For Every Action There is An Equal and Opposite Reaction

Newton Was an Economist - The Outlook for Real Estate and the Economy

Ted C. Jones, PhD
Chief Economist
Mega Themes

• More Jobs Than Ever in History
• Retail Boom Just Starting
• Residential Renting vs. Owning
• Entry Level Homebuyers Returning
• Inflation Potential
• Overweight in Real Estate
• Terrorism is Here to Stay
Percent Residential Loan Applications Fell in First Full Week of the CFPB-TRID Rules

-27.6
U.S. Jobs
Jobs (Millions) *Seasonally Adjusted*

+1.88% Prior 12 Months
292,000 Net New Jobs in November
2.65 Million in Past 12-Months

Bureau of Labor Statistics
## State Job Growth Rates - 12 Months Ending November 2015

<table>
<thead>
<tr>
<th>State</th>
<th>Percent</th>
<th>State</th>
<th>Percent</th>
<th>State</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idaho</td>
<td>4.19%</td>
<td>Colorado</td>
<td>1.78%</td>
<td>Minnesota</td>
<td>1.13%</td>
</tr>
<tr>
<td>Utah</td>
<td>3.55%</td>
<td>Kentucky</td>
<td>1.77%</td>
<td>Dist of Columbia</td>
<td>1.09%</td>
</tr>
<tr>
<td>Florida</td>
<td>3.02%</td>
<td>Iowa</td>
<td>1.75%</td>
<td>Missouri</td>
<td>1.04%</td>
</tr>
<tr>
<td>Washington</td>
<td>2.87%</td>
<td>Tennessee</td>
<td>1.71%</td>
<td>Wisconsin</td>
<td>1.04%</td>
</tr>
<tr>
<td>Oregon</td>
<td>2.75%</td>
<td>Michigan</td>
<td>1.71%</td>
<td>Mississippi</td>
<td>0.89%</td>
</tr>
<tr>
<td>South Carolina</td>
<td>2.64%</td>
<td>Rhode Island</td>
<td>1.67%</td>
<td>Montana</td>
<td>0.71%</td>
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<tr>
<td>California</td>
<td>2.63%</td>
<td>Connecticut</td>
<td>1.60%</td>
<td>Pennsylvania</td>
<td>0.68%</td>
</tr>
<tr>
<td>South Dakota</td>
<td>2.59%</td>
<td>Texas</td>
<td>1.53%</td>
<td>New Hampshire</td>
<td>0.63%</td>
</tr>
<tr>
<td>Nevada</td>
<td>2.52%</td>
<td>Nebraska</td>
<td>1.50%</td>
<td>Illinois</td>
<td>0.61%</td>
</tr>
<tr>
<td>Arizona</td>
<td>2.49%</td>
<td>Ohio</td>
<td>1.41%</td>
<td>Kansas</td>
<td>0.50%</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>2.23%</td>
<td>Delaware</td>
<td>1.40%</td>
<td>New Mexico</td>
<td>0.36%</td>
</tr>
<tr>
<td>Georgia</td>
<td>2.20%</td>
<td>New Jersey</td>
<td>1.39%</td>
<td>Alaska</td>
<td>0.15%</td>
</tr>
<tr>
<td>North Carolina</td>
<td>2.18%</td>
<td>Virginia</td>
<td>1.37%</td>
<td>Oklahoma</td>
<td>-0.09%</td>
</tr>
<tr>
<td>Hawaii</td>
<td>2.11%</td>
<td>Vermont</td>
<td>1.28%</td>
<td>Louisiana</td>
<td>-0.57%</td>
</tr>
<tr>
<td>Maryland</td>
<td>2.02%</td>
<td>Maine</td>
<td>1.27%</td>
<td>Wyoming</td>
<td>-0.72%</td>
</tr>
<tr>
<td>Indiana</td>
<td>1.96%</td>
<td>Alabama</td>
<td>1.27%</td>
<td>West Virginia</td>
<td>-1.42%</td>
</tr>
<tr>
<td>New York</td>
<td>1.88%</td>
<td>Arkansas</td>
<td>1.23%</td>
<td>North Dakota</td>
<td>-2.87%</td>
</tr>
</tbody>
</table>
Texas Leisure & Hospitality Jobs

