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TECHNICAL REPORT

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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 September 6, 2017

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July 2017 Summary¹

This review does not account for the impacts of Hurricane Harvey and the ensuing recovery process but reflects the economy through July.

The Texas economic expansion continued amid favorable labor market conditions. Employment growth surpassed 188,000 new jobs for 2017, just 5,300 short of the 2016 total. The statewide unemployment rate posted the largest decline in the country, falling 0.3 points to 4.3 percent. As a result, Texas wages increased more than twice the rate of national wage growth. However, wage growth struggled to match home price appreciation, augmenting housing affordability concerns. Potential headwinds to the Texas economy include energy price volatility and trade uncertainty, especially with Mexico.

Texas sustained this strong economic growth as the **Texas Business Cycle Index** (a measure of *current* economic activity in the state) increased at a quarterly annualized rate of 5.3 percent. The **major metro Business Cycle Indices** indicated increased economic activity throughout the Texas Urban Triangle. Austin and Dallas posted quarterly annualized growth above 4 percent, while Fort Worth reached 5.2 percent growth. The Houston index slowed to 1.3 percent amid its first employment decline since August 2016.

The **Texas Leading Economic Index** (a measure of *future* directional changes in the business cycle) advanced as permits increased and the Texas value of the dollar depreciated. Declines in the number of initial unemployment insurance claims also pushed the index forward. Consumer sentiment was positive as the **Texas Consumer Confidence Index** jumped 8.5 points to 140.3, its second highest reading since 2007. The strength of the job market and overall health of the Texas economy comforted Texas consumers.

Despite weak inflation, interest rates rebounded after falling to year-to-date (YTD) lows in June. While overall prices were flat, the uptick in oil prices and strong corporate earnings pushed the **ten-year U.S. Treasury bond yield** to a monthly average of 2.32 percent. The **Federal Home Loan**Mortgage Corporation 30-year fixed-rate inched up to 3.97 after a three-month decline. However, relatively strict lending standards and regulations continued to offset the impact of the historically low interest rates.

Texas housing sales decreased 5.1 percent using seasonally adjusted data amid persistent supply constraints. Current residential construction activity, measured by the **Residential Construction Cycle (Coincident) Index**, inched forward due to favorable employment trends in the industry. However, the **Residential Construction Leading Index (RCLI)** dipped as multifamily construction declined, signaling a slowdown in the residential construction business cycle. (For additional housing commentary and statistics, see <u>Texas Housing Insight</u> at recenter.tamu.edu.)

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



The average **West Texas intermediate crude oil spot price** increased to \$46.63 (nonseasonally adjusted) after falling to a nine-month low in June. Concerns regarding the global glut waned despite increased U.S. and OPEC crude oil production. The number of **active rigs** in Texas reached 464²—up 49.7 percent this year—and **crude oil production** increased 2.8 percent³. The natural gas market remained saturated, holding the **Henry Hub spot price** below \$3 per million BTU² (British thermal unit). Increased oil drilling, which produces natural gas as a byproduct, contributed to a global natural gas glut. The Energy Information Administration predicts that the U.S. will be a net exporter of natural gas by 2018—the first time in nearly 60 years. Texas remains the largest gasproducing state, accounting for 24.1 percent of national production.

Texas monthly nonfarm employment increased by 19,600 jobs, pushing the year's total increase above 188,000. The statewide unemployment rate fell 0.3 points to 4.3 percent, the largest decrease in the nation, while initial unemployment insurance claims fell to their lowest level since May 2008. Economic growth certainly contributed to the unemployment decline, but the labor force contraction also played a substantial role. After spiking above 64 percent this spring, the statewide labor force participation rate fell to 63.1 percent. Labor force participation peaked at 69.3 percent in 1995 and currently hovers around 1976 levels.

Every major Texas MSA observed a falling unemployment rate for the fourth consecutive month. Austin boasted the lowest rate at 3.0 percent followed by San Antonio at 3.3 percent. Dallas and Fort Worth both were 3.5 percent, while Houston recorded a 4-point drop to 4.6 percent.

