December 17, 2019

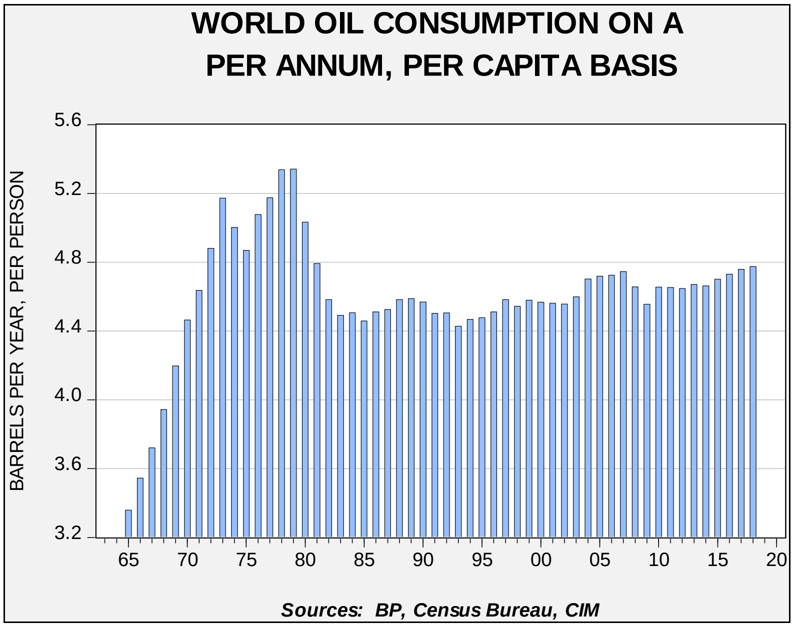
The Oil Market
Since June, oil prices have held mostly within a range of $50 to $60 per barrel.

(Source: Barchart.com)

After a sharp decline in prices from late May into early June, due in part to a contra-seasonal build in inventories, inventories fell and oil prices rebounded. Rising tensions with Iran added to the lift in prices in September. Since then, we have seen a retest of the lower end of the range and a steady recovery. Soon after year-end, we usually see a seasonal rise in inventories, which tends to weigh on prices. However, with the advent of exports, that seasonal pattern has become suspect. For example, last year we didn't see the usual increase in stockpiles.

Thoughts on Oil Demand
In general, forecasting demand is not usually a priority in commodity analysis. The shape of most short-run commodity demand curves is inelastic, which means that quantity isn't very sensitive to price. Demand inelasticity means that a small change in supply can have outsized effects on price. It is because of that structure that commodity analysts tend to focus on supply. That being said, demand is important over the long term. For example, the effect of environmental regulations and consumer sentiment has adversely affected coal demand and severely depressed prices. The price of coal didn't fall because supply expanded; it fell because demand declined.

One way to forecast oil demand over time is to use demographics. We start by calculating the per capita, per annum consumption of crude oil.



This chart shows annual oil consumption per person. Last year, on average, everyone in the world consumed 4.78 barrels per person per year. Although there is some variation as this measure does tend to rise as business cycles age, this calculation gives us a base to estimate long-term consumption. Additionally, the outlook is not all that bullish; the U.N. estimates that the world's population growth is poised to steadily decline, falling to 0.87% per year by 2025 and falling to 0.53% by 2050. That would suggest the "natural" rise in demand will be less than 1% this decade and weaker into mid-century.

Slowing population growth isn't the only worry facing oil; concerns about climate change are leading some nations to consider taxing carbon or taking other regulatory steps to reduce fossil fuel consumption. So far, efforts have been mixed; the incentive to "free ride" the CO^2 reduction efforts of other nations has prevented most nations from taking aggressive measures to reduce fossil fuel consumption. However, it is likely that this factor will eventually lead to less oil consumption and, coupled with falling population growth, the demand outlook is neutral at best.

At the same time, we have noted that some Democratic Party candidates for president have promised to shut down fracking on Federal lands. This action would have an immediate effect on reducing supply and would be bullish for crude oil. Our base case is a re-election of President Trump, but oil prices might benefit if he were to falter, depending on the occupant of the White House.

Oil Summary
The Saudis have been pressing OPEC to cut production to prop up oil prices in front of the Saudi Aramco (2222, TADAWUL, SAR, 36.80) IPO. Although shares have been sold on the Saudi exchange, the kingdom would like an international listing, probably in

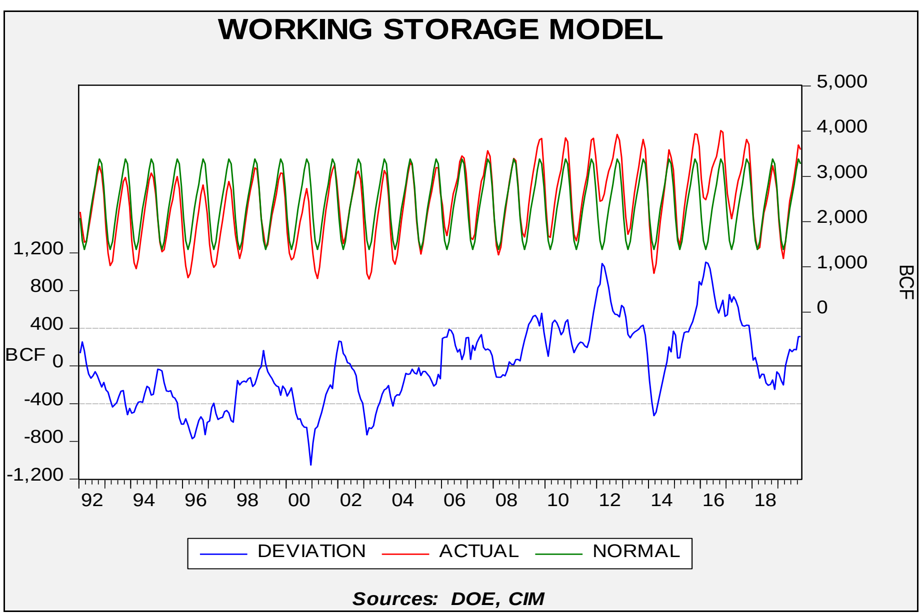
the Far East. As long as the Saudis are in the process of listing Aramco, the kingdom will have an interest in keeping oil prices elevated. However, once the listing process is over, we would not be surprised to see Saudi Arabia attempt to recapture market share. This action would put significant downward pressure on oil prices.

Natural Gas

Natural gas prices have become volatile. Since bottoming in August, prices have moved based on short-term temperatures.

(Source: Barchart.com)

This winter's [long-term weather forecasts are calling for mild temperatures,](#) which has weighed on prices since peaking in November.



Inventory levels fell below normal last winter, but steady increases in stockpiles took inventories above normal by the spring. They have continued to rise since April and are now above their seasonal levels. Without cold weather, we will likely see the usual stock declines in the winter fall below normal levels, leading to excessive inventory when the spring rebuild season commences. Although cold snaps tend to boost prices in the short term, sustained price increases will be difficult to maintain. So, we are generally bearish on prices in 2020.

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