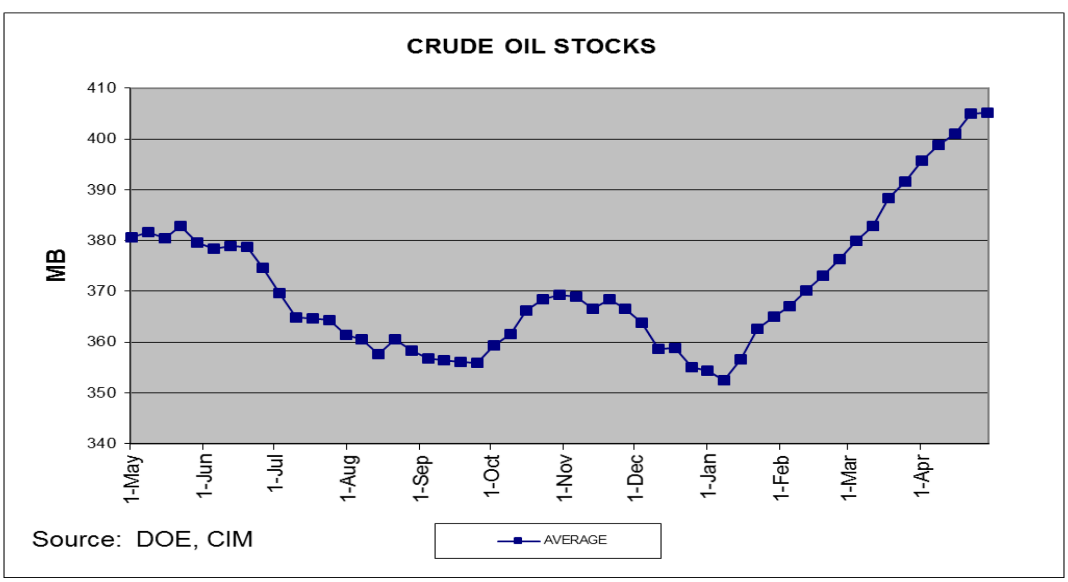
(Source: Barchart.com)

The decline from late June into late August is probably discounting the normal seasonal demand weakness that occurs after the summer ends. Refineries usually engage in extended maintenance during autumn which reduces oil demand. The recent rally looks like aggressive short covering. The sub-$40 lows will probably hold as the lower end of the trading range into early winter. From there, we would look for a retest of the upper end of the range. ***It is always important to remember that cartel markets tend toward trading ranges as the supply behaviors lead to price stability.*** We are probably entering a $60 to $40 dollar trading range. Could we break down below this range? Yes, because it isn't clear that OPEC will take steps to defend that level. However, some of the recent rally was due to rumors that OPEC was considering steps to support the market. Around $40 dollars, demand would be expected to improve. So, for now, our stance is that we are creating a price range and until we see strong evidence to the contrary, we expect it to hold.

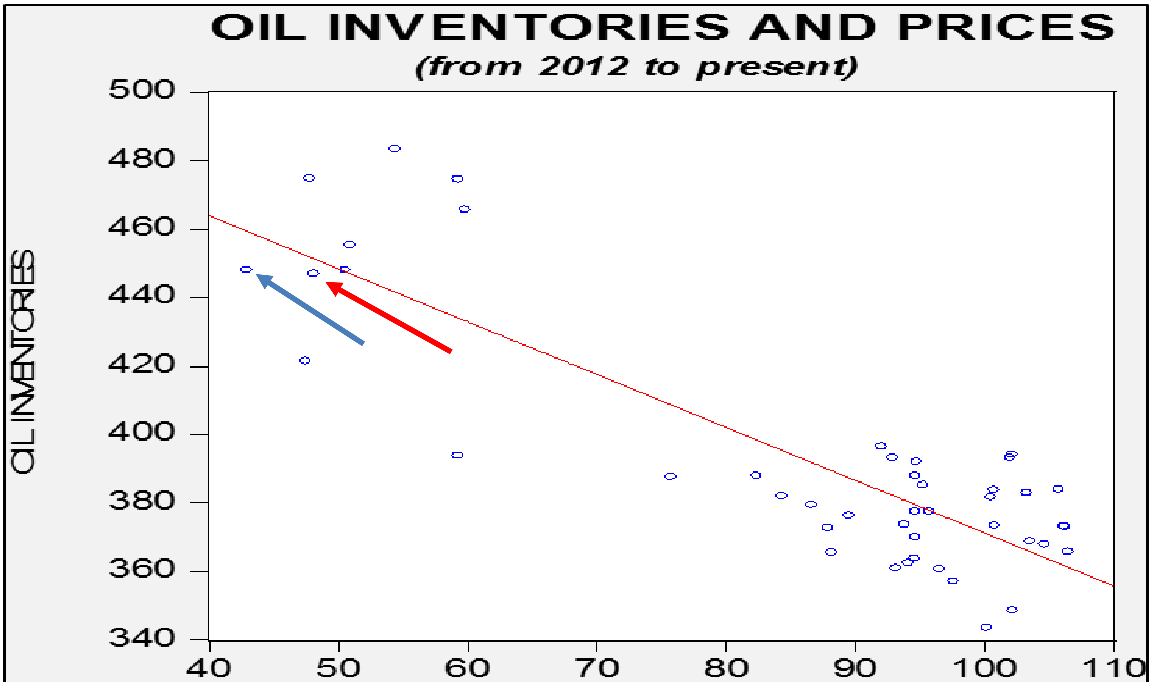
**Oil Prices and Inventories**
U.S. commercial crude oil inventories remain elevated.