Dallas and Fort Worth led employment growth, adding 5,300 and 5,500 jobs, respectively. Revised numbers indicate that employment stalled in Austin, posting less than 0.1 percent monthly growth since May. San Antonio added 2,000 jobs as goods-producing and government employment increased. Employment staggered in Houston for the first time this year—losing 6,500 jobs in July—but maintained the largest YTD growth in the Texas Urban Triangle at 1.7 percent. Most of the job loss occurred in construction, where workers adjusted after the completion of large-scale nonresidential projects (i.e. Houston Methodist The Woodlands Hospital).

Texas service sector employment remained robust, adding 15,500 jobs on top of the 31,800 gained the previous month (revised). The FIRE (finance, insurance, and real estate) industries expanded for the fifth consecutive month, adding 20,000 jobs YTD. Leisure and hospitality led employment growth with 7,000 new jobs, followed by a 5,600 job-increase in accommodation and food services.

The **Texas Service Sector Outlook Survey** reflected continued expansion, corroborating strong employment numbers. The employment, hours worked, and wage indices rose, albeit at a slower pace than the prior month, amid increased business activity. The revenue index ticked upward as

³ Crude oil production data lag this report by one month.



² Nonseasonally adjusted.

sale prices outpaced wage growth. Respondents expressed significant concern regarding political uncertainty, particularly regarding immigration, health care, and tax reform.

Retail employment halted its five-month slide, recovering 1,300 of the 22,000 jobs lost between January and June. Dallas and Fort Worth added 412 and 335 retail jobs, respectively, while Houston gained 1,389. Retailers continued to express frustration in the **Texas Retail Outlook Survey** as the sales index fell below zero for the first time this year. The general business activity and future outlook indices decelerated, reflecting decreased confidence in the retail environment.

The goods-producing sector continued to advance, adding 4,100 jobs. Texas manufacturing employment grew 5.4 percent annualized quarter over quarter, well above the national rate of 0.6 percent. Growth rates were even higher in Houston and Fort Worth at 10.3 and 5.9 percent, respectively. Austin's manufacturing growth rate remained positive at 2.4 percent but decelerated substantially from last month's 8.0 percent increase. Growth rates returned to positive territory in Dallas and San Antonio but remained under half a percent.

The **Texas Manufacturing Outlook Survey** confirmed employment growth and longer work weeks, and indicated a deceleration in employee wages and benefits. Revenue growth outpaced input price increases, contributing to improved business sentiment. The future outlook index reflected strong optimism but certain industries had hardships. Multiple respondents in the fabricated metals industry noted soft demand, while foreign competition presented stark challenges to electrical equipment, appliance, and component manufacturing respondents.

Total construction activity contracted amid declines in multifamily residential and office building construction. The construction industry lost 900 jobs, holding the annualized employment growth rate below a quarter of a percent. The **total value of construction** fell 3.5 percent, continuing its downward trend.

Texas **total private employee hourly earnings** rose 3.1 percent year over year, suggesting a tightening labor market. Hourly earnings in Dallas jumped 5.2 percent year over year, while Austin observed a 3 percent increase. San Antonio wages maintained their upward trend, rising 2.5 percent year over year. In Houston, wages were flat despite the continued economic recovery from the oil bust.

Texas manufacturing jobs paid a 9.8 percent premium in hourly earnings relative to the national average but declined 0.2 percent YTD. Fort Worth had the highest manufacturing wages, paying 49.2 percent more than the statewide average but is down 0.3 percent YTD. Manufacturing earnings rose half a percent in Houston for the second consecutive month, stemming from solid job growth in durable goods manufacturing. San Antonio was the outlier for wage growth, rising 13.3 percent this year while remaining 19.9 percent below the Texas average.

The **U.S. Consumer Price Index (CPI)** ticked up 1.7 percent—still below the Fed's 2 percent target. The core inflation rate, which excludes the often volatile energy and food sectors, rose marginally



(0.1 percent). The Dallas CPI fell to 1.8 percent but exceeded the national CPI in each of the previous three months as housing and apartment rents increased.

