

Outlook for the Texas Economy



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About this Report

Real Estate Center economists continuously monitor many facets of the global, national, and Texas economies. *Outlook for the Texas Economy* summarizes significant state economic activity and trends. All monthly measurements are calculated using seasonally adjusted data, and percentage changes are calculated month-over-month, unless stated otherwise.

This publication is designed to be a one-stop resource for economic indicators. We hope you find them as useful as we do. Your feedback is always appreciated. Send comments and suggestions to info@recenter.tamu.edu.

Dr. Luis Torres, Wesley Miller, and Bailey Cuadra

Data current as of November 3, 2017

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September 2017 Summary¹

The Texas economy held steady but encountered some noteworthy obstacles. The statewide unemployment rate fell to 4.0 percent but failed to boost wages. Declines in weighted building permits and housing starts indicate a slowdown in residential construction activity, heightening supply constraints. The strong global economy and steady decline in the Texas trade-weighted value of the dollar supported export growth, particularly for crude oil. Potential headwinds to the Texas economy include energy price volatility and trade uncertainty, especially with Mexico.

Despite the shock to the Houston economy, Texas sustained positive economic growth as the **Texas Business Cycle Index** (a measure of current economic activity in the state) increased at a quarterly annualized rate of 4.7 percent. Hurricane Harvey stalled the Houston index, dragging it down 6.5 percent quarter over quarter (QOQ) after a minor decline at the end of August (data revisions altered the August numbers from 0.4 percent positive growth to a 0.5 percent contraction). Low unemployment levels drove up the remaining **major metro Business Cycle Indices** after decelerating last month. The Austin index led the pack at an annualized rate of 6.9 percent QOQ as data revisions revealed eight straight months of economic acceleration. Dallas and Fort Worth posted 4.4 and 4.3 percent growth, respectively, while the San Antonio index rose 4.6 percent.

The **Texas Leading Economic Index** (a measure of *future* directional changes in the business cycle) inched forward as the declining Texas value of the dollar offset a slowdown in monthly well permits and economic disruptions along the Gulf Coast. Thus far, the **Texas trade-weighted value of the dollar²** has declined every month in 2017, thereby increasing the attractiveness of Texas goods and services to foreign consumers. The **Texas Consumer Confidence Index** diverged from the leading economic index, plummeting 26.9 percent after reaching a record high last month. Consumer sentiments should rebound quickly as the Houston economy stabilizes.

A combination of geopolitical uncertainty and mixed economic data heightened intra-month interest rate volatility. To start the month, the **ten-year U.S. Treasury bond yield** hit a 2017 low amid growing concerns of the economic impact of Hurricanes Harvey and Irma, as well as rising tensions with North Korea. Robust economic data and the increased likelihood of tighter monetary policy elevated the average yield up to 2.2 percent, just one basis point below last month's reading. The **Federal Home Loan Mortgage Corporation 30-year fixed-rate** trended downward, falling to a year-low 3.81 percent.

Texas housing sales increased 2.6 percent as Harvey delayed transactions from late August into September. Current residential construction activity, measured by the **Residential Construction Cycle (Coincident) Index**, decelerated due to falling residential construction values. The **Residential Construction Leading Index (RCLI)** slowed for the sixth consecutive month as weighted building

¹ All monthly measurements are calculated using seasonally adjusted data, and percentage changes are calculated month-over-month, unless stated otherwise.

² The Texas trade-weighted value of the dollar is generated by the Federal Reserve Bank of Dallas. Its release typically lags the *Outlook for the Texas Economy* by one month.

permits and total housing starts lagged, signaling a slowdown in the residential construction business cycle. (For additional housing commentary and statistics, see [Texas Housing Insight](https://recenter.tamu.edu) at recenter.tamu.edu.)

The average **West Texas intermediate crude oil spot price** increased to \$49.82³, the highest since April, as sustained OPEC production cuts met robust oil demand. Increases in the number of drilled but uncompleted wells in the Permian Basin indicate a possible slowdown in shale-oil production. The number of **active rigs** in Texas fell to 453³, and **crude oil production** contracted for the first time since March⁴, further easing oversupply concerns. Expectations of a cooler winter cycle pushed the **Henry Hub natural gas spot price** up to \$2.98 per million BTU³ (British thermal units) despite production increases.

Texas **monthly nonfarm employment** shed 7,300 jobs while the statewide **unemployment rate** surprisingly fell to 4.0 percent. In Austin, the unemployment rate fell below 3 percent for the first time since 2001 as the labor market tightened. Unemployment fell to 3.4 and 3.5 percent, respectively, in Dallas and Fort Worth, while settling at 3.3 percent in San Antonio. Unemployment stabilized in Houston at 4.8 percent after jumping 0.2 points last month. **Initial unemployment insurance claims** in Texas fell 20.3 percent after the post-hurricane spike and should decline even further as the economy recovers. Additionally, the **Texas labor force participation rate** ticked up to 63.0 percent after a four-month slide.

The employment contraction occurred primarily in Houston, where Hurricane Harvey shocked the leisure and hospitality industry and led to 24,900 total lost jobs. Austin and San Antonio added 8,300 and 800 jobs, respectively, as gains in government offset private sector contractions. Similarly, Fort Worth employment increased by 3,500 jobs, 93 percent of which occurred in the public sector. Dallas employment growth was more robust with 13,500 new jobs, primarily in financial activities and professional and business services.

Statewide, the goods-producing sector advanced, adding more than 4,100 jobs in both construction and the mining and logging industry. Annualized construction employment growth ticked up 0.6 percent and should accelerate as Houston rebuilding efforts progress. The **total value of Texas construction** fell 2.9 percent on a three-month moving average amid declines in both residential and nonresidential construction. Single-family residential construction values fell across the Texas Urban Triangle as builders struggled to satisfy housing demand. Commercially, office construction values contracted in every major metro except Dallas-Fort Worth (DFW). Total construction values in DFW increased 5.0 percent, primarily from the building of new schools, hospitals, and apartments.

Texas manufacturing employment growth slowed from 6.0 to 5.5 percent annualized QOQ, adding just 200 jobs this month. Fort Worth maintained the highest growth rate at 7.8 percent led by gains in durable goods production. The Houston index slowed from 7.5 to 3.1 percent, losing 2,800 jobs

³ Nonseasonally adjusted.

⁴ Crude oil production data lag this report by one month.

since July. Austin's manufacturing growth rate inched up to 1.4 percent, well below spring levels when annualized growth approached 10 percent. Dallas and San Antonio posted the strongest manufacturing employment growth, accelerating to 6.6 and 7.0 percent, respectively.

The **Texas Manufacturing Outlook Survey** confirmed the overall industry expansion, indicating increased activity and demand. The production index extended its positive trend to 15 months, and over 30 percent of respondents reported improved business activity. Producer prices elevated as hurricane-related disruptions pushed up the price of raw materials and inventory costs. Manufacturers highlighted the physical damages and ensuing production delays and losses but remained optimistic for the remainder of the year.

Hurricane Harvey hit the service sector the hardest, resulting in over 16,000 lost jobs. Waste management and remediation services added 5,500 jobs amid cleanup efforts but failed to offset losses of over 21,000 jobs to leisure and hospitality as well as to accommodation and food services. The **Texas Service Sector Outlook Survey** corroborated the employment woes as all of the labor market indices decelerated. While respondents noted lost sales, over 34 percent expected increased business activity in the next six months.

Recently released **retail sales** data for 17Q1 revealed a slowdown in every major Texas metro. Retail sales fell more than 4 percent year over year (YOY) in Austin, San Antonio, and Houston, and dropped 7.6 percent in Dallas. Fort Worth posted the largest decline at 12.6 percent YOY. At the state level, retail sales recovered at the end of 2016 and have since stabilized, increasing 3.5 percent YTD. Despite steady growth, retail employment contracted and trended downward throughout 2017. In September retailers shed 6,500 jobs, increasing the total to 11,700 lost YTD. However, the **Texas Retail Outlook Survey** reported a strong increase in sales and improved employment conditions, suggesting a possible uptick in coming months.

Despite low unemployment levels, employee compensation remained relatively mute throughout the state. **Real Texas private hourly earnings** ticked below 1.5 percent YTD, the second straight monthly decline. Wages in Austin and Fort Worth fell below zero YOY, while Houston wages dropped 2.5 percent relative to last September. In contrast, wages trended upward in Dallas and San Antonio at 4.0 and 1.2 percent YOY, respectively.

While Texas wages lag the national level by \$0.40, Texas *manufacturing* jobs paid an 11.9 percent premium in hourly earnings relative to U.S. average. Fort Worth had the highest manufacturing wages, paying 47.3 percent more than the statewide average but was down 1.6 percent YTD. Manufacturing earnings increased 2.0 percent in Houston despite employment contractions after Harvey. San Antonio remained the outlier for wage growth, rising 16.9 percent YTD while remaining 20.3 percent below the Texas average.

The **U.S. Consumer Price Index (CPI)** ticked up 2.2 percent amid spikes in gasoline prices following Hurricane Harvey. The core inflation rate, which excludes the often-volatile energy and food sectors, increased 0.1 percent, indicating a lack of underlying price pressure. Dallas observed even greater price pressures as the local CPI jumped from 2.5 to 3.2 percent, its highest reading since

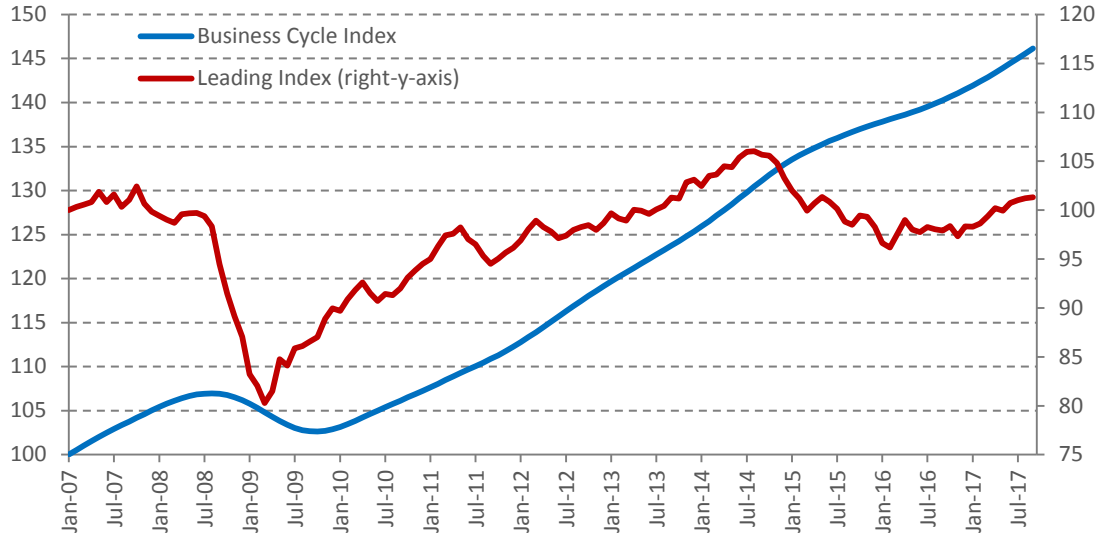
2011. Residential rental rates and rising gasoline prices accounted for most of the Dallas price increases.