This chart shows U.S. commercial crude oil stockpiles beginning in 1920. Our estimate for end-September stockpiles is the last data point on the graph. Inventory levels remain very elevated, but are falling from their spring highs.



The above chart shows the five-year average of inventories to isolate the usual seasonal pattern. There are two primary inventory build periods, from late-September into November and from early January into the spring. Over the past year, crude oil prices have mostly anticipated this pattern, which partly explains why prices fell so hard in November last year but stabilized when the rebuild season began. Essentially, the market discounted the build. It is likely we are seeing the same situation now; essentially, the market is anticipating the autumn inventory build, which means that prices will remain stable even after oil stockpiles rise in the coming weeks.



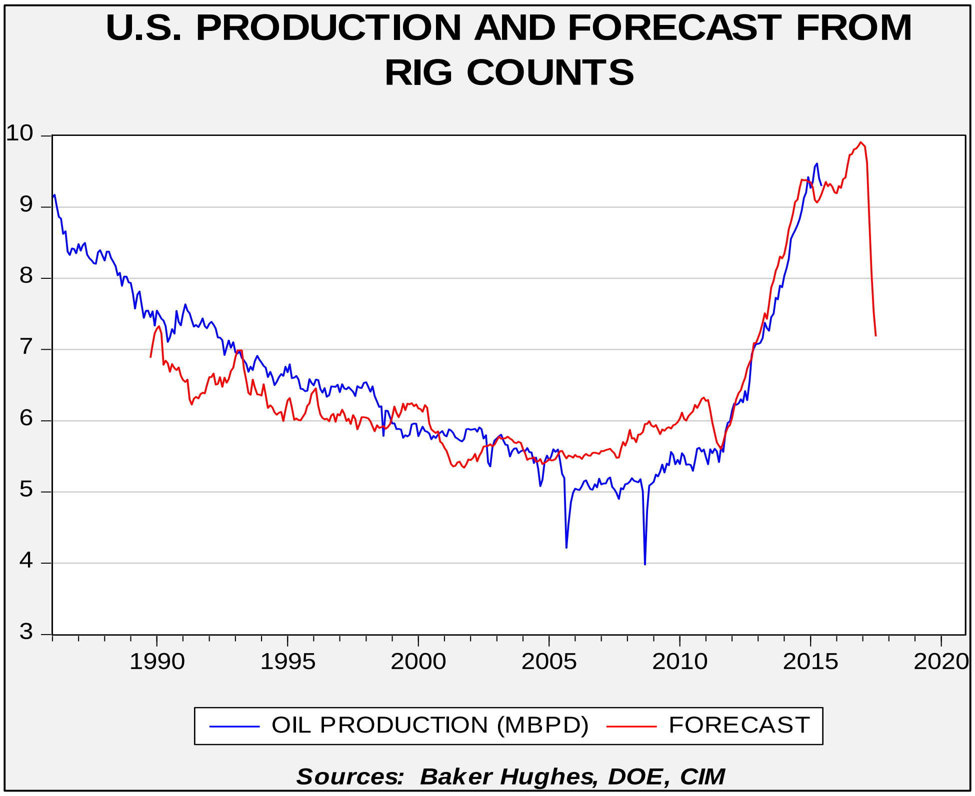
Sources: DOE, CIM

This scatterplot shows the relationship between oil prices and U.S. commercial crude oil inventories. The blue arrow shows August and the red arrow shows our projection for stocks with current prices for September. Current prices are much closer to the projected relationship. Of course, we will see crude oil inventories rise in the coming weeks as refinery maintenance begins. If we reach around 465 mb by Halloween, a reasonable projection, prices could retest the old lows. However, the winter storage withdrawal has the potential to take us back to the high end of the aforementioned range. Until the supply situation changes, we assume a rangebound market is the most likely outcome.

