Employment, Poverty, Inequality, and Education in the United States over the Early (and Middle) Stages of the Great Recession

For the IRP Thursday Seminar Series
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Why me today?

- Late cancellation of visiting scholar
- Bring us up to speed on how poverty and inequality have been changing over the course of the Great Recession
- Ask your opinion about where to concentrate my and our efforts next as IRP has been commissioned to study BOTH poverty AND inequality
Based on three new papers


- PLUS some updates from other sources
The Poverty and Inequality Tale of the USA’s Great Recession (GR)—an Outline

• Great Recession (GR) is really three simultaneous negative events (employment crisis, financial crisis, and housing crisis) which have exacerbated many negative structural economic trends as they interact with one another (e.g. construction and home values and borrowing/mortgage markets vs. labor markets)

• The GR still ongoing for the poor and the un/underemployed and those below median incomes and the negative effects are going to continue for a number of years

• First in depth look at USA here, more to follow from me and from IRP as GR grinds on and more data are available
Bringing Things Up to Date: January 2000-Summer 2011

• America is a nation in decline at least in real median cash income terms –
• The latest snapshot of how incomes are changing follows
• What’s to like and not to like about one answer income questions? (Micklewright JRSA, 2011)
• Do they track change well? (Yes, so far in a historic sense and Census Bureau confirms their veracity)
• Do they forecast the near future well? Unfortunately, I think yes
Median Household Income Index (HII) and Unemployment Rate by Month: January 2000 to June 2011

Source: Coder and Greene (2011), Sentier Research.
What does the chart show?

• American median household incomes peaked in 2001 and then in 2007, and dived in between, but were essentially flat from 2000 until the GR in 2008

• From 2008 to 2009 they fell by 8-10 percent, stayed flat for most of 2010, and then fell by another 3 percent through June 2011

• These changes have so far mirrored the pattern of unemployment in the United States
Outline: Some Broader and Longer Term Changes Beyond 2008 and up to 2010

1. Structural and cyclical changes in labor markets and human capital —three big issues
   - Poverty change
   - Inequality change and falling but still within the “lower middle class”
   - Capital vs. labor income change

2. Summary and conclusion

3. So what? and what’s next for the USA?
1. Structural and Cyclical Changes in Labor Markets: The link from Employment to Poverty and Inequality

• Cyclical changes in jobs are extremely large in the GR
• The Autor story and its consequences
  – Labor market polarization and employment and associated earnings outcomes
  – The old roads to the middle class for less educated/high school graduates is closed now
• The employment and earnings situations of 16 to 30 year olds who have only a high school degree ("the lost generation") is the worst since WWII and will be a problem for years to come
• In the race between technology and education, US is losing and even in expanding firms, jobs are being cut.
Three Big Employment Crisis Issues in the USA

• First: jobs crisis is cyclical driven by the steep drop in aggregate demand

• Second: jobs crisis is long-term unemployment and skill decay, which moves from cyclical to structural with long term joblessness for the least skilled

• Result: 20% American men 25-54 not working; longest average duration of unemployment since 1950 with 6 million out of work 6 months or more

• Third: jobs crisis flows are secular and chronic and arise from the merger of globalization and the I.T. revolution with rising skilled labor productivity and the increasing demands of the 21st century workplace on human capital accumulation and flexibility
Employment Decline Through October 2011

Chart by Amanda Cox and Catherine Rampell, 11-4-11 N.Y.Times

Note: Correlation between Employment share changes 2000/2005 vs. 2005/2009 is 0.67.
Source: U.S. Bureau of Labor Statistics

Source: Autor 2010.
The Occupational Change Story

• Employment for highly-educated professional, finance, management and health care ROSE during the recession (left side of chart) and is still rising
• Manufacturing and construction employment, transportation, and now public sector employment FELL during the recession reflecting both structural and cyclical elements (middle of chart)
• Low skill/low pay personal service jobs are expanding (right side of chart)
• The public sector is cutting jobs and will continue to cut them about half as fast as the private sector is creating them for at least two more years
Other Labor Trends

• Unemployment differs greatly by education and human capital/skill levels
• Pay patterns follow employment patterns
• Wages are polarizing and there is some at least temporary emptying of the middle class
• Wages in low-skill service sector are very low because of low productivity
Unemployment Rate by Educational Attainment (1979 to 2010)

