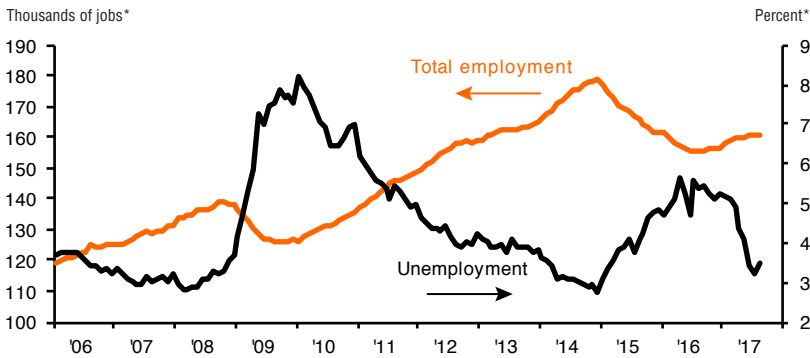


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## Summary

Permian Basin employment grew in August, and the unemployment rate ticked up. During September, estimated oil production and the rig count rose as did the average monthly price per barrel of West Texas Intermediate (WTI) crude oil. Housing activity remained robust in August with strong sales and prices. Recently released data show the combined gross domestic product (GDP) of Midland and Odessa fell in 2016.

### Employment Growth



\*Seasonally adjusted.

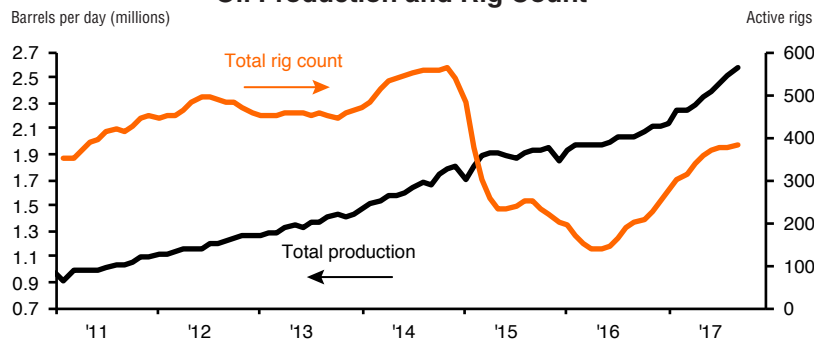
SOURCES: Bureau of Labor Statistics; Dallas Fed.

▶ Permian Basin employment continued to expand during August and is growing at a 4.4 percent year-to-date annualized rate. August employment was over 161,000, and both Midland and Odessa added jobs. A potential tailwind is the company outlook index from the [third-quarter Dallas Fed Energy Survey](#). The index rose from 20.3 in the second quarter to 28.2, while the uncertainty about the outlook decreased. This could be a hopeful sign for increased employment in the Permian.

▶ The unemployment rate in the Permian Basin remained below the U.S. and Texas rates but ticked up from 3.2 percent in July to 3.5 percent in August.

### Energy

#### Oil Production and Rig Count

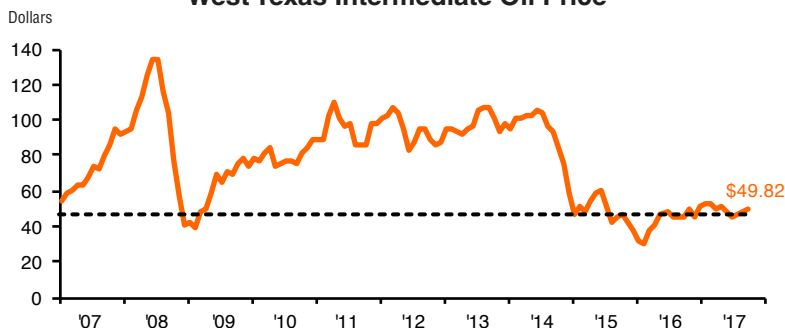


SOURCES: Energy Information Administration; Baker Hughes.

▶ September's rig count was 383—five rigs higher than August. During the first six months of the year, the average monthly rig count increase was 6.5 percent. Average monthly rig count growth in the second half of the year has been just 1.3 percent. Despite the slow growth, the Permian still contains a significant number of the rigs in Texas and the United States.

▶ While the rig count is moderating, oil production in the Permian Basin is still expanding at a relatively quick pace. Production is estimated to have grown to 2.6 million barrels per day during September—27 percent higher than the same time last year. Strong production readings in the Permian align with the third-quarter Dallas Fed Energy Survey oil production index, which showed a rise for the fourth straight quarter. The index grew from 10.2 in the second quarter to 19.3 in the third quarter.

#### West Texas Intermediate Oil Price



NOTE: The dashed line indicates the mean price needed to profitably drill a new well in the Permian Basin, according to the first quarter 2017 Dallas Fed Energy Survey.