**Slowing U.S. Production**

Last quarter, we discussed our outlook for U.S. oil production based on rig counts. Although the DOE did revise its recent production estimates lower, production remains elevated. Again, as we noted last quarter, there has been a 27-month lag between changes in rig counts and changes in production.

This chart updates our U.S. production model based on rig counts. So far, the model's forecast is working reasonably well.




This simple model suggests that production growth will remain high into 2017. Will this model get it perfect? No. All models are prone to error, simply because there are a number of uncountable variables that will affect production. In this case, high decline rates for fracked wells may lead to a shorter lag. Tightening financing could have a similar impact. However, this model does make the case that a major drop in output may simply take time.

**OPEC**

If U.S. production remains elevated, at least for a while, the only other way for prices to recover quickly and break out of the upper end of the range would be from OPEC production cuts. So far, Saudi Arabia appears committed to maintaining its market share policy. In two previous events, the 1986-87 and 1998-99 market share wars, Saudi Arabia eventually organized lower cartel production and lifted prices. In the latter event, Mexico and Russia promised to lower output but these actions provided little more than a veneer of non-OPEC cooperation.

The problem in this market share war is that the big, non-OPEC producer is the U.S. Like the U.K. in the 1980s, there is virtually no chance OPEC can negotiate lower American production. Only extended low oil prices will lower U.S. output; that condition probably holds true for Canadian output as well. The Russians will be open to talking about output cuts, but the odds of actual reductions are low. Simply put, if prices are going to be supported by production cutbacks in the short run, it will have to come from OPEC. At present, Saudi cutbacks would support Iran's economy. Given that Iran and Saudi Arabia are historical rivals, an agreement is unlikely.

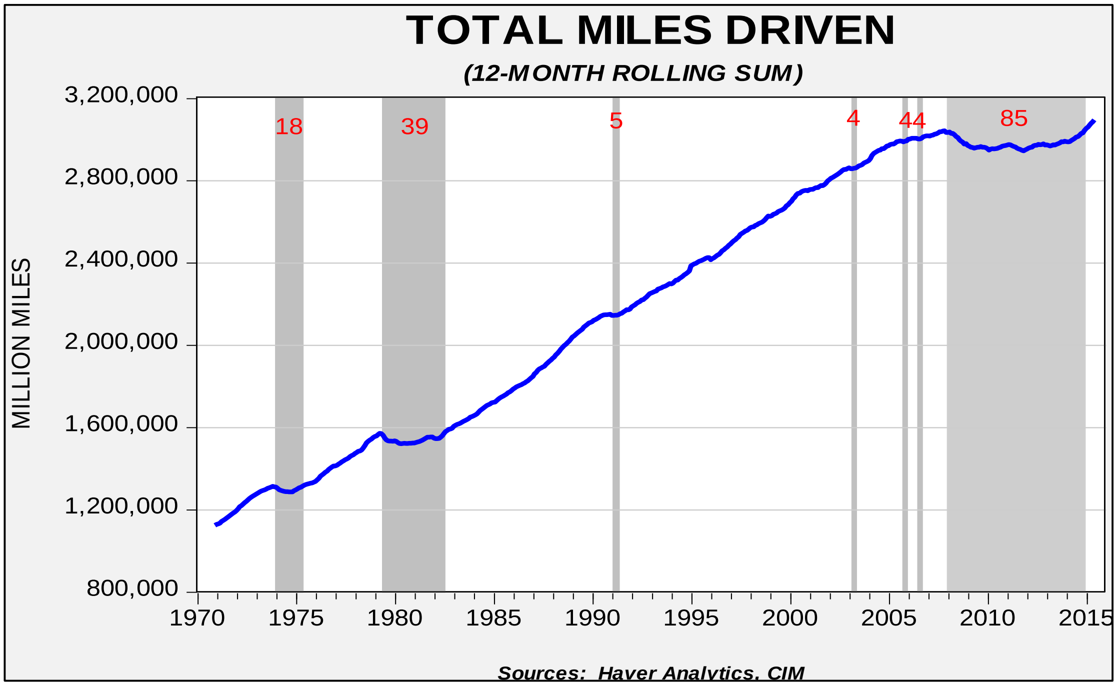
On the other hand, the First Gulf War was also about market share. Iraq, its economy ravaged by the Iran-Iraq War, asked OPEC for higher oil prices and was rebuffed by OPEC. In response, Saddam Hussein invaded Kuwait. From Hussein's perspective, he had just fought a long, costly war that had essentially protected the Persian Gulf kingdoms from Iran, and when he needed help he didn't get any. That didn't necessarily justify his attack on Kuwait, but it does suggest that the high oil reserve/low population nations in the Middle East are potentially vulnerable to direct action to lift oil prices from the high oil reserve/high population nations, who need constant high prices to operate their economies.

