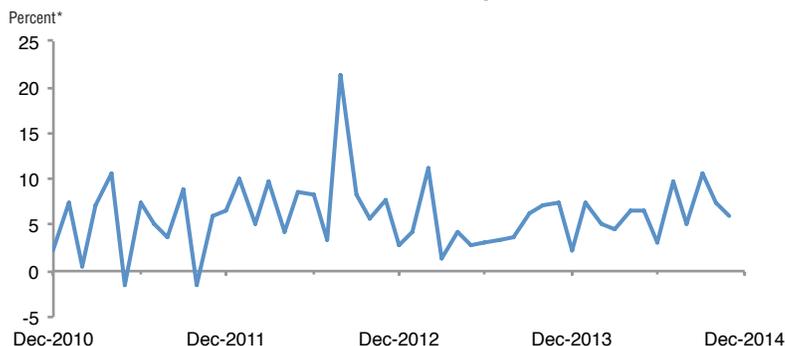


Economic Activity

Houston Business-Cycle Index

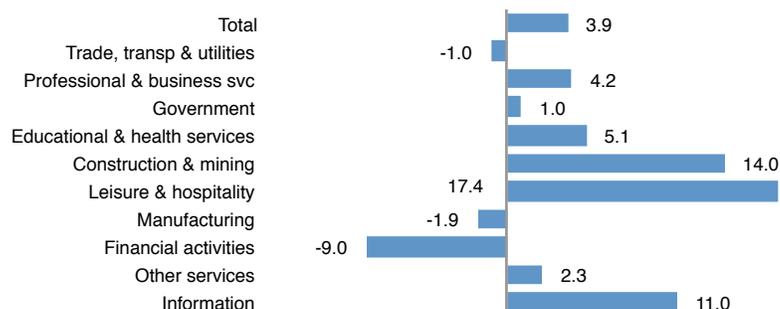


* Annualized month-over-month growth rate.

▶ The Houston Business-Cycle Index growth rate slowed to 6 percent in November from 7.4 percent in October. The oil and gas industry posted solid job gains in November, and refining and plastics continued to perform well. Lower oil prices and declines in drilling activity will likely take considerable steam out of the region's economic engine in coming months. While prospects for the Houston region are more uncertain, the outlook is for positive, though weaker, growth.

Employment

November Employment Growth



NOTE: Chart shows annualized monthly growth by employment supersector; data are seasonally adjusted and sorted by largest to smallest industry.

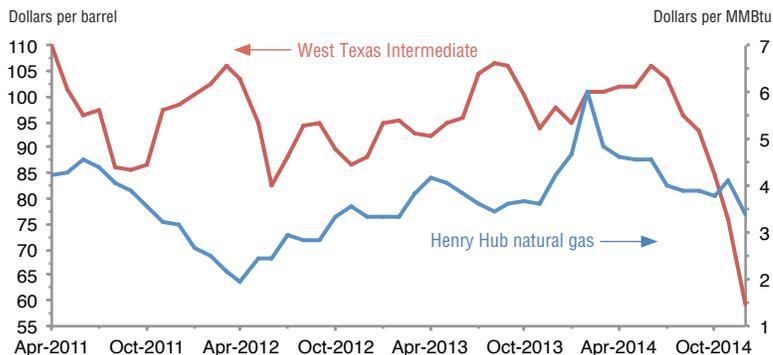
▶ Houston payroll employment grew at an annualized rate of 3.9 percent from October to November. Gains were particularly strong in leisure and hospitality and in construction and mining. Financial activities and manufacturing saw declines, as did trade, transportation and utilities. Annualized, Houston employment grew 4 percent in the first 11 months of 2014. Growth was faster in only six other years dating back to 1990.

▶ The Houston unemployment rate held steady for a second month at 4.8 percent in November. That compares with 4.9 percent for Texas and 5.8 percent for the U.S.

