Outlook for U.S. and Texas Economies

Commercial Real Estate Summit
Forth Worth, TX
September 27, 2017
Harvey Impacts

- Overall temporary negative shock on U.S. and Texas economies
- Big negative effects on wealth and lives but temporary effects on job growth
- Harvey not big enough to derail the positive job growth in Gulf Coast region or Texas
- Harvey and Irma not big enough to derail U.S. economy
- Housing stock damaged possible short-term slowdown in home construction and rise in regional labor costs
Job growth negative impact is large in September but rebounds quickly.

- September: TX expected job loss between 24,000-60,000 vs. gain of 30,000 prior Harvey
- October: TX job gains between 97,000-143,000 vs. gain of 27,000 prior Harvey
- Employment forecast for 2017 is growth between 2.9-3.1 percent vs. 2.7 percent prior Harvey
Note: Seasonally adjusted and detrended. Shaded area refers to recession
Source: Bureau of Labor Statistics
Contents

1. U.S. Economic Outlook

2. Texas Economic Outlook

3. Challenges and Issues
U.S. longest expansion since 1850
Job growth continues strong

Note: Seasonally adjusted. Shaded area refers to recession
Source: Bureau of Labor Statistics
Momentum picked up, slow productivity growth has caused slow growth

Real GDP and Nonfarm Productivity Growth
(Year-over-Year Percent Change)

Note: Seasonally adjusted. Shaded area refers to recession
Source: Bureau of Labor Statistics
Growth pick-up caused by an increase in capital investment

Private Fixed Investment (% of GDP)

Note: Seasonally adjusted. Shaded area refers to recession
Source: Bureau of Labor Statistics
Employees are moving to other jobs as opportunities improve.

**Quits and Layoffs**

(Thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>Quits</th>
<th>Layoffs and Discharges</th>
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<td>Jun-17</td>
<td>9,600</td>
<td>7,800</td>
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</tbody>
</table>

Note: Shaded area refers to recession. Source: Bureau of Labor Statistics.
Even with job openings above pre-crisis levels, some people cannot find jobs.

**Unemployment Rate by Educational Attainment (Percent)**

- Total, 25 years and older
- Less than high school
- High school graduates, no college
- Some college or associate degree
- Bachelor's degree and higher

**Note:** Seasonally adjusted. Shaded area refers to recession.

**Source:** Bureau of Labor Statistics
While wage growth does not reflect the strong labor market . . .

Note: Shaded area refers to recession.
Source: Federal Reserve Bank of Atlanta.
and have maintained employment cost relatively stable

Note: Shaded area refers to recession. Source: Bureau of Labor Statistics.
Moderate output and wage growth, low commodity prices have created a low-inflation environment.

Note: Seasonally adjusted. Shaded area refers to recession.
Well anchored, low-inflation expectations have caused interest rates to remain low.

Note: Shaded area refers to recession. 10-year Treasury Note Yield at Constant Maturity.
Household net worth has risen faster than disposable income due to equity values, long-term bond and housing prices.

Household Net Worth to Disposable Income (Ratio)

Note: Seasonally adjusted. Shaded area refers to recession.  
Source: Federal Reserve Board and Bureau of Economic Analysis.
Low inflation and low interest rates have made debt more attractive even with flat income growth.

Note: Seasonally adjusted. Shaded area refers to recession.
Source: Federal Reserve Board and Bureau of Economic Analysis.
Government debt has also risen, reaching a peak?

Federal Government Surplus or Deficit and Debt
(% of GDP)

Note: Seasonally adjusted. Shaded area refers to recession.
Source: U.S. Treasury, Federal Reserve Board and Bureau of Economic Analysis.
No clear signs of recession risk for the U.S. economy

Yield Curve Spread and Nonfarm Employment Growth
(Percent)

1. U.S. Economic Outlook

2. Texas Economic Outlook

3. Challenges and Issues
Positive growth momentum in Texas

Texas Business Cycle Index and Leading Index
(Index Jan2007=100)

Note: Seasonally adjusted. Shaded area refers to recession.
Source: Bureau of Labor Statistics
Texas employment outpaced U.S.

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

Note: Seasonally adjusted. Shaded area refers to recession.
Source: Bureau of Labor Statistics
Employment growth is broad based

Employment by Sector
(Year-over-Year and Quarter-over-Quarter Annualized Percent Change)

- Total Nonfarm (100%)
- Trade/Transportation/Utilities (20%)
- Government (15%)
- Professional & Business Services (14%)
- Educational & Health Services (14%)
- Leisure & Hospitality (11%)
- Manufacturing (7%)
- Construction (6%)
- Financial Activities (6%)
- Other Services (4%)
- Mining/Logging (2%)
- Information (2%)

Note: Seasonally adjusted.
Source: Bureau of Labor Statistics
Employment growth resurgence has been driven by the energy and manufacturing sectors.

**Note:** Seasonally adjusted. Shaded area refers to recession.

**Source:** Bureau of Labor Statistics
Energy employment jobs continue to recover

**Oil-Related Job Growth**

*(Month-over-Month Annualized Percent Change)*

- **Total**
- **Extraction**
- **Support Activities for Mining**
- **Fabricated Metals**
- **Agriculture, Construction, & Mining Machinery**
- **Architecture, Engineering, & Related**

Note: Seasonally adjusted. Shaded area refers to recession.
Source: Bureau of Labor Statistics
Energy sector recovery and improved global demand are a push for manufacturing.

