DALLASFED Economic Update

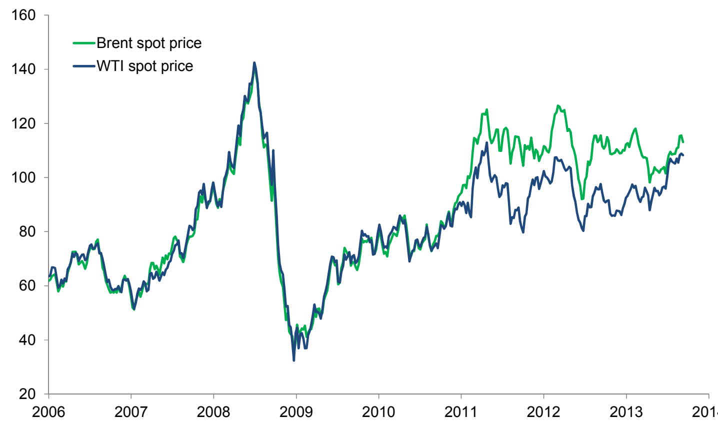
Energy

Geopolitical Uncertainty and Supply Disruptions Push Oil Prices Higher

Third Quarter 2013

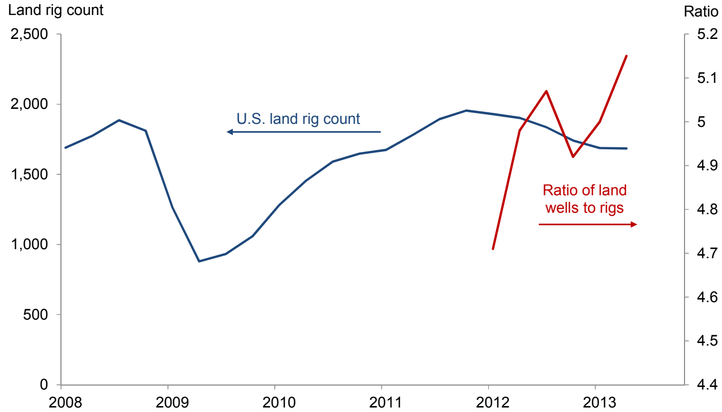
Crude oil prices continued increasing in the third quarter, pushed higher by concerns over stability in the Middle East as well as supply disruptions, particularly in Libya. Increases in the price of West Texas Intermediate (WTI)—the benchmark price of crude oil in the U.S.—earlier in the third quarter were mainly due to easing of the bottleneck at Cushing, Okla., which added to upward price pressure. Easing the bottleneck were the restart of the Ozark pipeline with its 215,000 barrels per day (b/d) capacity, the ramp-up of the Permian Express pipeline and the reversal of the Longhorn pipeline.[1] As global tensions abated slightly in mid-September, prices reversed their climb. The price of WTI averaged $108 per barrel for the week ending Sept. 13, and the price of Brent crude, which broadly reflects conditions in the global oil market, averaged $113 per barrel (*Chart 1*).

Chart 1
Oil Prices Rise for Most of Third Quarter



SOURCE: *Wall Street Journal*.

Chart 2
Rig Count Declines, Wells-to-Rigs Ratio Increases



NOTE: Baker Hughes began publishing well count data in August 2013, using quarterly data beginning in 2012.
SOURCE: Baker Hughes.

Retail gasoline sold in a 20 cent range over the quarter. High prices reflected the rise in crude oil prices early in the quarter and a pickup in demand because of the summer driving season, which runs from Memorial Day to Labor Day. Prices have been moving down since the beginning of September, with the U.S. retail gasoline price averaging $3.55 per gallon the third week in September. This price is 33 cents less than a year ago. The U.S. Energy Information Administration (EIA) expects gasoline to average $3.55 per gallon for the year, 8 cents less than in 2012. On-highway diesel sold for $3.97 per gallon in the third week of September, 16 cents less than a year ago. The EIA expects diesel prices to average $3.96 per gallon this year, similar to the 2012 average of $3.97.

International Supply and Demand

Global oil demand is estimated at 91.5 million b/d for the third quarter by the International Energy Agency (IEA). Warmer temperatures and increased air conditioning use boosted demand in July and August. Oil consumption growth in the Organization for Economic Cooperation and Development (OECD) countries and the emerging market economies continued to diverge this year, but the divergence has eased somewhat in the last few months. OECD demand declined less quickly, while non-OECD growth slowed slightly. Average demand for 2013 is forecast to be 90.9 million b/d by the IEA.

Demand for oil rose in eight of the top 10 global oil consumers through the first half of the year.[2] The largest surprise came from China, whose oil demand growth rose to a six-month high in June. However, currency depreciation in developing economies such as India, Indonesia, Malaysia, Peru, the Philippines and Thailand may curb their demand for oil.