▶ The number of new job advertisements online in the Houston area fell 5.9 percent in December. The inventory of total job advertisements increased 1.6 percent, however, after rising a revised 4.8 percent in November. The services/production and transportation categories both saw declines in December. The remaining categories saw ad growth for the third consecutive month. Taken together, this would tend to imply slower employment growth over the next few months.

Energy Prices

Crude and Natural Gas Spot Prices



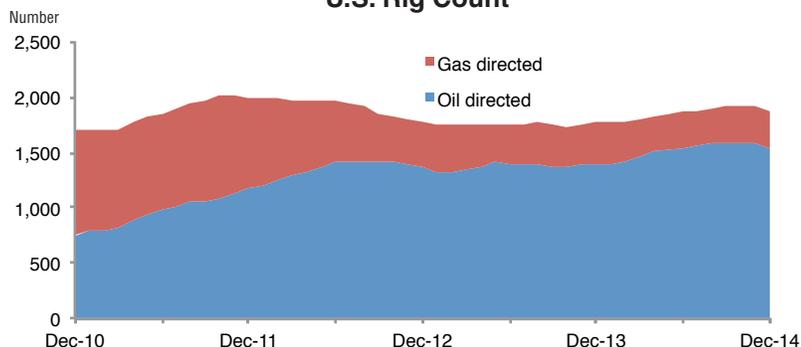
▶ The price of West Texas Intermediate (WTI) crude fell to \$59.28 in December from \$75.79 in November. It marked the sixth consecutive month of price declines since WTI's most recent peak in June 2014—a drop in value of nearly 55 percent. The average spread between WTI and Brent decreased 2.3 percent to \$3.02 in December, its lowest level since December 2010.

▶ Natural gas prices fell 71 cents from November to December to average \$3.40 per MMBtu, and natural gas liquids (NGL) spot prices followed suit. Per gallon, ethane (down 3 cents) and propane (down 32 cents) prices are nominally lower than any point since January 2001 and September 2003, respectively. Butane (down 25 cents) is at its lowest price since November 2008.

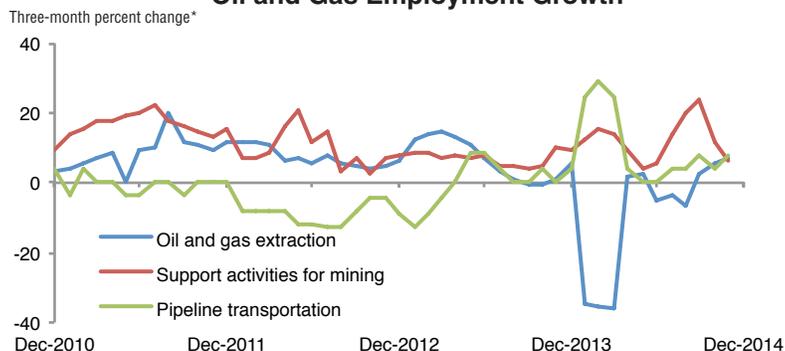
▶ The Gulf Coast retail price of a gallon of regular gasoline fell from \$2.69 in November to \$2.31 in December. On-highway diesel fell 23 cents to \$3.31. These are the lowest gasoline and diesel prices since May 2009 and December 2010, respectively.

Oil and Gas Extraction

U.S. Rig Count



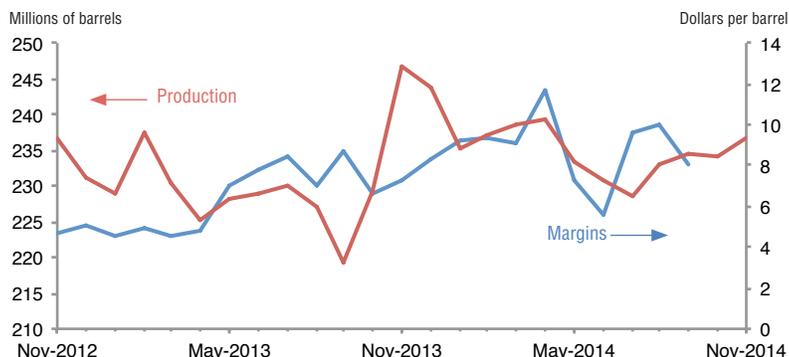
Oil and Gas Employment Growth



*Annualized and seasonally adjusted.

