

Houston Economic Indicators

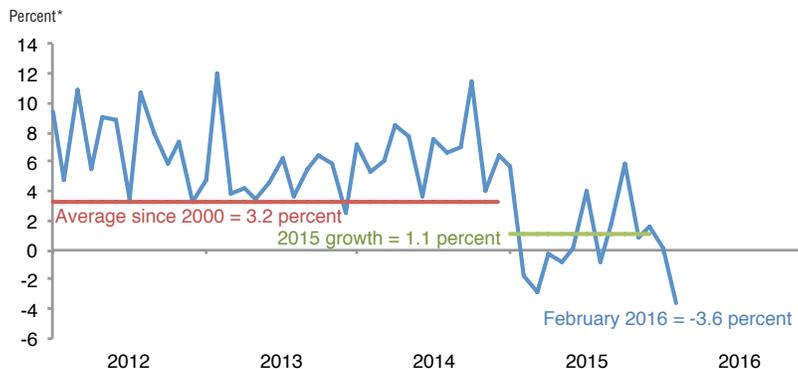
DALLAS FED

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Summary

Revised data suggest that Houston's economy was slightly stronger than originally estimated at the end of 2015. However, despite those revisions and a very modest increase in oil prices since February, mining-related industries continue to be a significant drag on Houston. Health, leisure and hospitality, and retail trade are softening the impact, but overall, the near-term outlook is tepid at best.

Business-Cycle Index

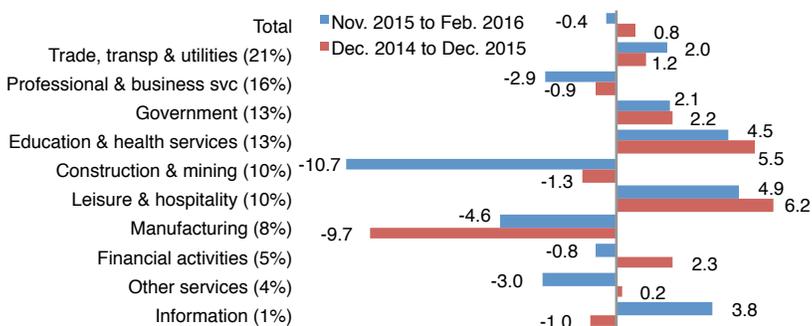


* Annualized month-over-month growth rate.

SOURCE: Dallas Fed.

▶ The **Houston Business-Cycle Index** growth rate fell to an annualized -3.6 percent in February, marking the largest one-month decline in the index since November 2009. The sharp drop was driven primarily by job losses. However, the index was stronger over the winter than initially estimated. December growth was revised up a second time to 1.6 percent, and January was revised up to 0.2 percent.

Employment Growth



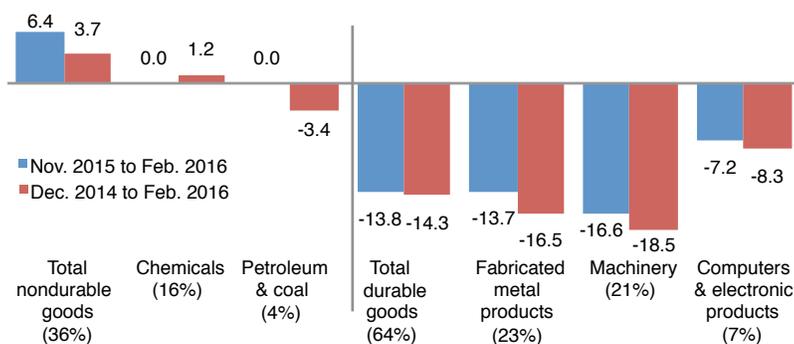
NOTES: Data show seasonally adjusted and annualized percentage growth by industry supersector. Numbers in parentheses represent share of total employment and may not sum to 100 due to rounding.

SOURCES: Bureau of Labor Statistics; adjustments by the Dallas Fed.

▶ Total nonfarm employment in **Houston** contracted an annualized 0.4 percent over the three months ending in February. Construction and mining (-2,578 and -4,248 jobs, respectively), manufacturing (-2,800) and professional and business services (-3,400) led decliners. Job growth over that time came primarily from leisure and hospitality (3,700), education and health services (4,100) and trade, transportation and utilities (3,000).

▶ Houston's unemployment rate held at 4.7 in February. It has been hovering around 4.8 since October. Over that time, Houston's labor force posted the strongest growth it had seen since late 2014. The unemployment rate was 4.9 percent in the U.S. and 4.4 percent in Texas in February.

Manufacturing Employment



NOTE: Growth rates are seasonally adjusted and annualized. Numbers in parentheses are shares of total manufacturing employment.

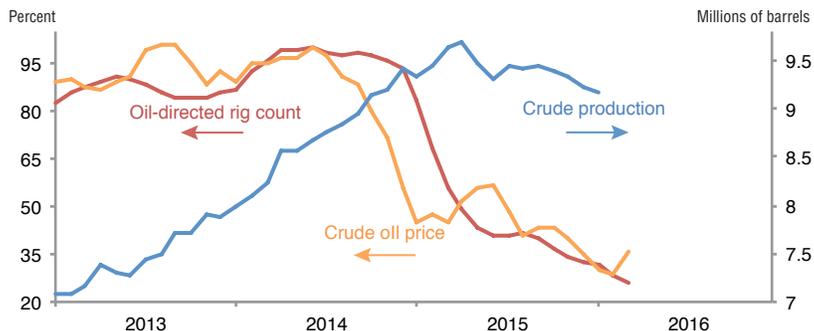
SOURCES: Bureau of Labor Statistics; adjustments by the Dallas Fed.

