Economic Outlook 2010/2011

The University of Arizona’s Twenty-Ninth Annual Forecast Luncheon

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Eller College of Management

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Economic and Business Research Center
Eller College of Management

Overview
- National outlook
  - Recession is over, but slow recovery
- Arizona still contracting
  - Will lag behind U.S. during recovery
- 3 keys to the outlook
  - Labor markets
  - Housing markets
  - Crisis in state government

National Outlook
- Recovery will be slow
  - Deep recessions normally followed by strong recoveries, BUT recessions involving financial crisis are typically slow to recover
  - Dampered by constrained credit markets and poor fundamentals for consumer spending
  - Credit markets require more time to heal
  - Consumers are weary
    - Consumption won’t be a driver
    - Household net worth has declined by $14 trill.
Household Net Worth ($Tril.)

Arizona’s Economy

- The hardest hit state?
  - Job growth ranking = 50th
  - Personal income growth = 41st
  - State revenue growth = 43rd
  - Fiscal peril – second only to California as worst
  - Residential foreclosures = 4th
  - Homeowners with negative equity = 2nd

Job Growth thru October 2009

<table>
<thead>
<tr>
<th>rank</th>
<th>state</th>
<th>% change vs year ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>Arizona</td>
<td>-6.8%</td>
</tr>
<tr>
<td>49</td>
<td>Michigan</td>
<td>-6.3%</td>
</tr>
<tr>
<td>48</td>
<td>Nevada</td>
<td>-6.0%</td>
</tr>
<tr>
<td>45</td>
<td>Oregon</td>
<td>-5.2%</td>
</tr>
<tr>
<td>44</td>
<td>Idaho</td>
<td>-5.2%</td>
</tr>
<tr>
<td>40</td>
<td>California</td>
<td>-4.6%</td>
</tr>
<tr>
<td>35</td>
<td>Florida</td>
<td>-4.4%</td>
</tr>
<tr>
<td>33</td>
<td>Colorado</td>
<td>-4.3%</td>
</tr>
<tr>
<td>26</td>
<td>Utah</td>
<td>-3.8%</td>
</tr>
</tbody>
</table>

Personal Income Growth thru 2q09

<table>
<thead>
<tr>
<th>rank</th>
<th>state</th>
<th>% change vs year ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>Nevada</td>
<td>-5.4%</td>
</tr>
<tr>
<td>46</td>
<td>Florida</td>
<td>-3.7%</td>
</tr>
<tr>
<td>45</td>
<td>Michigan</td>
<td>-3.6%</td>
</tr>
<tr>
<td>44</td>
<td>Idaho</td>
<td>-3.4%</td>
</tr>
<tr>
<td>41</td>
<td>Arizona</td>
<td>-3.3%</td>
</tr>
<tr>
<td>40</td>
<td>California</td>
<td>-3.3%</td>
</tr>
<tr>
<td>33</td>
<td>Utah</td>
<td>-2.7%</td>
</tr>
<tr>
<td>31</td>
<td>Colorado</td>
<td>-2.5%</td>
</tr>
<tr>
<td>15</td>
<td>Oregon</td>
<td>-1.4%</td>
</tr>
</tbody>
</table>

Tax Revenues, 3rd Quarter

Pew Center Fiscal Peril Index
Residential Foreclosures 3q09

<table>
<thead>
<tr>
<th>rank</th>
<th>state</th>
<th>1 for every X homes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nevada</td>
<td>80</td>
</tr>
<tr>
<td>2</td>
<td>California</td>
<td>156</td>
</tr>
<tr>
<td>3</td>
<td>Florida</td>
<td>168</td>
</tr>
<tr>
<td>4</td>
<td>Arizona</td>
<td>200</td>
</tr>
<tr>
<td>5</td>
<td>Idaho</td>
<td>255</td>
</tr>
<tr>
<td>6</td>
<td>Michigan</td>
<td>275</td>
</tr>
<tr>
<td>7</td>
<td>Utah</td>
<td>385</td>
</tr>
<tr>
<td>8</td>
<td>Colorado</td>
<td>421</td>
</tr>
<tr>
<td>9</td>
<td>Arizona</td>
<td>509</td>
</tr>
</tbody>
</table>

Proportion of Homeowners With Negative Equity 3q09

<table>
<thead>
<tr>
<th>rank</th>
<th>state</th>
<th>Negative equity share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nevada</td>
<td>65.0%</td>
</tr>
<tr>
<td>2</td>
<td>Arizona</td>
<td>47.9%</td>
</tr>
<tr>
<td>3</td>
<td>Florida</td>
<td>44.7%</td>
</tr>
<tr>
<td>4</td>
<td>Michigan</td>
<td>37.3%</td>
</tr>
<tr>
<td>5</td>
<td>California</td>
<td>34.7%</td>
</tr>
<tr>
<td>6</td>
<td>Idaho</td>
<td>19.7%</td>
</tr>
<tr>
<td>7</td>
<td>Michigan</td>
<td>19.0%</td>
</tr>
<tr>
<td>8</td>
<td>Utah</td>
<td>18.3%</td>
</tr>
<tr>
<td>9</td>
<td>Arizona</td>
<td>13.8%</td>
</tr>
</tbody>
</table>