The U.S. real goods trade deficit increased less than \$0.1 billion to \$61.8 billion as commodity imports slightly outpaced export growth. **Total Texas commodity exports** increased 2.3 percent, while **manufacturing exports** fell 3.7 percent for the third straight month. The combination of production disruptions and shipping obstacles pulled petroleum exports down 27.8 percent. However, **Texas crude oil exports** hit a record high, more than doubling from August, amid a roughly \$6 dollar price advantage for West Texas Intermediate over Brent crude (the European benchmark).

Strong global economic growth and the falling value of the dollar will likely support upward trending export growth throughout the next two quarters. Mexico, Texas' largest consumer, received more than a third of August exports but slowed economically in recent months. NAFTA renegotiations and the potential of a Mexican recession are potential headwinds to Texas-Mexico trade activity.

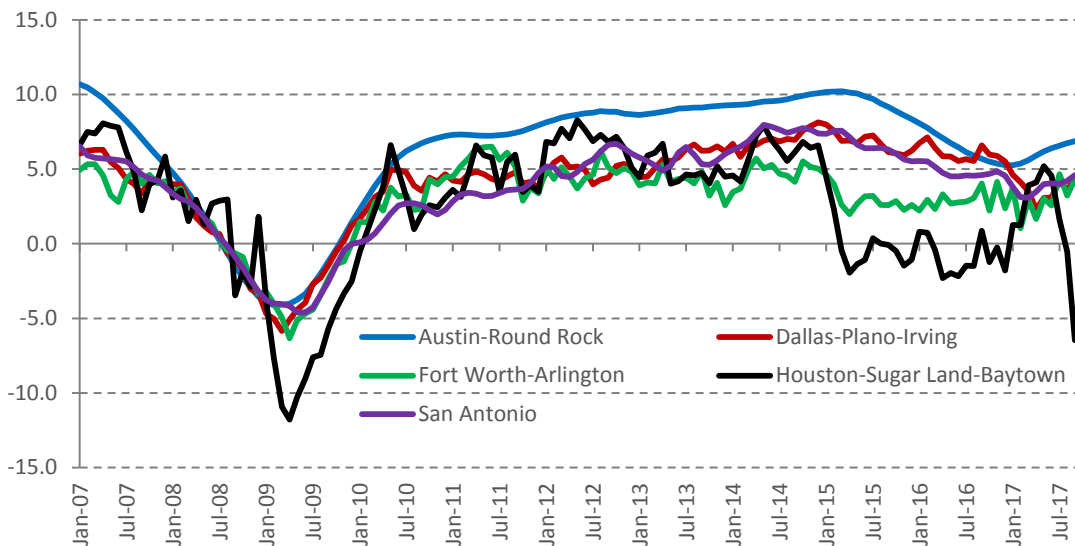
Economic Activity

Texas Business Cycle Index and Leading Index
(Index Jan 2007 = 100)



Note: Seasonally adjusted. For more information, see [Texas Business Cycle Index](#).
Source: Federal Reserve Bank of Dallas

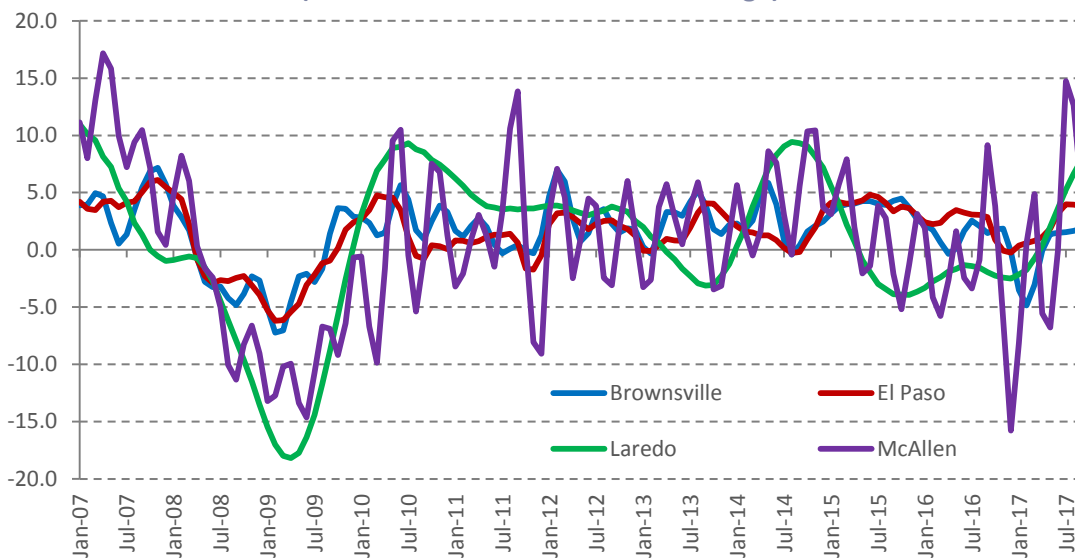
Major Metros Business Cycle Index
(Quarter-over-Quarter Percent Change)



Note: Seasonally adjusted. For more information, see [Texas Business Cycle Index](#).
Source: Federal Reserve Bank of Dallas

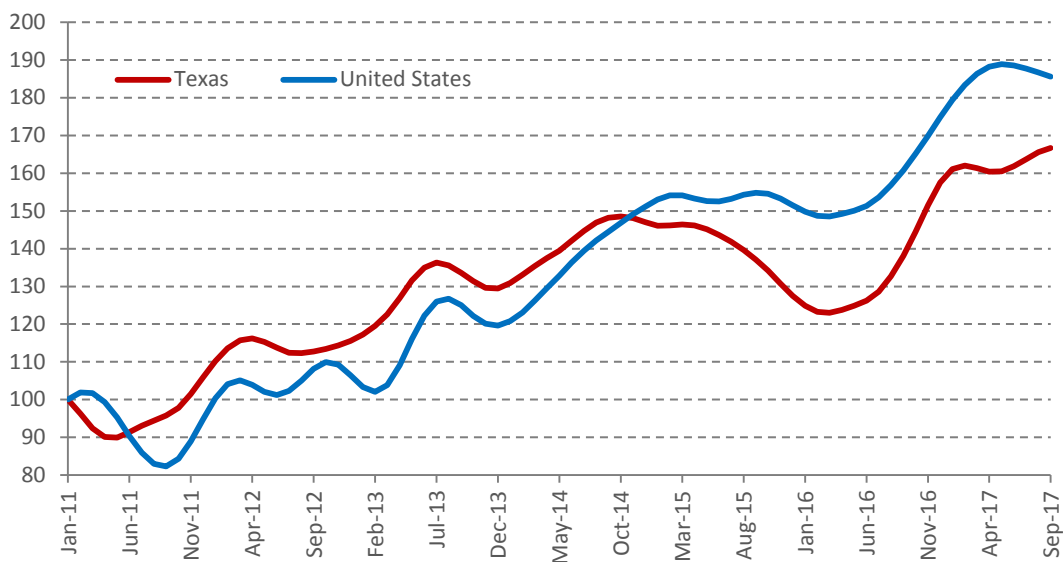


Border Metros Business Cycle Index (Quarter-over-Quarter Percent Change)



Note: Seasonally adjusted. For more information, see [Texas Business Cycle Index](#).
Source: Federal Reserve Bank of Dallas

Consumer Confidence Index (Index Jan 2011 = 100)

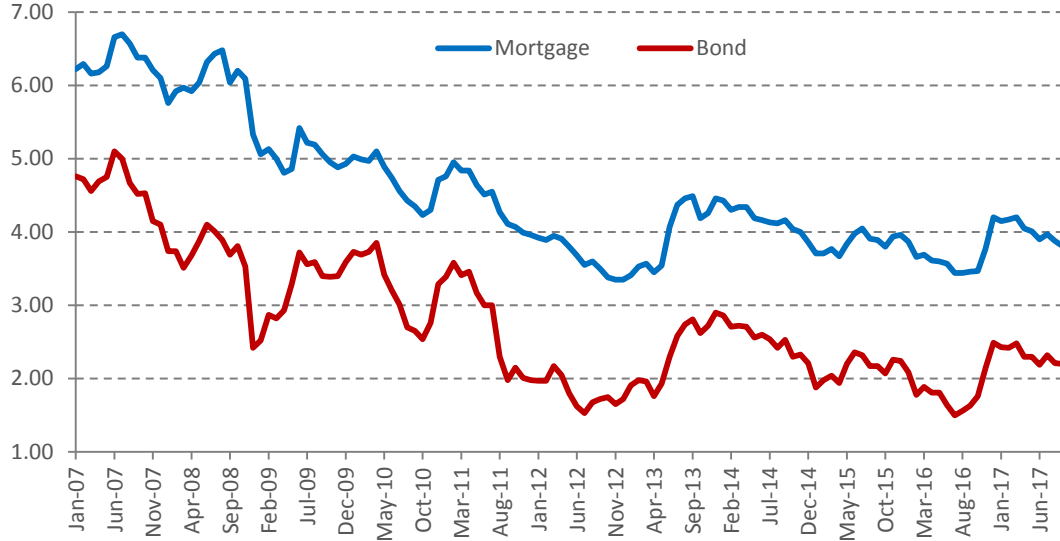


Note: Seasonally adjusted and detrended.
Source: Conference Board



Financial Activity

**30-Year Mortgage Rate and 10-Year Bond Yield
(Percent)**

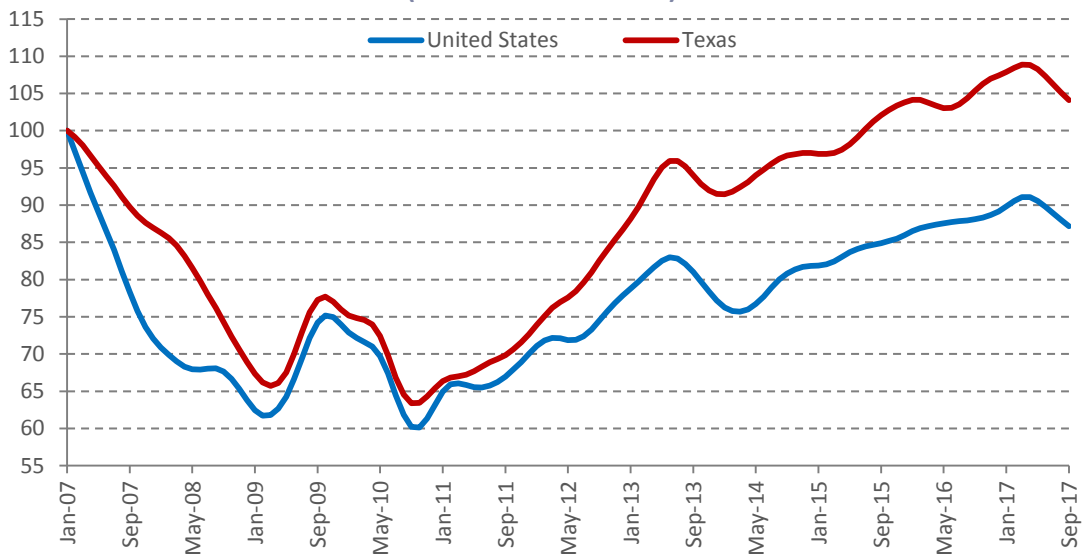


Note: Seasonally adjusted.

