# Texas Economy Starts 2018 Firing on All Cylinders

By Keith R. Phillips and Christopher Slijk

**ABSTRACT:** Aided by the oil and gas sector's recovery, the Texas economy rebounded in 2017 and is poised to expand at a faster pace in 2018. However, tight labor markets, disruptions to trade, and potential oil price declines pose risks to the outlook.

The Texas economy headed into 2018 firing on all cylinders for the first time since 2014, with broad-based economic growth across most regions and industries. Leading economic indicators and reports from Federal Reserve Bank of Dallas business contacts in fourth quarter 2017 and the beginning of 2018 suggest that the positive momentum will carry forward this year.

The Dallas Fed Texas forecasting model predicts that employment will grow between 2.9 and 3.9 percent in 2018 following a 2.1 percent expansion in 2017. The expectation for the jobs outlook is somewhat restrained relative to previous periods of strong expansion because labor markets are unusually tight in both Texas and the nation.

The Texas unemployment rate reached a historical low of 3.9 percent in October after declining most of the year. Respondents to Dallas Fed business outlook surveys in the fourth quarter and beginning of 2018 noted difficulty in finding workers and reported increased wage pressures.

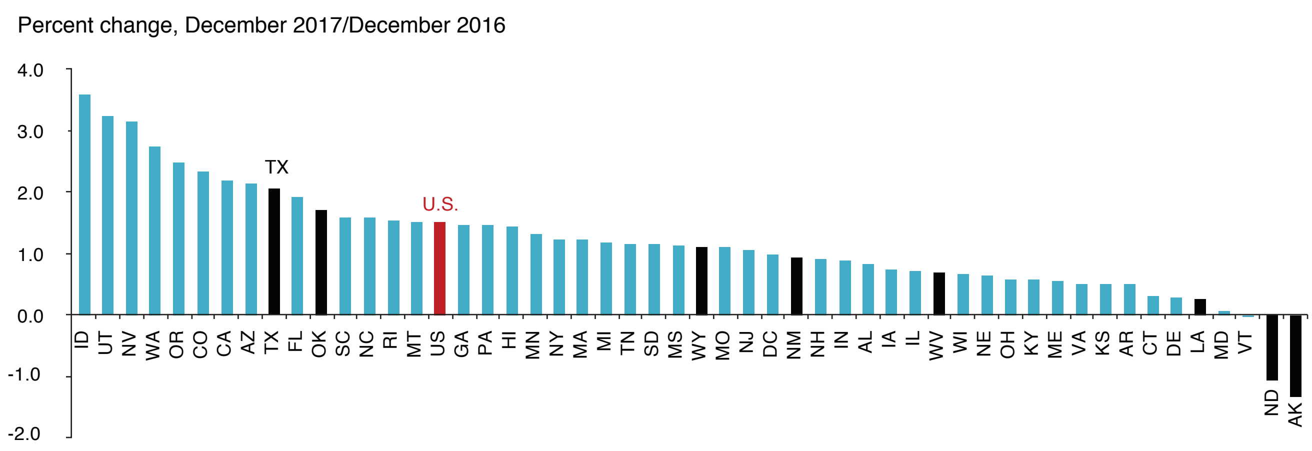
The Texas economy accelerated in 2017, primarily due to rebounding energy and manufacturing sectors, which overcame a powerful blow dealt by Hurricane Harvey in late August. Steadily rising oil prices propelled the energy sector and boosted related equipment manufacturing.

During much of 2017, the state benefited from a broad acceleration in the world economy and a weakening dollar. While the hurricane inflicted big property losses on homeowners and businesses along much of the Texas Gulf Coast, its impact on job and output growth was temporary.

## Texas Races Ahead

Texas' 2.1 percent employment growth was at the upper end of the 1.5–2.5 percent range forecast in *Southwest Economy* last year.[1] It was significantly

**CHART 1** Texas Pulls Ahead of U.S., Other Energy States in Job Growth




NOTE: Black bars represent significant energy-producing states.
SOURCES: Bureau of Labor Statistics; Texas Workforce Commission; adjustments by the Federal Reserve Bank of Dallas.

above the 1.2 percent rate in 2016 and above the state's long-term trend of 2.0 percent.

