September 2017

In August, prices for West Texas Intermediate (WTI) crude oil rose slightly, while natural gas prices fell marginally. Total Texas oil and gas employment has risen for seven consecutive months. Texas rig counts recently plateaued after rising since the start of this year. U.S. liquefied natural gas (LNG) exports are projected to increase as new export facilities come online. U.S. natural gas exports to Mexico hit an all-time high in June.

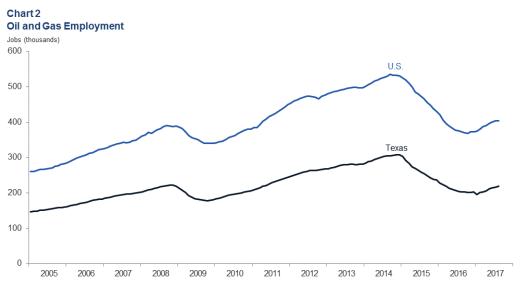
Oil and Natural Gas Prices

The average WTI spot price increased to \$48.04 per barrel in August from \$46.63 in July on further signs that the global oil market is rebalancing (*Chart 1*). Between July 28 and Aug. 25, U.S. commercial stocks of crude oil and petroleum products continued to decline as inventories fell by 13 million barrels. Additionally, production in Libya declined by 145,000 barrels per day (b/d) in August as violence at key oil fields disrupted output. Heavy flooding from Hurricane Harvey, which hit Texas in late August, reduced refinery utilization along the Gulf Coast. This caused some weakness in WTI prices late in the month as more production went into storage, driving the Brent—WTI spread to the highest level since July 2015. Henry Hub natural gas prices were \$2.87 per million British thermal units in August, compared with \$2.96 in July.



Texas Oil and Gas Employment

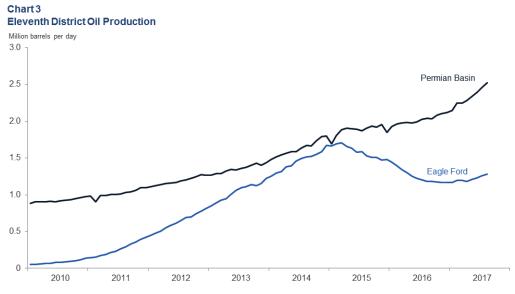
Texas oil and gas employment expanded in August by 1,700 jobs to roughly 218,500, driven by a gain of 2,200 jobs in support activities for mining (*Chart* 2). Meanwhile, payrolls in oil and gas extraction fell by 500 jobs. U.S. oil and gas employment stood at 403,600 in August, making Texas 54 percent of the U.S. total.



NOTES: Oil and gas employment is calculated by summing data series for oil and gas extraction and support activities for oil and gas operations for the U.S and summing oil and gas extraction and support activities for mining employment for Texas. All values are seasonally adjusted. SOURCES: Bureau of Labor Statistics; seasonal and other adjustments to Texas employment data by the Dallas Fed.

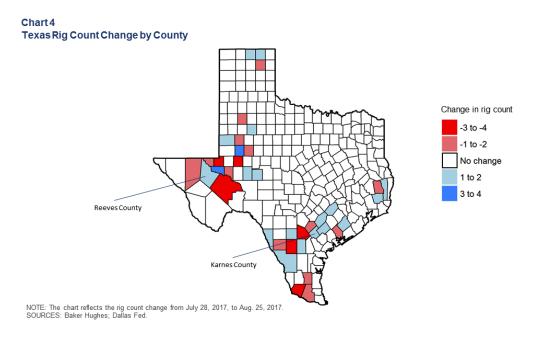
Eleventh District Oil Production

Permian Basin production rose in August by 62,300 b/d to 2.52 million, and Eagle Ford production was up by 17,000 b/d to 1.28 million (*Chart 3*). Eagle Ford production has been on an upward trend since it bottomed out in late 2016, although rig counts have been declining since reaching 86 on May 26. Operating rigs numbered 377 in the Permian Basin and 74 in the Eagle Ford at the end of August. Hurricane Harvey temporarily impacted production in the Eagle Ford and the Gulf of Mexico. Eagle Ford production for August may be revised downward once additional data are available.



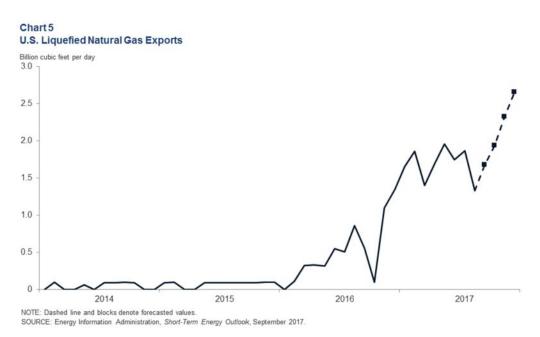
Texas Rig Count Change by County

There were 456 rigs operating in Texas as of the last week of August, down by six from the last week of July. Operators look to be moving rigs to more prolific counties within basins, such as Reeves County in the Permian Basin and Karnes County in the Eagle Ford (*Chart 4*). Rig counts in Texas recently peaked at 466 on July 14 and have since plateaued.



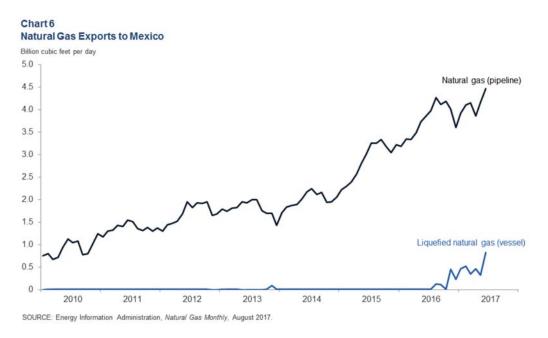
U.S. LNG Exports

U.S. LNG exports dropped to 1.3 billion cubic feet per day (bcf/d) in August from 1.9 bcf/d in July as Hurricane Harvey impeded tanker access to the Sabine Pass export terminal (*Chart 5*). Despite the drop in exports in August, the Energy Information Administration projects U.S. LNG exports will end the year at 2.7 bcf/d, significantly above the 2016 average of 0.5 bcf/d. Cheniere Energy loaded it first commissioning cargo in August for Train 4 of its Sabine Pass export facility, which is set to fully come online later in the second half of 2017. The next significant export facility projected to come online is Dominion Cove Point, scheduled for late 2017. U.S. LNG exports by vessel had reached 26 countries as of June 2017.



U.S. Natural Gas Exports to Mexico

According to the most recent data available, U.S. natural gas pipeline exports to Mexico increased to 4.5 bcf/d in June from 4.2 bcf/d in May (*Chart 6*). Additionally, U.S. LNG exports by vessel to Mexico rose to 0.8 bcf/d in June from 0.3 bcf/d in May. Mexico has been increasing gas imports from the U.S. to fuel its growing gas-fired power generation fleet, to offset a decline in domestic production and to take advantage of relatively cheap U.S. gas prices.



About Energy Indicators

Questions can be addressed to Kunal Patel at kunal.patel@dal.frb.org. *Energy Indicators* is released every third Thursday of the month 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.