Sources: Federal Home Loan Mortgage Corporation and Federal Reserve Board

Housing

**Housing Sales
(Index Jan 2007 = 100)**



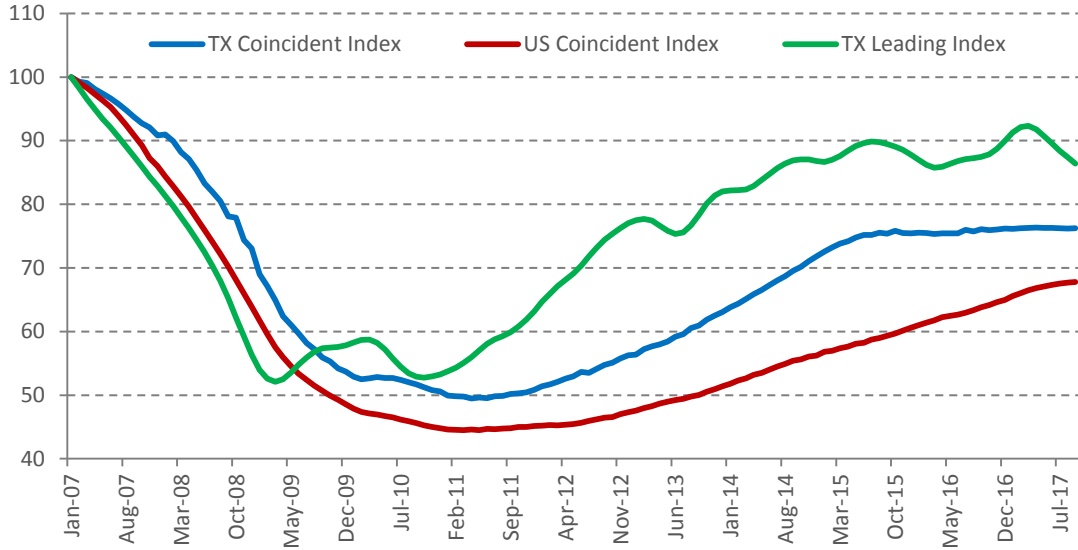
Note: Seasonally adjusted and detrended. Sales for the United States include all existing homes and new single-family homes; new non-single-family homes are not included. Texas includes all existing and new homes.

For more information, see [Housing Sales](#).

Sources: U.S. Census Bureau, National Association of Realtors, and Real Estate Center at Texas A&M University



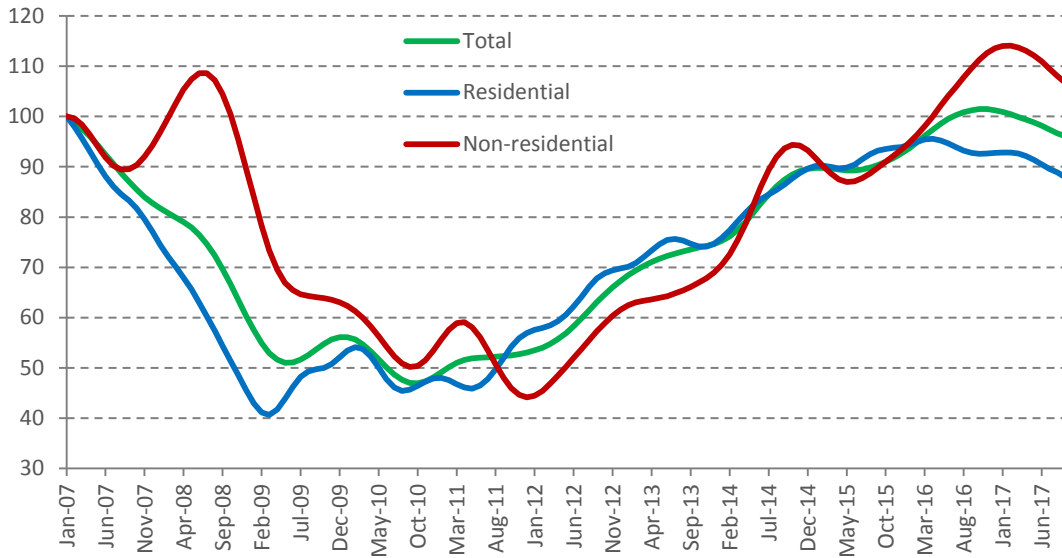
Residential Construction Coincident and Leading Indicator
(Index Jan 2007 = 100)



Note: Seasonally adjusted and detrended.

Sources: Real Estate Center at Texas A&M University and Federal Reserve Bank of Dallas

Texas Construction Values
(Index Jan 2007 = 100)

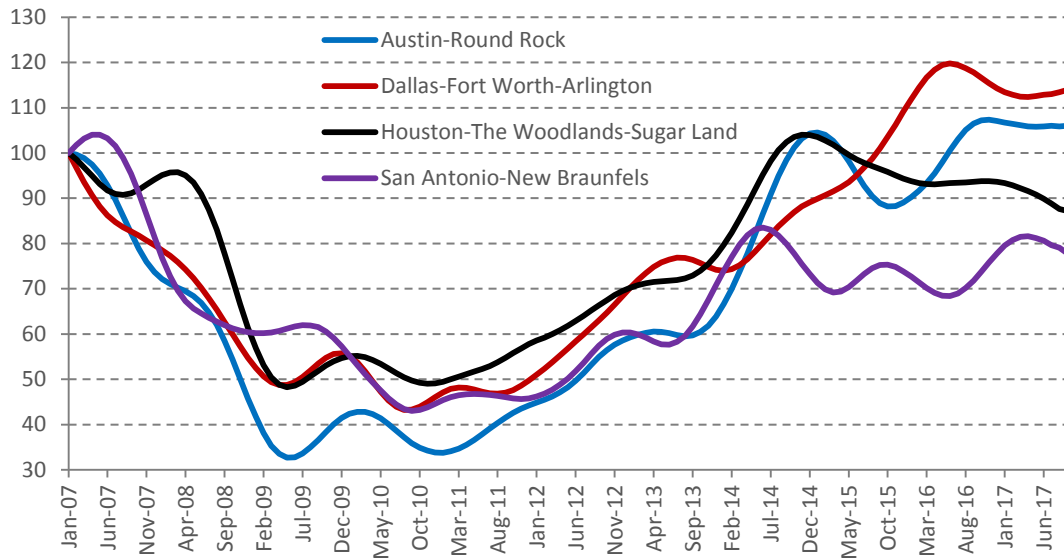


Note: Real values are seasonally adjusted and detrended.

Source: Dodge Analytics



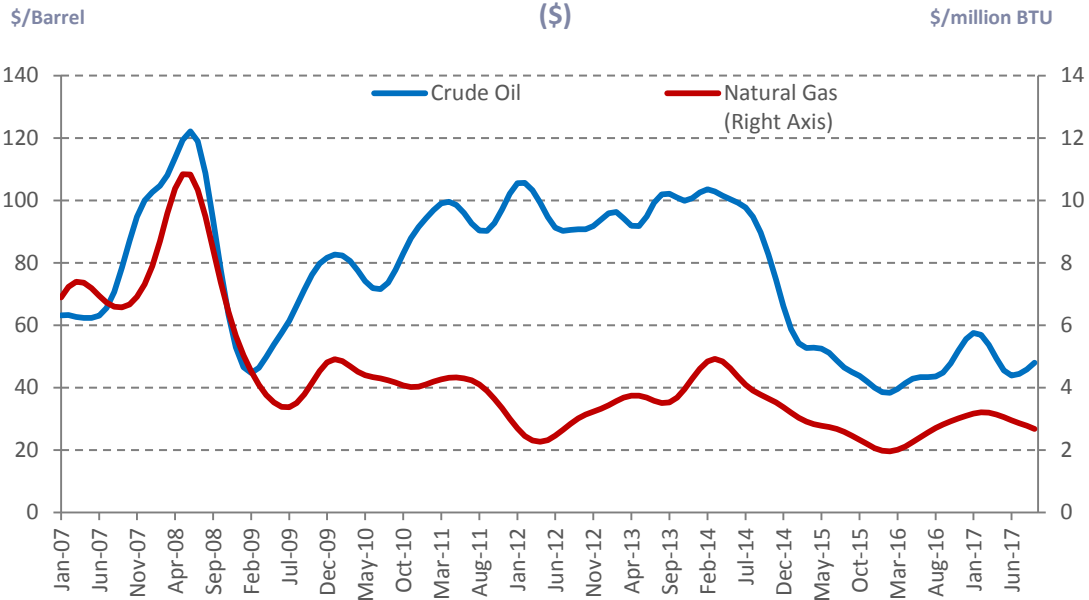
Major Metros Total Construction Values (Index Jan 2007 = 100)



Note: Real values are seasonally adjusted and detrended.
Source: Dodge Analytics

Energy

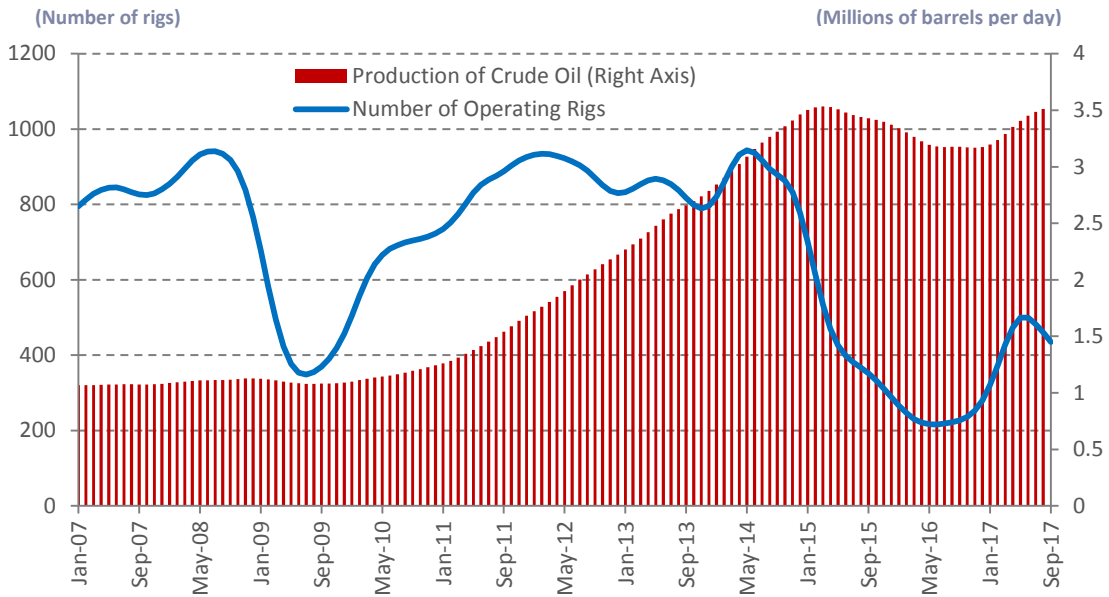
Crude Oil and Natural Gas Prices



Note: Seasonally adjusted and detrended.
For more information, see [Crude Oil and Natural Gas Prices](#).
Source: U.S. Energy Information Administration received from Thomson Reuters



