Improving the Measurement of Poverty in the United States

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President Lyndon B. Johnson delivering the State of the Union address, Jan. 8, 1964. Photo (excerpt): LBJ Library & Museum.

- An accurate measure is essential to gauge impact of government efforts to reduce poverty
- In the US, it was particularly important as we marked the 50th anniversary of the War on Poverty
- Trends with official poverty measure (OPM) suggest "we waged a war on poverty and poverty won" (Reagan) but OPM is badly flawed
- In recent work, a group of us at Columbia re-examined trends in poverty using an improved measure



- Having accurate measure(s) of poverty was crucial
- When Blair declared war on poverty in 1999
- 3.4 million children were in poverty (relative or absolute)
- 2.6 million were materially deprived
- By 2008/09
- Absolute poverty fell by 1.8 million a >50% reduction.
- Relative poverty fell by 600,000 a 15% reduction.
- Material deprivation fell by 400,000 a 15% reduction.

Absolute poverty = income <60% median in 1998/99, uprated only for inflation Relative poverty = income <60% contemporary median Material deprivation = index of lacking basic necessities & low income



The official measure of poverty in the US

- Developed in 1961 by Mollie Orshansky for "temporary emergency use"
- Food was the primary household expenditure, with 1/3 of expenses going toward food
- Cost of minimally adequate diet in 1955 was multiplied by three and adjusted for family composition to set thresholds (if family income is below threshold, the family is poor)
- These absolute thresholds are updated annually for inflation, but not changes in living standards, so they are now much lower, as a percentage of median incomes, than in the past

Problems with the official measure

- Housing, not food, is now the largest household expenditure: Housing = 33% of total expenditures vs. food = 14%
- Thresholds are not adjusted for geographic variation in cost of living
- Income does not include many government transfers, e.g. tax credits and non-cash benefits such as Food Stamps (SNAP) and public housing
- Income is not adjusted for necessary expenses child support, work expenses, child care, & medical out of pocket expenditures (MOOP)
- Unit of analysis is family or unrelated family/individual, cohabitors treated as unrelated individuals
- Equivalence scale is flawed
- No distinction made between different types of owners and renters
- Thresholds assume elderly require less money for food than non-elderly

If official measure is so flawed, why use it?

- Problems with the OPM are well known (see NAS report)
- But moving to a new measure is challenging -- for both political and technical reasons – as chronicled in West Wing:
- https://www.youtube.com/watch?v=q9EehZlw-zk

Supplemental Poverty Measure (SPM)

- The Obama administration bravely decided to implement an improved "supplemental" measure alongside the official one
- SPM sets more appropriate "quasi-relative" thresholds and better accounts for resources (cash & non-cash transfers including Food Stamps and tax credits, work & medical expenses)
- Census has released SPM estimates since 2009, but not historically
- Liana Fox, Irv Garfinkel, Neeraj Kaushal, Chris Wimer, and I provided
- first historical estimates using SPM, and
- estimates using an "anchored SPM" where thresholds are anchored to today's SPM poverty line and then taken back historically adjusting for inflation using CPI-U-RS

SPM vs. OPM

- Thresholds:
- OPM based on minimally adequate food diet in 1960s
- SPM based on consumption of a basic bundle in past 5 years
- Resources:
- OPM includes only income and cash transfers
- SPM include income, cash transfers and in-kind benefits, *minus* taxes, child support paid, work expenses, child care, MOOP
- Family unit:
- OPM includes family only
- SPM includes unmarried partners, unrelated children under 15, and foster children under 22

Establishing SPM thresholds

Consumer Expenditure Survey (1961-2012)

- 30-36th percentile of expenditures on food, clothing, shelter, utilities for all two-child households (plus 20%)
- Pre-1980: Two data points with interpolation
- To set anchored threshold, we define 2012 thresholds using data for 2007-2012 and then carry them back historically adjusting for inflation using the CPI-U-RS

Adjustments

- Shelter component estimated separately by housing status (renter, owner with mortgage, owner without mortgage)
- Three-parameter equivalence scale for family size/composition
- Geographic adjustments (not in initial estimates)

