

Energy

Energy Prices Rise in Response to Seasonal and Global Economic Factors

First Quarter 2013

Crude oil prices rose in January (*Chart 1*) in response to colder winter weather, the end of the federal government's fiscal-cliff budget deliberation and a Saudi Arabia production cutback. West Texas Intermediate (WTI) and Brent crude prices continued moving higher in the first half of February before edging lower. WTI recovered slightly and averaged \$93 per barrel in March, while Brent averaged \$109 per barrel in March.

The Brent–WTI differential decreased in January, partly due to expansion of the Seaway Pipeline; however, continued bottlenecks at the storage hub in Cushing, Okla., resulting from increased inflows from the Midwest, are keeping WTI prices low relative to Brent. Growing supplies and insufficient pipeline capacity are causing other landlocked domestic crudes, including those from the Bakken in North Dakota and the Permian Basin in Texas, to trade at a discount to WTI.

Gasoline and diesel prices trended up for most of the first quarter, dipping slightly at the end of March (*Chart 2*). The U.S. average regular gasoline retail price rose from \$3.32 per gallon in January to \$3.71 in March, 14 cents less than the March 2012 average. Retail gasoline prices seasonally increase during refinery maintenance season, generally in March and April, as the transition to more expensive summer gasoline begins. The U.S. retail on-highway diesel price averaged \$4.03 during first quarter 2013.

The U.S. Energy Information Administration (EIA) is forecasting retail gasoline prices to average \$3.55 per gallon in 2013—seven cents less than the 2012 average price.

World Demand and Supply

The International Energy Agency (IEA) forecasts global oil demand to average 90.6 million barrels per day in 2013, up about 820,000 barrels per day from a year ago. This estimate is lower than previous IEA estimates of 2013 demand, a result of deterioration in the European economy, slower Chinese growth and sequestration in the U.S.

Global oil production rose 90,000 barrels per day in February over January, according to the most recent IEA data. The increase in February supply, which totaled 90.8 million barrels per day, was due to increased production

Chart 1
Crude Oil Prices Rise, Then Fall in First Quarter

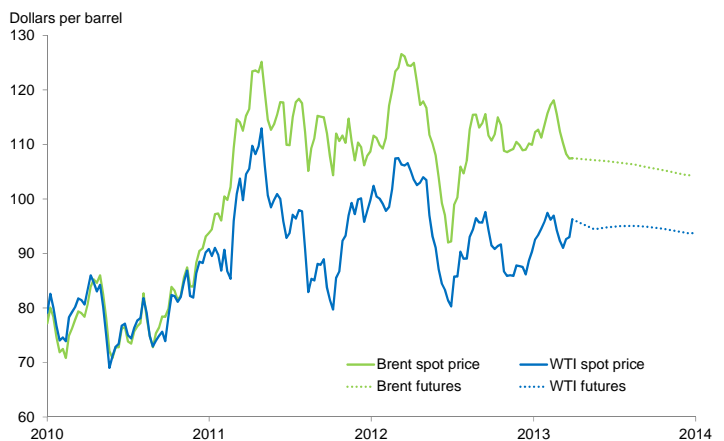
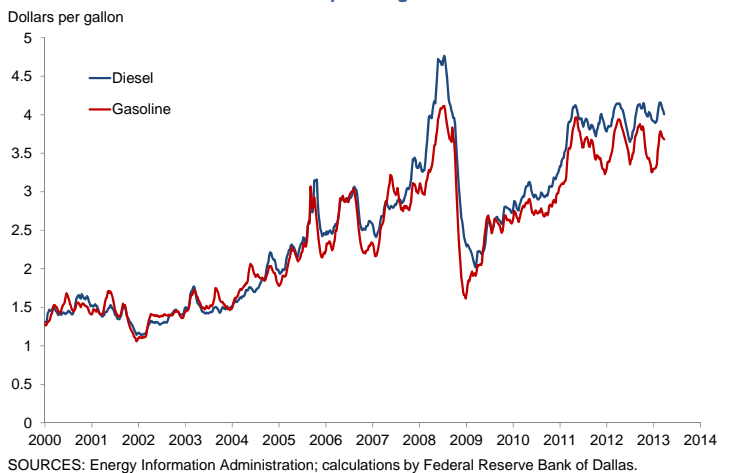