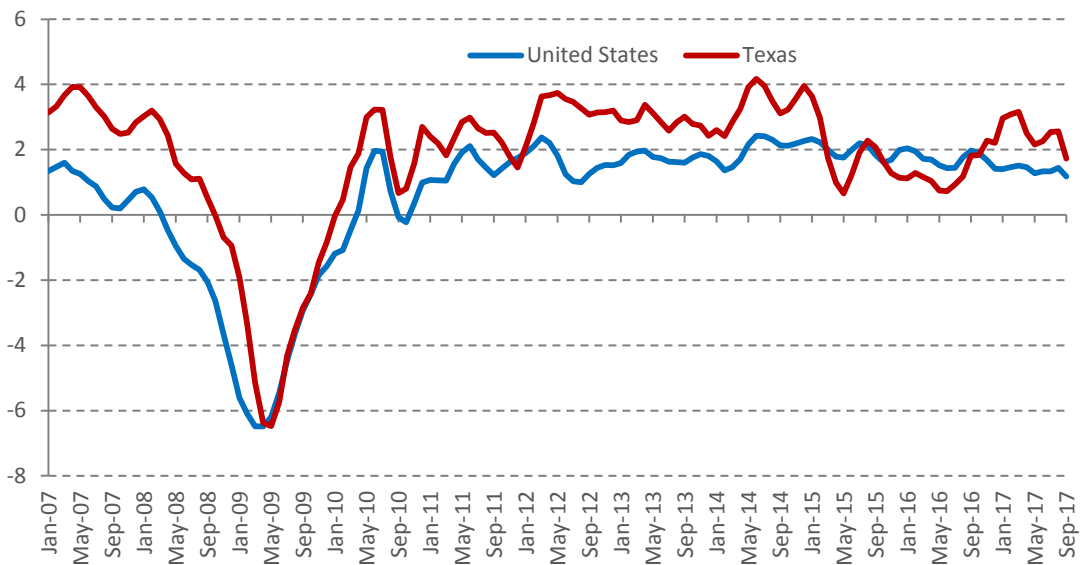
Texas Production of Crude Oil and Rig Count (Count)



Note: Seasonally adjusted and detrended.
 For more information, see [Texas Production of Crude Oil and Rig Count](#).
 Sources: Baker Hughes and U.S. Energy Information Administration

Employment

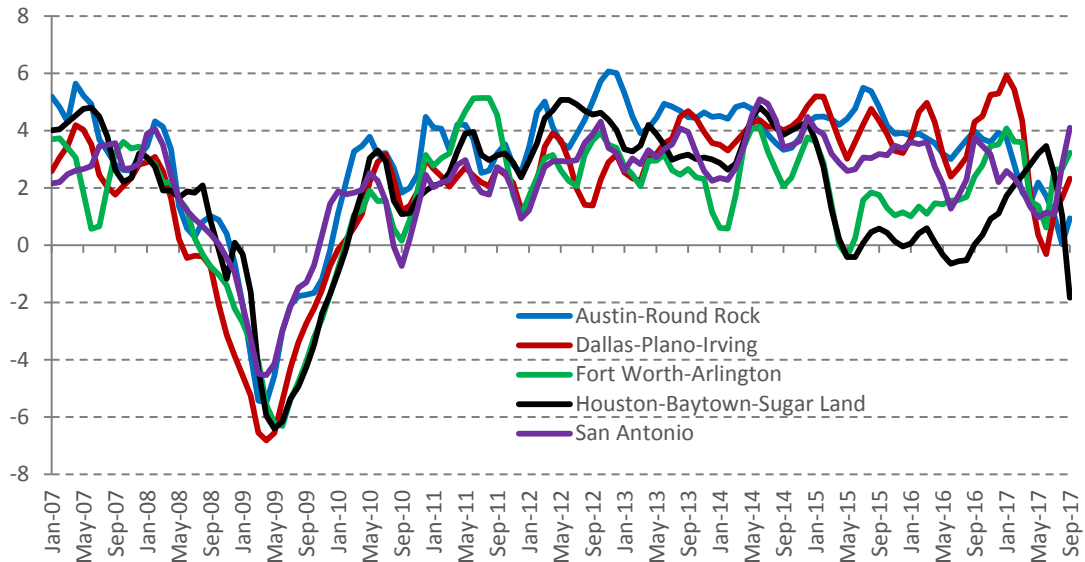
Employment Growth Rate (Quarter-over-Quarter Annualized Percent Change)



Note: Seasonally adjusted, 3-month moving average. September 2017 is preliminary.
 For more information, see [Employment Growth Rate](#).
 Source: Bureau of Labor Statistics

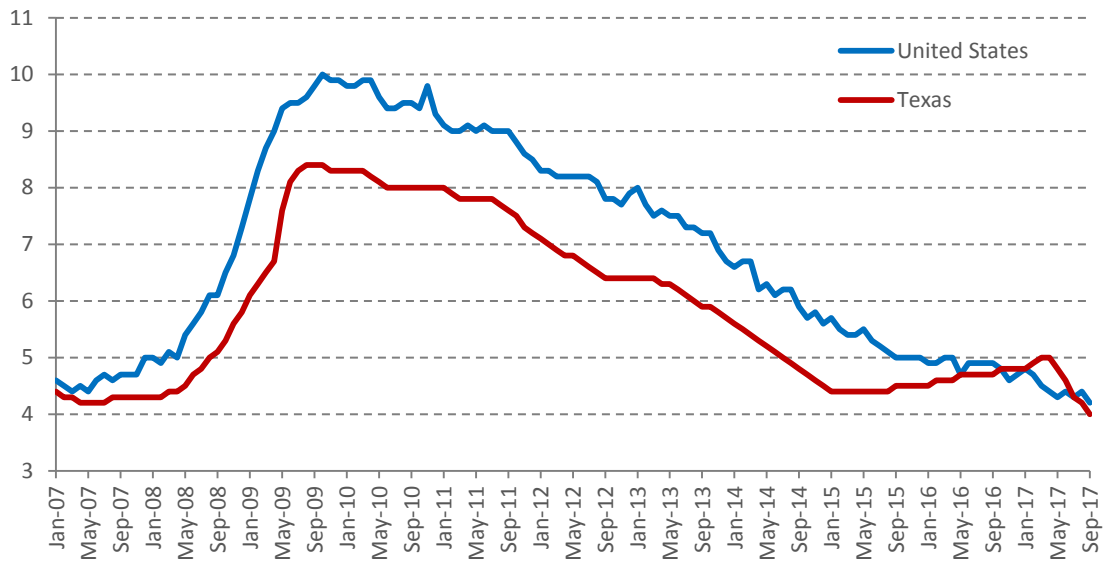


Major Metros Employment Growth Rate
(Quarter-over-Quarter Annualized Percent Change)



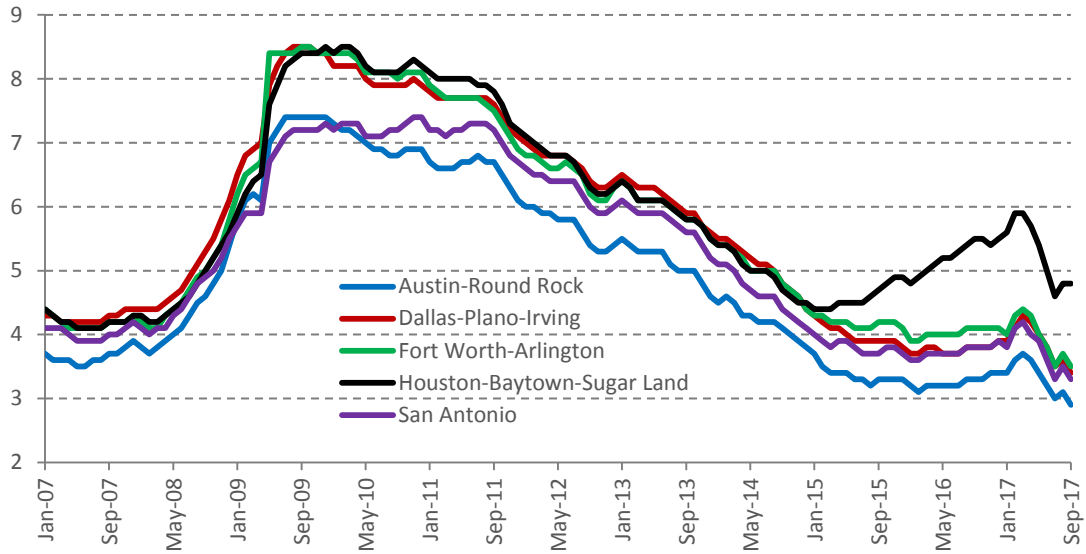
Note: Seasonally adjusted, 3-month moving average. September 2017 is preliminary.
For more information, see [Employment Growth Rate](#).
Source: Bureau of Labor Statistics

Unemployment Rate
(Percent)



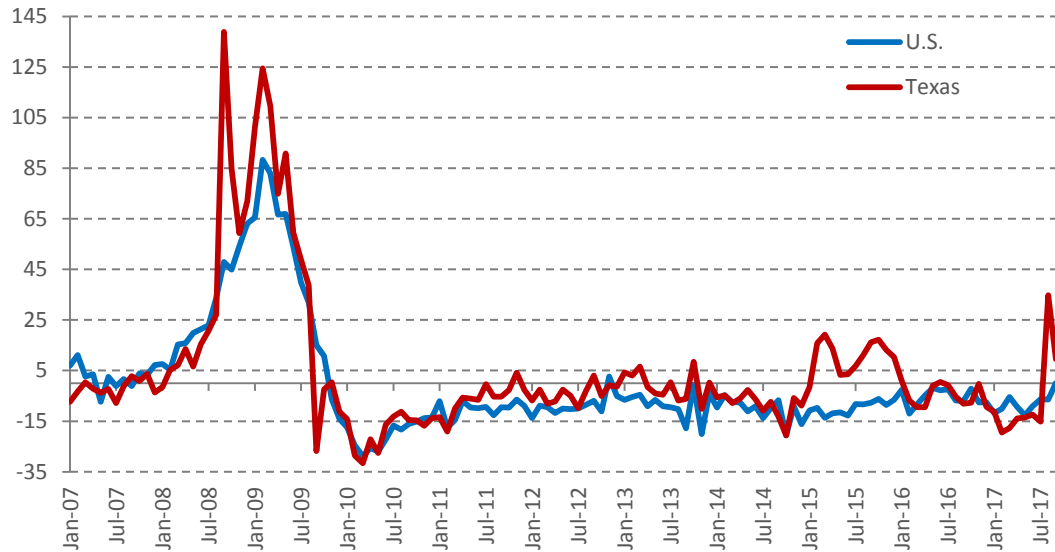
Note: Seasonally adjusted. September 2017 is preliminary. For more information, see [Unemployment Rate](#).
Source: Bureau of Labor Statistics