Renewed job growth exceeded the national average last year, ranking Texas as ninth-strongest among the states (*Chart 1*). The latest ranking is comparable to 2014, before energy prices tumbled. With the energy decline, Texas job growth slipped to 36th among the states in 2015 and 18th in 2016. Nevertheless, Texas fared (and continues to fare) much better than other energy-intensive states such as North Dakota and Louisiana, which fell to near the bottom of the state rankings.

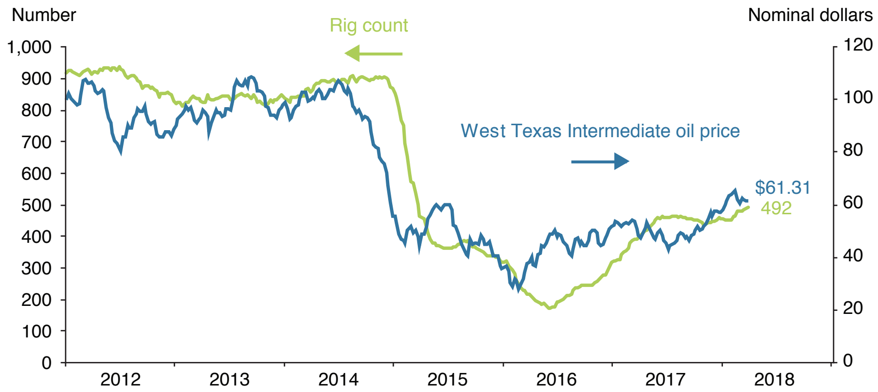
The Texas Business-Cycle Index, a composite indicator of economic activity, rebounded last year to 4.3 percent, reflecting a pace of growth well above the index's historical average. It was propelled by the pickup in job activity, the decline in the unemployment rate and an acceleration in state gross domestic product growth in the first three quarters of 2017. For the year, the index turned in the strongest year-over-year performance since August 2015.

## Leading the Rebound

Oil and gas activity picked up in mid-2016, after West Texas Intermediate prices steadied at around $45 per barrel. Activity accelerated as prices climbed in mid-2017, reaching into the mid-$60 range in February 2018 (*Chart 2*). The rig count rose through the first half of last year, attaining a two-year high of 466 in July. Employment followed about six months later, rising at an annualized 12.2 percent rate through December (25,500 jobs) after bottoming out in November 2016.

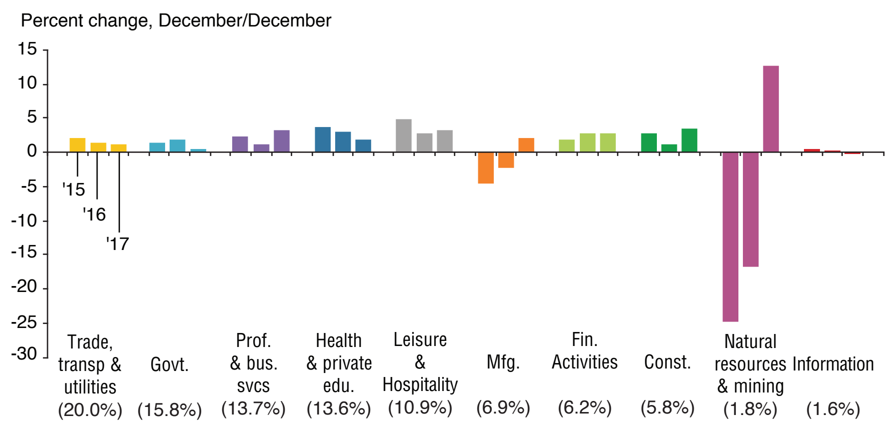
State manufacturing activity accelerated throughout the year, with the Dallas Fed's Texas Manufacturing Outlook Survey showing the fastest rise in production growth since the mid-2000s. Employment in sectors linked to oil and gas production, such as fabricated metals and mining machinery, grew 7.0 percent last year—more than three times the rate of overall job growth. Such work makes up approximately 17 percent of the state's manufacturing employment.

**CHART 2** Oil Price and Texas Rig Count Pick Up Through 2017




NOTE: Data are weekly; last data point is the week of March 16.
SOURCES: *Oil and Gas Journal;* Baker Hughes.

**CHART 3** Professional and Business Services Lifts Service Sector in 2017




NOTE: Figures in parentheses represent share of total nonfarm employment as of December 2017.
SOURCES: Bureau of Labor Statistics; adjustments by the Federal Reserve Bank of Dallas.