Manufacturing Employment by Sector
(Year-over-Year and Quarter-over-Quarter Annualized Percent Change)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Year-over-Year</th>
<th>Qtr-over-Qtr Ann.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>100%</td>
<td></td>
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<tr>
<td>Total Durable Goods</td>
<td>64%</td>
<td></td>
</tr>
<tr>
<td>Fabricated Metal Products</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td>Machinery</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Computers &amp; Electronic Products</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Total Nondurable Goods</td>
<td>36%</td>
<td></td>
</tr>
<tr>
<td>Chemicals</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Petroleum &amp; Coal</td>
<td>3%</td>
<td></td>
</tr>
</tbody>
</table>

Note: Seasonally adjusted.
Source: Bureau of Labor Statistics
Strong growth in labor market causes wages to increase

Average Hourly Earnings, All Employees: Total Private
(Year-over-Year Percent Change)

- United States
- Texas

Average Hourly Earnings Aug-17
- U.S. $26.8
- Texas $25.1

Note: Seasonally adjusted. Deflated with Consumer Price Index for all urban consumers: All items. Shaded area refers to recession. Source: Bureau of Labor Statistics
Texas manufacturing is expected to continue to grow

Note:
Seasonally adjusted. Shaded area refers to recession.
Source: Federal Reserve Bank of Dallas and Institute for Supply Management. United States index is adjusted -50 to be on scale with Texas Index.
Service sector also expects positive growth

Note: Seasonally adjusted. Shaded area refers to recession.
Source: Federal Reserve Bank of Dallas and Institute for Supply Management. United States index is adjusted -50 to be on scale with Texas Index
Construction activity was slowing before Harvey

Texas Construction Values
(Index Jan 2007=100)

Note: Seasonally adjusted and detrended. Inflation adjusted. Shaded area refers to recession. Source: Dodge Analytics.
Multifamily construction activity has fallen while single-family has slowed.

Note: Seasonally adjusted and detrended. Inflation adjusted. Shaded area refers to recession.
Source: Dodge Analytics.
Texas residential construction should increase after Harvey

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

Note: Shaded area refers to recession.
Source: Dallas Federal Reserve and Real Estate Center at Texas A&M University.
Texas housing market stepped back because of supply constraints and Harvey

Housing Sales
(Index Jan 2007=100)

Note: Seasonally adjusted and detrended. Shaded area refers to recession.
Source: Real Estate Center at Texas A&M University.
Shortages for homes under $300,000 dragged down total housing sales

Months of Inventory by Price Cohort
(Months)

- $0-$199,000
- $200,000-$299,999
- $300,000-$399,999
- $400,000-$499,999
- $500,000+

Note: Seasonally adjusted and detrended. Shaded area refers to recession.
Source: Real Estate Center at Texas A&M University.
Is something wrong with Texas home prices?

Case-Shiller Texas Home Price Estimates
(Index IQ1975=100)

Source: Federal Housing Finance Agency and Real Estate Center at Texas A&M University, and author’s calculations
Current nonresidential construction was strong before Harvey

Non-Residential Construction Coincident Indicator
(Index Jan 2007=100)

Note: Shaded area refers to recession.
Source: Real Estate Center at Texas A&M University.
Strength driven by office and warehousing construction

Non-Residential Construction Values
(Index Jan 2007=100)

Note: Seasonally adjusted and detrended. Shaded area refers to recession.
Source: Dodge Analytics.
Office construction and rent growth should slow as vacancy rate is close to natural rate (19%).

DFW Office Market: Rent Growth and Vacancy Rate
(Index 2000Q1=100)

Source: CoStar, and Real Estate Center at Texas A&M University.
Retail construction and rent growth should continue to rise as vacancy rate is below the natural rate (9%).

DFW Retail Market: Rent Growth and Vacancy Rate
(Index 2000Q1=100)

Source: CoStar and Real Estate Center at Texas A&M University.
Warehouse construction and rent growth should continue to slow as vacancy rate is close to natural rate (11%).

**DFW Warehouse Market: Rent Growth and Vacancy Rate**

*Index 2000Q1=100*

- **Year-over-Year (%)**
- **Percent**

Source: CoStar and Real Estate Center at Texas A&M University.
Increased U.S. production of crude to offset OPEC cuts

Texas Production of Crude Oil and Rig Count
(Index 2000Q1=100)

Note: Seasonally adjusted and detrended.
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1. U.S. Economic Outlook

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3. Challenges and Issues
Relative to historical performance, growth has been low and unequal

Headwinds facing the U.S. economy include:

- weak productivity growth;
- an aging population;
- falling labor force participation;
- increasing polarized income distribution.
How to expand U.S. growth?

1. Fiscal policy should aim for a gradual and sustained reduction in the government deficit (higher revenues and lower spending) to put public debt on downward path

2. Fed should continue to raise interest rates in light of incoming data, while reducing its holdings of securities thus avoiding market volatility

3. Reforming the tax system to simplify with lower tax rates and fewer exemptions and redesign to create incentives
U.S. Economy Challenges and Issues

How to expand US growth?

4. Improving infrastructure
5. Revitalizing trade promoting a level playing field in trade
6. Supporting low and middle-income households by improving educational opportunities and outcomes
7. Adopting a skills-based immigration reform
8. Protecting the financial sector
9. Simplifying federal regulations
10. Strengthening healthcare coverage
11. Minimizing the unintended consequences of technology and import penetration
U.S. and Texas economy will continue to grow in 2017 and 2018.

The U.S. economy is expected to grow around 2.1% in both 2017 and 2018.

Inflation is expected to get closer to Federal Reserve target of 2% raising interest rates.
Texas Economic Outlook

- Texas employment is expected to grow between 2.9-3.1% in 2017

- Harvey should give a boost to both residential and nonresidential construction

- Putting possible pressures on construction labor

- Single-family home sales expected to fall -1.3% in 2017 vs. gain of 3.7% before Harvey
Please visit our webpage

www.recenter.tamu.edu