Oil Prices Rise as Natural Gas Retreats

April 2, 2010

Oil prices averaged just over \$62 per barrel in 2009 but climbed above \$80 per barrel in March. The Energy Information Administration's 2010 average price estimate remains unchanged at \$80. The futures strip remains in contango—the spot price of crude oil is lower than the price of oil delivered at a future date—with prices rising to \$84 by year-end (*Chart 1*).

Natural gas prices hit their high early in 2010 as cold weather drove up heating demand throughout the country. Prices have since fallen back to under \$4 per MMBtu.

Oil Demand Rises

Worldwide oil demand has been revised upward again. The International Energy Agency estimate for 2010 demand now stands at 86.6 million barrels per day (mb/d), a 1.8 percent increase over 2009. The most recent data confirm that world consumption grew in fourth quarter 2009 after five straight quarters of decline (*Chart 2*).

While world demand is expected to grow this year, Organization for Economic Cooperation and Development (OECD) demand is expected to decline slightly to 45.4 mb/d, or 0.3 percent. Despite expected positive GDP growth, oil consumption is projected to stagnate due to structural changes—such as oil being displaced by natural gas and nuclear power in electricity generation and heating. Fuel used for transportation is still likely to grow in 2010.

With OECD demand holding steady, non-OECD countries account for the total anticipated consumption growth in 2010, over half of which is attributable to non-OECD Asia. In total, non-OECD demand will likely grow 4 percent or more, generating an additional 1.7 mb/d of demand in 2010.

The non-OECD share of total demand has grown from 38 percent in 2000 to 46 percent in 2009. Since 2000, non-OECD demand growth has far outpaced that of developed nations (*Chart 3*).

U.S. Energy Consumption Weak

Oil consumption declined 1.9 percent in January year-over-year. The decline is evident in all products, from gasoline to jet kerosene. Electricity generation followed the same path, falling in March, likely as a result of easing cold winter weather (Chart 4).

Supplies Rise with Demand

World oil supplies rose by 0.9 mb/d in February. Growth is coming from both OPEC and non-OPEC suppliers ($\it Chart 5$). OPEC is now producing at its highest level in over a year and 1.8 mb/d above its quota of 24.85 mb/d. Compliance fell to 56 percent in February, down from 58 percent in January. At the March 17

Chart 1
Oil Prices Holding Steady



SOURCES: Wall Street Journal; Futuresource.com.

Chart 2 OECD Consumption Expected to Hold Steady in 2010

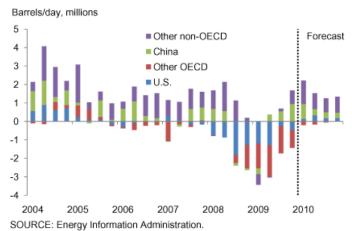
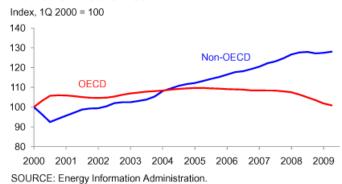
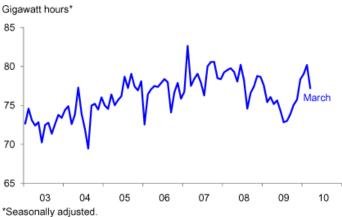


Chart 3
Oil Demand Growth Stronger in Non-OECD than OECD Economies



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Chart 4 Electricity Use Declines (Weekly average)



meeting, OPEC ministers left quota levels unchanged.

Inventories Rise Modestly

SOURCE: Edison Electric Institute.

In the week ending March 26, oil inventories increased modestly from 25.1 days of forward supply to 25.2 days. The OECD experienced a similar uptick in January to 59.2 days of cover from 58.3 days in December. Total U.S. crude oil stocks are now 6 percent above the seasonal average (*Chart 6*).

Natural gas inventories had drawn down due to increasing demand during the harsh winter, but recently inventories rose on the back of warmer weather. Even after the significant winter drawdown, inventories are still 10 percent above the seasonal average.

Gasoline Prices Rise

Gasoline prices hit their highest level in over a year in March. The nationwide average touched \$2.87 per gallon for the week

Chart 6
U.S. Crude Oil Inventories Within Seasonal Norms

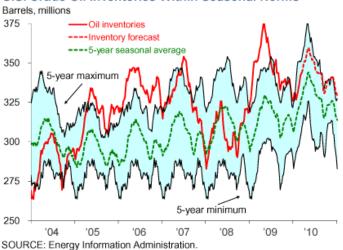
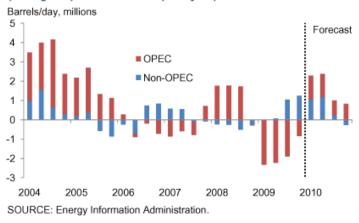


Chart 5
OPEC Production Expected to Increase (Change in production from prior year)



of March 22. Gasoline inventories at 25 days of supply are marginally higher than the prior-year level of 24.

Natural Gas Prices Recede

After climbing above \$6 in January, natural gas prices fell back to \$4 in the final week in March. The futures market is not expecting much of an increase, with December 2010 contracts rising to \$5.20.

Warmer weather and increased production from shale gas fields are the likely causes of price declines. Many producers continue to drill in shale gas regions in order to maintain their leases. Since bottoming out in July 2008, the rig count has increased 52 percent, with 63 percent of that increase attributable to horizontal rigs (*Chart 7*).

—Jackson Thies and Mine Yücel

Chart 7
Horizontal Drilling Picks Up Significantly Due to Shale Gas



About the Authors

Thies is a research analyst and Yücel is a vice president and senior economist in the Research Department at the Federal Reserve Bank of Dallas.

The Quarterly Energy Update can be found online at www.dallasfed.org/research/energy/.