Resurgent state exports also provided a boost. Texas exported goods worth more than $250 billion last year, far more than any other state. Much of the state's manufactured output, such as computer and electronic products, refined petroleum products and transportation equipment, is sent abroad.

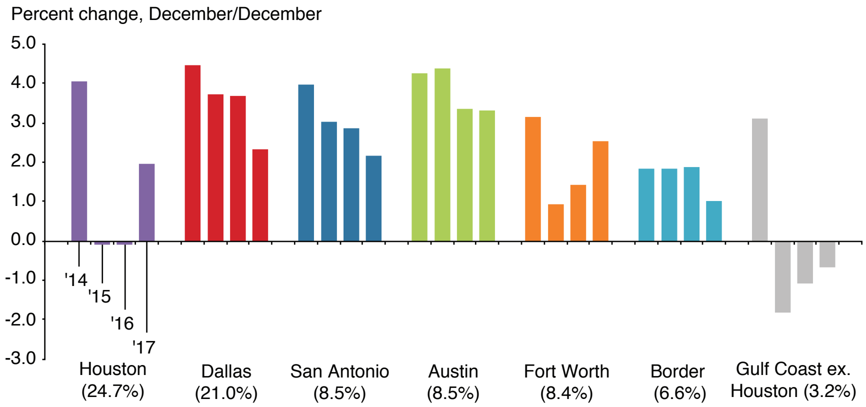
Before last year, export activity faced challenges. The Texas value of the dollar—the dollar's value weighted by exchange rates with the state's largest trading partners—appreciated over 27 percent from mid-2014 lows to early 2017. This made Texas exports more expensive and, thus, less competitive internationally, pressuring manufacturers.

The trend reversed with a notable dollar weakening from January to September 2017. Although the dollar rose in the final quarter, overall it was down 8.6 percent for the year. A general strengthening of the world economy also led to greater demand for U.S. goods abroad. As a result, state exports rose sharply. The real value of goods shipped internationally from Texas increased 10.8 percent from 2016 to 2017.

Meanwhile, the state's service sector grew steadily, largely unaffected in

CHART 4

Major Texas Metros See Job Growth in 2017




NOTES: Figures in parentheses represent share of total state employment as of December 2017. Border includes the El Paso, Laredo, McAllen and Brownsville metropolitan statistical areas (MSAs). Gulf Coast includes the Beaumont–Port Arthur, Victoria and Corpus Christi MSAs.

SOURCES: Bureau of Labor Statistics; Texas Workforce Commission; Federal Reserve Bank of Dallas.

2015 and 2016 by declines in oil and gas and manufacturing. Professional and business services experienced a strong uptick in hiring, particularly in scientific and technical services (*Chart 3*). Leisure and hospitality growth picked up slightly by year-end following the post-hurricane collapse as evacuees sought temporary shelter in hotels.

Job growth in trade, transportation and utilities decelerated slightly. This was largely attributable to retail employment, which makes up more than half of jobs in the sector and which grew just 0.6 percent last year.[2] Health care also slowed, driven by less-robust growth in residential care and social assistance.

## Energy Regions Resurgent

Employment grew in all major metros in 2017, largely following the lead set by the state's industries (*Chart 4*). While Hurricane Harvey disrupted middle and upper Gulf Coast metros, it did little to stall energy sector-led momentum.

Houston, the state's largest metro area, added jobs at a 1.9 percent annual rate during 2017. Professional and business services employment and financial activities—particularly real estate and rental and leasing services following the hurricane—significantly boosted total employment. Houston saw only a slight increase in mining jobs in 2017, though they made up just 3 percent of area employment. Most oil and gas job growth was concentrated in West Texas.

Meanwhile, the Interstate 35 corridor—the Dallas–Fort Worth, Austin and San Antonio metros—remained the primary engine of job creation in the state, although less so than in the previous two years. Combined, the metros added more than half of the 256,000 net new jobs created in Texas in 2017. Labor market tightness in the three areas constrained expansion as unemployment rates slid to prerecession averages or lower.