The U.S. real goods trade deficit increased 1.3 percent as exports slipped in automobiles and parts, consumer goods, and industrial supplies and materials. **Total Texas commodity** and **manufacturing exports** decreased 6.4 percent and 6.5 percent, respectively, led by a sharp drop in computer and electronic product exports. **Texas crude oil exports** fell 13.5 percent but remained nearly three times greater than prior to the 2015 lifting of the oil export ban. Strong global economic growth and the falling value of the dollar will likely support upward trending export growth throughout the next two quarters. The **Texas trade-weighted value of the dollar**⁴ continued its downward trend, falling 1.9 percent month over month and 8.4 percent since January. Mexico, Texas' largest consumer, received more than a third of July exports and continued to prosper among strong economic growth. Upcoming NAFTA renegotiations present a potential headwind to Texas-Mexico trade activity.

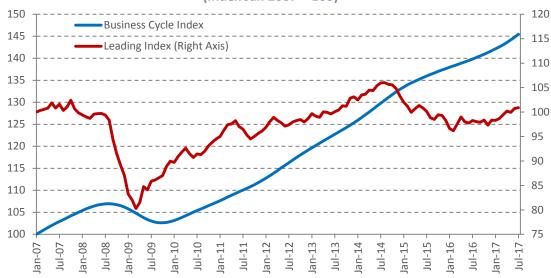
⁴ The Texas trade-weighted value of the dollar is generated by the Federal Reserve Bank of Dallas. Its release typically lags the Outlook for the Texas Economy by one month.



Economic Activity

Texas Business Cycle Index and Leading Index

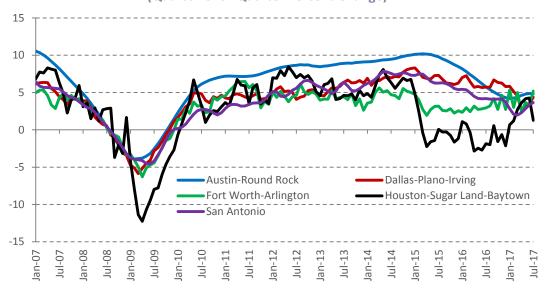
(Index Jan 2007 = 100)



Note: Seasonally adjusted. For more information, see <u>Texas Business Cycle Index</u>. Source: Federal Reserve Bank of Dallas

Major Metros Business Cycle Index

(Quarter-over-Quarter Percent Change)

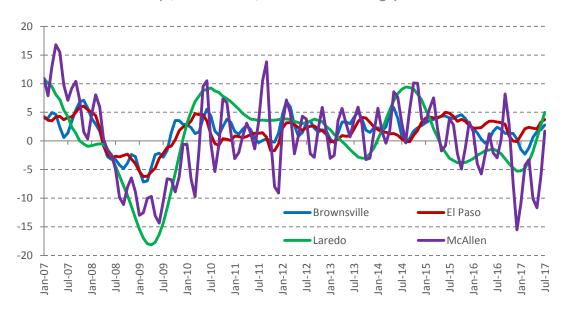


Note: Seasonally adjusted. For more information, see <u>Texas Business Cycle Index</u>. Source: Federal Reserve Bank of Dallas



Border Metros Business Cycle Index

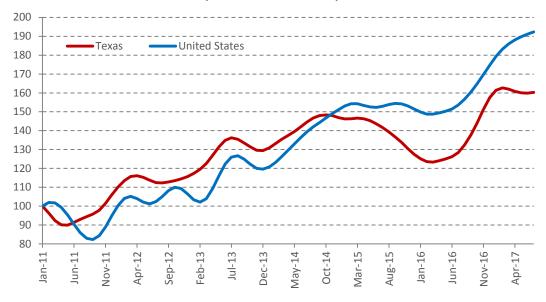
(Quarter-over-Quarter Percent Change)



Note: Seasonally adjusted. For more information, see <u>Texas Business Cycle Index</u>. Source: Federal Reserve Bank of Dallas

Consumer Confidence Index

(Index Jan 2011 = 100)

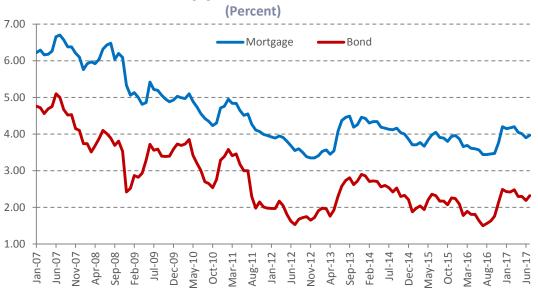


Note: Seasonally adjusted and detrended. For more information, see <u>Texas Business Cycle Index</u>. Source: Conference Board