Major Metros Unemployment Rate (Percent)



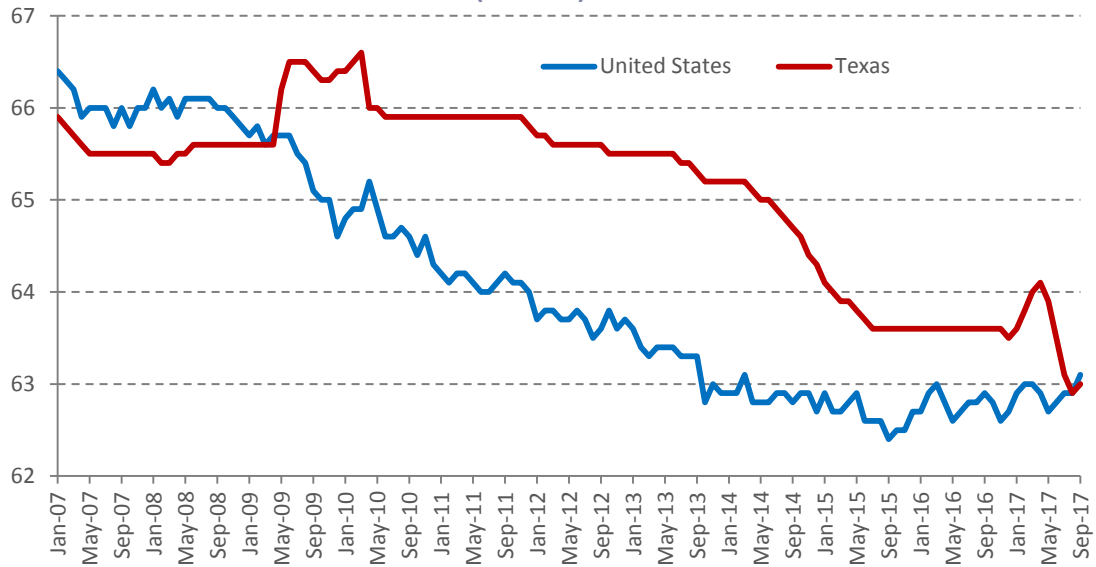
Note: Seasonally adjusted. September 2017 is preliminary. For more information, see [Unemployment Rate](#).
Sources: Bureau of Labor Statistics and Real Estate Center at Texas A&M University

Unemployment Insurance Claims: Initial Applications (Year-over-Year Percentage Change)



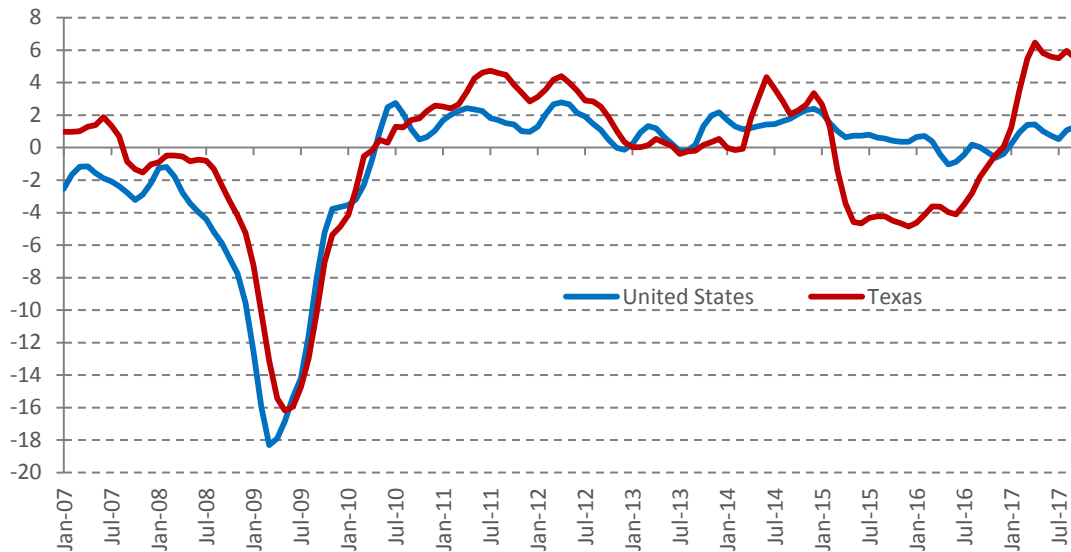
Note: Seasonally adjusted. For more information, see [Unemployment Insurance Claims: Initial Applications](#).
Source: Department of Labor

Labor Force Participation Rate (Percent)



Note: Seasonally adjusted. For more information, see [Unemployment Rate](#).
Source: Bureau of Labor Statistics

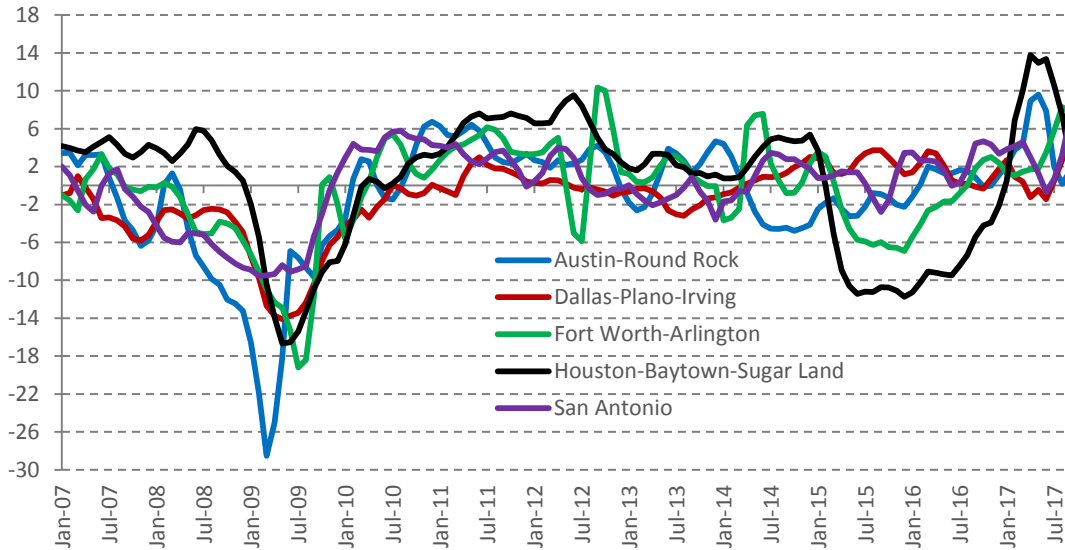
Manufacturing Employment (Quarter-over-Quarter Percent Change)



Note: Seasonally adjusted, 3-month moving average. September 2017 is preliminary.
For more information, see [Employment Growth Rate](#).
Source: Bureau of Labor Statistics

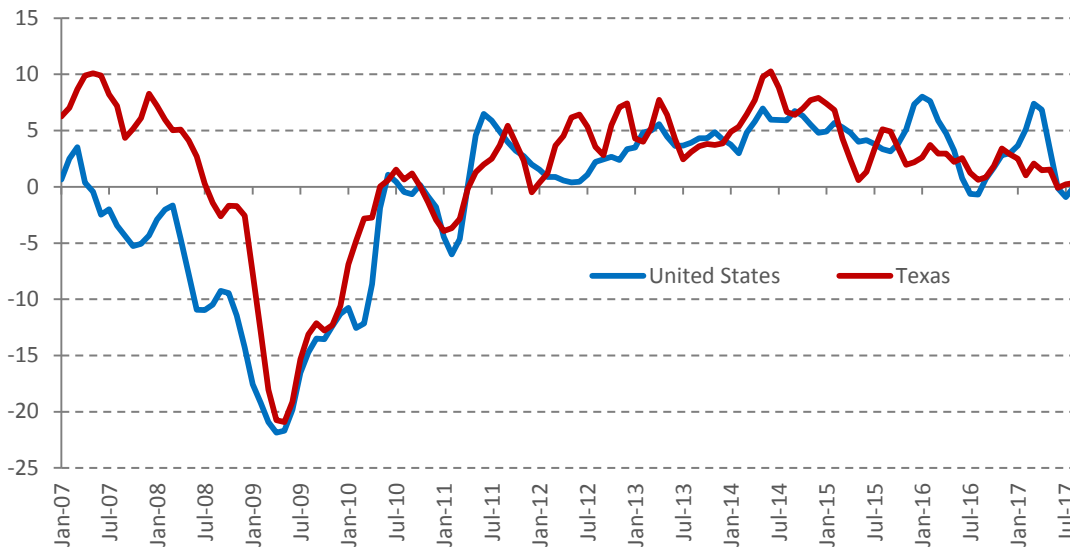


Major Metros Manufacturing Employment (Quarter-over-Quarter Percent Change)



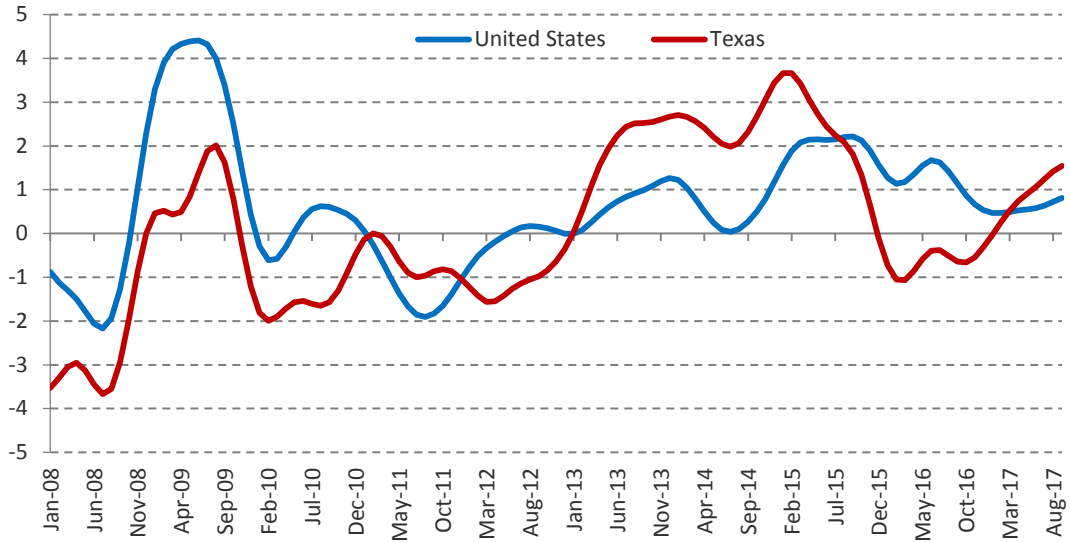
Note: Seasonally adjusted, 3-month moving average. September 2017 is preliminary.
 For more information, see [Employment Growth Rate](#).
 Source: Bureau of Labor Statistics

Construction Employment (Quarter-over-Quarter Percent Change)