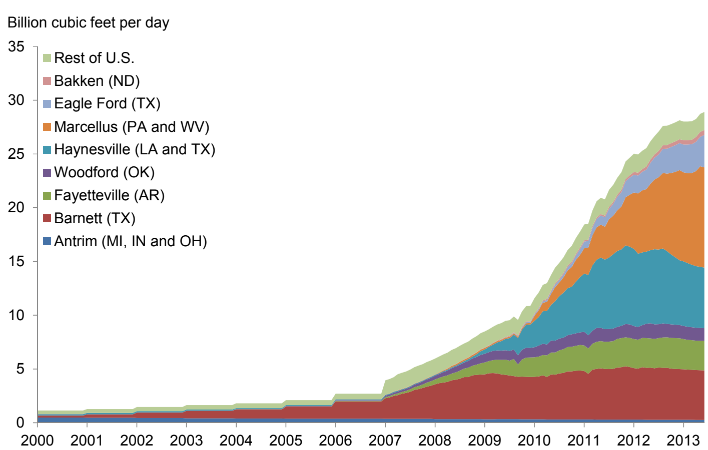
Chart 3
Crude Oil Inventories Continue to Decline

*Data have been seasonally adjusted.
SOURCES: Energy Information Administration; calculations by Federal Reserve Bank of Dallas.

Chart 4
Henry Hub Natural Gas Prices Remain Above Year-Ago Levels

SOURCE: *Wall Street Journal.*

Chart 5
Natural Gas Production Weakens Across Most Shales



SOURCE: Energy Information Administration.

Organization of the Petroleum Exporting Countries (OPEC) oil production was dominated by supply disruptions in July and August. Crude oil production outages from OPEC producers totaled 2.1 million b/d in August, according to the EIA, the highest level of disruption since they began tracking the data in 2009. OPEC supply disruptions are the result of labor disputes in Libya, continued U.S. sanctions on Iranian oil, infrastructure upgrades in Iraq and production problems in Nigeria and Venezuela. Increased production from Saudi Arabia, at a 32-year high in August according to the IEA, offset some of these losses.

The IEA projects non-OPEC supply to increase in the third quarter. Non-OPEC production gains come mostly from continued production growth in U.S. shale formations and Canadian oil sands.

U.S. Energy Indicators

The rig count has traditionally been a strong measure of U.S. energy activity, serving as an indicator of demand for products used in drilling, producing and processing oil and gas. However, as technological advances have made rigs more efficient, the rig count has become a less reliable indicator of energy activity, with production continuing to climb as the rig count holds steady or declines slightly. The U.S. well count may be a better indicator; Chart 2 illustrates that even as the total U.S. land rig count declined, the ratio of land wells to rigs increased.

U.S. crude oil production continued to increase during the third quarter, according to supply estimates from the EIA. Production reached 7.7 million b/d at the beginning of September. This is the highest weekly average since May 1989. The EIA expects production to average 7.5 million b/d in 2013.

Crude oil inventories continued falling during the third quarter (*Chart 3*). Inventories dropped 6 percent in July and a further 2 percent in August, according to the latest data from the EIA. Declining inventories signal increased demand. The EIA projects total liquids consumption, which includes gasoline and diesel, to increase 1 percent during the second half of 2013 from prior-year levels.

Natural Gas

Natural gas prices were lower in the third quarter than in the second but remained above year-ago levels (*Chart 4*). After rising to $3.71 per million British thermal units (MMBtu) in July, the Henry Hub natural gas price fell to $3.32 per MMBtu in August before increasing again to $3.62 per MMBtu in the second week in September. However, September is a "shoulder" month—when natural gas demand for cooling abates and demand for heating has not started—normally resulting in softer prices.

Low natural gas prices are prompting cutbacks in natural gas exploration, particularly in shale formations (*Chart 5*). Production is generally down in the Barnett, Haynesville and Fayetteville formations, but continues growing in the Eagle Ford, where gas is a byproduct of expanding oil extraction. Natural gas consumption in July and August was lower than year-ago levels, and the EIA forecasts the same for September, mainly because of decreased demand from electric power providers. However, demand for residential and commercial use is expected to increase later this year with colder winter temperatures.

—Amy Jordan and Mine Yücel

Notes

1. The Ozark pipeline runs from Cushing, Okla., to Wood River, Ill. The Permian Express pipeline, with 90,000 barrels per day capacity, runs from Wichita Falls, Texas, to Nederland, Texas. Since its reversal, the Longhorn pipeline transports crude oil from West Texas to Houston.
2. The top 10 oil consumers in order of consumption are the U.S., China, Japan, Russia, India, Saudi Arabia, Brazil, Germany, South Korea and Canada.

About the Authors

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