Financial Activity

30-Year Mortgage Rate and 10-Year Bond Yield

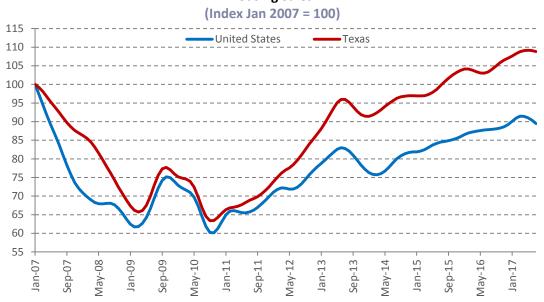


Note: Seasonally adjusted.

Sources: Federal Home Loan Mortgage Corporation and Federal Reserve Board

Housing

Housing Sales



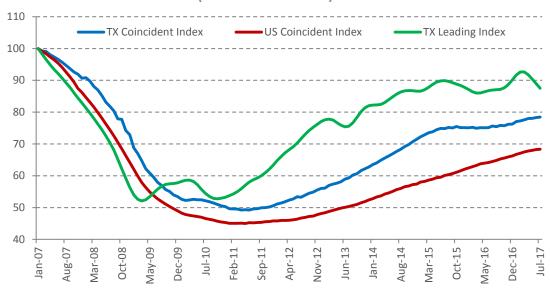
Note: Seasonally adjusted and detrended. Sales for the United States include all existing homes and new single-family homes; new non-single-family homes are not included. Texas includes all existing and new homes. For more information, see Housing Sales.

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)

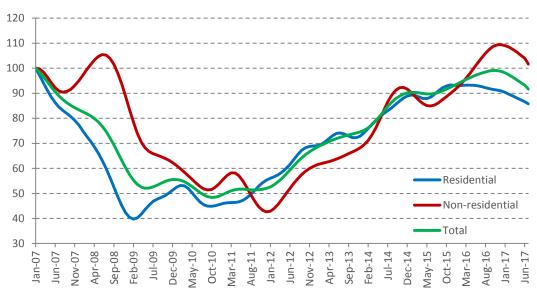


Note: Seasonally adjusted and detrended.

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

Texas Construction Values

(Index Jan 2007 = 100)



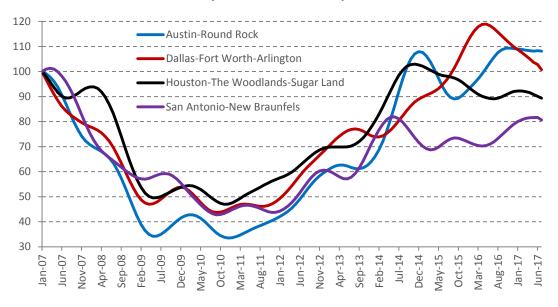
Note: Real values are seasonally adjusted and detrended.

Source: Dodge Analytics



Major Metros Total Construction Values

(Index Jan 2007 = 100)

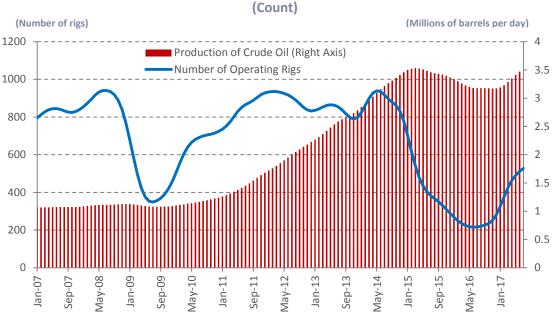


Note: Real values are seasonally adjusted and detrended.

Source: Dodge Analytics

Energy

Texas Production of Crude Oil and Rig Count



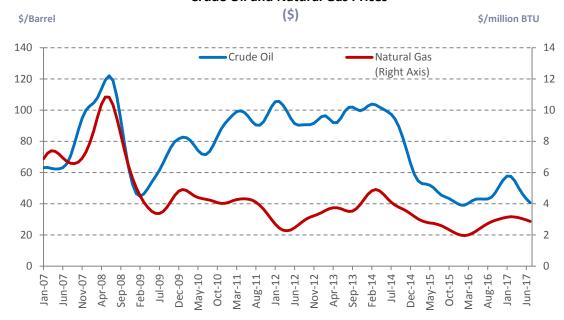
Note: Seasonally adjusted and detrended.

