**OVERVIEW**

- Consumers boost spending
- Employment continues to languish
- Housing markets are still distressed
- Mobility remains at decades low
- Census 2010 results
  - Smaller, older but young, more diverse, overbuilt
  - Population declined during the recession
- State balances its budget
- Slow recovery ahead

---

**HOW IS THIS POSSIBLE?**

- No boost from wages, employment
- Personal income is up 5% from year ago
  - Nearly all from higher transfer payments
  - Reduction in payroll taxes
- Release of pent up demand?
  - Consumers finally pulling the trigger
  - Spending savings, taking on debt
- Link to housing?

---

**AZ’S JOB MARKETS**

- Published estimates revised downward
- Nonfarm employment peaked in Aug. 2007
  - 312,400 jobs disappeared, 11.7%
    - PHX lost 243,800 or 12.7%
    - TUS down 35,100 or 9.1%
- Employment bottomed in September 2010
  - AZ added 23,500 thru March (6 months)
    - PHX added 18,800
    - TUS up 2,500
Housing fundamentals are very poor
- Foreclosures remain elevated
  - AZ ranked 2nd worst in 2010 (NV worse)
- Half of AZ homeowners with mortgage have negative equity
  - Same for states that are sources for in-migrants to AZ
- Mobility of the population severely restricted
- Home prices are still falling
- Vacant inventories are sufficient to house a whole decade of population growth!
Breakfast with the Economists:
Mid-Year Economic Update

April '11 Foreclosures, Source: RealtyTrac

Home Prices, Metro PHX
S&P/Case-Shiller and Realtor Data

Vacant Housing Units
U.S. Census, 2010

<table>
<thead>
<tr>
<th>Area</th>
<th>Total Number</th>
<th>Vacant</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>2,844,526</td>
<td>463,536</td>
<td>16.3</td>
</tr>
<tr>
<td>Apache County</td>
<td>32,514</td>
<td>9,743</td>
<td>30.0</td>
</tr>
<tr>
<td>Cochise County</td>
<td>59,041</td>
<td>8,176</td>
<td>13.8</td>
</tr>
<tr>
<td>Coconino County</td>
<td>63,321</td>
<td>16,610</td>
<td>26.2</td>
</tr>
<tr>
<td>Gila County</td>
<td>32,698</td>
<td>10,698</td>
<td>32.7</td>
</tr>
<tr>
<td>Graham County</td>
<td>12,980</td>
<td>1,860</td>
<td>14.3</td>
</tr>
<tr>
<td>Greenlee County</td>
<td>4,372</td>
<td>1,184</td>
<td>27.1</td>
</tr>
<tr>
<td>La Paz County</td>
<td>16,049</td>
<td>6,851</td>
<td>42.7</td>
</tr>
<tr>
<td>Maricopa County</td>
<td>1,639,279</td>
<td>227,696</td>
<td>13.9</td>
</tr>
<tr>
<td>Mohave County</td>
<td>110,911</td>
<td>28,372</td>
<td>25.6</td>
</tr>
<tr>
<td>Navajo County</td>
<td>56,938</td>
<td>21,280</td>
<td>37.4</td>
</tr>
<tr>
<td>Pima County</td>
<td>440,909</td>
<td>52,249</td>
<td>11.9</td>
</tr>
<tr>
<td>Pinal County</td>
<td>159,222</td>
<td>33,632</td>
<td>21.1</td>
</tr>
<tr>
<td>Santa Cruz County</td>
<td>18,010</td>
<td>2,573</td>
<td>14.3</td>
</tr>
<tr>
<td>Navajo County</td>
<td>110,432</td>
<td>19,529</td>
<td>17.7</td>
</tr>
<tr>
<td>Yuma County</td>
<td>87,850</td>
<td>23,083</td>
<td>26.3</td>
</tr>
</tbody>
</table>
Breakfast with the Economists:
Mid-Year Economic Update

June 3, 2011

Building Permits, TUS
(seasonally adjusted annual rate)

CENSUS 2010 RESULTS

- State-wide count was 6.4 mil
  - 262,000 lower than Census Bureau estimates
    - Metro PHX = 235,704 short (3.8 mil)
    - Metro TUS = 45,023 short (980,263)
- Either population declined or a large number of residents were not counted
- AZ still 2nd fastest-growing over decade
  - 16th largest state

POPULATION GROWTH 2000-10
PERCENT CHANGE

2010 POPULATION
U.S. CENSUS BUREAU

- Arizona is 16th largest state, 6.4 mil
  - Larger than Colorado - 5.0 mil people
  - Larger than Oregon - 3.8 mil
- Arizona has more than twice the number of people as
  - Utah, 2.8 mil
  - Nevada, 2.7 mil
  - New Mexico 2.1 mil
  - Idaho, 1.6 mil

