

This Week in Petroleum: November 5, 2008

What the Economic Downturn Could Mean for Oil Markets

Amid increasing concerns about a major economic downturn here in the United States and abroad, one bright spot for U.S. consumers is the continuing fall in the price of oil and oil products. At \$2.40 per gallon on Monday, the U.S. average retail price for regular gasoline is down by more than \$1.70 per gallon from its peak this past July. To assess what the economic downturn and OPEC's recent announcement of production cuts might mean for oil markets through 2009, EIA is reviewing previous recessions and OPEC production cuts, examining recent economic forecasts, and running new model simulations in anticipation of our next Short-Term Energy Outlook (STEO) that will be released on November 12.

EIA's analysis of oil markets focuses on four key components: 1) global oil consumption, 2) non-OPEC supply, 3) OPEC supply and surplus capacity, and 4) exploration and production investment. The balance among these components, along with inventories, determines the degree of tightness in the oil market and, ultimately, crude oil prices. Below, we discuss our current thinking on these components.

Oil Consumption. U.S. consumption of oil, which has fallen by about 1 million barrels per day (bbl/d) in 2008 relative to 2007, is expected to fall again by a smaller amount in 2009. In contrast to 2008, where skyrocketing prices drove consumption lower, the 2009 decline will be driven by reduced economic activity and will likely be mitigated by substantially lower average oil prices in 2009 compared to 2008. Current expectations at the global level also reflect more pessimistic forecasts for economic activity (though there is a wide range of views on how the downturn and credit crunch will affect economic growth). Under a scenario where global economic growth for the remainder of 2008 and 2009 is 1 percent below the economic forecast used in EIA's October Short-Term Energy Outlook, global oil consumption in 2009 could increase by less than half as much as we forecasted in October.

Non-OPEC Supply. Existing projects, other than those impacted by taxation regimes in other countries that would result in operating losses in the current pricing environment, will likely continue to operate unless prices fall dramatically, but a global economic slowdown could have important effects on long-term supply as discussed below.

OPEC Supply (Crude and Non-Crude) and Surplus Capacity. A key question regarding OPEC's October 24 announcement of a 1.5 million bbl/d output cut is how much of the announced reduction actually will be implemented now and in the coming months. All OPEC producers except Saudi Arabia have recently been producing at, or close to, capacity. EIA's current working view is that the actual OPEC cut between October and January could reach 1.1 million bbl/d. This represents about 70 percent of the announced cut, compared to a typical 50 percent compliance rate with previous OPEC cuts. While compliance with past announced cuts has often decreased over time, current market conditions and an expected growth in non-OPEC production may help maintain discipline among OPEC members and keep OPEC crude production from rising in 2009. OPEC's non-crude liquids production, which is not covered by its announcement, is still projected to grow by nearly 1 million bbl/d in 2009, leaving total (crude and non-crude) expected OPEC liquids production in 2009 only slightly below the 2008 level.

As the OPEC country with the ability and willingness to change production levels the most, Saudi Arabia's production level is pivotal. Our current working scenario assumes that Saudi Arabia reduces production to levels consistent with production in the first part of 2007 in the first quarter of 2009, or nearly 1 million bbl/d below its estimated peak monthly production level in the third quarter of 2008. OPEC surplus capacity could reach 4 million bbl/d by the end of 2009, nearly all in Saudi Arabia, providing Saudi decision-makers with a significant cushion that they could use to dampen the impact of future disruptions or geopolitical uncertainties.

Exploration and Production Investment The credit crunch and the recent decline in prices for oil and natural gas are likely to affect exploration and production investment in both OPEC and non-OPEC countries. Some countries with nationalized oil sectors will be under considerable pressure to maintain the flow of oil revenue to social programs, reducing resources available for reinvestment in the oil sector. High-cost projects such as Canada's oil sands or Brazil's subsalt, already technically and financially demanding, could face additional challenges to their profitability. (In fact, delays in some new oil sands projects in Canada have already been reported.) Insofar as non-OPEC producers are concerned, the major investor-owned oil companies are likely to be less affected by the credit crunch than independent producers. The greater the delays in investment in existing and new oil fields, the lower production will be once the world economy and oil demand recover, increasing the risk that we will return to a tight supply situation.

So, as EIA prepares for the next STEO, we are looking carefully at the key components that will drive our near-term consumption and supply numbers and ultimately determine our price path.

Residential Heating Fuel Prices Fall A Bit Further

Residential heating oil prices decreased for the fourth straight week since the start of the heating season during the period ending November 3, 2008. The average residential heating oil price dropped 7.2 cents last week to reach 298.7 cents per gallon, which was a decrease of 12.3 cents from this time last year. Wholesale heating oil prices rose 8.5 cents, reaching 215.0 cents per gallon, a decrease of 48.5 cents compared to the same period last year.

The average residential propane price slipped 2.6 cents lower to 250.1 cents per gallon. This was an increase of 16.8 cents in relation to the 233.3 cents per gallon average for this same time last year. Wholesale propane prices gained 1.7 cents per gallon, from 105.1 cents to 106.8 cents per gallon. This was a decrease of 57.3 cents from the November 5, 2007 price of 164.1 cents per gallon.

