July 2019

Oil prices dipped from May to June. Drilling activity also softened, particularly for shallower wells. However, mining employment accelerated the past few months ahead of a surge in pipeline capacity and in spite of worsening company outlooks.

Oil and Natural Gas Prices

International benchmark Brent crude averaged $64 per barrel in June, down from $71 in May, as concerns over the global economy and rising U.S. production weighed on markets (Chart 1). West Texas Intermediate (WTI) crude priced in Cushing, Oklahoma, fell in tandem to $55, while WTI priced in Midland, Texas, slipped to $54 as the spread between the two regions narrowed.

The Waha natural gas spot price in West Texas managed to average just above zero at $0.29 in June. Permian gas co-produced with oil continues to suffer due to the large volume of production overwhelming takeaway and storage capacity.

Employment, Drilling and Production

Texas Support Activities Return to Growth

Job growth in support activities for mining—the sector most closely correlated with drilling activity—showed a marked acceleration over the three months ending in May, rising to a 3.7 percent annual rate (1,500 jobs) from a 9.7 percent decline over the three months ending in March (Chart 2). Oil and gas extraction jobs grew 3.5 percent (654 jobs) over that timeframe.
U.S. drilling activity has been steadily eroding in 2019. The rig count for New Mexico and Texas dropped 6.3 percent the past three months, and June marked the seventh consecutive month of declines in the region.

**Rigs Targeting Shallower Wells Outside of Permian Lead Declines**

The erosion in drilling activity across the U.S. so far this year has been mostly in shallower wells, targeting oil and gas deposits between 5,000 and 10,000 feet deep (**Chart 3**). This is particularly true for operations outside of the Permian where the number of rigs targeting that depth fell by 41—or nearly one-third. Permian declines have been concentrated among rigs targeting depths of 10,000 to 15,000 feet, which are down 13 percent from the start of the year.
Permian Takeaway Capacity

Takeaway capacity additions in the Permian such as the EPIC, Cactus II, Grey Oak and Jupiter pipelines are scheduled to surge in the second half of 2019 and into 2020 (Chart 4). With new liquids and natural gas transport capacity becoming available, local discounts on crude oil and natural gas relative to benchmarks Brent crude and Henry Hub may ease, potentially improving the wellhead prices received by many producers.

Company Outlooks

The 161 firms that participated in the June Dallas Fed Energy survey indicated that their outlooks had worsened (Chart 5). Oilfield services firms were particularly negative, with their outlook index value falling below zero for the second time since 2016. Outlooks and sentiment in the oil industry tend to correlate with oil prices. The dip in WTI–Midland over the second quarter likely contributed to a lower index. However, comments in the survey—as well as a coincident surge in uncertainty—suggest the prospects of an oversupply of crude, mounting concerns for the global economy, and ongoing challenges securing capital from lenders and investors are weighing on outlooks.
About Energy Indicators

Questions can be addressed to Jesse Thompson at jesse.thompson@dal.frb.org. Energy Indicators is released monthly and can be received by signing up for an email alert. For additional energy-related research, please visit the Dallas Fed's energy home page.