For more information, see $\underline{\text{Texas Production of Crude Oil and Rig Count}}$.

Sources: Baker Hughes and U.S. Energy Information Administration



Crude Oil and Natural Gas Prices

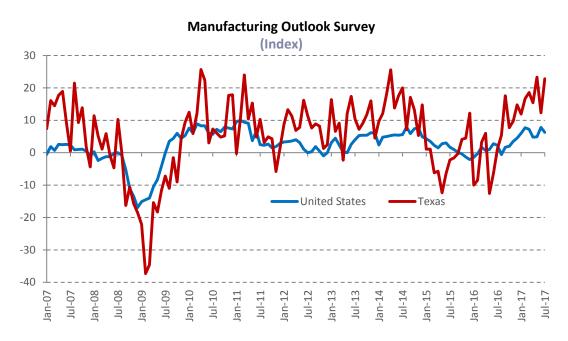


Note: Seasonally adjusted and detrended.

For more information, see <u>Crude Oil and Natural Gas Prices</u>.

Source: U.S. Energy Information Administration received from Thomson Reuters

Manufacturing



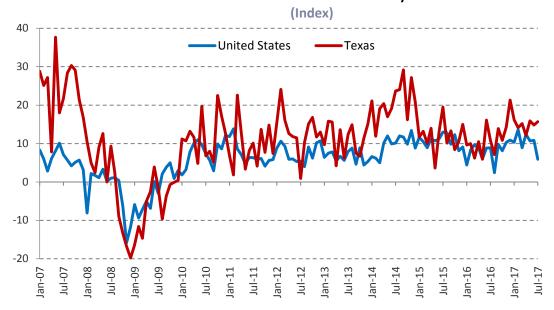
Note: Seasonally adjusted. For more information, see <u>Manufacturing Outlook Survey</u>.

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



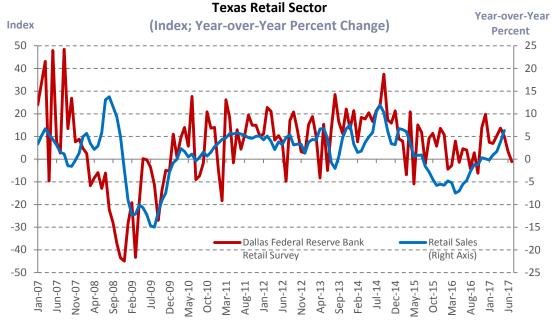
Services

Services Sector Outlook Survey



Note: Seasonally adjusted. For more information, see <u>Services Sector Outlook Survey</u>.

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



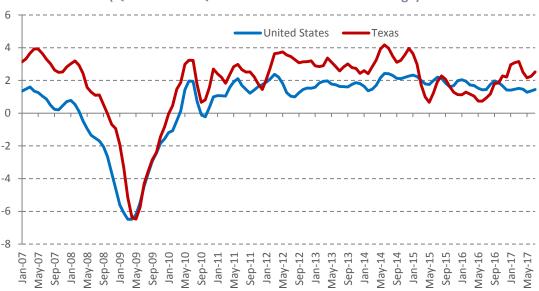
Note: Seasonally adjusted and inflation adjusted. For more information, see <u>Texas Retail Sector</u>. Sources: Retail Sector Outlook Survey from the Federal Reserve Bank of Dallas, Retail Sales from Texas Comptroller of Public Accounts



Employment

Employment Growth Rate

(Quarter-over-Quarter Annualized Percent Change)



Note: Seasonally adjusted, 3-month moving average. July 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) 8 6 2 0 -2 Austin-Round Rock <u>Dallas-Plano-Irving</u> Fort Worth-Arlington Houston-Baytown-Sugar Land -6 San Antonio -8 Sep-10 Jan-11 May-11 Sep-11 Jan-12 Jan-07 May-07 Мау-08 Мау-09 May-10 May-12 Sep-12 Jan-13 May-13 May-14 Sep-14 Jan-15

Note: Seasonally adjusted, 3-month moving average. July 2017 is preliminary.