Establishing SPM resources

- Adjust income in 1968-2013 CPS ASEC with:
 - In-kind benefits:
 - Food stamps (values available in CPS back to 1980)
 - Energy subsidies (values available in CPS back to 1982)
 - Housing subsidies (receipt available in CPS back to 1976, impute values based on SU portion of the threshold as cap)
 - School lunch (values available back to 1980, receipt available in earlier years, impute years of missing values)
 - WIC (receipt available in CPS back to 2001; impute receipt prior)
 - Tax liabilities/credits: Available to 1980, before with TAXSIM
 - Impute MOOP, child care, work expenses from CEX

Estimating the SPM historically

- First step was to do this for 2009 and later years
- We came close to matching Census SPM poverty rates
- This gave us confidence that our methodology was sound
- We then produced SPM estimates going back to 1967

30% 25.8% 25% 20% **16.0**% 15% 15.0% • I4.2% 10% 5% **0%** ⊦ 60°20°2012012012 10,00,00,00

•••••• OPM —— SPM (Anchored, 2012)

Figure I: Official vs Supplemental Poverty Rates, 1967-2012



Figure 2: Effects of Taxes and Transfers on Poverty Rates, 1967-2012

Anchored SPM — Pretax/Pretransfer Anchored SPM







Conclusions

- Using SPM has altered our understanding of the record since War on Poverty
- Poverty has fallen by about 40% since 1967
- Safety net plays a substantial and growing role in reducing poverty
- The reduction in poverty, and the role of the safety net, would be obscured if we limited our analysis to OPM

See: Fox et al, 2013; Wimer et al., 2013. http://cupop.columbia.edu/publications/2013

Cited in: Washington Post, New York Times, The New Yorker, Business Week, Chicago Tribune, LA Times, Huffington Post, USA Today, The Economist, PBS, MSNBC, Al Jazeera, Mother Jones, The Atlantic, Wall Street Journal, Bloomberg News, Economic Report of the President



We need to set aside the belief that government cannot do anything about reducing inequality... Without Social Security, nearly half of seniors would be living in poverty — half. Today, fewer than I in 10 do... And because we've strengthened that safety net, and expanded pro-work and pro-family tax credits like the Earned Income Tax Credit, a recent study found that the poverty rate has fallen by 40 percent since the 1960s.

Next steps

• Updating analysis



Figure 1: Official vs Anchored Supplemental Poverty Rates, 1967-2015



Figure 2: Trends in Market and Post-Tax, Post-Transfer Poverty, 1967-2015



Figure 3: Trends in Market and Post-Tax, Post-Transfer Deep Poverty, 1967-2015

Next steps

- Extending analysis to the state level
- We have produced a State Poverty Chartbook that shows SPM rates, and trends by state (using a geographically adjusted measure)
- We have also used the SPM to estimate the impact of a "race to the top" in TANF, EITC, CTC, and Food Stamps
- Estimating trends for key subpopulations (e.g. young children, young adults, foster children) and by factors such as race/ethnicity, family structure, urban vs. rural residence

Still to come

- Continuing to improve estimates (e.g. adjusting for underreporting, missing data)
- Continuing to look at key sub-groups and vulnerable groups
- Using our data to model effects of policy reforms on poverty and longer-term outcomes
- We're interested in proposals to reduce poverty (e.g. universal child allowance)
- But given the election results, we'll also need to look at other proposals that might increase poverty (e.g. Food Stamp cuts)

Other aspects of disadvantage

- In Robin Hood survey in NYC, we measure poverty but also material hardship, health & well-being, assets/debt, shocks, service utilization, life satisfaction, over a 3 year panel interviewed quarterly
- This gives us a much more comprehensive picture of poverty and disadvantage than the SPM would alone
- It also provides a platform to flexibly respond to and study policy reforms as they happen (e.g. paid sick leave, minimum wage increases)

For more information

- To learn about our work with the SPM, go to the Columbia University Center on Poverty and Social Policy website: <u>www.povertycenter.columbia.edu/</u>
- To learn about the Poverty Tracker, go to the Robin Hood website: <u>http://povertytracker.robinhood.org/#home</u>