The Economy: What Comes Next?
Synopsis

• The national economic outlook
• Implications for Oregon
• From recession to recovery
• The new normal
• The talent dividend
• Fiscal ROI of education
The Great Recession
A different kind of recession

- An Asset Bubble
  - Housing Collapse
- Speculative Finance
  - Deregulation, “too big to fail”
  - Multiplied the shock
  - Accommodative Fed
- Punctured by Energy Prices
  - Running up against real limits
A home price bubble
Deepest, longest US recession
Recession Path

Shape of the Great Recession in Oregon and Nationally
Change since Peak in December 2007 Employment, SA

Source: Bureau of Labor Statistics
Early 2009: US, Oregon in Freefall

Employment Growth
12-Month Change in Non-Agricultural Payroll Employment

Source: Bureau of Labor Statistics
Early 2010: Economy Flattening Out

Employment Growth
12-Month Change in Non-Agricultural Payroll Employment

Source: Bureau of Labor Statistics
Oregon & US unemployment spiked

Unemployment Rate
Oregon and U.S. Seasonally Adjusted Percent of Labor Force

Source: Bureau of Labor Statistics
The lost decade

Long Term Job Growth
Wage & Salary Employment (Thousands)

Source: Bureau of Labor Statistics
Analyzing Oregon’s performance

• Since the Peak (November 2007)
  – Wage and salary employment
  – US: -8.4 million jobs: -6.0%
  – Oregon -121,000 jobs: -7.0%

• Why is Oregon worse off?

Note: computations through January 2010
Late to the housing collapse

Oregon Lags US Housing Cycle
Portland and U.S. Housing Price Change (12 months)

Source: Case-Shiller House Price Index
Construction decline later, but steeper

Oregon Construction Peaked Later, Caught Up to US

Construction Employment (Index 2000=100)

Source: Bureau of Labor Statistics
Durable goods collapsed
#1 in Durable Goods Dependence

Oregon Most Dependent on Durable Goods

Percent of State GDP from Durable Goods Manufacturing

Source: Bureau of Economic Analysis
PDX #1 in Manufacturing GDP

Portland-Vancouver-Beaverton, OR-WA (MSA)
San Jose-Sunnyvale-Santa Clara, CA (MSA)
Houston-Sugar Land-Baytown, TX (MSA)
Hartford-West Hartford-East Hartford, CT (MSA)
Raleigh-Cary, NC (MSA)
Bridgeport-Stamford-Norwalk, CT (MSA)
Memphis, TN-MS-AR (MSA)
San Francisco-Oakland-Fremont, CA (MSA)
Los Angeles-Long Beach-Santa Ana, CA (MSA)
Kansas City, MO-KS (MSA)
Atlanta-Sandy Springs-Marietta, GA (MSA)
Baltimore-Towson, MD (MSA)
Orlando-Kissimmee, FL (MSA)
Exports declined dramatically

Exports of Goods & Services (EXPGS)
Source: U.S. Department of Commerce: Bureau of Economic Analysis

Shaded areas indicate US recessions.
2009 research.stlouisfed.org
Vulnerable to export shock

Oregon is in top ten in exports per capita

Exports Per Capita, 2007

Ranking among 50 States

Source: WISERTrade, 2007
Unemployment: special factors

Unemployment Rate
Oregon and U.S. Seasonally Adjusted Percent of Labor Force

Source: Bureau of Labor Statistics
Net migration is strong

Oregon Rank

11th 6th 17th 24th 10th 8th 10th 9th

Oregon net domestic migration, percent of current population

2008: Oregon ranked 8th highest in net in-bound percent of United Van Lines Moves

2009: Oregon ranked 1st among states in net in-bound percent of United Van Lines Moves

Source: Census Bureau estimates
What’s the outlook?
GDP expected to recover

Real GDP

Bars - CAGR  Line - Yr/Yr Percent Change

- GDPR - CAGR: Q4 @ 5.7%
- GDPR - Yr/Yr Percent Change: Q4 @ 0.1%

Forecast

Wells Fargo Securities, Monthly Outlook, February 10, 2010
Unemployment will persist

High unemployment projected to persist for years
National Unemployment Rate (Percent)

Source: Wells Fargo Economic Forecast

Wells Fargo Securities, Monthly Outlook, October 7, 2009
Financial Crises take longer to recover

Source: Knotek & Terry, Federal Reserve Bank of Kansas City, 2009
A double dip recession is possible

(Percent change, annual rate)

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We’re in uncharted territory

Economist’s models are “out of sample estimates”

Recovery implies we recover the same jobs, the same businesses, the same economic activity we lost

This time it’s different . . .
The New Normal
1. When markets rebound, jobs will return
2. When markets rebound, jobs will return
The lost decade

