Houston Economic Indicators DALLASFED

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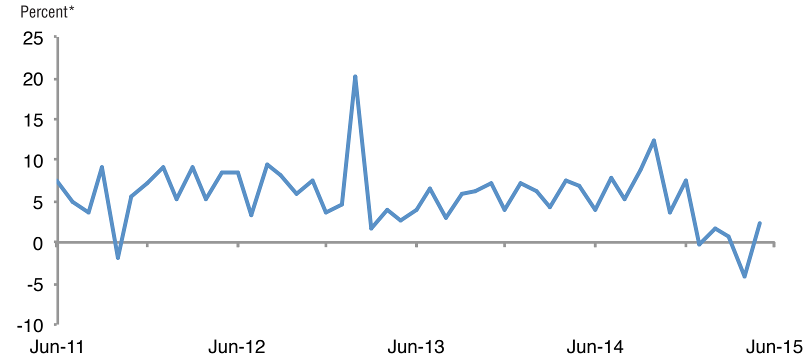
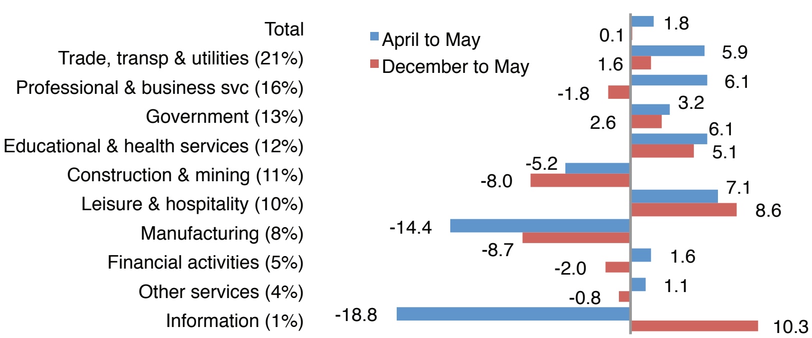
Houston Business-Cycle Index



*Annualized month-over-month growth rate rate in overall economic activity.

▶ After its sharpest contraction since 2009, the Houston Business Cycle Index returned to positive growth in May. The 2.5 percent annualized growth was the strongest reading of the year. Growth in the index was mostly due to a strong improvement in job growth in May. Oil and gas production industries continue to be a drag on the region, but refining, petrochemicals and service industries are managing to offset oil-producer woes. On balance, the Houston region outlook remains weak.

Employment Growth

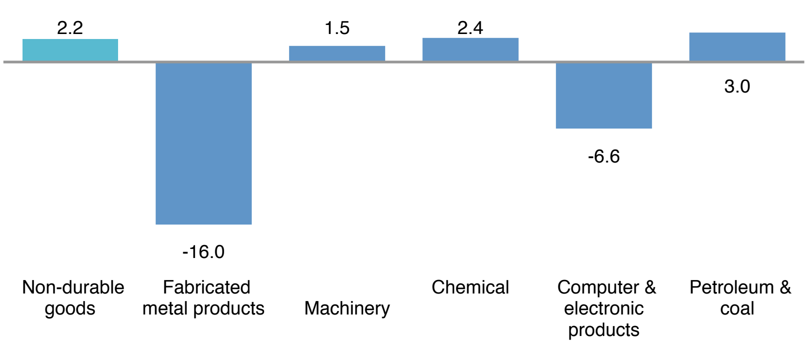


NOTES: Seasonally adjusted and annualized. Numbers in parentheses are shares of total Houston nonfarm employment and may not sum to 100 due to rounding.

▶ Total nonfarm employment rose an annualized 1.8 percent in May, pulling the year-to-date job growth totals into slightly positive territory. The improvement was tied primarily to service sectors, while goods-producing industries continued to decline. Retail, administrative, employment services and ambulatory health jobs were the primary subsectors underpinning the month-to-month growth in service industries. May declines in construction and mining and manufacturing were concentrated in sectors tied to the oil field. The information industry contracted very sharply but is highly volatile due to its small size.