Recession

Thousands of Jobs Seasonally-Adjusted

+4.54% 12 Months
Austin-Round Rock-San Marcos MSA Jobs

Jobs (Thousands) *Seasonally Adjusted*

+3.88% Prior 12 Months
35,800 Net New Jobs Prior 12 Months

Bureau of Labor Statistics
San Antonio-New Braunfels MSA Jobs

Jobs (Thousands) Seasonally Adjusted

+3.66% Prior 12 Months
35,100 Net New Jobs Prior 12 Months
U.S. Existing Home Sales & Median Prices

Sales on a Seasonally Adjusted Annualized Rate

Median Price $ Thousands

Home Sales Millions

Median Price

Home Sales

National Association of REALTORS®

stewart
U.S. Existing Home Sales
Sales – Not Seasonally Adjusted - Thousands

National Association of REALTORS®
U.S. Existing Home Sales
Median Price – Not Seasonally Adjusted - $Thousands

National Association of REALTORS®
U.S. Existing Home Sales

Months Inventory – *Seasonally Adjusted*

![Graph showing U.S. Existing Home Sales](graph.png)

National Association of REALTORS®
## U.S. Existing Sales

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Forecast</td>
</tr>
<tr>
<td>Jan</td>
<td>281,000</td>
<td>296,742</td>
</tr>
<tr>
<td>Feb</td>
<td>295,000</td>
<td>293,712</td>
</tr>
<tr>
<td>Mar</td>
<td>405,000</td>
<td>385,310</td>
</tr>
<tr>
<td>Apr</td>
<td>449,000</td>
<td>458,647</td>
</tr>
<tr>
<td>May</td>
<td>495,000</td>
<td>495,528</td>
</tr>
<tr>
<td>Jun</td>
<td>572,000</td>
<td>530,332</td>
</tr>
<tr>
<td>Jul</td>
<td>551,000</td>
<td>546,980</td>
</tr>
<tr>
<td>Aug</td>
<td>504,000</td>
<td>562,425</td>
</tr>
<tr>
<td>Sep</td>
<td>471,000</td>
<td>434,522</td>
</tr>
<tr>
<td>Oct</td>
<td>444,000</td>
<td>472,946</td>
</tr>
<tr>
<td>Nov</td>
<td>351,000</td>
<td>423,626</td>
</tr>
<tr>
<td>Dec</td>
<td>435,245</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5,336,014</td>
<td>82,769</td>
</tr>
</tbody>
</table>

|       | 2015 YTD 6.55% | 2016 4.86% |
San Antonio Residential Closings
Number Per Month

Number Per Month

'02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15
San Antonio Residential Closings

Average Number of Closings Per Month for Prior 12 Months

+10.0%
San Antonio Residential Closings

Average Price

'02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15
San Antonio Residential Closings

Average Price – 12 Month Moving Average

+$6.7\%$
San Antonio MSA Residential Building Permits

Number of Dwelling Units

8,000 Permits is the past 12 months, 30,800 New Jobs
3.85 New Jobs Per New Dwelling Unit
Austin Existing Home Sales

Average Number Per Month For Prior 12 Months

'02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15

+4.3%
Austin Existing Home Prices

Median Price $ Thousands

- $0
- $50
- $100
- $150
- $200
- $250
- $300

'02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15
Austin Existing Home Prices

Median Price $ Thousands Prior 12 Month Moving Average

- '02
- '03
- '04
- '05
- '06
- '07
- '08
- '09
- '10
- '11
- '12
- '13
- '14
- '15

+8.8%
Austin Existing Home Sales

Months Inventory – *Seasonally Adjusted*
Austin MSA Residential Building Permits

Number of Dwelling Units -- Thousands

October 2015

20,478 New Dwelling Permits, 31,900 Net New Jobs
1.56 Net New Jobs Per New Dwelling
U.S. Real Retail & Food Service Sales

$ Billions – Seasonally Adjusted
Light Weight Vehicle Sales

Millions – *Seasonally Adjusted Annual Rate*

Bureau of Economic Analysis
Household Debt Service as a Percent of Household Disposable Income

