The Comerica U.S. and Regional Economic Outlook

The Transitional Economy: Crosscurrents and Volatility

Robert A. Dye Ph.D.
Chief Economist, Comerica Bank
August 2015
<table>
<thead>
<tr>
<th></th>
<th>Post Recession 2010-13</th>
<th>Transitional 2014-2016</th>
<th>Late Cycle 2017 - ??</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fed Policy:</td>
<td>QE and ZIRP</td>
<td>Lift-Off</td>
<td>Towards Normalization</td>
</tr>
<tr>
<td>Energy:</td>
<td>The Shale Gale</td>
<td>Saudi Shift</td>
<td>U.S. Swing Producer</td>
</tr>
<tr>
<td>Manufacturing:</td>
<td>Rebound</td>
<td>Headwinds</td>
<td>Productivity Push</td>
</tr>
<tr>
<td>Financial:</td>
<td>Regulation</td>
<td>Recognition</td>
<td>Rollback</td>
</tr>
<tr>
<td>Housing:</td>
<td>Depression, MF</td>
<td>Rebalancing</td>
<td>Single-family</td>
</tr>
<tr>
<td>Consumer:</td>
<td>Deleveraging/Saving</td>
<td>Releveraging/Saving</td>
<td>Releveraging/Desaving</td>
</tr>
<tr>
<td>Demographic:</td>
<td>Baby Boomers Hit the Wall</td>
<td>Rise of the Millennials</td>
<td>Millennial Families</td>
</tr>
<tr>
<td>Labor:</td>
<td>Re-absorption</td>
<td>Tightening</td>
<td>Wage Pressure</td>
</tr>
<tr>
<td>Inflation:</td>
<td>Weak Demand</td>
<td>Low energy prices</td>
<td>Increasing</td>
</tr>
<tr>
<td>Global:</td>
<td>China Cooling</td>
<td>Firmer Europe</td>
<td>Asian Reset</td>
</tr>
</tbody>
</table>
Consumers Are In a Different Place

Household Savings and Debt

- Personal Savings Rate, percent, (L)
- Household Financial Obligations Ratio, percent (R)

Source: Bureau of Economic Analysis, Federal Reserve
Fed Policy: Countdown to Interest Rate Lift-off

- Fed brackets lift-off...September-December 2015
- Labor market metrics are showing “some” improvement, August data
- Fiscal drag easing
- GDP growth for 2015H2 expected to be moderate
- Increasing chatter from FOMC through mid-September
- Interest rate lift-off, perhaps September, October and December possible
- Low oil prices, rising dollar and global equities complicate inflation outlook
- Shallow trajectory, interest rates may not fully normalize before next recession
- Fischer’s “crawl”
Comerica: 5 Key States, 31% of U.S. GDP
Comerica Bank’s Texas Economic Activity Index Sees Smallest Decline of 2015 in June

The Texas Economic Activity Index consists of eight variables: nonfarm payrolls, exports, hotel occupancy rates, continuing claims for unemployment insurance, housing starts, sales tax revenues, home prices, and the Baker Hughes rotary rig count.
Job Growth in Texas is Cooling, but Still Positive

Unemployment Rate, percent

Job Growth, y/y percent

Sources: BLS
Texas Employment Resilient Through July

Employment: Total Nonfarm, (Ths., SA) for Texas (L)
Employment: Natural Resources and Mining, (Ths., SA) for Texas (R)

change from previous month

Sources: BLS
Shale Gale Contributing to Global Oil Glut

U.S. crude oil production, ths barrels, (L)

U.S. petroleum demand, ths barrels per day (R)

Source: Energy Information Agency
Falling Crudes Prices Suppress Oil Field Activity

WTI Crude Price Through April 2015

Average Active Rotary Rigs, Total Number U.S. (R)

WTI Crude Oil Spot Price at Cushing, $/barrel (L)

Sources: Energy Information Agency, Baker Hughes
WTI Oil Prices, 2 Cycles Overlaid

WTI Oil Price 18 Months Before and After Peak, $/bbl

December 2006 – December 2009
Peak Oil Price 133.88, June 2008

December 2012 – June 2015
Peak Oil Price 105.79, June 2014

Current Oil Price 51.16, July 2015

Source: Energy Information Agency
Total U.S. Rig Count, 2 Cycles Overlaid

Rig Count 18 Months Before and After Peak

March 2007 – March 2010
Peak Rig Count 2014, September 2008

March 2013 – June 2015
Peak Rig Count 1930, September 2014

Current Rig Count 866, July 2015

Source: Baker Hughes
U.S. Crude Oil Inventories and Field Production

Sources: EIA
Comerica’s Michigan Economic Activity Index Continues Strong Gains through June

The Michigan Economic Activity Index consists of eight variables: nonfarm payrolls, exports, hotel occupancy rates, continuing claims for unemployment insurance, housing starts, sales tax revenues, home prices, and auto production.
Michigan Is Normal!

Unemployment Rate, percent

Job Growth, y/y percent

Sources: BLS
Auto and Light Truck Sales Near Cyclical Peak

Light Vehicle Sales and Assemblies

Sources: Autodata, Federal Reserve
Exchange Rates Volatility Increased by Desynchronized Global Monetary Policy

The Dollar, the Euro and the Yen

Source: Federal Reserve
Manufacturing: Feeling Headwinds

Industrial Production and ISM MF Index

MF Industrial Production, pchya (L)  ISM MF Index (R)

Sources: Institute of Supply Management, Federal Reserve
The California Economic Activity Index consists of eight variables: nonfarm payrolls, exports, hotel occupancy rates, continuing claims for unemployment insurance, housing starts, national defense spending, home prices, and the NASDAQ-100-Technology Sector Index (NDXT).
California Outperforms

Unemployment Rate, percent

Job Growth, y/y percent

Sources: BLS
Tech Stocks Show Strong Silicon Valley Economy

Stock Indexes

NASDAQ Tech 100 Stock Index
S&P 500 Stock Index

Sources: NASDAQ, S&P
California House Prices Gaining

Case-Shiller House Price Indexes

Source: S&P
Florida’s Economy Continues to Shine

The Florida Economic Activity Index consists of eight variables: nonfarm payrolls, exports, hotel occupancy rates, continuing claims for unemployment insurance, housing starts, sales tax revenues, home prices, and total enplanements.
Florida Picking Up Momentum

Unemployment Rate, percent

Job Growth, y/y percent

Sources: BLS
Exchange Rates Volatility Increased by Desynchronized Global Monetary Policy

The Dollar, the Euro and the Yen

Source: Federal Reserve
The Arizona Economic Activity Index consists of eight variables: nonfarm payrolls, exports, hotel occupancy rates, continuing claims for unemployment insurance, housing starts, home prices, sales tax revenues, and total enplanements.
Arizona Very Weak In Current Cycle

Job Growth, y/y percent

Sources: BLS
Phoenix House Prices Still Deep Under Water

Case-Shiller House Price Indexes

Source: S&P