In other words, how long will Iran allow the Saudis to keep oil prices depressed and fight them for market share? It should be noted that Saddam Hussein probably would not have invaded Kuwait if he had anticipated that the Bush administration would take determined steps to build a military coalition and oust his forces. However, the key question now is if a similar situation occurred today, would the U.S. be able to perform the same rescue? It is highly doubtful that Russia would approve of any military action in the region, which would remove the imprimatur of a United Nations resolution. Given the reluctance of the current administration to engage in large-scale military operations, an invasion of Kuwait today would probably not generate the same response seen in 1991.

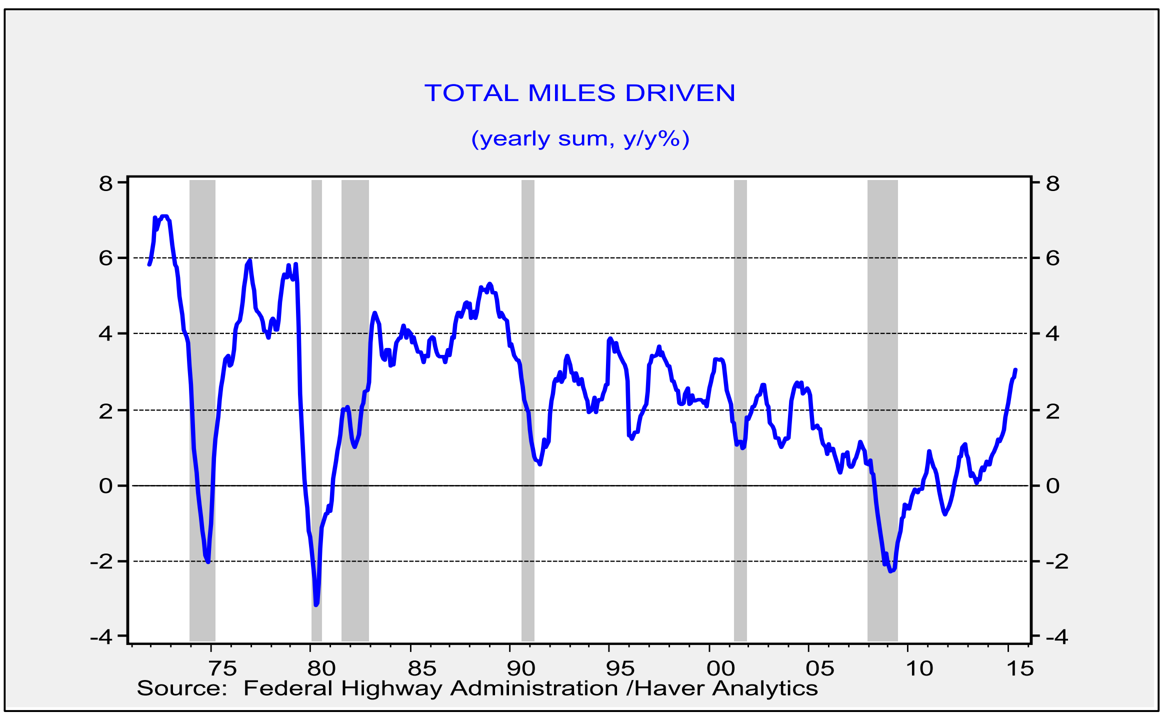
The longer oil prices remain depressed, the greater the odds are of some sort of geopolitical event in the Middle East. The erosion of U.S. influence in the region has already created chaos. The Arab Spring is one symptom of reduced power, and the undermining of the Sykes-Picot borders in the area has triggered a refugee crisis that Europe is struggling to contain. Although accurately predicting the timing of geopolitical events is nearly impossible, we can say with some degree of confidence that the likelihood of such an event is rising.