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CENSUS 2010 RESULTS

- We’re getting older, but still one of the youngest states
- Population distribution across age groups has become “rectangular”

WE’RE GETTING OLDER:
MEDIAN AGE, 2010 CENSUS

<table>
<thead>
<tr>
<th>County</th>
<th>2010</th>
<th>2000</th>
<th>difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>35.9</td>
<td>34.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Coconino County</td>
<td>31.0</td>
<td>27.0</td>
<td>4.0</td>
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<tr>
<td>Graham County</td>
<td>31.6</td>
<td>29.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Apache County</td>
<td>32.4</td>
<td>30.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Yuma County</td>
<td>33.8</td>
<td>30.9</td>
<td>2.9</td>
</tr>
<tr>
<td>Maricopa County</td>
<td>34.6</td>
<td>31.8</td>
<td>2.8</td>
</tr>
<tr>
<td>Navajo County</td>
<td>34.7</td>
<td>33.0</td>
<td>1.7</td>
</tr>
<tr>
<td>Greenlee County</td>
<td>34.8</td>
<td>33.6</td>
<td>1.2</td>
</tr>
<tr>
<td>Pinal County</td>
<td>35.3</td>
<td>33.9</td>
<td>1.4</td>
</tr>
<tr>
<td>Santa Cruz County</td>
<td>35.6</td>
<td>35.7</td>
<td>-0.1</td>
</tr>
<tr>
<td>Pima County</td>
<td>37.7</td>
<td>36.9</td>
<td>0.8</td>
</tr>
<tr>
<td>Cochise County</td>
<td>39.7</td>
<td>37.1</td>
<td>2.6</td>
</tr>
<tr>
<td>Mohave County</td>
<td>47.6</td>
<td>42.3</td>
<td>5.3</td>
</tr>
<tr>
<td>Gila County</td>
<td>47.9</td>
<td>42.9</td>
<td>5.0</td>
</tr>
<tr>
<td>Yavapai County</td>
<td>49.2</td>
<td>44.5</td>
<td>4.7</td>
</tr>
<tr>
<td>La Paz County</td>
<td>53.9</td>
<td>46.8</td>
<td>7.1</td>
</tr>
</tbody>
</table>

AZ IS THE 6TH YOUNGEST STATE
PERCENTAGE OF POPULATION UNDER AGE 18

AZ POPULATION, 2010 CENSUS

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June 3, 2011
Breakfast with the Economists:
Mid-Year Economic Update

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June 3, 2011

Population Gain by Decade, TUS

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (000s)</th>
<th>Change</th>
<th>Annual Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>149.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1960</td>
<td>268.0</td>
<td>120.0</td>
<td>6.1</td>
</tr>
<tr>
<td>1970</td>
<td>351.7</td>
<td>82.7</td>
<td>2.7</td>
</tr>
<tr>
<td>1980</td>
<td>531.4</td>
<td>179.7</td>
<td>4.2</td>
</tr>
<tr>
<td>1990</td>
<td>668.8</td>
<td>137.4</td>
<td>2.3</td>
</tr>
<tr>
<td>2000</td>
<td>848.5</td>
<td>179.7</td>
<td>2.4</td>
</tr>
<tr>
<td>2010</td>
<td>980.3</td>
<td>131.8</td>
<td>1.5</td>
</tr>
<tr>
<td>2020</td>
<td>1084.1</td>
<td>103.8</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Retail Sales Growth, TUS

(retail, restaurant & bar, food, and gasoline)

Residential Permits, TUS

STATE FISCAL UPDATE

- Legislature addressed in 2011 session
  - FY 10-11 $543 mil shortfall
  - FY 2012 deficit of $1.2B
    - Excludes over $1 bil in suspended formulas
- Prior “solutions” largely temporary
  - FY08-10 totaled $12.8B
- Expiration of Federal ARRA stimulus money forced permanent cuts
  - $1.1B total in health care and education
  - Closed the “structural deficit” near term
- Spending has been reduced by 22% since FY08

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The University of Arizona
NEWLY-ENACTED BUDGET SPENDING REDUCTIONS, FY 11-12