Percent

'81 '83 '85 '87 '89 '91 '93 '95 '97 '99 '01 '03 '05 '07 '09 '11 '13 '15

FED Board of Governors, BEA
### U.S. Property Returns

**Q3 2015 TTM**

<table>
<thead>
<tr>
<th>Property</th>
<th>12-Month Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>12.84%</td>
</tr>
<tr>
<td>Hotel</td>
<td>13.89%</td>
</tr>
<tr>
<td>Apartment</td>
<td>11.52%</td>
</tr>
<tr>
<td>Retail</td>
<td>13.71%</td>
</tr>
<tr>
<td>Industrial</td>
<td>14.79%</td>
</tr>
<tr>
<td>Office</td>
<td>12.47%</td>
</tr>
</tbody>
</table>

- **Tax-Exempt Investments**
- **All Cash Purchase**
- **Cash Flow + Value Change**
- **Only Pay Property Taxes**
- **$459 Billion of Properties**
- **7,012 Properties**

Source: NCREIF

U.S. Commercial Real Estate Sales Volume

$ Billions – *Trailing 12 Months*

Property and Portfolio Sales $2.5 Million and Up

- 11.8% Below 2007 Peak

+21.4%
Austin Commercial Real Estate Sales Volume

$ Millions – *Trailing 12 Months*

Property and Portfolio Sales $2.5 Million and Up
San Antonio Commercial Real Estate Sales Volume

$ Millions – *Trailing 12 Months*

Property and Portfolio Sales $2.5 Million and Up
Commercial Real Estate Cap Rates

Percent – All Property Types

Property and Portfolio Sales $2.5 Million and Up

US Austin San Antonio

REAL CAPITAL ANALYTICS
30-Year Residential Rates

Expect 5.2 to 5.6 Percent in Next 12 Months

Freddie Mac®
$60 OIL
Natural Gas Price Delivered to Commercial Customers vs. WTI Crude Oil -- Gas Per 1,000 Cubic Feet, Oil Per Barrel

Natural Gas

Oil

U.S. Energy Information Administration
## U.S. - China Trade -- $US Millions

<table>
<thead>
<tr>
<th>Month</th>
<th>Exports</th>
<th>Imports</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec-14</td>
<td>12,166.2</td>
<td>40,218.9</td>
<td>(28,052.7)</td>
</tr>
<tr>
<td>Jan-15</td>
<td>9,552.0</td>
<td>38,158.4</td>
<td>(28,606.4)</td>
</tr>
<tr>
<td>Feb-15</td>
<td>8,699.8</td>
<td>31,240.1</td>
<td>(22,540.3)</td>
</tr>
<tr>
<td>Mar-15</td>
<td>9,887.2</td>
<td>41,121.9</td>
<td>(31,234.7)</td>
</tr>
<tr>
<td>Apr-15</td>
<td>9,316.8</td>
<td>35,795.1</td>
<td>(26,478.3)</td>
</tr>
<tr>
<td>May-15</td>
<td>8,758.8</td>
<td>39,211.2</td>
<td>(30,452.4)</td>
</tr>
<tr>
<td>Jun-15</td>
<td>9,687.8</td>
<td>41,145.1</td>
<td>(31,457.3)</td>
</tr>
<tr>
<td>Jul-15</td>
<td>9,500.7</td>
<td>41,077.2</td>
<td>(31,576.6)</td>
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<tr>
<td>Aug-15</td>
<td>9,166.7</td>
<td>44,117.2</td>
<td>(34,950.5)</td>
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<tr>
<td>Sep-15</td>
<td>9,423.7</td>
<td>45,700.6</td>
<td>(36,277.0)</td>
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<td>Oct-15</td>
<td>11,384.3</td>
<td>44,358.0</td>
<td>(32,973.7)</td>
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<tr>
<td>Nov-15</td>
<td>10,681.0</td>
<td>41,940.5</td>
<td>(31,259.5)</td>
</tr>
</tbody>
</table>

| Total   | $118,225.0 | $484,084.2 | $(365,859.4) |

Source: U.S. Census Bureau
China Impact on U.S. Economy

U.S. 2015 GDP $18.01 Trillion (Q2 2015 Annualized Rate)

Purchases by China of U.S. Goods $118.2 Billion (2015 est)

Impact = 6.5/10ths of 1 Percent of U.S. GDP
2016 Economic Concerns

- Election Year - *Politicians*
- Government Revenues & Regulations
- Rural Land Bubble Just Starting
- GSEs – *Fannie Mae & Freddie Mac*
- Inflation & Interest Rates

Newton’s Third Law of Motion
Twitter: DrTCJ
blog.stewart.com/ted
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