Source: Authors' Analysis of CPS ORG Files (various years), CEPR extracts.
# Real Wage Growth for Selected Age, Education Groups, 2007 to 2010

(Average Annual Percent Change in Inflation (2010$) Adjusted Hourly Wages)

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Ages 25 to 34</th>
<th>Ages 35 to 44</th>
<th>Ages 45 to 54</th>
<th>Ages 55 to 64</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Degree Only</td>
<td>-0.6%</td>
<td>-0.7%</td>
<td>-0.2%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Bachelor's Degree Only</td>
<td>-0.5%</td>
<td>0.1%</td>
<td>1.2%</td>
<td>-0.6%</td>
</tr>
<tr>
<td>Post-Graduate Education or Degree</td>
<td>0.5%</td>
<td>1.3%</td>
<td>1.4%</td>
<td>-0.1%</td>
</tr>
</tbody>
</table>

Note: Adjusted for inflation using US CPI-U. Hourly wages for non-union workers.

Source: Authors' Analysis of CPS ORG files, CEPR extracts.
Change in Hourly Wage Inequality: 1979-2009

Figure 2. Growth in Hourly Wage Inequality (Indexed 1979=100), 90/10, 90/50, and Gini, 1979-2010

Notes: Wage percentile and gini values are adjusted to smooth the 1994 series break.
Source: Authors’ Analysis of CPS ORG Files (various years), CEPR extracts.
Nine out of ten of the largest occupations in 2010 pay far less than the U.S. mean wage.

- Retail salespersons: $12.02
- Cashiers: $9.52
- Office clerks, general: $13.58
- Combined food preparation and serving workers, including fast food: $8.95
- Registered nurses: $32.56
- Waiters and waitresses: $9.99
- Customer service representatives: $15.76
- Janitors and cleaners, except maids and housekeepers: $11.81
- Laborers and freight, stock and material movers, hand: $12.36
- Secretaries and administrative assistants, except legal, medical, and executive: $15.38

U.S. mean hourly wage: $21.35

Education and the Importance of Investments in Human Capital

• Human Capital--skills and knowledge of workers --are paramount and obtained through education and both formal and on the job training

• 21st century demands more human capital for societies to advance and highest/best trained in most nations are increasingly quite well off

• Not everyone needs a bachelor’s degree to succeed, but those with less than a college education need better skills

• Some nations are advancing much faster than others and the laggard-- US at present--will lose out in the race between education and technology
Percent of Adults with an Associate's Degree or Higher by Age Group: Selected Top Countries

Percentage of Adults with an Associate's Degree Only, by Age Group

Source: OECD, *Education at a Glance* (Author's calculations)
Some Human Capital Questions for IRP (Thematic Summer Conference in 2013)

• What works to build and maintain human capital for non-four-year college graduates?
• How important are job flexibility, ability to multi-task, learn skills on the job, including computing and IT applications?
• The Europeans spend 10 times as much as we do on Active Labor Market Programs (ALMPs) and have much higher productivity amongst non-four-year college grads
• Our community colleges are just beginning to make a dent in this problem, but secondary school graduates and employers must also sign on for success
2. Poverty: Official Cash Income Rates and More Inclusive Ones

- The pre-tax money income measures—long series but rapidly losing relevance
- Who is really hurting? The young and undereducated (disconnected men, especially minorities, young single parents, ex-inmates)
- How have they coped? Doubling up to avoid poverty or to lessen its impact
- The more inclusive income measure: NAS-type poverty measures and the effects of tax and in-kind benefits on the poor are more promising

Source: U.S. Census Bureau (2011) and author’s calculations.
Note: 1) The “MSI-GA-CE” estimate is the closest to the “new” supplemental poverty measure estimate as it subtracts expenditures for medical expenses from income, geographically adjusts for differences in housing costs across states and uses a poverty line based on the consumer expenses of a two adult and two child household for food, clothing, and shelter at about 40 percent of the median consumption level for such a family in 2009.
Bottom Lines

• Poverty is rising in the USA by all measures, though the anti-poverty effects of the ARRA have reduced some or much of the increases in poverty since 2007

• Cash benefits like unemployment help older, more established workers—not younger ones

• The long term solution are jobs that pay a decent wage and which offer hope of stability and wage growth

• We are still trying to evaluate how health care costs and subsidies ought to figure into poverty and income measurement (more to come)
3. Inequality: Cash and More Inclusive Income Measures