<table>
<thead>
<tr>
<th>Agency</th>
<th>Net Reductions ($ mil.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dept. of Education</td>
<td>$(163)</td>
</tr>
<tr>
<td>AHCCCS (Medicaid)</td>
<td>$(511)</td>
</tr>
<tr>
<td>Dept. of Corrections</td>
<td>10</td>
</tr>
<tr>
<td>Universities</td>
<td>$(198)</td>
</tr>
<tr>
<td>Dept. of Economic Security</td>
<td>$(50)</td>
</tr>
<tr>
<td>Dept. of Health Services</td>
<td>$(97)</td>
</tr>
<tr>
<td>School Facilities Board</td>
<td>0</td>
</tr>
<tr>
<td>One extra payroll</td>
<td>0</td>
</tr>
<tr>
<td>Employee Benefit Savings</td>
<td>$(62)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$1,071</td>
</tr>
</tbody>
</table>

AZ GENERAL FUND REVENUES AND EXPENDITURES ($BILLIONS)

PRIOR CHART DOESN'T INCLUDE
- Effects of the recently-passed “jobs bill” that totals $538 million in cuts to corporate taxes to be phased in over FY15-18.

NEAR-TERM OUTLOOK
- Mobility of population must improve before
  - Absorb inventory of vacant houses
  - Start building homes
- In 2011
  - Credit markets will slowly improve
  - Spending will bounce
  - Hiring will strengthen
- Recovery accelerates in 2012-2014 but restrained by the drag from
  - Housing & non-residential real estate
  - Public sector spending
THE GREAT RECESSION HAS BEEN OFFICIALLY OVER FOR TWO YEARS!

- Ended June 2009
- Time flies when you are having fun!

UNEMPLOYMENT

- December 2007-Start of Recession
  - Unemployment 5.0%
- October 2010
  - Peak Unemployment 10.1%
- April 2011
  - Unemployment up from 8.8% to 9.0%
- Currently over 13.3 million unemployed
- 6.1 million have been unemployed for six month or more = 46.1% unemployed

THE UN’S

- UNDERPERFORMING
- UNHAPPY
- UNCERTAIN
- UNSUSTAINABLE
UNEMPLOYMENT

- Participation Rate
  - % of population over age of 16 in labor force
  - April 2011: 64.2% lowest since 1984
  - January 2001: 67.2%

- Employment Rate
  - % of population over age of 16 employed
  - April 2011: 58.4% very low and declining
  - January 2001: 64.4%

WOMEN RULE

- More high school graduates than men
- More in college than men
- More seek advanced degrees than men

UNEMPLOYMENT - Structural unemployment - April 2011

- Less than H.S.  14.6%
- H.S.  9.7%
- Some college  7.5%
- Bachelor’s or higher  4.5%
- Teenagers 16-19  24.9%

INFLATION ON THE RISE

- CPI Annual Rate
  - April 2011 = 0.4%
  - 12 month 3.2%
- Core Annual Inflation Rate (no food or energy)
  - April 2011 = 0.2%
- Producer Price Index
  - April 2011 = 0.8%
- Import Price Index
  - April 2011 = 2.2%
**Breakfast with the Economists:**
**Mid-Year Economic Update**

**INFLATION**
- Price increases - June 2010 to June 2011
  - Oil: 59%
  - Gasoline: 51%
  - Gold: 26%
  - Silver: 108%
  - Corn: 112%
  - Wheat: 92%

- How I wished I had invested in commodities!

**GROWTH IN GDP UNDERPERFORMING**
- An economy that is growing at a very slow pace

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP</th>
<th>GDP</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>Q1 -6.4%</td>
<td>Q1 3.7%</td>
<td>Q1 1.8%</td>
</tr>
<tr>
<td>2010</td>
<td>Q2 -0.7%</td>
<td>Q2 1.7%</td>
<td>Q3 2.5%</td>
</tr>
<tr>
<td>2011</td>
<td>Q4 5.0%</td>
<td>Q4 2.8%</td>
<td>Q4 2.8%</td>
</tr>
</tbody>
</table>

- Too slow to significantly change unemployment rate

**WE ARE UNHAPPY WITH THE ECONOMY**
- The economic recovery is merely sputtering along

- Recent poll
  - 82% said the economy is in poor shape

**RECESSON RECOVERY**

<table>
<thead>
<tr>
<th>Year</th>
<th>1st Q</th>
<th>2nd Q</th>
<th>3rd Q</th>
<th>4th Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>5.3%</td>
<td>9.3%</td>
<td>8.1%</td>
<td>8.5%</td>
</tr>
<tr>
<td>1983</td>
<td>1st Q</td>
<td>2q Q</td>
<td>3rd Q</td>
<td>4th Q</td>
</tr>
<tr>
<td>1984</td>
<td>1st Q</td>
<td>2q Q</td>
<td>3rd Q</td>
<td>4th Q</td>
</tr>
<tr>
<td>2010</td>
<td>1st Q</td>
<td>2q Q</td>
<td>3rd Q</td>
<td>4th Q</td>
</tr>
<tr>
<td>2011</td>
<td>1st Q</td>
<td>2q Q</td>
<td>3rd Q</td>
<td>4th Q</td>
</tr>
</tbody>
</table>
Consumption