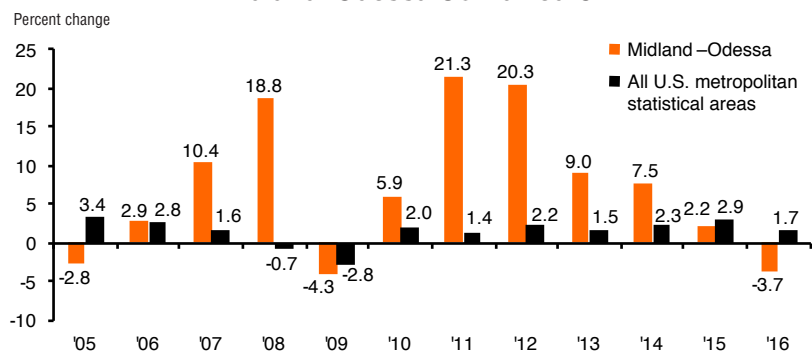
SOURCES: Energy Information Administration; Chicago Mercantile Exchange; Dallas Fed.

▶ The average price per barrel of WTI crude oil rose to \$49.82 in September from \$48.04 in August. This is \$3 above the \$46 Permian Basin breakeven price reported in the [first-quarter 2017 Dallas Fed Energy Survey](#). Average WTI price forecasts rose in the third-quarter Dallas Fed Energy Survey up to \$50.20 from a second-quarter average of \$48.79.

▶ The number of drilled but uncompleted wells (DUCs) in the U.S. minus the Permian rose to 4,729 and to 2,330 in the Permian in August.

## Gross Domestic Product

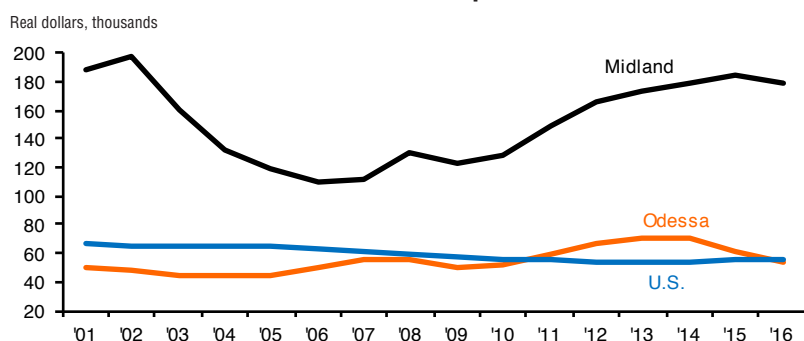
### Midland–Odessa Combined GDP



NOTE: The Midland–Odessa gross domestic product (GDP) is created by summing the total GDP of the Midland, Texas, MSA and the total GDP of the Odessa, Texas, MSA.

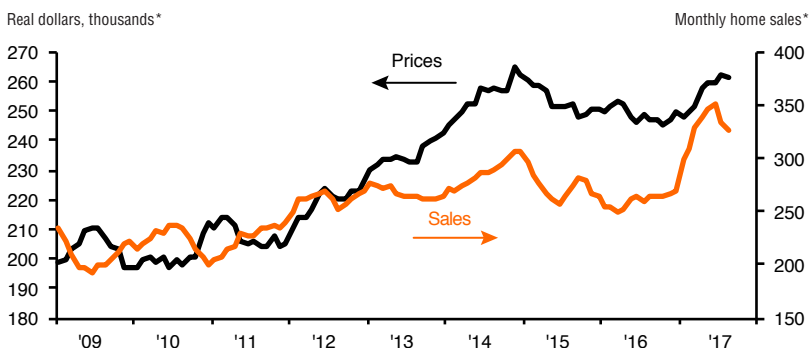
SOURCE: Bureau of Economic Analysis.

### GDP Per Capita



SOURCE: Bureau of Economic Analysis.

## Home Sales and Prices



\*Seasonally adjusted; six-month moving average.

SOURCE: The Real Estate Center at Texas A&M University.

▶ The bust in energy prices may have contributed to the 3.7 percent contraction of the combined GDP of Midland and Odessa between 2015 and 2016. This is in contrast with the U.S. metro area GDP, which rose 1.7 percent during that period. While both Midland's and Odessa's GDPs fell, the latter fell much more significantly. Both areas saw a large drop in transportation and warehousing, and Odessa's mining GDP fell by 24 percent. Midland's GDP in 2016 was about \$30 billion, while Odessa's was near \$8.5 billion.

▶ GDP per capita (GDP divided by the total population of each metropolitan statistical area) fell in 2016 for both Midland and Odessa. Though Midland's GDP per capita decreased a modest 1.4 percent, it remains more than \$120,000 higher than the GDP per capita of the U.S. as a whole. However, Odessa's GDP per capita fell 12 percent and is lower than the U.S. average by about \$1,000.

▶ Permian Basin housing indicators were strong in August as the average home price was \$261,000 and home sales totaled 327. Though both saw slight decreases, the two indicators still remain elevated. Home sales have increased by 23 percent since the same time last year, and home prices are up by almost 6 percent.

▶ The higher prices and sales continue to be matched by other housing indicators. Inventories continue to fall, and permits have risen an impressive 16 percent since August 2016.

NOTES: Data are for the Midland–Odessa metropolitan statistical area (Martin, Midland and Ector counties), except for energy data, which cover the 55 counties in West Texas and southern New Mexico that make up the Permian Basin region. Data may not match previously published numbers due to revisions.

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