**What about Demand?**

The true level of world oil consumption is somewhat uncertain because China is importing oil to build a strategic oil reserve. Thus, the demand data is probably overstating actual consumption. However, U.S. gasoline consumption is improving. The chart below shows the rolling 12-month total for miles driven by American passenger vehicles. We put gray bars on the chart to show periods between new peaks. Usually, the U.S. makes a new peak in annual miles driven every month. We are emerging from the longest period between peaks since the data series began in 1973.




It should be noted that the yearly growth rate of miles driven has increased to its highest rate since 2000.




The rise in miles driven is good news for oil demand and is a modestly bullish factor for crude oil prices. It's not enough, on its own, to bring a reversal in oil prices but it should support the evolving trading range described above.

**Oil Summary**

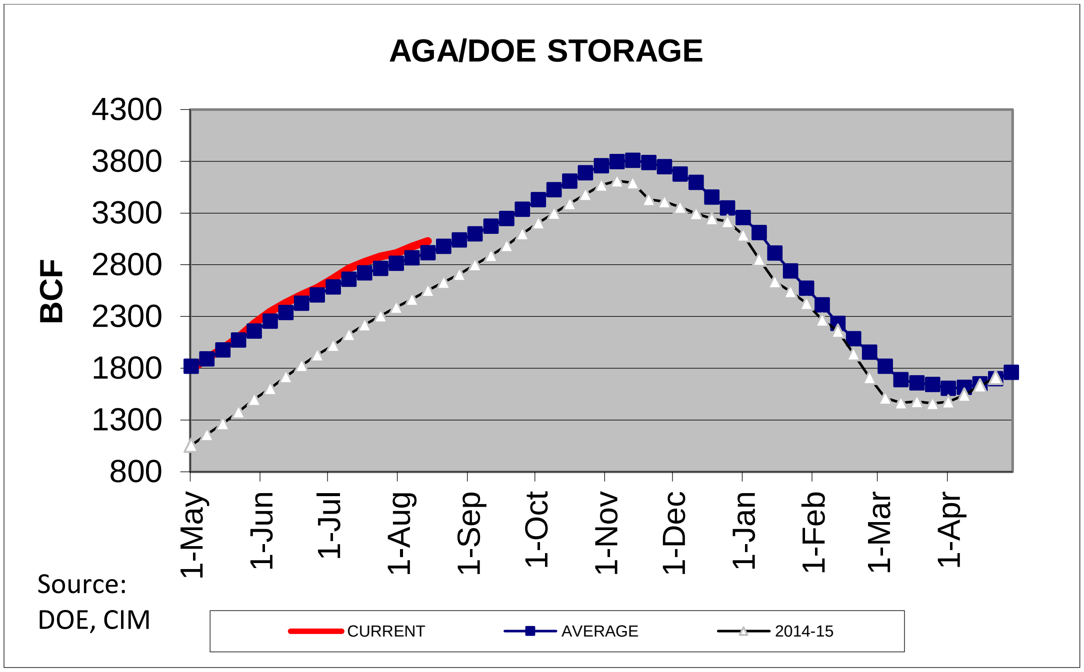
To a great extent, our outlook on oil prices remains the same. We are probably in a $40 to $60 per barrel range until either (a) OPEC cuts production, (b) U.S. production falls significantly, or (c) the Middle East becomes geopolitically unstable. The second option probably will not occur until late next year at the earliest. There is no strong evidence that the first option is going to occur anytime soon and the last option could happen anytime, but it is unlikely until the Iran nuclear deal is completely finished. Thus, the aforementioned range probably takes us into the middle of next year.

**Natural Gas**

Natural gas prices have been rangebound for months.


(Source: Barchart.com)

Although prices bottomed in late April and rose just over $3.00 per MMBTU, they quickly settled into a narrow range between $2.60 and $2.90. We are moving into a “shoulder season” in terms of demand, where moderate temperatures reduce consumption until winter.




Inventory levels are currently 114 mb above average. We anticipate peak storage around 3.950 tcf.

With prices near the low end of the range, the nearby price will likely rise. However, it should be noted that January futures prices are at $3.00 per MMBTU, the top end of the range. Forecasts are predicting an El Niño winter, which usually means warmer than normal temperatures for much of North America. In general, we expect prices to remain in the trading range into December. If the weather is warm, prices could be vulnerable to a major decline, perhaps breaking the current low end of the range. Thus, we would remain cautious on natural gas.

Bill O'Grady
Chief Market Strategist
Confluence Investment Management