▶ The Houston-area unemployment rate held at 4.2 percent in May. The labor force added 3,100 people in May, marking the end of six consecutive months of contraction when the labor force fell by 36,400—the largest such drop since May 2000. The unemployment rate was 4.2 percent in Texas and 5.5 percent in the U.S.

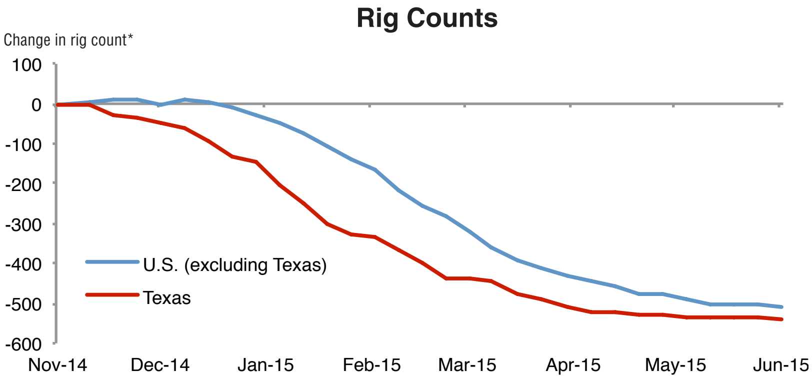
Manufacturing Employment



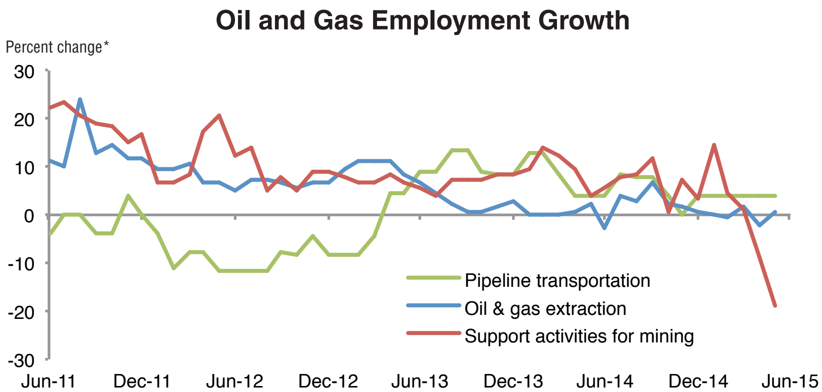
NOTES: Annualized and seasonally adjusted percent change from December 2014–May 2015. Sorted from largest to smallest sector.

▶ Manufacturing employment continued to lose ground in May in sectors tied to the oil field. Fabricated metals, one of the first sectors to respond to the decline in rig counts, has declined an annualized 16 percent this year. Machinery employment was propped up by firms outside the mining and construction industry. Chemical and petroleum and coal manufacturing (refineries) employment increased as substantial construction projects are underway amidst very heavy operating rates. All manufacturing categories have faced challenges stemming from the strong dollar this year.

Oil and Gas Extraction



*Change in the number of active rigs since last week of November 2014.

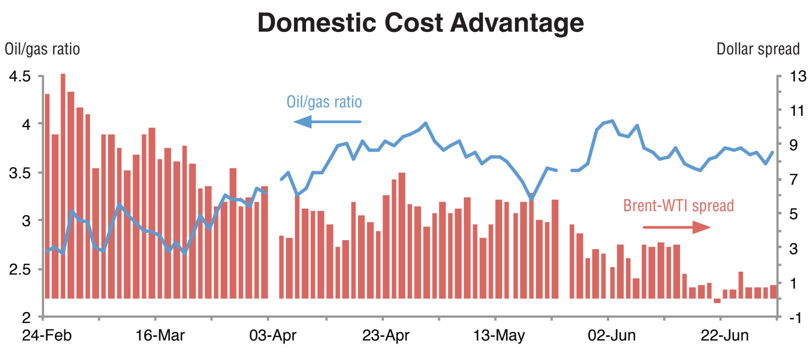


*Seasonally adjusted, annualized three-month growth rates.

