

# Income and Benefits Data in Federal Surveys: Misreporting and Missing Data

Linda Giannarelli – Senior Fellow & TRIM3 Project Director, the Urban Institute

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# Context

- Challenges faced as a user of the data
- Using survey SES data to assess program eligibility, including Medicaid/CHIP eligibility
- Analysis of the low-income population and subgroups of that population
  - Program participation, level of dependency
  - Impact of hypothetical changes in policies

# Two Key Challenges

- Misreporting / Underreporting
  - Aggregate under-reporting vs. actual totals
  - Findings from exact-match projects
- Missing Data
  - Large role of allocated data
  - Some issues with allocated data
- Wish list

# CPS-ASEC Under-reporting: 2010 ASEC Amounts (CY 2009) vs. NIPA

Income Type	Percent captured (includes allocated data)
Wage and salary income	93%
Unemployment compensation	66%
Non-farm self-employment	32%
Rents and royalties	56%
Interest income	27%
Dividend income	14%
Social Security (OASDI)	85%
Pension income	67%
Veterans payments	63%
Supplemental Security Income (SSI)	75%
Supplemental Nutrition Assistance (SNAP)	56%

Source: Austin Nichols and Karen Smith, APPAM conference presentation, 2011

# CPS-ASEC Under-reporting: Reported Enrollment vs. Program Data

Program	Percent of Enrollment Captured (including allocated responses)
TANF, 2009 (average monthly units)	58%
SNAP, 2009 (average monthly units)	58%
Medicaid and SCHIP, 2008 (average monthly individuals)	87%
SSI, 2009 (annual individuals)	76%

Source: unpublished tabulations

# ACS Income collection: Additional Challenges

- Many respondents fill out form independently
- Few income sources are collected individually (only wages/salaries, self-employment, Social Security, SSI)
- Amounts that are combined
  - All public assistance and welfare income
  - All asset income (interest, dividends, rent)
  - All retirement income
  - All other income (veterans payments, child support, workers' comp, unemployment comp, anything else)

## ACS 2008:

### Likely TANF Income vs. Program Data

- Likely TANF income = Income reported as “public assistance or welfare payments” that is reported by low-income families with children
- Likely-TANF income vs. program data, 3 states
  - Georgia: 84%
  - Illinois: 96%
  - Massachusetts: 23%
- Aggregate public assistance reported in IL exceeds total across all IL cash benefit programs

# ACS 2008: Likely Unemployment Compensation vs. Program Data

- Likely UC income = Income reported from “any other source”, reported by individuals with apparent unemployment
- Likely-UC income vs. program data, 3 states
  - Georgia: 23%
  - Illinois: 23%
  - Massachusetts: 26%



# ACS 2008: SSI Income vs. Program Data

- Reported amount vs. program data, 3 states
  - Georgia: 81%
  - Illinois: 86%
  - Massachusetts: 85%
- Data show higher incidence of very-high amounts (over SSI maximum payment) vs. CPS-ASEC data

# Comparisons of Survey Data on Benefits with Actual Benefit Status

- Exact match of a survey data file with an administrative data set, based on SSN
- Studies have been performed for Medicaid, SSI/Social Security, SNAP
- General findings:
  - Many actual recipients fail to report enrollment
  - Some reporters are not actually enrolled

# SNAP Exact Match Study\*

- Match of 2005 ASEC with SNAP program data from Texas, Maryland, and Illinois
- Estimates (weighted numbers of households)
  - 833,000 correct reporters
  - 922,000 false negatives
  - 92,000 false positives

\* Julie Parker, Census Bureau working paper

# “SNACC” Project – Medicaid Undercount Project \*

- Involved CMS, ASPE, NCHS, AHRQ, Census Bureau, SHADAC, RWJ
- CY 2005 Estimates
  - 24.8 million correctly reported as enrolled
  - 18.7 million false negatives
  - 7.7 million false positives
  - Adjusted undercount estimate: 32%

Source: Phase V Research Results, Extending the Phase II Analysis, 2010

# Why do people not report their benefits correctly?

- A few possible reasons
  - Long reference period
  - Confusion between programs
  - Stigma
  - Interview fatigue
- Ongoing research
  - Census Bureau cognitive testing
  - Exact-match analyses

# Allocated Data

- Allocated data are a substantial portion of the data that users of public-use files are analyzing

# Benefit Amounts in Survey Data with and Without Allocated Data, 2005 \*

Program	CPS-ASEC Annual Dollar Amount as Percent of Administrative Target	
	Only truly-reported CPS amounts	Truly-reported plus allocated amounts
TANF	40%	57%
Food Stamps	43%	55%
SSI	60%	82%

Source: Wheaton, Laura, JSM 2007 conference paper

# Issues with Allocated Data for Low-Income Families

- People allocated to be enrolled in a program are less likely to appear eligible than actual reporters
- Allocated data for benefit programs may be inconsistent with known policies
- Allocated income amounts (earnings, Social Security) can make a person who actually reported a benefit program appear ineligible



# Implications

- Aggregate impacts of misreporting and allocation may not be significant, but...
- Impacts for specific studies, subgroups, can be substantial
- Allocated data are not the same as truly-reported data at the micro-level

# Wish List – Specific Questions

- ACS
  - Ask about more individual income items
  - Reinstate the question on work-related disability
  - Ask if a household lives in public or subsidized housing
- CPS/ASEC
  - Identify individuals combining school and employment, at any age

# Wish List -- General

- Continued cognitive testing – Why don't people report all of their income and benefits?
- Continued refinements to CATI/CAPI systems
- Refinements to allocation methods

# Cited Research

- Parker, Julie. “SNAP misreporting on the CPS: Does it affect poverty estimates?” SEHSD working paper number 2012-1
- Austin, Nichols, and Karen Smith. “Using NIPA and Tax Data to Assess the Quality of the March CPS”, APPAM
- SNACC Project: Phase V Research Results: Extending the Phase II Analysis of Discrepancies between the MSIS and the CPS-ASEC from Calendar Years 2000-2001 to Calendar Years 2002-2005.
- Wheaton, Laura. “Underreporting of Means-tested Transfer Programs in the CPS”, JSM 2007.