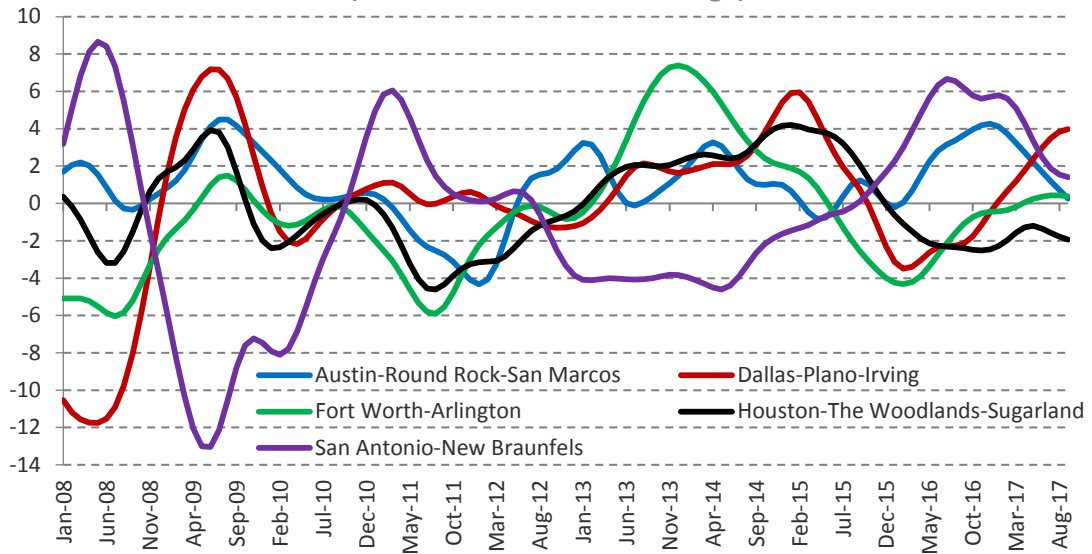
Note: Seasonally adjusted, 3-month moving average. September 2017 is preliminary.
 For more information, see [Employment Growth Rate](#).
 Source: Bureau of Labor Statistics

Total Private Employee Hourly Earnings (Year-over-Year Percent Change)



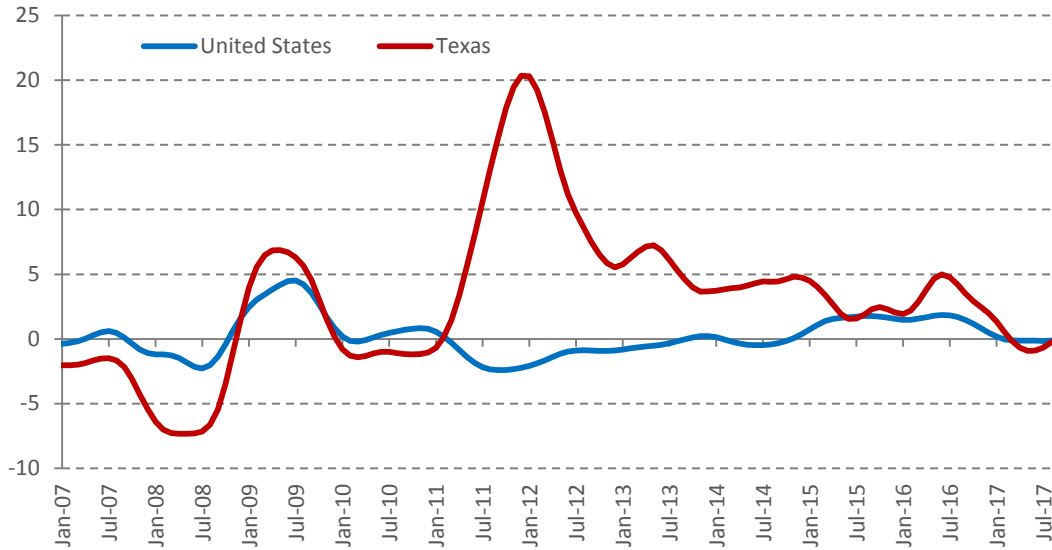
Notes: Inflation adjusted, seasonally adjusted and detrended. September 2017 is preliminary.
For more information, see [Total Private Employee Hourly Earnings](#).
Source: Bureau of Labor Statistics

Major Metros Total Private Employee Hourly Earnings (Year-over-Year Percent Change)



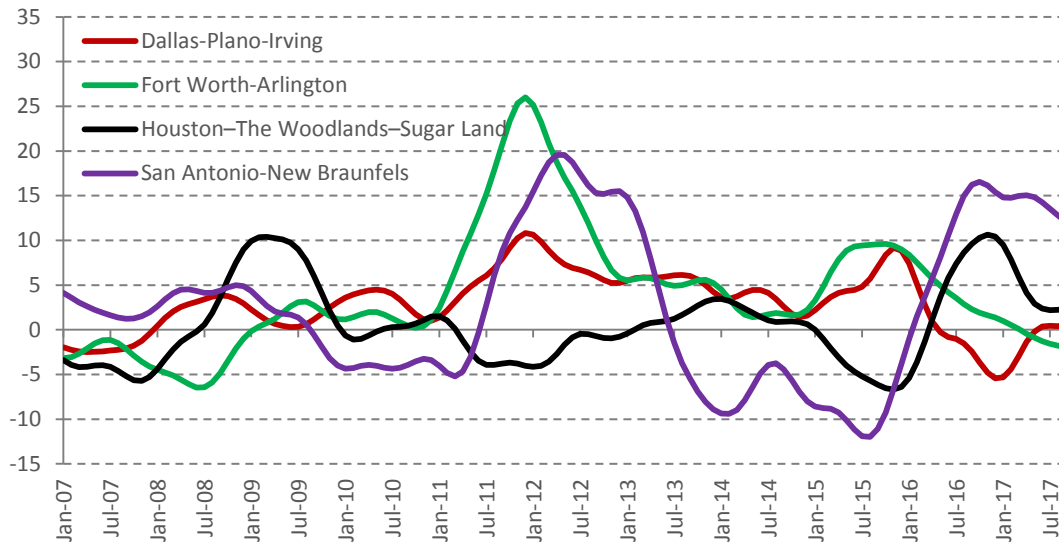
Notes: Inflation adjusted, seasonally adjusted and detrended. September 2017 is preliminary.
For more information, see [Total Private Employee Hourly Earnings](#).
Source: Bureau of Labor Statistics

Manufacturing Employee Hourly Earnings (Year-over-Year Percent Change)



Notes: Seasonally adjusted and detrended. Inflation adjusted. September 2017 is preliminary.
For more information, see [Total Private Employee Hourly Earnings](#).
Source: Bureau of Labor Statistics

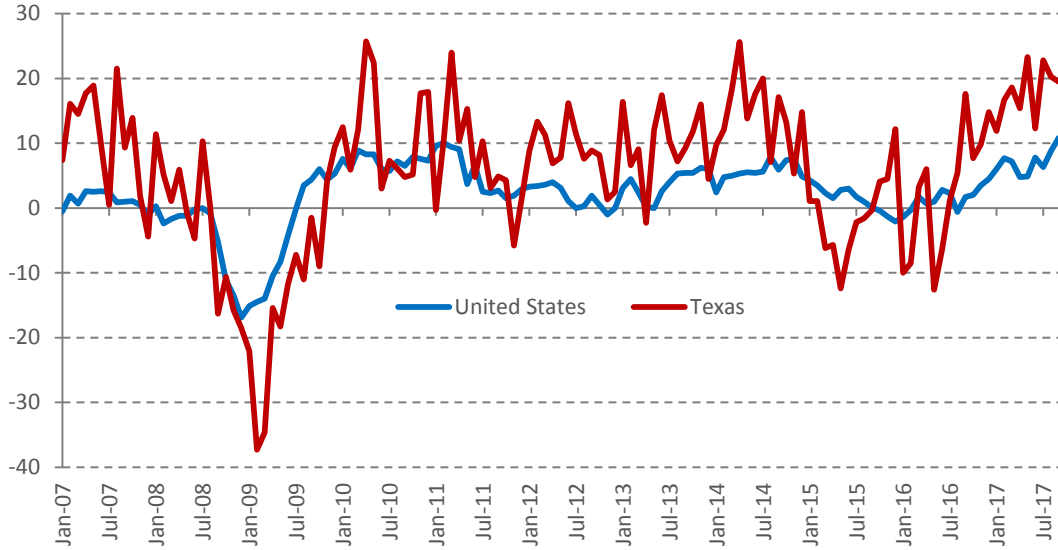
Major Metros Manufacturing Employee Hourly Earnings (Year-over-Year Percent Change)



Notes: Seasonally adjusted and detrended. Inflation adjusted. September 2017 is preliminary.
For more information, see [Total Private Employee Hourly Earnings](#).
Source: Bureau of Labor Statistic

Manufacturing

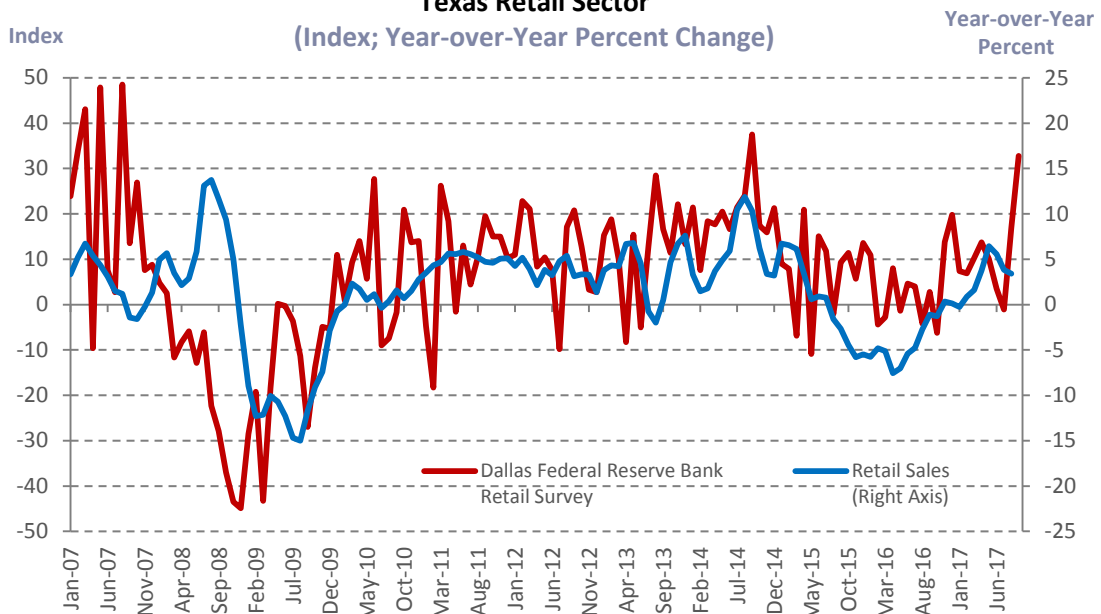
**Manufacturing Outlook Survey
(Index)**



Note: Seasonally adjusted. For more information, see [Manufacturing Outlook Survey](#).
Sources: Federal Reserve Bank of Dallas and Institute for Supply Management. United States index is adjusted -50 to be on scale with Texas index.