- Long term changes in Census pre-tax household money income (Gini, percentiles and the ‘fanning out’ of the distribution)
- More inclusive data but ‘dated’: CBO after tax and benefit income to 1979-2007 plus a forecast to 2010
- Downward mobility?
- Main message: there are some winners, but many, many more losers
Income Inequality Trends: 1970’s-2000’s

Gini Index (Percentage) of Disposable Income

Source: Brandolini and Smeeding (2009), reproduced with permission.
Note: The Gini Index varies from 0, complete equality, to 1, complete inequality. EVS = Survey of Income and Expenditure; GSOEP = German Socio-Economic Panel
Percentile Shares of Adjusted Before Tax Household Money Income by Quintile
Share of Income of Each Quintile Relative to Share in 1967 and Actual Share in 2009

Recession Years  Lowest quintile  Second quintile  Third quintile  Fourth quintile  Highest quintile
Changes in Net Income Shares by Percentiles, 1979--2010
(Estimated 2010 Net Income Share on next slide)

## CBO Net Income Shares by Percentiles in 1979, 2007 and 2010 (estimated from money income changes)

<table>
<thead>
<tr>
<th></th>
<th>1979</th>
<th>2007</th>
<th>2010 (Est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Quintile</td>
<td>6.8%</td>
<td>4.9%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Second Quintile</td>
<td>12.3%</td>
<td>9.4%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Middle Quintile</td>
<td>16.5%</td>
<td>14.1%</td>
<td>13.9%</td>
</tr>
<tr>
<td>Fourth Quintile</td>
<td>22.3%</td>
<td>20.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Highest Quintile</td>
<td>42.4%</td>
<td>52.5%</td>
<td>53.0%</td>
</tr>
<tr>
<td>(All Quintiles)</td>
<td>(100.0%)</td>
<td>(100.0%)</td>
<td>100.0%</td>
</tr>
<tr>
<td>Top Decile</td>
<td>27.6%</td>
<td>38.7%</td>
<td>N/A</td>
</tr>
<tr>
<td>Top Ventile</td>
<td>18.1%</td>
<td>29.3%</td>
<td>N/A</td>
</tr>
<tr>
<td>Top Centile</td>
<td>7.5%</td>
<td>17.1%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Change in **Net Income** by Percentiles, 1979--2007
and 2007 Income Levels in CPI-URS1 Dollars
(shown in bracketed figure, in thousands, in the legend)
Downward Mobility?

- The new SPM (NAS-like income definition—next slide) suggests slightly higher poverty BUT much higher numbers of households whose incomes are between 1 and 2 times the poverty line.
- 48 percent of all Americans and 57 percent of America’s children live with incomes below twice the US SPM poverty line ($48,000 for four; $42,000 for 3; $25,000 for two).
### SPM Income Definition

<table>
<thead>
<tr>
<th>Resource Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPM Resources = Money Income From All Sources</strong></td>
</tr>
<tr>
<td><strong>Plus:</strong></td>
</tr>
<tr>
<td>Supplemental Nutritional Assistance (SNAP)</td>
</tr>
<tr>
<td>National School Lunch Program</td>
</tr>
<tr>
<td>Supplementary Nutrition Program for Women, Infants, and Children (WIC)</td>
</tr>
<tr>
<td>Housing subsidies</td>
</tr>
<tr>
<td>Low-Income Home Energy Assistance (LIHEAP)</td>
</tr>
<tr>
<td><strong>Minus:</strong></td>
</tr>
<tr>
<td>Taxes (plus credits such as the Earned Income Tax Credit (EITC))</td>
</tr>
<tr>
<td>Expenses Related to Work</td>
</tr>
<tr>
<td>Child Care Expenses*</td>
</tr>
<tr>
<td>Medical Out-of-Pocket Expenses (MOOP)*</td>
</tr>
<tr>
<td>Child Support Paid*</td>
</tr>
</tbody>
</table>

*Items for which data from new CPS ASEC questions are used in the SPM estimates.
Figure 4.
Distribution of People by Income-to-Threshold Ratios: 2010
(Percent distribution)

* Includes unrelated individuals under the age of 15.
Changes Between Definitions

