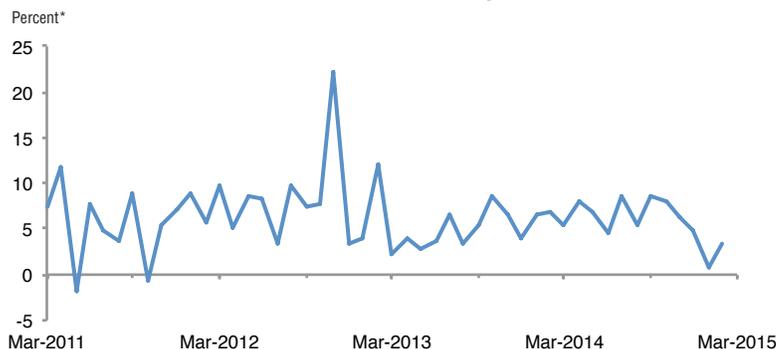


Economic Activity

Houston Business-Cycle Index

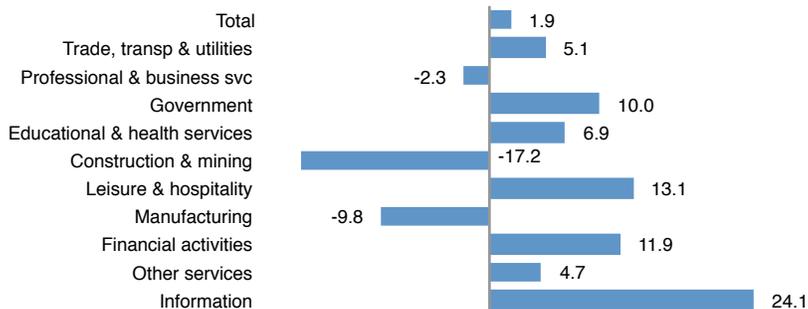


*Annualized month-over-month growth rate.

► After four consecutive months of deceleration, the Houston Business-Cycle Index accelerated to a rate of 3.3 percent growth in February, up from a revised 0.8 percent in January. This was in part due to healthy employment growth in the services and government sectors. Early signs that lower oil prices and declines in drilling activity will take the steam out of the region's economic engine are beginning to manifest, but industries not tied to the oil patch are doing well. Recent revisions to 2014 employment data and further declines in leading indicators forced a downward revision to the outlook for Houston and Texas in March, but the forecast continues to suggest positive job growth in 2015.

Employment

February Employment Growth



NOTES: Chart shows annualized monthly percentage growth by employment supersector. Data are seasonally adjusted and sorted by largest to smallest.

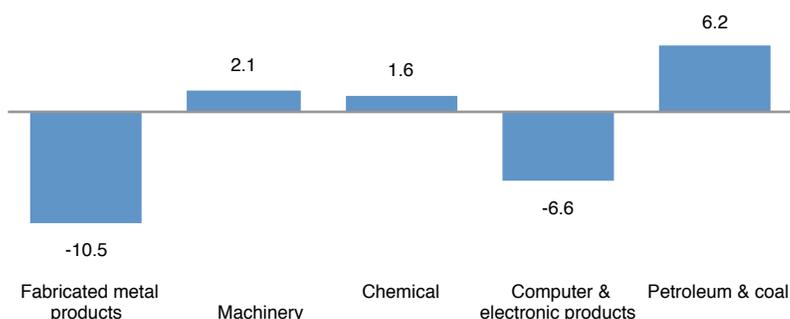
► Payroll employment grew at an annualized rate of 1.9 percent in February after January growth was revised down to -0.3 percent, the first negative month since October 2011. The strongest February gains were in information services, leisure and hospitality, and financial activities. Declines were concentrated in construction and mining and manufacturing. So far this year, manufacturing employment has declined at an annual pace of 10.8 percent.