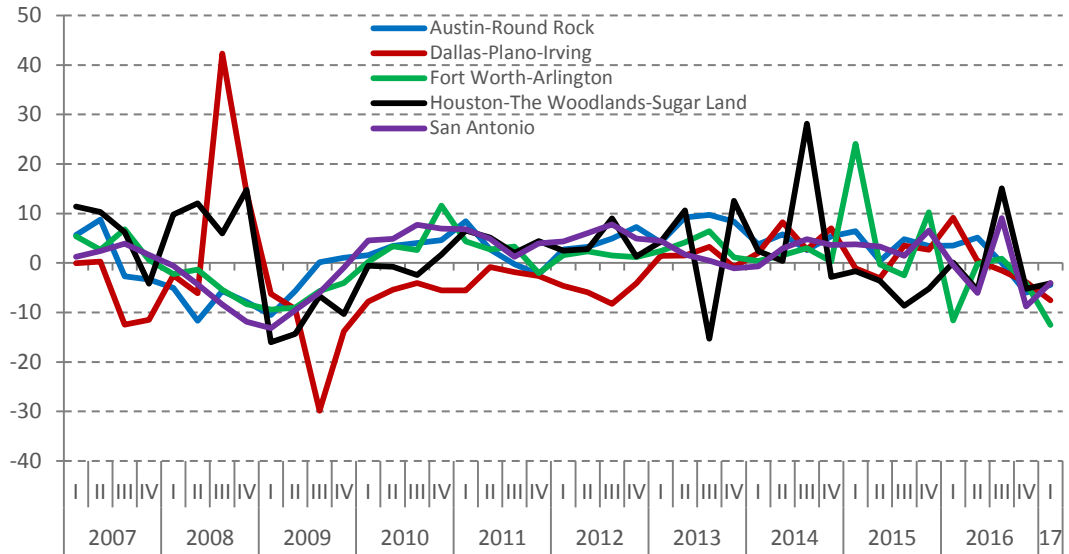
Services

**Texas Retail Sector
(Index; Year-over-Year Percent Change)**



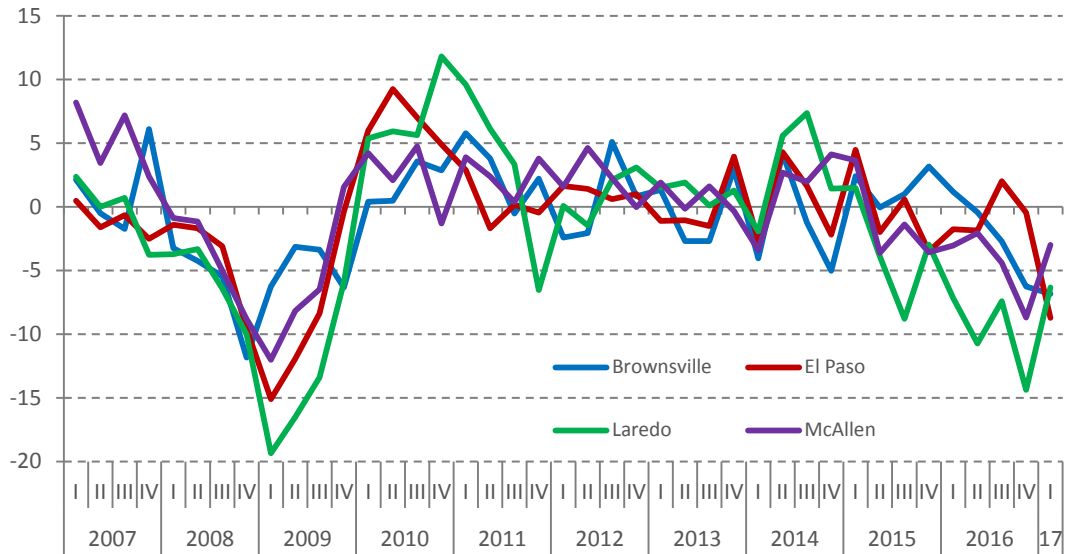
Note: Seasonally adjusted and inflation adjusted. For more information, see [Texas Retail Sector](#).
Sources: Retail Sector Outlook Survey from the Federal Reserve Bank of Dallas, Retail Sales from Texas Comptroller of Public Accounts

Major Metros Retail Sales (Year-over-Year Percent Change)



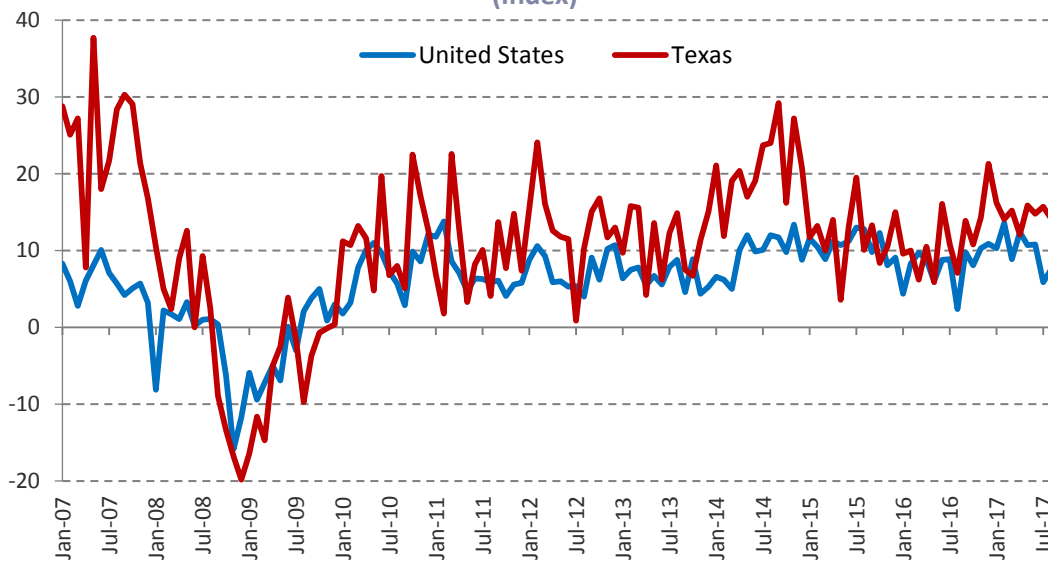
Note: Seasonally adjusted and inflation adjusted. For more information see [Texas Retail Sector](#).
Source: Retail Sales from Texas Comptroller of Public Accounts estimated by Dallas Federal Reserve Bank

Border Metros Retail Sales (Year-over-Year Percent Change)



Note: Seasonally adjusted and inflation adjusted. For more information see [Texas Retail Sector](#).
Source: Retail Sales from Texas Comptroller of Public Accounts estimated by Dallas Federal Reserve Bank

Services Sector Outlook Survey (Index)

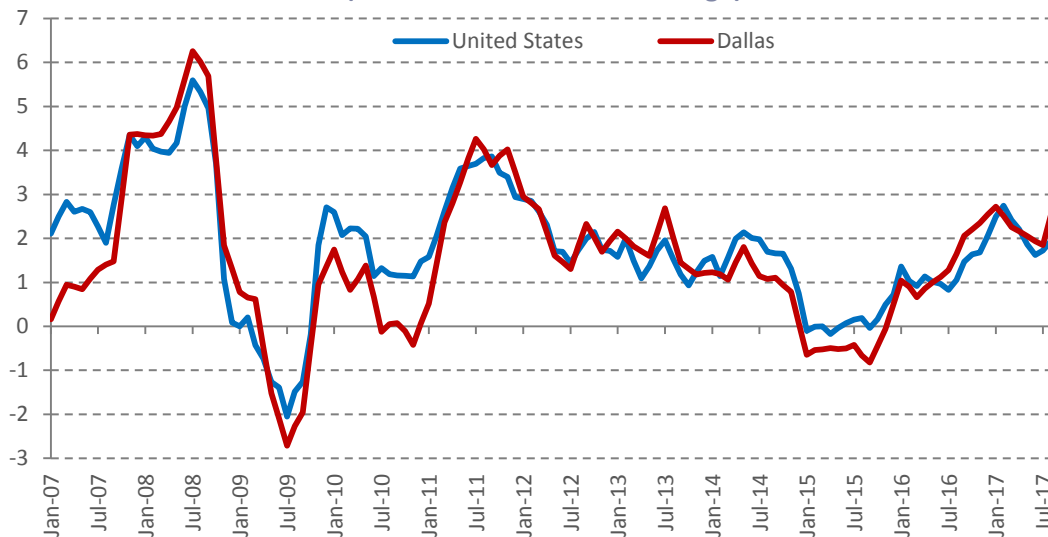


Note: Seasonally adjusted. For more information, see [Services Sector Outlook Survey](#).

Sources: Federal Reserve Bank of Dallas and Institute for Supply Management. United States index is adjusted -50 to be on scale with Texas index.

Prices

CPI Inflation Rates (Year-over-Year Percent Change)

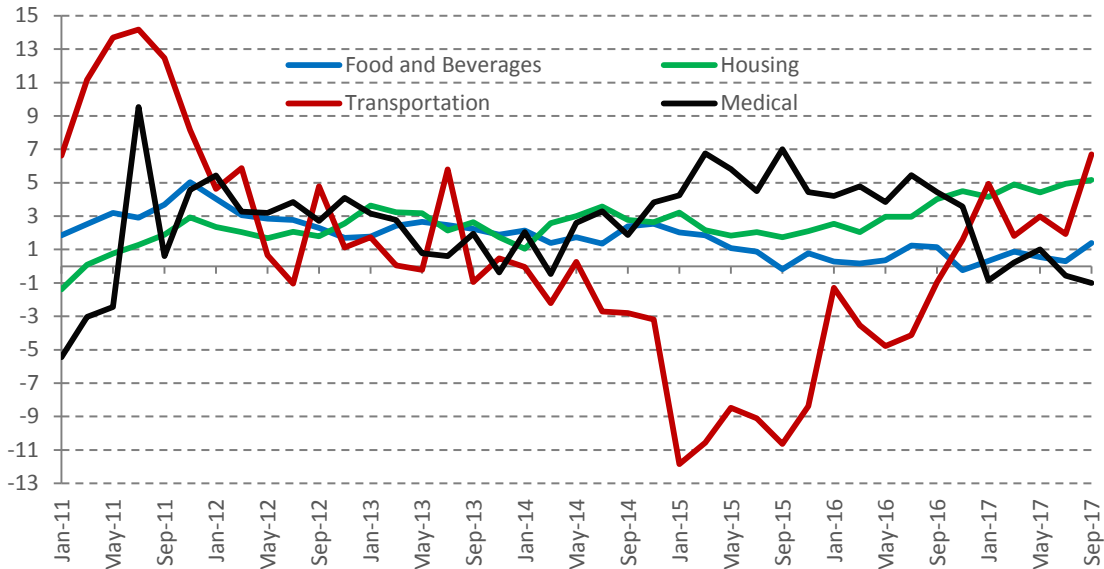


Note: Seasonally adjusted. For more information, see [CPI Inflation Rates](#).