The growth rate in Dallas, the financial services center of Texas, slowed last year to 2.3 percent after a four-year run that exceeded 3 percent. Dallas reflects the U.S. economy to a greater degree than most other regions in Texas and benefited less from the state rebound in oil and gas. The region's leisure and hospitality and health care industries were the largest contributors to growth, though less than in prior years. Employment in Fort Worth, with its large manufacturing base, moderately expanded as that sector recovered statewide.

Austin, the state's high-tech hub, led growth among Texas' large metros. Hiring in scientific and technical services accelerated to 6.1 percent from 4.7 percent in 2016; the area's low average unemployment rate of 3.1 percent likely constrained growth in these high-skill positions. Leisure and hospitality employment sharply rose in the second half, likely reflecting hurricane-related temporary relocations.

San Antonio, with its significant industry concentration of tourism, health care and military, expanded at a fast rate in 2017. Here, too, post-hurricane activity supported hiring in the construction and accommodation sectors. The leisure and hospitality industry added jobs well above its long-term average of 3.3 percent. However, hiring in government and health care slowed compared with the past several years.

## Accelerating Growth in 2018

Texas began 2018 with strong momentum. Various forward-looking indicators in the Texas Manufacturing Outlook Survey reached levels not seen in more than a decade. February's three-month-moving-average measure of how companies viewed their outlook was the strongest since March 2006. The unfilled orders index, which peaked in December 2017, attained its second-strongest reading since November 2005. Firms also reported increased capital expenditures, with that index's three-month average the highest since March 2006.

Respondents to February's Texas Service Sector Outlook Survey were also optimistic, with the outlook and expected hiring indexes near their highest levels since late 2014, just before the energy slump. The Dallas Fed Beige Book, an anecdotal summary of Eleventh District economic activity, indicated robust expansion in January, with an improving business outlook following passage of revisions to federal tax law. "Numerous contacts were optimistic that tax reform would provide a tailwind to business growth," the Beige Book noted.

The first quarter 2018 Dallas Fed Energy Survey also reflected strength, with 51 percent of firms reporting an improved outlook versus 8 percent indicating deteriorating prospects. The capital expenditures index remained strong and has been positive for the past seven quarters, indicating expansion. Labor market indexes continue to point to rising employment and employee hours. Firms reported an expectation for year-end oil prices of $63 per barrel, up from $59 in the previous survey.

The Texas Leading Index, a statistic that summarizes eight economic indicators, suggests an upbeat outlook, with most components supportive over the three months ended in February. The national economy, as seen in the U.S. leading index, will likely buttress the Texas economy.

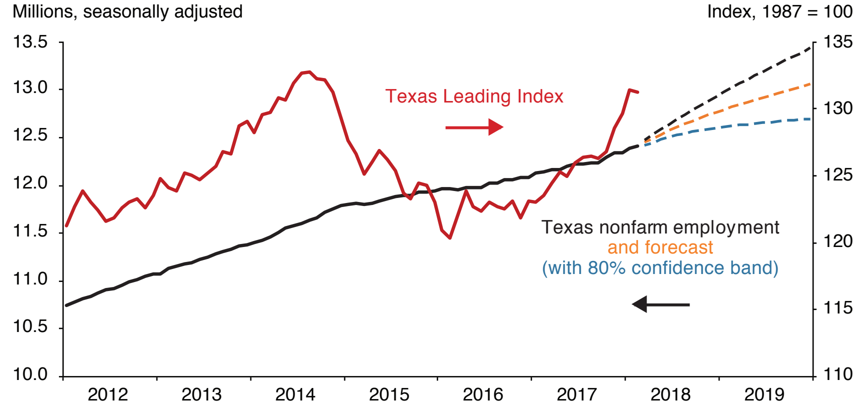
The energy components—real (inflation-adjusted) oil prices and well permits—both rose. Stock prices of Texas-based companies increased, suggesting continued corporate earnings growth. Labor market indicators were mixed, with average weekly hours worked in manufacturing up, but help-wanted advertising down slightly. Initial claims for unemployment insurance decreased from December to February. The Texas value of the dollar fell during the period.

Despite soft job growth in December, the annualized rate of expansion from August (just before Hurricane Harvey) to December was a healthy 2.8 percent. Because the storm's effects on job growth were significant but temporary, the four-month period provides a balanced view. January's 4.0 percent pace of growth further supports a return to above-trend growth.

While international and national demand for Texas products and services will likely strengthen this year, tight labor markets in the state and nation will suppress job growth.

