Quarterly Energy Update—Third Quarter 2009

October 13, 2009

Energy Prices Recover

Oil prices have hovered around $70 per barrel for two months. While up more than 50 percent this year, prices are still more than 30 percent below year-ago levels (Chart 1).

The futures market expects oil prices to trade moderately higher over the coming year. The 12-month futures contract is $5 higher than current spot prices, or about 7 percent. This is in stark contrast with the first quarter when the differential exceeded $15, which was 40 percent higher than the spot price.

Petroleum Product Supply

Global oil supply declined by almost half a million barrels per day in August as increased cheating from OPEC failed to offset declines in non-OPEC production. Non-OPEC production declined by 450,000 barrels but was still significantly higher than a year ago. OPEC compliance now stands at 66 percent. At the September 9 OPEC meeting, quotas remained unchanged and the discussion focused on increasing compliance levels.

Demand

The International Energy Agency estimates Organization for Economic Cooperation and Development demand is likely bottoming and will increase marginally in the third and fourth quarters. Unlike earlier estimates, the most recent reading revised consumption forecasts up instead of down. This is significant, as it reinforces the belief that economic activity is stabilizing and is potentially on the road to recovery.

U.S. oil consumption has risen steadily for the past four months but is still down significantly year over year. Preliminary data for October indicate continued strengthening in gasoline consumption, signaling further firming in the U.S. economy.
Total petroleum products consumption experienced a small pullback in the first week of October; however, the year-over-year change is nearly flat (Chart 2).

Refinery Utilization Up
Refinery utilization has ticked up in recent weeks (Chart 3). Despite the uptick, utilization rates remain relatively low at 85 percent, due to ample inventories and forecasts for a relatively mild winter.

Chart 2
Recovery in Oil Consumption

*Seasonally adjusted.
SOURCES: Energy Information Administration, seasonal and other adjustments by the Dallas Fed.

Chart 3
Refinery Utilization Ticks Up


Subdued demand for refined products and uncertainty surrounding greenhouse gas emissions regulations have led refiners to cut back on expansion projects. New mandates to reduce carbon emissions will likely increase costs for refiners, and the gradual shift to renewable and alternative fuels could displace some of the demand for traditional refined products.

Inventories Remain Elevated
U.S. petroleum inventories remain above their five-year seasonal average but
have come down substantially from the levels seen in early May (Chart 4). While the economy and petroleum product consumption appear to be stabilizing, the absolute level of demand remains weak and supplies are plentiful.

**Natural Gas and Oil Prices Diverge**
Natural gas has rebounded from its recent lows, but oil continues to trade at a significant premium on an energy content basis. As of October 8, the price of oil was approximately 16 times that of natural gas. This is down from two weeks ago when the ratio touched 30, which was the highest relative price of oil in over 15 years and well above the energy content parity of 6 times (Chart 5).

Plentiful supply and weak demand for natural gas have led to relatively weak prices. Increased gas production from shale plays is being met with tepid industrial demand due to the recession. The result has been above-average injections into inventory. After adjusting for seasonality, gas inventories are at their highest levels in 15 years and approaching capacity limits. According to the Energy Information Administration, the peak capacity of underground working gas storage is around 3.9 trillion cubic feet (Tcf). At the end of September there was almost 3.6 Tcf in storage. As inventories approach the limit, more natural gas could be forced onto the market, putting downward pressure on prices in the near term.

—Jackon Thies and Mine Yücel
About the Author

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