Arizona’s Economy

- The recession continues
  - Federal Reserve Bank of Philadelphia’s state coincidence index
  - Based on 
    - nonfarm employment
    - average hours worked in manufacturing
    - Unemployment rate
    - Inflation adjusted wage and salary disbursements
  - Arizona one of 18 states with losses greater than 1% during three months ending September

Arizona’s Economy (continued)

- Federal Reserve Bank of Philadelphia’s state coincidence index
  - Based on 
    - nonfarm employment
    - average hours worked in manufacturing
    - Unemployment rate
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State Coincident Indexes: FRB Philadelphia

Metro Tucson’s Economy

- Nonfarm employment peaked in March 2007
  - 26,000 jobs have disappeared, 6.7%
  - Statewide 275,000, 10.3%
- Still declining at 4-5% annual rate in Sept.
Metro Tucson’s Economy

- Job losses are widespread
  - All sectors but health services are shedding jobs
  - Some categories have fallen to mid-1990 levels

Nonfarm Job Growth, TUS
seasonally adjusted annual rate (m/m), smoothed

Nonfarm Employment, TUS
seasonally adjusted

Manufacturing Jobs, TUS
seasonally adjusted

Information Jobs, TUS
seasonally adjusted

Accomodations Jobs, TUS
seasonally adjusted
### Industry Employment During the Recession
**Metro Tucson**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Chg</th>
<th>since peak</th>
<th>peak</th>
<th>lead (lag)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonfarm</td>
<td>-26.6</td>
<td>-6.7%</td>
<td>Mar 07</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>-12.0</td>
<td>-42.3%</td>
<td>Nov 06</td>
<td>4</td>
</tr>
<tr>
<td>Professional &amp; Business Serv.</td>
<td>-7.4</td>
<td>-13.9%</td>
<td>Oct 07</td>
<td>(7)</td>
</tr>
<tr>
<td>Trade, Transportation &amp; Util.</td>
<td>-7.4</td>
<td>-11.4%</td>
<td>May 07</td>
<td>(2)</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-2.9</td>
<td>-10.5%</td>
<td>Dec 07</td>
<td>(9)</td>
</tr>
<tr>
<td>Information</td>
<td>-2.8</td>
<td>-38.3%</td>
<td>Jan 06</td>
<td>14</td>
</tr>
<tr>
<td>Government</td>
<td>-2.4</td>
<td>-2.9%</td>
<td>Sep 08</td>
<td>(17)</td>
</tr>
<tr>
<td>Financial Services</td>
<td>-2.8</td>
<td>-10.5%</td>
<td>Mar 07</td>
<td>0</td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>-1.9</td>
<td>-4.7%</td>
<td>Sep 06</td>
<td>6</td>
</tr>
<tr>
<td>Other Services</td>
<td>-0.6</td>
<td>-3.9%</td>
<td>Apr 06</td>
<td>11</td>
</tr>
<tr>
<td>Mining</td>
<td>-0.5</td>
<td>-26.4%</td>
<td>Aug 08</td>
<td>(17)</td>
</tr>
<tr>
<td>Health Services &amp; Private Ed.</td>
<td>-4.4</td>
<td>8.0%</td>
<td>still growing (33)</td>
<td></td>
</tr>
</tbody>
</table>
**Outlook for Jobs**

- When will nonfarm employment begin to recover?
- How long will it take to regain all the jobs lost?

**Nonfarm Employment, AZ**

- seasonally adjusted

**Recoveries Compared**

Nonfarm Employment, AZ

**Recoveries Compared**

Nonfarm Employment, AZ

**Nonfarm Job Growth**

Metro Tucson

**Consumer Spending Brightens**

- Retail sales has bottomed out
  - Expect modest increases in 2010
Other Positive Signs

- Initial unemployment insurance claims peaked in February
- Household formation is still positive
  - Lowest mobility rates in 60 years

Housing Beginning to Stabilize

- Building permits have reached the bottom
  - Will register large percentage increases but remain depressed
- Existing home sales are up
  - One third are foreclosures/short sales
- Housing prices approaching bottom
  - Standard & Poor’s Case Shiller index
    - PHX moving up
  - FHFA/OFHEO house price index
    - Still declining, but slower pace
Crisis in AZ State Government