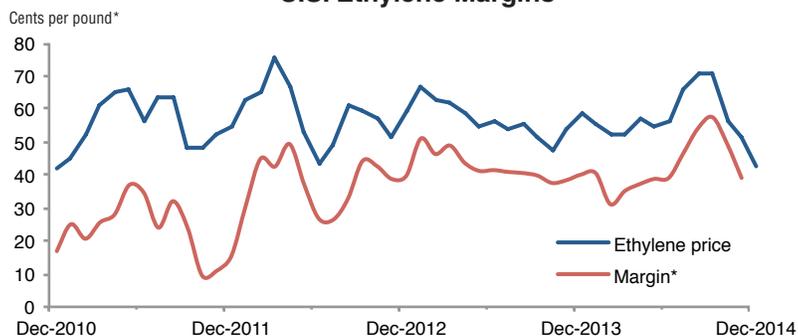
Refining and Petrochemicals

Gulf Coast Refineries



NOTE: Data are seasonally adjusted.

U.S. Ethylene Margins



*Based on Gulf Coast ethane feedstock prices.

▶ The U.S. rig count was flat from October to November at 1,925 as increases in gas drilling offset declines in oil drilling. The December average was 1,882. Oil-directed rigs in West Texas and North Dakota account for the bulk of the falloff in December, though California saw a steep decline in the final week of the month.

▶ The Texas rig count declined by 5 in November to 904. From the end of November through the week ending Dec. 26, the count fell by 49, driven by declines in vertical drilling in the Permian basin. The weekly rig count in the Eagle Ford dropped by 18 from the end of October to the end of December.

▶ Houston energy extraction and pipeline job growth picked up in the three months ending in November to 7.4 and 7.8 percent, respectively, while support activities for mining slowed to 6.6 percent. Energy-related employment expanded strongly in Houston in 2014, but industry product prices and fundamentals have added a great deal of uncertainty to the outlook for 2015. Lower price expectations are making many projects unfeasible, and expectations are for significant declines in drilling activity in early 2015.

▶ Gulf Coast refinery production decreased from August to September, the most recent data available. Refiner margins increased in November. Gulf Coast refinery operating rates climbed to 93.3 percent from 90.7 percent in October. It was the second-highest level since April 2014, which was the highest since the dataset began in June 2010.

▶ Gulf Coast gasoline inventories were slightly higher in December than November, but diesel inventories moved up nearly 20 percent to a 10-year high for mid-December. Gulf Coast petroleum product imports increased in December, led by blending components for gasoline, distillate fuels and other oils. U.S. exports of petroleum products were down, led by distillate fuels. Net exports of petroleum products remain near historically high levels.

▶ Ethylene plant margins fell in October and November and likely fell in December. Ethylene averaged 42.7 cents in December, down from 51.2 cents in November. The three-month U.S. and Gulf Coast chemical production average grew year over year in November. NGL prices softened to near historic lows, reducing costs for chemical firms.

▶ WTI was 2.8 times the energy equivalent price of natural gas in December, well under its peak but still 75 percent higher than pre-shale norms. This price ratio is a proxy for U.S. chemical manufacturers' competitiveness (higher is better). Combined with a strong dollar and softening global demand growth, petrochemical exports likely declined in November and December.

SOURCES: **Economic activity:** Federal Reserve Bank of Dallas; **employment:** Bureau of Labor Statistics and Conference Board; **energy prices:** Energy Information Agency and *Wall Street Journal*; **rig count:** Baker Hughes; **refining and petrochemicals:** American Chemistry Council, Census Bureau, Polymerupdate.com and Muse, Stancil and Co.

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