<table>
<thead>
<tr>
<th>Share of Persons below 2x poverty line</th>
<th>Census Money Income</th>
<th>SPM Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>34%</td>
<td>48%</td>
</tr>
<tr>
<td>Kids</td>
<td>44%</td>
<td>57%</td>
</tr>
<tr>
<td>Adults</td>
<td>30%</td>
<td>38%</td>
</tr>
<tr>
<td>Elders</td>
<td>35%</td>
<td>49%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Share of Persons between 1x and 2x poverty line</th>
<th>Census Money Income</th>
<th>SPM Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>19%</td>
<td>32%</td>
</tr>
<tr>
<td>Kids</td>
<td>21%</td>
<td>39%</td>
</tr>
<tr>
<td>Adults</td>
<td>16%</td>
<td>29%</td>
</tr>
<tr>
<td>Elders</td>
<td>26%</td>
<td>33%</td>
</tr>
</tbody>
</table>
What is going on here?

- SNAP, public housing, EITC, and refundable tax credits help those below poverty weather the storm, but fade out as incomes rise toward twice the poverty level.
- Health care costs and child care costs rise as earnings become a greater share of income as a family moves up above the poverty line and into the 1-2 times poverty range.
- Payroll taxes increase and federal and state income taxes rise as earnings rise above the poverty line.
- Two earner households above twice the poverty line fall below that level when one loses their primary job.
- And ‘doubling up’ makes the situation look better than it otherwise is.
Winners and Losers

- The high end is driving most all the positive income change we see (e.g. **80th percentile change, 90th, and 95th –not just the 99th percentile**)
- Middle class people—those below the 80th percentile!—are losing ground in share, especially the bottom two quintiles (and trend is a chronic, not just a cyclical, issue)
- Middle class is only gaining modestly in real income level through 2007 (with expected losses through 2011 that almost erase these gains) and being squeezed when we consider income definitions like the SPM
- CBO inclusive ‘net income’ numbers show more inequality than do Census cash numbers
Remaining Puzzle: How to Treat Health Care?

- Poverty measures subtract out of pocket costs and insurance premiums; and employee deductibles have now doubled from 2003-2010, rising by $2400 at the median over 7 years while cash earnings are flat or falling. Other out-of-pocket expenses for dental and eye care are also rising.

- Income distribution studies, which add the employer premium (now $10,500 for a family) and the value of Medicare and Medicaid to incomes, show that incomes at lower and middle income ranges increase substantially when you count such subsidies, rising by 70 percent in the bottom quintiles, 23 percent at the median and only 6 percent in the top quintile.

- How should we account for both phenomena?

- From stocks of wealth to flows of realized and unrealized capital income plus labor income (from SCF after tax income to ‘more complete income’, MCI)
- Recession’s impact on stocks (recovered 80/85 percent of their value) is much less than on housing (30 percent loss in value and continuing with another 5 percent decline in 2011) and stocks much more skewed in its distribution
- Profits are climbing but earnings and labor shares are falling, even if you count employer benefits
- Debt is falling BUT because of bankruptcy and unavailability of credit (for poor and moderate income) risks, including housing
Income from Labor and Income from Wealth (MCI) Gini Index with After Tax SCF Income and MCI

Labor and Capital Shares 1989-2009

Source: See Smeeding and Thompson (2011) for more information.
5. Summary and Conclusion, I wish I were wrong, but--

- This is a very deep and different recession in the United States with impacts to be felt for years, especially for younger undereducated workers where cyclical effects are mixed toxically with chronic structural effects.
- Efforts to fight poverty have been surprisingly successful using the more inclusive poverty measure, but will wane with budget cuts coming in 2012.
- Housing remains a huge problem with many dimensions.
- Jobs with decent wages are the long run answer to poverty, but we do not have enough jobs. The ones out there are mostly at lower wages, especially for the lesser educated who need skill upgrading in order to become more productive.
- Inequality remains high and has increased across the recession. I expect it to climb even higher in the recovery, should we really have one soon.
6. So What?
Constructive Directions for Policy

• Higher taxes on the winners are called for— upper income quintile (not just top 1 percent) do not pay enough including higher income elders’ Medicare premiums
• Subsidized jobs for the less skilled and longer term unemployed are needed right away
• More and better employment and training for the less educated at ages 25-30, especially at the technical level and in conjunction with employer involvement
• Find ways to increase profit sharing within enterprises so that all workers benefit when a company does well, not just the top 2-5 percent of workers
THANK YOU

• I look forward to your reactions and discussion