▶ Manufacturing continued hemorrhaging jobs in the three months ending in February. Losses in machinery (-2,200 jobs) and fabricated metals (-2,000) were particularly pronounced. Nondurable goods—including chemicals—added 1,300 jobs.

▶ Durable goods manufacturing has lost 29,800 jobs since drilling activity collapsed in December 2014.

Oil and Gas

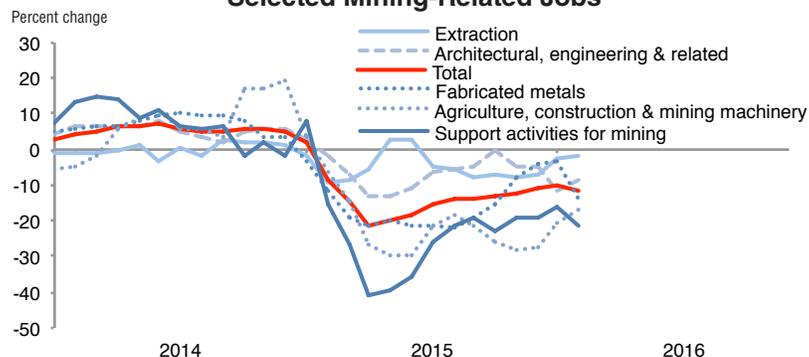
Rig Counts and Production



NOTES: Rig count is seasonally adjusted. Rig count and nominal oil price are indexed to June 2014.

SOURCE: Energy Information Administration.

Selected Mining-Related Jobs

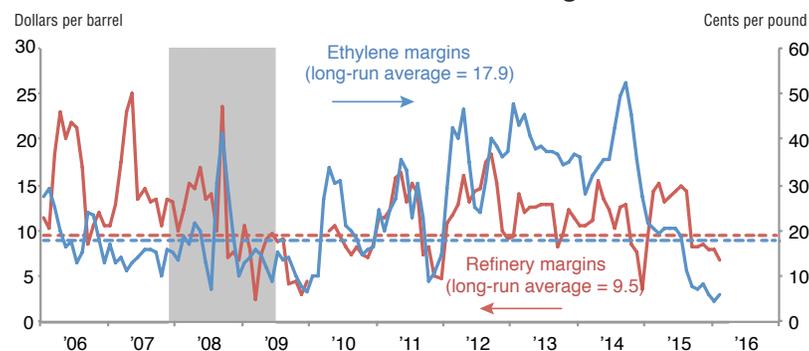


NOTE: Data are three-month annualized percent changes.

SOURCES: Bureau of Labor Statistics; seasonal and other adjustments by the Dallas Fed

Refining and Petrochemicals

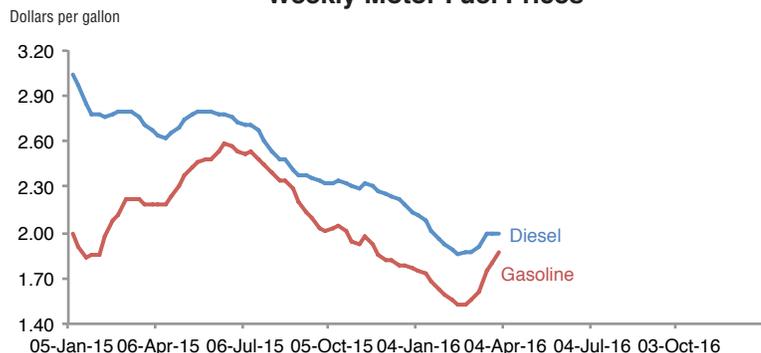
Gulf Coast Downstream Margins



NOTES: Dashed lines depict long-run averages. Shaded area represents U.S. recession.

SOURCES: Pace Consulting; Muse, Stancil & Co.; National Bureau of Economic Research.

Weekly Motor Fuel Prices



SOURCE: Energy Information Administration.

▶ U.S. crude production was 469,000 barrels per day lower in January (the most recent estimate) than at its March 2015 peak. Although inventories remain robust, falling production may have helped oil prices rise about \$10 a barrel from lows near \$26 in January and February, to \$38 at the end of March.

▶ The U.S. rig count continued its long decline in March, reaching a historic low of 450 rigs in the last week of the month.

▶ Mining-related job losses in Houston expanded in the three months ending in February as oil prices dipped below \$30. Total core energy jobs (extraction, support, selected manufacturing and selected professional services) fell an annualized 11.7 percent (-7,800 jobs) from November 2015 to February 2016. Support activities for mining led decliners, falling an annualized 21.2 percent (-2,400).

▶ Since mining-related jobs peaked in December 2014, the group has lost 48,800 jobs—a drop of 16.5 percent—mostly from support activities for mining and selected manufacturing sectors.

▶ Real refining and petrochemical cash margins have mostly been above their longer-run averages since the Great Recession. Refinery margins fell to \$6.8 per barrel in February—below the long-run average of \$9.5. However, weekly data since February suggest that margins have improved.

▶ Margins for ethylene—a key petrochemical—have fallen further below their average of 17.9 cents to 6.3 cents. Plunging oil prices have resulted in lower costs for foreign competitors; Gulf Coast petrochemical costs are tied to natural gas prices, which haven't fallen as much. The **strong dollar** has also impacted the industry's profitability.

▶ Capacity utilization remains high at both refineries and chemical plants despite planned shutdowns for seasonal maintenance.

▶ Gulf Coast retail prices for motor fuels have been rising in the weeks since mid-February. Gasoline prices sank in late February to \$1.56 per gallon but rose to \$1.86 at the end of March. On-highway diesel fell in mid-February to \$1.86 but rose to just over \$2 at the end of March.

NOTE: Data may not match previously published numbers due to revisions.

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