For more information, see **Employment Growth Rate**.



Unemployment Rate

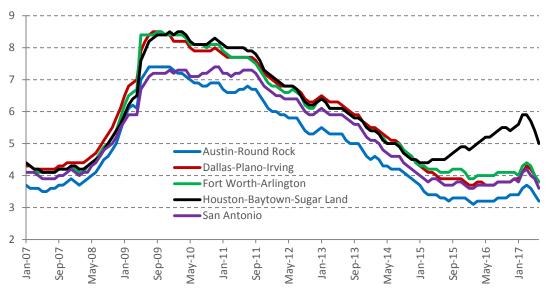
(Percent)



Note: Seasonally adjusted. July 2017 is preliminary. For more information, see <u>Unemployment Rate</u>. Source: Bureau of Labor Statistics

Major Metros Unemployment Rate

(Percent)

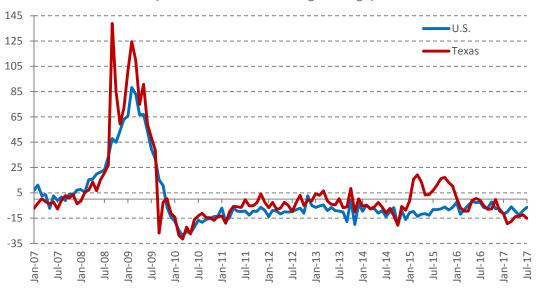


Note: Seasonally adjusted. July 2017 is preliminary. For more information, see <u>Unemployment Rate</u>. Sources: Bureau of Labor Statistics and Real Estate Center at Texas A&M University



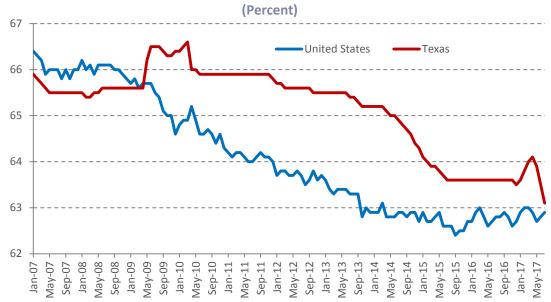
Unemployment Insurance Claims: Initial Applications

(Year-over-Year Percentage Change)



Note: Seasonally adjusted. For more information, see <u>Unemployment Insurance Claims: Initial Applications</u>. Source: Department of Labor

Labor Force Participation Rate

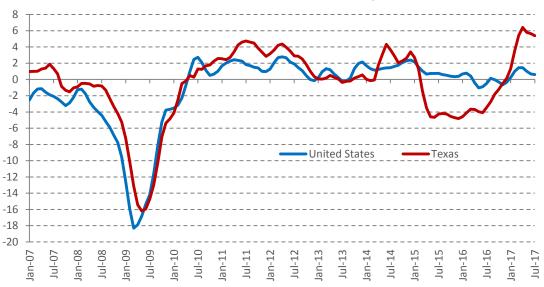


Note: Seasonally adjusted. For more information, see <u>Unemployment Rate</u>. Source: Bureau of Labor Statistics



Manufacturing Employment

(Quarter-over-Quarter Percent Change)



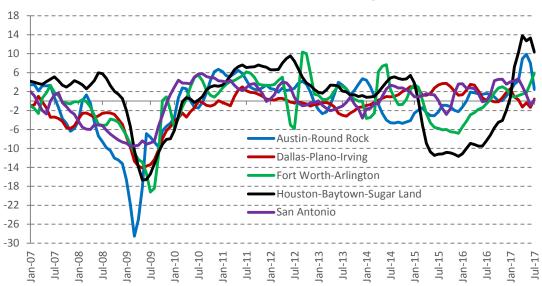
Note: Seasonally adjusted, 3-month moving average. July 2017 is preliminary.

For more information, see **Employment Growth Rate**.

