Measuring Poverty

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prepared for ...
Step Up Silicon Valley
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CPI’s ten research groups

Poverty measurement (David Betson & Kathy Edin)
Educational access (Sean Reardon)
Recession and recovery (Michael Hout)
Income inequality (David Grusky & Kim Weeden)
Safety net (Henry Brady & Bruce Owen)
Residential segregation (Robert Mare)
Discrimination and poverty (Shelley Correll & Cecilia Ridgeway)
Racial and ethnic inequality (C. Matthew Snipp & Dan Lichter)
Hispanic inequality (Tomás Jiménez & Doug Massey)
Social mobility (Gary Solon)
Project #1
Monthly quantitative measurement of poverty: Bundle of key poverty indicators released each month

Virtues of monthly measurement
• Monitor and plan for demands on safety net
• Allows for possibility of macroeconomic response

Exploit CPS monthly income measurement
Qualitative studies of poverty have been immensely important in uncovering experience of poverty.

One-shot tradition of qualitative analysis makes monitoring trend impossible.

Solution: Qualitative trend measurement.
President Obama vowed to “build new ladders of opportunity into the middle class” in his 2013 address.

Ways to move forward
1. Administrative data (i.e., IRS)
2. Adding intergenerational module to existing survey (e.g., ACS, CPS, SIPP)
Project #4: Developing local and regional poverty measures

The SPM revolution in poverty measurement

But we need to develop local SPM measures
What’s wrong with the official poverty measure?

Ignores regional differences in housing costs (and hence poverty in California is arguably underestimated)

Ignores some types of income and benefits (e.g., EITC, SNAP) and hence it appears as if “nothing can be done”

Doesn’t take into account individual differences in child care and health costs
How to calculate the SPM

Step 1: Establish the poverty threshold

Step 2: Calculate family resources

Step 3: Families making less than the threshold are in poverty
### Calculating the threshold

**Official Measure**

- Cost of a minimum food basket per 1955 Food Consumption Survey
- Multiply by 3
- Update each year with Consumer Price Index

**Supplemental Measure**

- 33\textsuperscript{rd} percentile of sum of expenditures for food, clothing, shelter, and utilities (FCSU) per Consumer Expenditure Survey
- Multiply by 1.2
- Based on most recent 5 years of CE data
- Updated CE threshold each year (with last 5 years of data)
## Adjustments to the threshold

<table>
<thead>
<tr>
<th>Official Measure</th>
<th>Supplemental Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>No geographic adjustments</td>
<td>Adjustments in each state using ACS data (five year moving average) on rental costs, with each metropolitan area in each state distinguished</td>
</tr>
<tr>
<td>No adjustments by “shelter type”</td>
<td>Adjust by differences in shelter expenditures by renters, owners with a mortgage, owners without a mortgage (i.e., different threshold for each type)</td>
</tr>
<tr>
<td>Adjustments by family type</td>
<td>Adjustments by family type (i.e., equivalence scales) that assume economies of scale and that children need less than adults</td>
</tr>
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### Calculating resources

<table>
<thead>
<tr>
<th>Official Measure</th>
<th>Supplemental Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross before-tax money income from all sources (using Annual Social and Economic</td>
<td>Gross money income (CPS) including cash benefits (TANF, SS, SSI, UI) plus value of</td>
</tr>
<tr>
<td>Supplement of the CPS)</td>
<td>federal in-kind benefits for FCSU (e.g., SNAP, housing subsidies) and tax credits</td>
</tr>
<tr>
<td>Only <em>cash</em> benefits are counted (e.g., TANF, SS, SSI, UI)</td>
<td>(EITC)</td>
</tr>
<tr>
<td></td>
<td><strong>MINUS</strong> income and payroll taxes and other nondiscretionary expenses</td>
</tr>
<tr>
<td></td>
<td>• child care &amp; work-related expenses</td>
</tr>
<tr>
<td></td>
<td>• child support payments</td>
</tr>
<tr>
<td></td>
<td>• out-of-pocket medical care expenses (incl. health insurance premiums)</td>
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### Poverty Measure Concepts: Official and Supplemental

<table>
<thead>
<tr>
<th></th>
<th>Official Poverty Measure</th>
<th>Supplemental Poverty Measure</th>
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<tbody>
<tr>
<td><strong>Measurement Units</strong></td>
<td>Families and unrelated individuals</td>
<td>All related individuals who live at the same address, including any co-resident unrelated children who are cared for by the family (such as foster children) and any cohabitors and their relatives</td>
</tr>
<tr>
<td><strong>Poverty Threshold</strong></td>
<td>Three times the cost of a minimum food diet in 1963</td>
<td>The 33rd percentile of expenditures on food, clothing, shelter, and utilities (FCSU) of consumer units with exactly two children multiplied by 1.2</td>
</tr>
<tr>
<td><strong>Threshold Adjustments</strong></td>
<td>Vary by family size, composition, and age of householder</td>
<td>Geographic adjustments for differences in housing costs by tenure and a three parameter equivalence scale for family size and composition</td>
</tr>
<tr>
<td><strong>Updating Thresholds</strong></td>
<td>Consumer Price Index: all items</td>
<td>Five year moving average of expenditures on FCSU</td>
</tr>
<tr>
<td><strong>Resource Measure</strong></td>
<td>Gross before-tax cash income</td>
<td>Sum of cash income, plus in-kind benefits that families can use to meet their FCSU needs, minus taxes (or plus tax credits), minus work expenses, minus out-of-pocket medical expenses and child support paid to another household</td>
</tr>
</tbody>
</table>
Building a measure for California and for California counties

PPIC (Sara Bohn, Caroline Danielson, Matt Levin) and CPI (Beth Mattingly, Chris Wimer) collaboration

Four rationales

Census Bureau measure based on CPS three-year average (whereas we provide year-specific estimates)

Need county-level estimates: Counties operating in the dark (which is problematic because of variability in housing costs, food stamp use, EITC receipt)

Need to examine demographic variability in poverty

Counterfactuals (e.g., how much reduction secured by ramping up EITC by 10 percent?)
Geographical units

California SPM

County-level SPM
Alameda, Butte, Contra Costa, El Dorado, Fresno, Humboldt, Imperial, Kern, Kings, Los Angeles, Madera, Marin, Merced, Napa, Orange, Placer, Riverside, Sacramento, San Bernardino, San Diego, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Shasta, Solano, Sonoma, Stanislaus, Tulare, Ventura, Yolo, Lake/Mendocino, Alpine/Amador/Calaveras/Inyo/Mariposa/Mono/Tuolumne, Colusa/Glenn/Tehama/Trinity, Sutter/Yuba, Monterey/San Benito, Del Norte/Lassen/Modoc/Siskiyou, Nevada/Plumas/Sierra
Data sources

American Community Survey

Current Population Survey: Impute medical and child care costs to ACS respondents; impute receipt of Housing Assistance

Administrative data: Used to better estimate CalWorks and food stamp use from caseload counts by county
The payoff

Release date: September, 2013

What will we learn?

Which counties have highest and lowest poverty rates?

Which groups have the highest and lowest rates?

In which counties are problems emerging?

Which programs are doing the most poverty-reduction work?
American Recovery and Reinvestment Act (ARRA): Would it have reduced poverty had it been applied in 2008?

Answer: By 1.3 points (via tax credit expansions, additional payments to Social Security recipients, SNAP benefit increases)