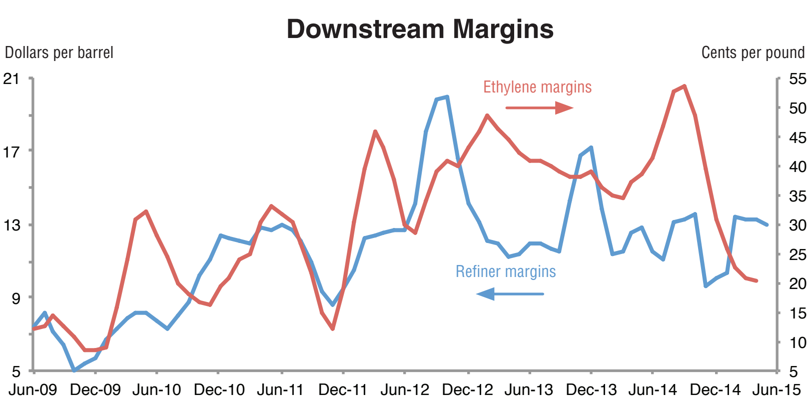
▶ Declines in the U.S. rig count that began in late November 2014 seem to have petered out. With the prolific Eagle Ford and most of the Permian Basin within its borders, the Texas rig count dropped by 540 rigs to 361, while the U.S rig count (excluding Texas) fell by 510 rigs to a total of 498. Few areas of the industry have been unscathed by the large drop in oil prices. The surge in firm bankruptcies and mergers and acquisitions that normally occurs after similar oil-price shocks and drilling declines has yet to materialize, but comments from industry contacts suggest that significant layoffs are in the past.

▶ Employment in support activities for mining (e.g., oilfield services contractors, geologic services), which is particularly sensitive to oil prices and rig counts, has been hit hard in the last few months. The sector fell at an annual rate of 19.1 percent from February to May. The bulk of that decline occurred in May when the category lost 1,700 jobs. Oil and gas extraction job numbers (e.g., drilling and production) are generally unchanged this year. Anecdotally, this resilience is tied to a desire to retain skilled workers and the continuing ability of many firms to raise money in capital markets. Growth in pipeline transportation has moderated since late 2014 but remains positive.

Refining and Petrochemicals



NOTE: Oil/gas is the ratio of West Texas Intermediate (WTI) crude and the barrel-of-oil-equivalent Henry Hub natural gas spot prices.



▶ Lower oil prices are generally good for refiners because demand for fuel rises as it becomes cheaper. When foreign oil is more expensive than domestic oil, it also represents a significant cost advantage to domestic refiners. The spread between the spot price of Brent and West Texas Intermediate has generally fallen since February, averaging $1.67 in June. This represents a significant erosion of U.S. refiners' cost advantage in the global market. Similarly, the ratio between the price of oil and natural gas is a proxy for the global competitiveness of domestic petrochemical companies (the higher the ratio, the larger the advantage). After rising as high as 9.1 in April 2012, the ratio held between 3 and 4 from March to June. Both measures continue to indicate a domestic cost advantage. Even so, the strong dollar has contributed substantially to a decline of 8.7 percent in the value of petrochemical products exported year to date relative to 2014 through the Houston-Galveston customs district.

▶ Margins for petrochemical firms have fallen much more than for refiners since oil prices peaked last summer. Refiner margins have been largely unscathed. Stronger margins for both in recent years have spurred significant investment in Houston and the Texas Gulf Coast, but according to industry contacts, many of the announced projects that are not yet in the construction pipeline have been imperiled in part due to the lower oil/gas price outlook. Construction in this sector is likely to remain very heavy at least until 2017, and that activity continues to be a buffer for the region against declines in the oil field.

SOURCES: **Business-cycle index:** Dallas Fed; **employment:** Bureau of Labor Statistics (BLS); **manufacturing employment:** Dallas Fed and BLS; **oil and gas extraction:** Baker Hughes, Dallas Fed and BLS; **refining and petrochemicals:** Energy Information Administration, *Wall Street Journal*, Pace Consulting and Muse, Stancil and Co.

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