Source: Bureau of Labor Statistics

Major Metros Manufacturing Employment

(Quarter-over-Quarter Percent Change)



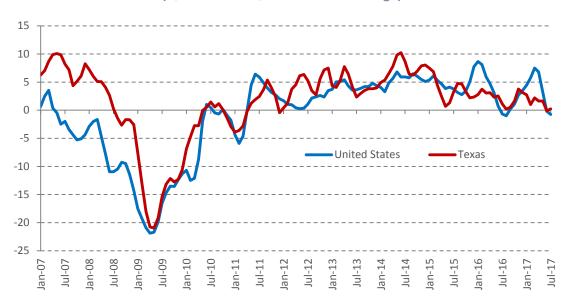
Note: Seasonally adjusted, 3-month moving average. July 2017 is preliminary.

For more information, see **Employment Growth Rate**.



Construction Employment

(Quarter-over-Quarter Percent Change)



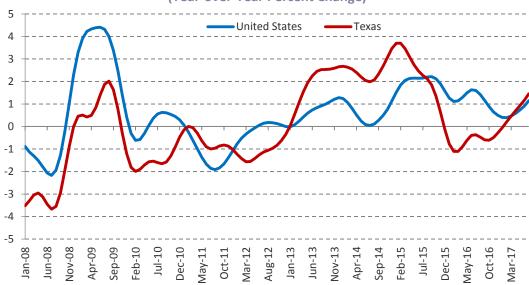
Note: Seasonally adjusted, 3-month moving average. July 2017 is preliminary.

For more information, see **Employment Growth Rate**.

Source: Bureau of Labor Statistics

Total Private Employee Hourly Earnings

(Year-over-Year Percent Change)



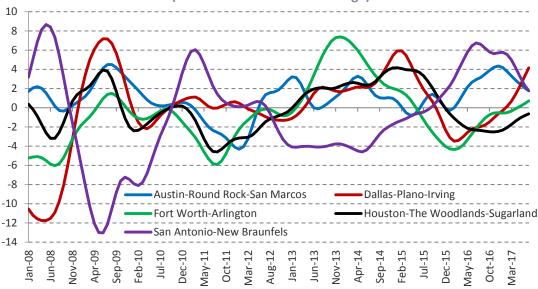
Notes: Inflation adjusted, seasonally adjusted and detrended. July 2017 is preliminary.

For more information, see <u>Total Private Employee Hourly Earnings</u>.



Major Metros Total Private Employee Hourly Earnings

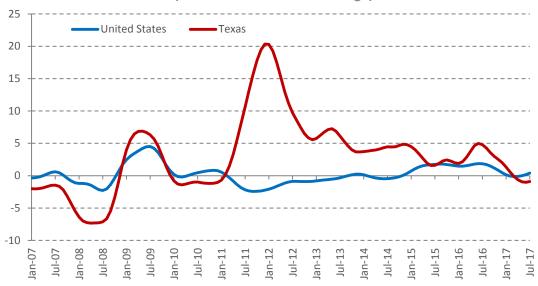
(Year-over-Year Percent Change)



Notes: Inflation adjusted, seasonally adjusted and detrended. July 2017 is preliminary. For more information, see <u>Total Private Employee Hourly Earnings</u>. Source: Bureau of Labor Statistics

Manufacturing Employee Hourly Earnings

(Year-over-Year Percent Change)

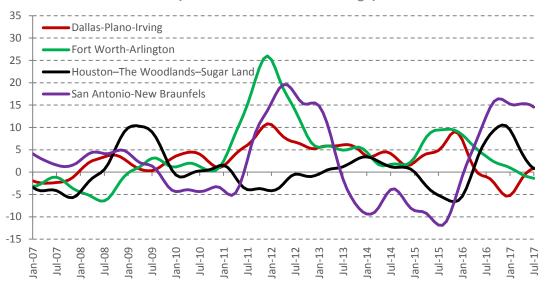


Notes: Seasonally adjusted and detrended. Inflation adjusted. July 2017 is preliminary. For more information, see <u>Total Private Employee Hourly Earnings</u>.



Major Metros Manufacturing Employee Hourly Earnings

(Year-over-Year Percent Change)



Notes: Seasonally adjusted and detrended. Inflation adjusted. July 2017 is preliminary.

For more information, see <u>Total Private Employee Hourly Earnings</u>.

