Welcome.

Len Jessup
Dean, Eller College of Management

Our Region:
Clearing, but Still a Bit Cloudy

George W. Hammond, Ph.D.
Director, Economic and Business Research Center
The Current Situation

• Arizona is still growing: adding jobs, residents, and real income
  – But growth is slow relative to pre-recession growth rates
• Housing permits slowed during the second half of 2013, but have picked up recently for Arizona and Phoenix
• Fiscal drag adversely affected growth in 2013, particularly in Tucson
Arizona and U.S. Job Growth
Seasonally Adjusted, Year-to-Year Growth Rates

Arizona, Phoenix, Tucson, and U.S.
Job Growth Since Peak
CES Seasonally Adjusted

Arizona’s Unemployment Rate
Continues to Drop
Seasonally Adjusted

Arizona’s Employment-Population Ratio
Age 16+

Arizona Housing Permit Activity Bounced Back
Twelve Month Moving Average, Seasonally Adjusted Annual Rate

What a Drag
Federal fiscal policy slows growth

- Income shifting into 2012 to avoid tax increases in 2013
- Expiration of the federal payroll tax holiday
- Sequester cuts
- Federal government shutdown

Arizona Multi-Family Permits Drove Growth in Early 2014
Seasonally Adjusted Annual Rate

Government Shares of GDP

University of Arizona
Economic and Business Research Center
Breakfast with the Economists

Change in Federal Procurement Spending 2012-2013 Relative to GDP
Federal Procurement Data System

Tucson MSA Job Growth
Seasonally Adjusted, Year-to-Year Growth Rates

Tucson MSA Housing Permit Activity Slowed Lately
Seasonally Adjusted Annual Rate

Tucson MSA Retail Sales
Smoothed Year-over-Year Growth Rates
Tucson MSA Job Growth Rises

Tucson MSA Job Growth by Industry

Tucson MSA Population Change And Housing Permits

Tucson MSA Job Growth Alternative Scenarios
The Macro Economy

The Good
The Bad
The Not-So Bad

Steven M. Reff
Lecturer in Economics, Eller College of Management
Author of Economics University
Co-Author of Grokking Economics

In not-so-many words, Mark Twain once said there are three types of lies:

There are lies, there are damn lies, and then there are statistics.

Before getting into my presentation, you must know a couple of two-letter words in Macroeconomics:

Ceteris Paribus
All other things held constant

If something changes, then what is going to happen?

It depends!
MACROECONOMIC GOALS:

6.3%  Full Employment  6%
1.95%  Stable Prices  2%
-1.0%  Economic Growth  3%

Monday, June 2, 2014
Civilian Labor Force

Who is NOT included?

1. Institutionalized individuals
   - Prisoners
   - Mental Patients
   - Nursing Home Patients

2. Military Personnel

Civilian Labor Force =

Employed workers + Unemployed workers

Unemployment Rate =

# of Unemployed workers / # in labor force
Unemployment Rate = 
\[
\frac{\text{# of Unemployed workers}}{\text{# in labor force}}
\]

- Employed workers
- Unemployed workers

Unemployment Rate June 2013: 7.5%
Unemployment Rate April 2014: 6.3%
Stable Prices 2%

Inflation Rates Graph (2004-2014)

Federal Reserve Targeted Inflation Rate

Personal Consumption Expenditures Price Index

Personal Consumption Expenditures Price Index and the CPI

Federal Reserve Crisis Solution Chart

The U.S. is in a financial crisis

Purchase Securities

Did it work?

No
On December 12, 2012, the FOMC of the Federal Reserve System announced Quantitative Easing 4 or better known as QE4.

http://reffonomics.com/QE
A Quick Review of Real GDP

C + I + G + NX

Real GDP (2%)
15,583.9 (2013) First Quarter
15,902.9 (2014) First Quarter

C (2.47%)
10,644 (2013) First Quarter
10,914 (2014) First Quarter

I (3.6%)
2,470.1 (2013) First Quarter
2,562.4 (2014) First Quarter

G (-1.5%)
2,907.4 (2013) First Quarter
2,862.7 (2014) First Quarter

X (3.5%)
1,960.5 (2013) First Quarter
2,032.1 (2014) First Quarter

M (2.8%)
2,382.7 (2013) First Quarter
2,451.0 (2014) First Quarter
Severe Winter Weather

Economic Growth during the First Quarter of 2014:

0.1%

Recently revised to:

-1.0%

The dip in the first quarter now marks the first quarterly GDP decline since the first quarter of 2011.

Severe Winter Weather
Components of the Conference Board's Leading Economic Indicators Index:

Average weekly hours (manufacturing)

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<tr>
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</thead>
<tbody>
<tr>
<td>AVERAGE WEEKLY HOURS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total private</td>
<td>33.7</td>
<td>33.4</td>
<td>33.7</td>
<td>33.7</td>
</tr>
</tbody>
</table>

Components of the Conference Board's Leading Economic Indicators Index:

Average weekly jobless claims for unemployment insurance

http://ycharts.com/indicators/initial_claims_for_unemployment_insurance
Components of the Conference Board's Leading Economic Indicators Index:

Manufacturers’ new orders for consumer goods/materials

New orders for manufactured goods in March, up two consecutive months, increased $5.3 billion or 1.1 percent to $493.9 billion, the U.S. Census Bureau reported May 2, 2014.