► The area labor force contracted by 12,400 over the past four months. This is the first four-month decline since October 2013 and the largest since August 2000. This pulled the Houston unemployment rate down slightly to 4.2 percent in February. That compares with 4.3 percent for Texas and 5.5 percent for the U.S.

► The number of new job advertisements online in the Houston area fell 12.2 percent in March. The inventory of total job ads declined 6.6 percent. All occupational categories contributed to the decline in ads, but losses were steepest in the professional and related category. This suggests weak employment growth over the next few months.

Manufacturing Employment

Durable Goods

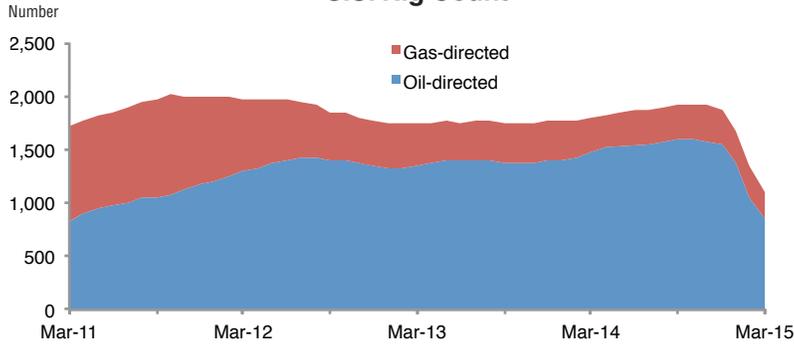


NOTES: December 2014–February 2015 percent change. Data show the annualized and seasonally adjusted change; sorted from largest to smaller industry.

► While the February decline in total manufacturing employment mentioned above was concentrated in fabricated metal products, there has been weakness across many sectors with ties to oil and gas extraction since December. This is consistent with comments in the Dallas Beige Book, Texas Manufacturing Outlook survey and the Houston Purchasing Managers Index. Chemical and petroleum and coal product manufacturing generally benefit from lower oil and gas prices but represent a small portion of total manufacturing jobs.

Oil and Gas Extraction

U.S. Rig Count

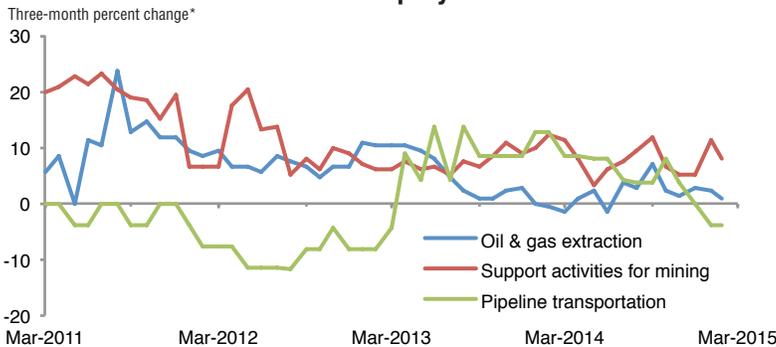


▶ The average monthly U.S. rig count declined by 239 rigs to 1,109 between February and March as low oil prices forced firms to curtail drilling; 80 percent of that decline accrued to oil-directed rigs. That brings the decline in U.S. rigs since October to 816. Weekly data indicate that the U.S. rig count was 1,048 by the end of March.

▶ From the end of February to the end of March, the Texas rig count fell to 462, a decline of 108. The weekly rig count in the Eagle Ford dropped from 157 to 137 over that same time frame. Since January, declines in drilling have been dominated by deeper horizontal rigs, though vertical rigs continue to decline.

▶ Houston job growth in mining decelerated over the three months ending in February. Extraction slowed to 0.7 percent, and support activities slowed to 8.2 percent. Pipeline transportation registered a three-month decline of 3.8 percent and a monthly decline of 4.2 percent in February, annualized. Lower oil prices have made many mining projects unfeasible, and further declines in mining employment are expected in the coming months.