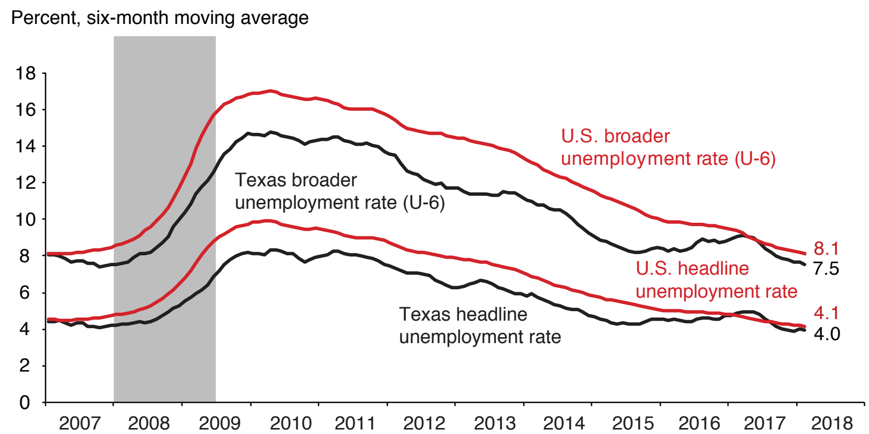
The Texas unemployment rate fell to 3.9 percent in October and November—the lowest level since at least 1976, when the data series began—before rising to 4.0 percent in December. With the U.S. unemployment rate likely below its natural rate, it will be more difficult to entice workers to migrate to the state (*see "Gone to Texas: Migration Vital to Growth in the Lone Star State" on page 3*).

**CHART 5** Texas Expected to See Job Growth of 3.4 Percent in 2018




SOURCES: Bureau of Labor Statistics; Texas Workforce Commission; Federal Reserve Bank of Dallas.

**CHART 6** Broad Unemployment Rate Drops to Near Prerecession Low




NOTES: The shaded area indicates U.S. recession. Data are through February 2018.

SOURCES: Census Bureau, Current Population Survey; seasonal and other adjustments by the Federal Reserve Bank of Dallas.

The recent pattern of job growth, along with robust gains in the Texas Leading Index, suggests that employment will grow between 2.9 and 3.9 percent in 2018 (*Chart 5*).

## Risks to the Outlook

While there is much reason for optimism for Texas in 2018, several issues threaten to temper the state's strong momentum.

First, Texas' dependence on international trade creates vulnerability to a significant disruption. Almost 1 million jobs—8 percent of total Texas employment—are tied to global exports. Furthermore, nearly half of the state's exports are to Mexico and Canada, a great deal of those involving production sharing.[3] Thus, significant changes to the North American Free Trade Agreement, which is undergoing renegotiation, or other trade pacts could significantly pressure Texas manufacturers and companies that service exporters and importers. Various tariff regimes create additional uncertainty.

Second, the nascent energy sector recovery could quickly reverse course if oil prices precipitously drop.

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*(Continued from page 17)*

A substantive increase in the oil rig count requires oil prices above $60 per barrel, industry officials have suggested. Conversely, a sudden, sustained decline in prices below this could slow activity, and oil at less than $52 per barrel—roughly the average breakeven price for drilling new wells in most shale plays—could bring an industry decline.

Finally, tightening labor markets could serve as a significant restraint on further growth. Besides the state's very low headline jobless rate, the state's U-6 rate, which includes discouraged workers and those who are working part-time but looking for full-time positions, is near a 10-year low *(Chart 6)*. Businesses will increasingly struggle to fill job vacancies, slowing the rate at which they can expand.

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## Notes

[1] "Texas Economy Shifting into Second Gear," by Keith R. Phillips and Christopher Slijk, Federal Reserve Bank of Dallas *Southwest Economy*, First Quarter, 2017.

[2] "Texas Retail in the Doldrums; Brick-and-Mortar Stores Take the Brunt," by Amy Jordan, Federal Reserve Bank of Dallas *Southwest Economy*, Third Quarter, 2017.

[3] "Intra-Industry Trade with Mexico May Aid U.S. Global Competitiveness," by Jesus Cañas, Aldo Heffner and Jorge Herrera Hernández, Federal Reserve Bank of Dallas *Southwest Economy*, Second Quarter, 2017.

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