Source: Bureau of Labor Statistics



CPI Inflation Rates (Dallas Components)
(Year-over-Year Percent Change)

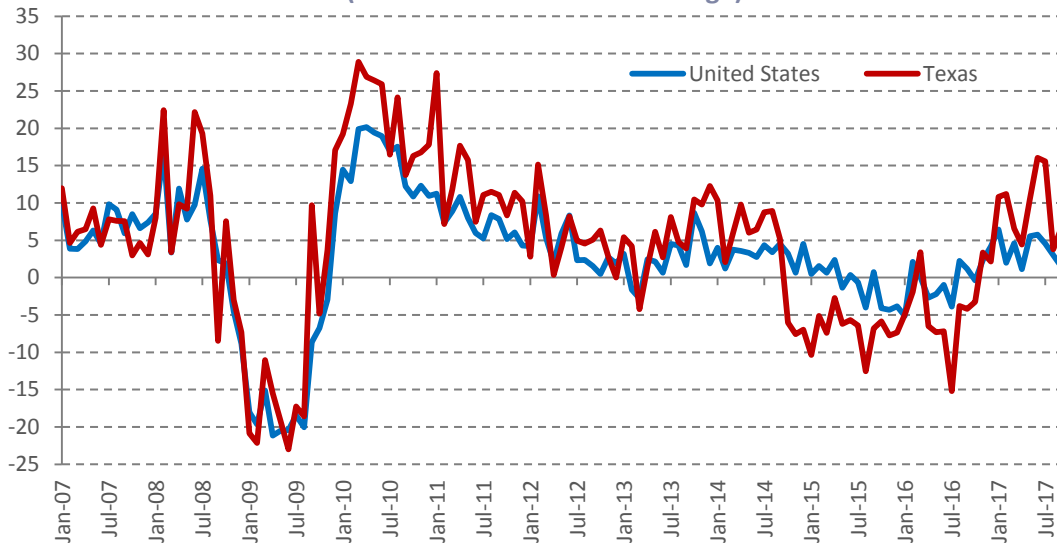


Note: The Dallas CPI is composed of the following major groups: Food and Beverages, Housing, Apparel, Transportation, Medical Care, Recreation, Education and Communication, and Other Goods and Services. The four major components are included in the graph above.

Source: Bureau of Labor Statistics

Trade

Exports (All Commodities)
(Year-over-Year Percent Change)

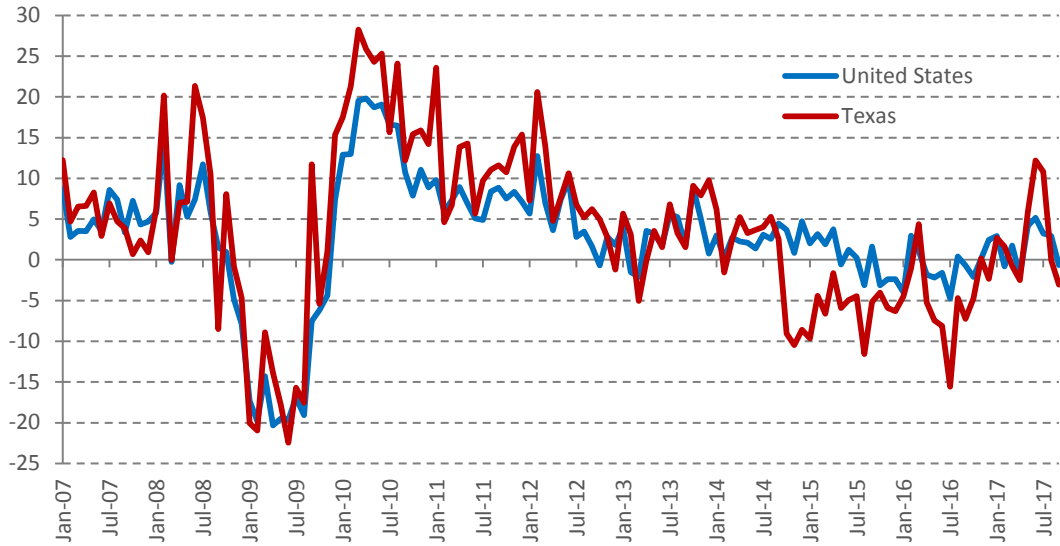


Note: Inflation adjusted with Bureau of Labor Statistics export indices. For more information, see [Exports](#).

Sources: International Trade Administration, Foreign Trade Division, and U.S. Census Bureau

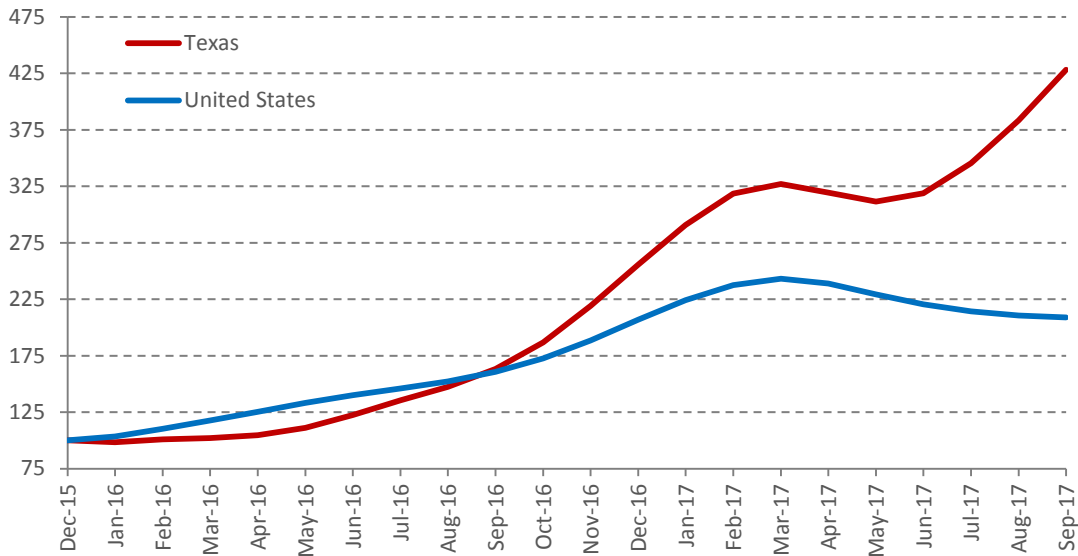


Manufacturing Exports (Year-over-Year Percent Change)



Note: Inflation adjusted with Bureau of Labor Statistics export indices. For more information, see [Manufacturing Exports](#).
Sources: International Trade Administration, Foreign Trade Division, and U.S. Census Bureau

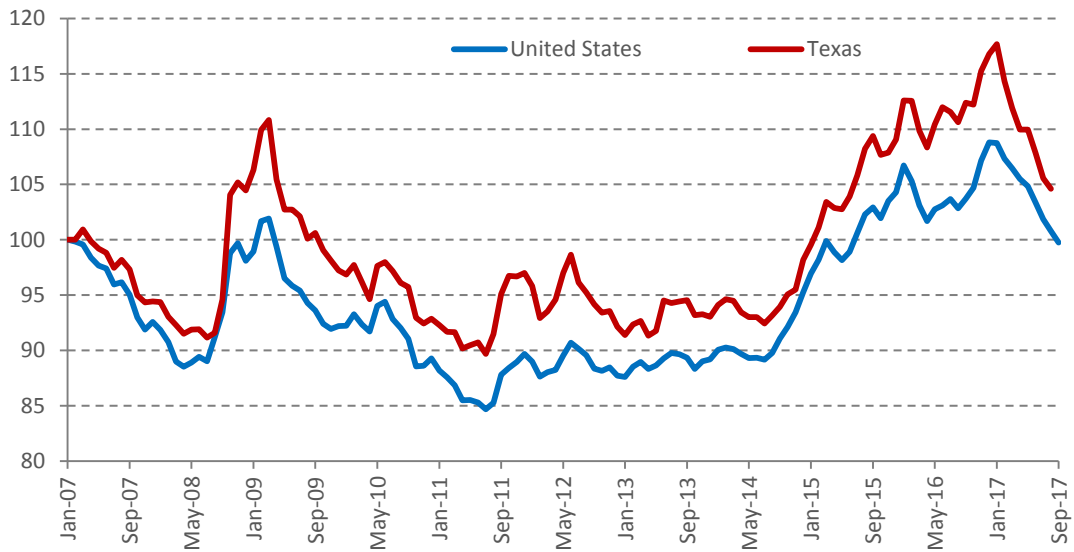
Crude Oil Exports (Index Dec 2015 = 100)



Note: Inflation adjusted and detrended with Bureau of Labor Statistics export indices. For more information, see [Crude Oil Exports](#).

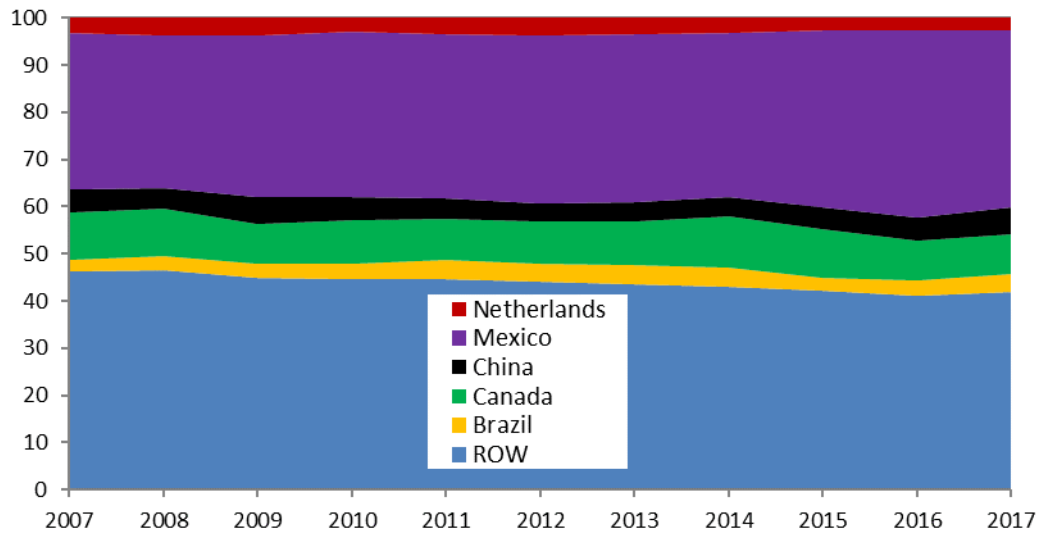
Sources: International Trade Administration, Foreign Trade Division, and U.S. Census Bureau

Real Trade Weighted Value of U.S. Dollar (Index Jan 2007 = 100)



Note: For more information, see [Real Trade Weighted Value of U.S. Dollar](#).
Sources: Federal Reserve Bank of Dallas and Federal Reserve Bank of St. Louis

Texas Exports by Country (Percent)



Note: For more information, see [Exports](#).
Sources: International Trade Administration, Foreign Trade Division, and U.S. Census Bureau



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