- AZ is facing one of the largest budget gaps in the nation
  - Currently about 20%
- Increases in spending
  - New "safety net" programs
  - Voter mandated
- Permanent tax cuts since mid-90s based on transitory revenue = $2.6 billion annually
  - Better choice: budget stabilization fund

AZ’s Budget Gap ($Bil.), FY2010

Spending

Revenues

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**Economic Outlook Luncheon 2010-2011**

**Westin La Paloma**

**December 11, 2009**

Marshall J. Vest, mvest@eller.arizona.edu
Eller College of Management
The University of Arizona

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**AZ’s Budget Gap ($Bil.), FY2010**

<table>
<thead>
<tr>
<th>Spending</th>
<th>10.1</th>
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<tbody>
<tr>
<td>Revenues</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>1.1</td>
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**AZ’s Budget Gap ($Bil.), FY2010**

<table>
<thead>
<tr>
<th>Spending</th>
<th>10.1</th>
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</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>0.6</td>
</tr>
</tbody>
</table>

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**Where Would You Cut Spending?**

- K-12: $4.8
- Higher Education: $1.8
- Other Agencies: $1.6
- Corrections: $0.9
- Unemployment: $1.0

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**Crisis in AZ State Government**

- Arizona Town Hall findings (November)
  - “An immediate, temporary revenue-raising response is imperative”
  - “Developed economies, as in Arizona, must rely on innovation and technological progress in order to maintain economic growth. Education and research and development are keys, while cost factors, including tax burden, are of lesser importance to economic development.”

- Crisis in AZ State Government
  - But you can’t raise taxes without hurting the economy!
  - Arizona Town Hall
    - “State and local government taxes have only a small effect on economic growth”
    - “Tax reductions boost economic growth only when the burden is high”
    - Tax cuts simply lower revenues
Crisis in AZ State Government

• Arizona Town Hall findings (November)
  – Tax burden in AZ is low and declining
  • "Compared to the size of the Arizona economy, ongoing general fund revenue has fallen since the early 1990s, and is now the lowest on record."
  • State and local government revenue ranks
    – 50th on a per person basis
    – 39th on a per dollar of personal income basis

• Obstacles to closing the gap
  • Voter mandated spending without funding
  • Mismanagement of tax base
  • Ideological roadblocks
  • Super-majority required to raise taxes

Crisis in AZ State Government

• Solutions
  – Additional spending cuts
    • Over the past couple of years, largest spending cuts in history have been enacted totaling $1.1 Billion
    – layoffs, shuttering agencies
  • You could lay off all state employees and not begin to close the gap
  • Eliminate all but K-12 and AHCCCS?

Near Term Outlook

• Recovery will proceed slowly
  – Residential foreclosures and high inventories
  – State & local government spending
  – Commercial real estate construction
  – Weak consumer spending
• Unemployment will top 10% (AZ) in 1st quarter
  – retreat slowly, 2014 before dips below 6%
  – Metro Tucson’s rate runs 1% lower
• Nonfarm payrolls will bottom in 3rd quarter 2010
• Public sector shrink through 2011, lag behind

• Retail sales will increase by 4.1% in 2010
  – Double-digit increases in 2011
    • primarily replacement demand
    • frugality is "in"
  – 2010 Census of Population will find
    – Metro Tucson 1.035 million
    – Metro Phoenix 4.4 million
    – AZ 6.6 million people
Near Term Outlook

- Construction industry will continue to shed jobs
  - Dip below 16,500 in 2010 (27,900 in 2006)
- Homebuilding has turned the corner but there is little upside potential until 2011-12
  - At least 25,000 vacant homes currently
- Commercial real estate still in early stages of down cycle, foreclosures lie ahead

Near Term Outlook

- BAD NEWS: a long way to go to repair extensive damage that's been done
- GOOD NEWS: the "Great Recession" is coming to an end and healing will begin soon

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Economic Outlook

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State of the Economy

Gerald J. Swanson, Ph.D.

Professor of Economics
Thomas R. Brown Professor in Economics Education
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Unemployment

December 2007 4.7%
November 2009 10.0%

High unemployment will continue through next year. Currently over 15.4 million unemployed.

We lost 7.8 million job since the recession started.
The most since 1945!
Unemployment
Includes Discouraged Workers
Workers Forced to Work Part-Time.

Estimated Unemployment Rate = 17.5%

Average work week has fallen to 33 hours.

Does not include those people who are working below their skill level.

Unemployment “MANCESSION”
There is still a gender gap.

<table>
<thead>
<tr>
<th>Unemployment rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 2008</td>
</tr>
<tr>
<td>Men 6.9%</td>
</tr>
<tr>
<td>Women 5.9%</td>
</tr>
<tr>
<td>November 2009</td>
</tr>
<tr>
<td>Men 10.4%</td>
</tr>
<tr>
<td>Women 8.2%</td>
</tr>
</tbody>
</table>

Unemployment Problems
• This high unemployment is largely structural rather than cyclical.
• Many of the jobs are gone forever.