Chart 2
Gasoline and Diesel Prices Trend Up During First Quarter

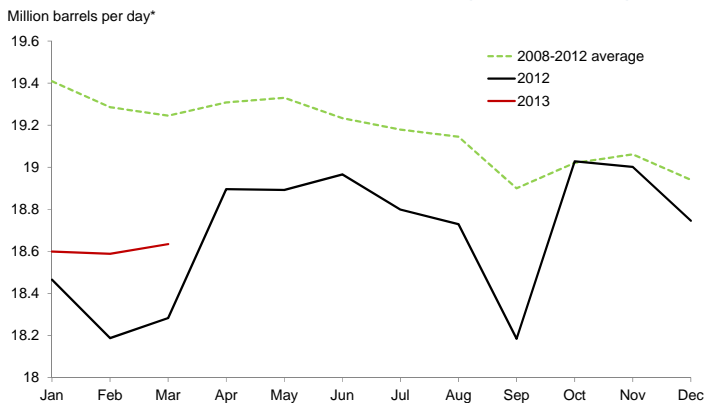


in the Organization of the Petroleum Exporting Countries (OPEC). Non-OPEC supply decreased slightly in February, but the IEA expects non-OPEC output to average 54.1 million barrels per day for the first quarter, 720,000 barrels per day higher than first quarter 2012. The IEA projects non-OPEC production in 2013 to rise by 1.1 million barrels per day to 54.5 million barrels per day mostly on higher output from North America, particularly Texas.

United States

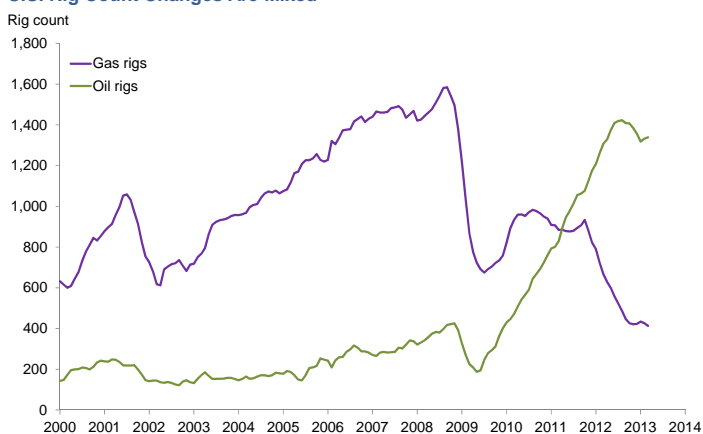
U.S. demand for oil products has trended down since late 2012; however, demand ticked up in March and remained

Chart 3
Demand for Oil Products Trends Down, Remains Higher Than Year-Ago Level



SOURCES: Energy Information Administration, calculations by Federal Reserve Bank of Dallas.

Chart 4
U.S. Rig Count Changes Are Mixed



SOURCE: Baker Hughes.

Chart 5
Natural Gas Price Increases in First Quarter



SOURCES: Wall Street Journal, Bloomberg.

above year-ago levels, averaging 18.6 million barrels per day in the first quarter (*Chart 3*). The EIA forecasts products consumption to increase by a meager 0.1 percent in 2013 over last year.

U.S. crude production averaged 7.09 million barrels per day in the first quarter, the highest since second quarter 1992. Texas produces the most crude oil of any state and contributed roughly 30 percent to U.S. production in 2012. The EIA projects U.S. crude production to average

7.31 million barrels per day in 2013. Higher crude production has led the EIA to anticipate production exceeding crude imports as early as the end of 2013. Production has not exceeded imports since February 1995.

The rig count (*Chart 4*) is a measure of U.S. energy activity, serving as an indicator of demand for products used in drilling, producing and processing oil and gas. The gas rig count decreased over the quarter; there were 434 rigs in January, falling to 413 in March. The oil rig count rose slightly in the first quarter, from 1,318 rigs in January to 1,339 in March.

Natural Gas

Natural gas prices were weak in the beginning of 2013, but edged up slightly in March (*Chart 5*). The Henry Hub natural gas spot price averaged \$3.77 per million British thermal units (MMBtu) in March and was \$1 higher in the first quarter than a year ago. The EIA forecasts the Henry Hub price to average \$3.41 per MMBtu in 2013.

Although low prices led to natural gas supply cutbacks, production still increased 5 percent in 2012. This increase was 2.5 percentage points less than the increase in 2011, however. Producers cut back on natural gas directed drilling, but there was plenty of associated gas flowing with oil production. Associated gas is found in oil wells and is either dissolved in the oil or becomes free gas. Dry gas production was flat to declining in the U.S. except in the Eagle Ford and Marcellus shales (*Chart 6*). Natural gas consumption was up 4.4 percent in 2012 as a result of the low prices.

—Amy Jordan and Mine Yücel

About the Authors

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

Chart 6
Dry Shale Gas Production Increases in Eagle Ford, Marcellus