- Pent-Up Demand
  - Consumers are slowly starting to spend again
  - Consumers’ psyches remain fragile
  - Reduced incomes and housing values are still constraining spending

- Gas and food prices putting major crimp in household budgets
  - Gas prices up 51% from a year ago
  - Food prices up 3.2% from a year ago
  - Food commodity price index up 17%

Investment Spending

- Uncertainty an issue
  - Business confidence slowly improving
  - Businesses are investing more
  - Corporations are very profitable
  - Productivity has stalled
  - Housing construction very slow

Fiscal Policy

- Deficit - unsustainable
  - Fiscal 2009 $1.4 Trillion
  - Fiscal 2010 $1.3 Trillion
  - Projected 2011 $1.65 Trillion
  - Projected 2012 $1.1 Trillion
FISCAL POLICY IS DEAD

- Keynesian policy has played out
  - Tax rebate
  - Stimulus package
  - Auto bailout
  - Cash for clunkers
  - Home buyer tax credit
  - Appliance tax credit
  - Payroll tax cut

FISCAL POLICY - DO THE MATH

- Spending at highest percent since WWII
  - 24.3%
  - Post-WWII Average 20.4%

- Taxes at lowest percent of GDP in 60 years
  - 14.8%
  - Post-WWII Average 18.5%

GOVERNMENT SPENDING

- State and local governments continue to downsize
- Private sector adding jobs
- Government sector losing jobs

- Since 2008
  - States have cut 98,000 jobs
  - Local governments have cut 409,000 jobs

GOVERNMENT SPENDING

- Debt ceiling - hit May 16, 2011
  - Since 1962, the U.S. has reached the debt ceiling 74 times
  - Four times we did not immediately raise the ceiling - but we always eventually did!
FISCAL POLICY
- Mandatory spending
  - 1965 29% of budget
  - 2010 66% of budget
- Add defense
  - 83% of budget
  - 17% discretionary
- 38% of the current budget is financed by borrowing.

FISCAL POLICY - DO THE MATH
- Reducing the deficit
  - Discretionary spending - all those government departments = 17% of budget
  - National defense spending = 17% of budget
- 38% of budget financed by borrowing.

FISCAL POLICY - DO THE MATH
- Interest on the national debt
  - Fiscal 2010 = $413,954,825,362.17
  - Fiscal 2011 = $244,476,372,569.22
- Treasury bonds interest rates

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>1yr</td>
<td>5.9%</td>
<td>.21%</td>
</tr>
<tr>
<td>5yr</td>
<td>6.8%</td>
<td>1.27%</td>
</tr>
<tr>
<td>10yr</td>
<td>7.1%</td>
<td>3.05%</td>
</tr>
<tr>
<td>20yr</td>
<td>7.2%</td>
<td>3.9%</td>
</tr>
<tr>
<td>30yr</td>
<td>7.3%</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

FISCAL POLICY
- Eliminating the deficit
- Cap spending growth
- Cap deficit as percent of GDP
**Mandatory spending**
- This is where the money is
  - Social Security
  - Medicare
  - Medicaid
- Total unfunded liabilities for these programs
  - $107 Trillion

**Fiscal Policy**
- We cannot grow ourselves out of this deficit
- It is a structural deficit
- The problem is real and the solution will be painful

**Could the U.S. Face a Sovereign Debt Crisis?**
- December Outlook question:
  - What happens when we hit the debt ceiling?
    - Forced austerity or default
    - We are now facing these choices

**Monetary Policy**
- The printing presses are being turned off
- No more quantitative easing
- Lots of liquidity
- Very low interest rates
**MONETARY POLICY**
- Zero interest rates for 30 months
  - A record
- Injected approx. $2 Trillion in excess reserve

**MONETARY POLICY**
- Hyper-expansionary monetary policy
- The Federal Reserve's balance sheet has exploded!
  - August 2007 $800 Billion
  - April 2011 $2.7 Trillion
- Definition of inflation
  - Old definition - changed in 2003
  - New definition

**CONCLUSIONS**
- We must be patient!
- We must first do no harm!
- Congress and the President must focus on long-run solutions, not election-cycle solutions!

**THANK YOU**
- Enjoy the long hot and hopefully wet summer!
Breakfast with the Economists: Mid-Year Economic Update

June 3, 2011

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