Source: Bureau of Labor Statistic

Prices

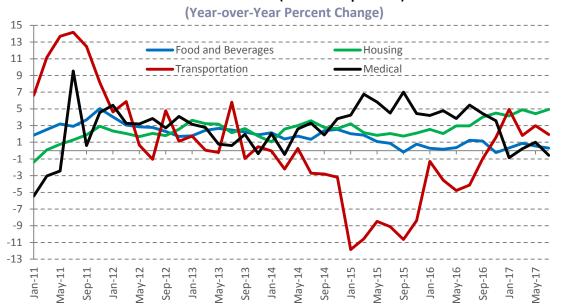
CPI Inflation Rates



Note: Seasonally adjusted. For more information, see CPI Inflation Rates.



CPI Inflation Rates (Dallas Components)

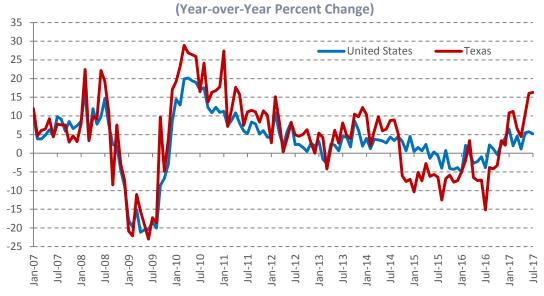


Note: The Dallas CPI is composed of the following major groups: Food and Beverages, Housing, Apparel, Transportation, Medical Care, Recreation, Education and Communication, and Other Goods and Services. The four major components are included in the graph above.

Source: Bureau of Labor Statistics

Trade





Note: Inflation adjusted with Bureau of Labor Statistics export indices. For more information, see <u>Exports.</u>. Sources: International Trade Administration, Foreign Trade Division, and U.S. Census Bureau



Manufacturing Exports

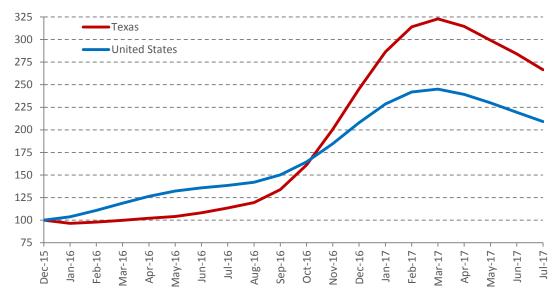
(Year-over-Year Percent Change)



Note: Inflation adjusted with Bureau of Labor Statistics export indices. For more information, see <u>Manufacturing Exports</u>. Sources: International Trade Administration, Foreign Trade Division, and U.S. Census Bureau

Crude Oil Exports

(Index Dec 2015 = 100)



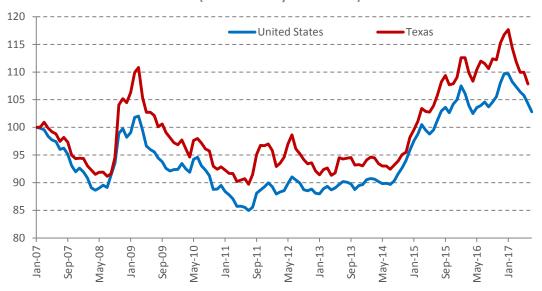
Note: Inflation adjusted and detrended with Bureau of Labor Statistics export indices. For more information, see <u>Crude Oil Exports</u>.

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



Real Trade Weighted Value of U.S. Dollar

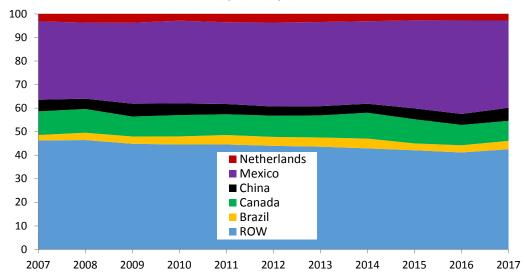
(Index January 2007 = 100)



Note: For more information, see <u>Real Trade Weighted Value of U.S. Dollar</u>. Sources: Federal Reserve Bank of Dallas and Federal Reserve Bank of St. Louis

Texas Exports by Country

(Percent)



Note: For more information, see $\underline{\text{Exports}}.$

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





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