Inflation

<table>
<thead>
<tr>
<th>October 2009</th>
<th>All item 0.1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core 0.3%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oil</th>
<th>$74.00</th>
<th>$39.00</th>
<th>90%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold</td>
<td>$1149.00</td>
<td>$769.00</td>
<td>49%</td>
</tr>
<tr>
<td>Silver</td>
<td>$18.00</td>
<td>$9.85</td>
<td>83%</td>
</tr>
<tr>
<td>Platinum</td>
<td>$1439.00</td>
<td>$807.00</td>
<td>78%</td>
</tr>
</tbody>
</table>

Growth
GOOD NEWS!
Third quarter GDP was +3.5%
REVISED now +2.8

Projected fourth quarter GDP +2.2%
Productivity

**GOOD NEWS!**

- Productivity 2nd Quarter 2009: +6.1%
- Unit Labor Cost: -0.3%
- Productivity 3rd Quarter 2009: +13.4%
- Unit Labor Cost: -6.1%

Consumption

- Consumer confidence still low
  - Declined in September
  - Increase in October
  - Consumption -0.6%
  - Consumption +0.7%

Consumption

- Consumers are saving.
  - October 2009: 4.4%
  - Consumers are paying down debt at a record pace.
  - 18 straight months of declining credit balances.

Investment Spending

- Business confidence low but improving.
- Inventories are a bright spot.
- New home building showing signs of life.
- Loans are still difficult to get.

Investment Spending

- Manufacturing capacity utilization
  - October 2009: 70.7%
  - Slowly Improving!
  - 81% Normal

Government Spending

- Deficit projection fiscal 2009 was $490B.
  - Actual FY 2009: $1.4 TRILLION!
  - Projected FY 2010: $1.5 TRILLION
Deficits and Unfunded Liabilities

“Everyone wants to go to heaven, but nobody wants to die!”

-- Songwriters Dorsey & Thomas

Government Spending

- Deficit for fiscal 2009 = \textbf{10.0\%} of GDP
- \textbf{3\%} of GDP is normally considered safe

Monetary Policy

FEDERAL RESERVE UNDER ATTACK!

Mortgage Defaults Will Continue.

More resets to come:$1.1 trillion in the next 3 years.

We will continue to have record rates of home vacancies for the next year.

Monetary Policy

Our next big problem will be commercial real estate.

There are $1.7 trillion of commercial loans on banks books currently.

Between now and 2012, $1.4 trillion worth of commercial loans will come due.

Monetary Policy

Last Year Fed Funds Rate \hspace{1cm} 0.09\%

Today Fed Funds Rate \hspace{1cm} 0.12\%

Some banks appear to be stabilizing...

However:

129 have failed in 2009.

416 banks on probation.
Monetary Policy
The Federal Reserve’s Balance Sheet has Exploded!
August 2007 $800 billion
November 2009 $2.1 trillion

BONUS QUESTION
Where does the FED get the money to buy these assets?

Monetary Policy
Political Risks
• Next year is an election year.
• Loss of policy independence.

Economic Risks
• Fed waits too long to increase interest rates.
  -- or --
• Increases rates too soon and stalls recovery.

Fiscal Policy
Political Risks
• Next year is an election year.

Economic Risks
• Deficits are not controlled.

FACT
A real recovery depends on
government demand being
supplemented by sustainable
sources of private spending.

Too Big to Fail
What does it mean?
• Private profits and public loses.
  -- or --
• Heads I win, tails you lose.

Too Big to Fail
Capitalism without losses
is like religion without sins.
We Have a Big Overhang of Uncertainty.

Uncertainty
• What policies will finally come out of Washington?
• What will happen next in our two wars?
• When will the economy again function without major government intervention?
• When will the state economies start to improve?

Possible Barriers to Recovery
1. Consumer
2. Unemployment
3. Households balance sheets
4. State and local governments
5. Tight credit
6. Slow growth
7. Excess capacity
8. Stimulus does not work

What Have We Learned?
• Things that can’t go on forever eventually stop.
• Houses are not liquid assets.
• Homes are not ATM machines.
• Markets are not always efficient.
• The great moderation of business cycle never happened.

What Have We Learned?
• Monetary policy does not always work the way the textbook states it should work.
• John Maynard Keynes is not dead.
• Pork shoulder roasts get more tender the longer you cook them.

Economists are fallible!

AND YES...
Conclusion

Remember:
• We are a very optimistic, can-do country by nature.

Go out there and...

Be Patient...
Be Positive...

HAPPY HOLIDAYS!

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