Total Nonfarm Payrolls: All Employees (PAYNSA)

Shaded areas indicate US recessions.
2010 research.stlouisfed.org
Financial Crises take longer to recover

Source: Knotek & Terry, Federal Reserve Bank of Kansas City, 2009
2. Housing will only go up

U.S Housing Prices: 1991 = 100
1. Housing will only go up

U.S. Housing Prices: 1991 = 100
Life after the bubble

- Households lost $5 trillion in wealth
- 1 in 5 mortgages is underwater
  - 15 million families owe more than their house is worth
- 1 in 12 mortgages is delinquent or in foreclosure
- Expectations have changed
Overbuilt America

• McMansions
  – 11% of new single family homes were at least 4,000 square feet in 2007

• Extra Bedrooms
  – 50 million US households had more bedrooms than family members in 2007
  – 43% had an extra bedroom in 2007 compared to 4% in 1960
3. Energy will always be cheap
Energy will always be cheap
High energy prices here to stay

- Recent decline is driven by global recession
- Rest-of-world now competes for finite energy supply
- Value of US $ is in long term decline
- Cost of carbon will drive energy prices still higher
4. We’ll drive more every year

Vehicle Miles Travelled Per Capita Per Day, United States

Source: Impresa calculations, US DOT data
4. We’ll drive more every year

Vehicle Miles Travelled Per Capita Per Day, United States

Source: Impresa calculations, US DOT data
Gas prices killed car sales
We’re already driving less

Per Capita VMT declining since 2005
Vehicle miles traveled per person per day, US

Driving is now 4 miles per person, per day, below the long term trend

Source: Bureau of Transportations Statistics, Impresa calculations
More cars than drivers

United States
- 246 million vehicles
- 207 million drivers
The New Normal

- Slower growth, different jobs
- Fewer smaller houses, less speculation
- More expensive energy
- A “less car” lifestyle and economy
The Talent Dividend
CEOs for Cities is a national network of urban leaders dedicated to building and sustaining the next generation of great American Cities.
The Hypothesis

- Better educated metropolitan areas have higher incomes
- Better skilled workers are more innovative and productive
The Evidence

Education Explains Most Differences in Metro Income
Annual Per Capita Income, 2005

Percent of Population with a 4-Year College Degree, 2006
Sources: BEA (Income), Census (Education)
Estimating the Gain

- Each 1% improvement in college attainment is associated with a $763 increase in per capita income for the entire metropolitan area.
- These education gains are the product of a shift in the entire skill distribution, not just moving 1% past the 4 year mark.
Typical Improvement

- Can we move Portland (33.3% college attainment) to the same level as San Diego (34.2%) or Atlanta (34.6%) college attainment?
- The Portland Talent Dividend $1.6 Billion Annually
The Fiscal Return on Education
## Taxes & Attainment

<table>
<thead>
<tr>
<th>Educational Level of Household Head</th>
<th>Median AGI</th>
<th>Tax Rate</th>
<th>Total Tax</th>
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<tbody>
<tr>
<td>Less than HS</td>
<td>23,500</td>
<td>4.1%</td>
<td>1,000</td>
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<tr>
<td>High School Diploma</td>
<td>38,900</td>
<td>4.5%</td>
<td>1,800</td>
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<tr>
<td>1 to 3 Years of College</td>
<td>45,700</td>
<td>4.6%</td>
<td>2,100</td>
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<tr>
<td>4 Year Degree or Higher</td>
<td>64,800</td>
<td>4.8%</td>
<td>3,100</td>
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</table>
Most Taxes Come from Well Educated

Educational Level of Household Head

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Households</th>
<th>Income Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than HS</td>
<td>5.5%</td>
<td>1.8%</td>
</tr>
<tr>
<td>High School Diploma</td>
<td>24.5%</td>
<td>15.7%</td>
</tr>
<tr>
<td>1 to 3 Years of College</td>
<td>34.0%</td>
<td>29.0%</td>
</tr>
<tr>
<td>4 Year Degree or Higher</td>
<td>36.0%</td>
<td>53.4%</td>
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</tbody>
</table>
Health Plan

Percent on Oregon Health Plan, 2008

Source: American Community Survey, 2008
Welfare

Percent Receiving Welfare, 2008

Source: American Community Survey, 2008
Unemployment Insurance

Percent receiving Unemployment Insurance, 2008

Source: American Community Survey, 2008
Corrections

Percent of Persons Incarcerated, 2008

Source: American Community Survey, 2008
A though experiment

Moving 10,000 from HS Graduate to 4-Year College Degree would produce annual gains of

- Revenue: $8 million added
- Expenditure: $9 million saved
- Net Gain: $17 million