--U.S. Census Bureau News--

Components of the Conference Board’s Leading Economic Indicators Index:

Manufacturers’ new orders for non-defense capital goods

New orders for manufactured durable goods in April increased $1.9 billion or 0.8 percent to $239.9 billion, the U.S. Census Bureau announced today. This increase, up three consecutive months, followed a 3.6 percent March increase.

--U.S. Census Bureau News--

Components of the Conference Board’s Leading Economic Indicators Index:

Vendor performance (slower deliveries diffusion index)

Of the 18 manufacturing industries, 17 are reporting growth in April in the following order: Apparel, Leather & Allied Products; Primary Metals; Furniture & Related Products; Miscellaneous Manufacturing; Food, Beverage & Tobacco Products; Transportation Equipment; Fabricated Metal Products; Machinery; Printing & Related Support Activities; Plastics & Rubber Products; Textile Mills; Chemical Products; Computer & Electronic Products; Wood Products; Paper Products; Petroleum & Coal Products; and Electrical Equipment, Appliances & Components. The only industry reporting contraction in April is Nonmetallic Mineral Products.

--Institute for Supply Management--

Components of the Conference Board’s Leading Economic Indicators Index:

Building permits for new private housing units
Components of the Conference Board’s Leading Economic Indicators Index:

**The Standard & Poor’s 500 stock index**

Historical chart

- May 28, 2014: S & P: 1,920
- June 5, 2013: S & P: 1,695

**Money Supply (M2)**

Components of the Conference Board’s Leading Economic Indicators Index:

- June 5, 2013: S & P: 1,920
- May 28, 2014: S & P: 1,920

**Interest rate spread**

Components of the Conference Board’s Leading Economic Indicators Index:

**Index of consumer expectations**

Consumer confidence rose slightly this month as better weather, higher stock prices and signs of an improving job market lifted Americans’ mood. The Conference Board said its Consumer Confidence Index rose to 83 . . .

up from 81.7 in April. It fell in April from 83.9 in March. Consumers’ expectations for the economy in the short-term, jobs and personal finances also improved.
U.S. Housing starts rise 13.2% in April

U.S. New Housing Starts (in thousands)

<table>
<thead>
<tr>
<th>Month</th>
<th>Starts</th>
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<tbody>
<tr>
<td>June</td>
<td>85.7</td>
</tr>
<tr>
<td>July</td>
<td>90.2</td>
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<tr>
<td>August</td>
<td>87.1</td>
</tr>
<tr>
<td>September</td>
<td>83.1</td>
</tr>
<tr>
<td>October</td>
<td>92.5</td>
</tr>
<tr>
<td>November</td>
<td>73.5</td>
</tr>
<tr>
<td>December</td>
<td>77.8</td>
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2014:
<table>
<thead>
<tr>
<th>Month</th>
<th>Starts</th>
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<tbody>
<tr>
<td>January</td>
<td>65.0</td>
</tr>
<tr>
<td>February</td>
<td>70.5</td>
</tr>
<tr>
<td>March (r)</td>
<td>83.7</td>
</tr>
<tr>
<td>April (p)</td>
<td>96.5</td>
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</tbody>
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--U.S. Census Bureau News--

Dow Jones Industrial Average Closed at: 14,960.59
June 5, 2013

Dow Jones Industrial Average Closed at: 16,697.59
May 29, 2014

Unemployment (U3)

Historical chart
The Present Situation Index increased to 80.4 from 78.5, while the Expectations Index edged up to 84.8 from 83.9 in April.

The Bad or Not-So Bad

West New Housing Starts (in thousands)

<table>
<thead>
<tr>
<th>Month</th>
<th>Start (in thousands)</th>
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<tbody>
<tr>
<td>June</td>
<td>13.3</td>
</tr>
<tr>
<td>July</td>
<td>13.0</td>
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<td>August</td>
<td>12.8</td>
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<tr>
<td>September</td>
<td>10.2</td>
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<tr>
<td>October</td>
<td>11.7</td>
</tr>
<tr>
<td>November</td>
<td>8.8</td>
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<tr>
<td>December</td>
<td>9.7</td>
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<table>
<thead>
<tr>
<th>Year</th>
<th>Start (in thousands)</th>
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<tbody>
<tr>
<td>2014</td>
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<tr>
<td>January</td>
<td>9.8</td>
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<tr>
<td>February</td>
<td>9.0</td>
</tr>
<tr>
<td>March (r)</td>
<td>11.1</td>
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<tr>
<td>April (p)</td>
<td>12.3</td>
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--U.S. Census Bureau News--
Gold is on track to end the year at a loss for the first time in 13 years. Will it?

It depends!

It is going to take the rest of the world to help us this time.
There will be more heated debates on:

- Income Inequality
- Minimum Wage Laws
- Immigration

“If I ever go looking for my heart's desire again, I won't look any further than my own backyard.”

Tucson’s Economy
- The Good
- The Bad
- The Ugly
A special thank you to JPMorgan Chase & Co. for sponsoring today’s event.