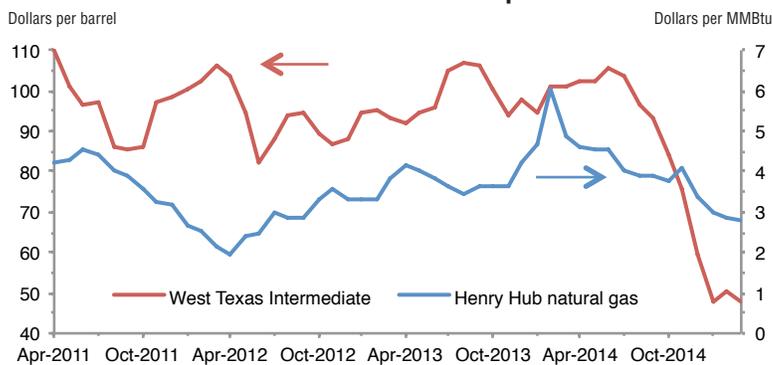
Oil and Gas Employment Growth



* Annualized and seasonally adjusted.

Refining and Petrochemicals

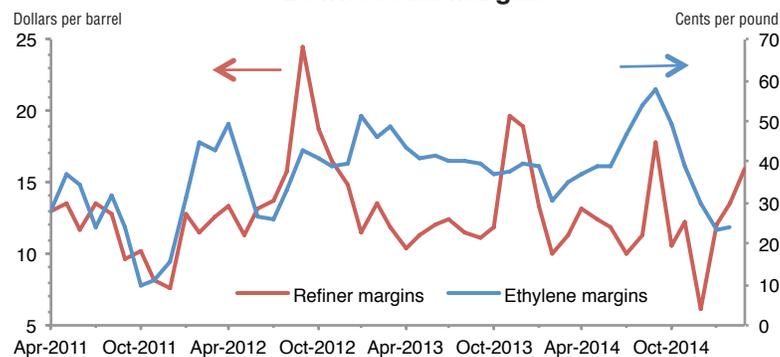
Crude and Natural Gas Spot Prices



▶ The price of West Texas Intermediate (WTI) crude fell back to January levels in March, averaging \$47.82, down from \$50.58 in February. The average spread between WTI and Brent increased 73 cents to \$8.02 in March, its highest level since February 2014.

▶ Natural gas prices fell 5 cents from February to March to average \$2.80 per million British thermal unit (MMBtu), and natural gas liquids spot prices followed suit. The Gulf Coast retail price of a gallon of regular gasoline fell 3 cents over the course of March and was \$2.19 the last week of the month. Retail diesel fell 12 cents to \$2.68 a gallon.

Downstream Margins



▶ WTI fell relative to the price of natural gas in February and March. This price ratio is a proxy for the competitiveness of U.S. chemical manufacturers (higher is better). Combined with a strong dollar and seasonal factors, petrochemical exports likely weakened in the first quarter. Net exports of petroleum products remained near historically high levels in first quarter 2015 but declined both year over year and quarter over quarter.

▶ Downstream margins moved in opposite directions the past two months. Gulf Coast refineries saw higher margins as the spread between the Brent and WTI crude prices broadened. Seasonally adjusted refinery operating rates have remained over 90 percent this year. Domestic petrochemical margins suffered as falling oil prices benefit foreign producers. Ethylene plant margins fell in January and February from fourth quarter 2014 as product prices fell by over 30 percent.

SOURCES: **Business-cycle index:** Federal Reserve Bank of Dallas; **employment:** Bureau of Labor Statistics, Conference Board and Federal Reserve Bank of Dallas; **energy prices:** U.S. Energy Information Administration and *Wall Street Journal*; **rig count:** Baker Hughes; **refining and petrochemicals:** American Chemistry Council, Pace Consultants Inc., Census Bureau, PolymerUpdate.com.

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