Gasoline Prices in All Regions Continue Downward Slide

The U.S. average price for regular gasoline fell another 25.6 cents to hit 240 cents per gallon. Over the past seven weeks, the U.S. average has plunged 143.5 cents and has dropped 171.4 cents from the all-time high set on July 7. As a result, the price is now 61.3 cents below the price a year ago and is also the lowest since February 26 of 2007. Prices fell by more than 20 cents in each of the major regions. While the average price on the East Coast slumped 23.5 cents to 244.9 cents per gallon, the New England portion of the region was the only area where the average price drop did not exceed 20 cents. The average price in New England dropped 19.2 cents to 244.8 cents per gallon, still 52.1 cents lower than the price last year at this time. In the Midwest and Gulf Coast regions, prices sank below \$2.25. In the Midwest, the price tumbled 26 cents to 223.7 cents a gallon. Dropping 23.2 to 222.8 cents per gallon, the price in the Gulf Coast remained the lowest among the regions. The price in the Rocky Mountains dropped 28 cents to 248.2 cents per gallon, the first time it has been below \$2.50 a gallon since March 19 of last year. The price on the West Coast not only fell for the nineteenth week in a row, it dropped the most among the regions, plummeting 31 cents to reach 274 cents per gallon, slipping below \$3 for the first time since October 15, 2007. The price in California fell 34.7 cents to 278.3 cents per gallon.

Diesel prices throughout the country also continued their downward slide. The U.S. average dropped 20 cents to hit 308.8 cents per gallon, the lowest since October 15 of last year. The all-time high price for diesel was set at 476.4 cents per gallon sixteen weeks ago on July 14. Since then the price has fallen for 15 of the sixteen weeks, plunging a total of 167.6 cents. As prices continued to spiral downward, the average prices were lower than last year at this time in all regions except the New England portion of the East Coast, which was 4.5 cents above last year's price. On the East Coast as a whole, the average dropped 17.8 cents to 321.9 cents per gallon. Tumbling the most among the five regions, the price in the Midwest fell 22.6 cents. At 301.8 cents per gallon, the price was also the lowest of any region. The average price in the Gulf Coast slipped 18.6 cents to 303.3 cents per gallon. The price in the Rocky Mountains sank to 315.7 cents per gallon, a drop of 21.8 cents. On the West Coast, the price fell 18.1 cents to 305.2 cents per gallon. In California, the average price shrank by 22.9 cents to 305.7 cents per gallon.

Propane Inventories Post October Draw

Total propane inventories reported an atypical 0.5 million-barrel stock draw during October, the first since 2002, despite nearly normal temperatures during the month. In comparison, the most recent 5-year period showed inventories gaining an average of nearly 1.9 million barrels. The final week of October saw inventories remain relatively flat at an estimated 60.4 million barrels. During this same time, inventories fell by 0.5 million barrels in the East Coast and 0.3 million barrels in the Midwest, while in the Gulf Coast, inventories gained 0.6 million barrels. The combined Rocky Mountain/West Coast region also reported a gain last week, up by 0.1 million barrels. Propylene non-fuel use inventories remained unchanged last week at 3.0 million barrels while the share of this fuel to total propane/propylene inventories remained steady at 5.0 percent.

Summary of Weekly Petroleum Data for the Week Ending October 31, 2008

U.S. crude oil refinery inputs averaged 14.6 million barrels per day during the week ending October 31, down 234 thousand barrels per day from the previous week's average. Refineries operated at 85.3 percent of their operable capacity last week. Gasoline production rose last week, averaging 9.1 million barrels per day. Distillate fuel production decreased last week, averaging about 4.4 million barrels per day.

U.S. crude oil imports averaged nearly 10.0 million barrels per day last week, down 365 thousand barrels per day from the previous week. Over the last four weeks, crude oil imports have averaged 10.2 million barrels per day, 485 thousand barrels per day above the same four-week period last year. Total motor gasoline imports (including both finished gasoline and gasoline blending components) last week averaged 1.0 million barrels per day. Distillate fuel imports averaged 149 thousand barrels per day last week.

U.S. commercial crude oil inventories (excluding those in the Strategic Petroleum Reserve) remained unchanged from the previous week. At 311.9 million barrels, U.S. crude oil inventories are in the upper half of the average range for this time of year. Total motor gasoline inventories increased by 1.1 million barrels last week, and are near the lower boundary of the average range. Both finished gasoline inventories and gasoline blending components inventories increased last week. Distillate fuel inventories rose by 1.2 million barrels, and are in the lower half of the average range for this time of year. Propane/propylene inventories were flat last week and remain below the lower limit of the average range. Total commercial petroleum inventories increased by 5.1 million barrels last week, and are in the lower half of the average range for this time of year.

Total products supplied over the last four-week period has averaged nearly 19.1 million barrels per day, down by 6.7 percent compared to the similar period last year. Over the last four weeks, motor gasoline demand has averaged 9.0 million barrels per day, down by 2.3 percent from the same period last year. Distillate fuel demand has averaged 4.0 million barrels per day over the last four weeks, down by 4.8 percent from the same period last year. Jet fuel demand is 15.9 percent lower over the last four weeks compared to the same four-week period last year.

The tables that follow display the latest U.S. Petroleum Balance Sheet and the most recent 4 weeks of Weekly Petroleum Status Report data.