# The Use and Misuse of Income Data and the Rarity of Extreme Poverty in the United States

Bruce D. Meyer, University of Chicago, NBER, AEI, and
U.S. Census Bureau
Victoria Mooers, University of Chicago
Derek Wu, University of Chicago

July 10, 2018 American Enterprise Institute

Disclaimer: Any opinions and conclusions expressed herein are those of the author(s) and do not necessarily represent the views of the U.S. Census Bureau. While this work was not subject to formal Census Bureau content review, Census staff reviewed all statistical output to ensure that no confidential information was disclosed. We would like to thank the Alfred P. Sloan Foundation, the Russell Sage Foundation and the Charles Koch Foundation for their support.

## Introduction: The CID

- This paper is one of the first from an unprecedented new project that assembles and links data on income, program receipt, and closely related information
- We call the project the Comprehensive Income Dataset (CID) (Medalia et al. 2018)
- The project will link several Census Bureau surveys to tax records and means-tested and social insurance program records
- The goals of the project are to 1) improve household surveys and tax administration and 2) understand poverty, inequality, and the effects of government transfers
- My expectation is that our results will challenge myths on the left and right: government programs have reduced poverty; poverty is lower than is conventionally reported.
- Focus on extreme poverty first because results stark; deep poverty and traditional poverty results on way but complex

## Introduction: Past Claims

- Claims of extreme poverty
  - 4.3% of non-aged households with children under \$2/day in monthly cash income in 2011 SIPP (Shaefer and Edin 2013)
  - 1.3 million children under \$2/day in annual cash income in 2011 CPS (Shaefer and Edin 2017)
  - 5.3 million people under \$4/day in 2015, from Povcal/LIS/CPS (Deaton 2018); highlighted in UN HRC poverty report
- Also claims of high rates of people who have no earnings and receive no government benefits, focusing on single mothers ("the disconnected")
  - See Turner, Danziger, and Seefeld (2006), Blank and Kovak (2009), Loprest (2011), Loprest and Nichols (2011)
- Shaefer and Edin contend extreme poverty rates risen greatly over time due to welfare reform. Blank and Kovak have similar finding.

## Conflicting Evidence

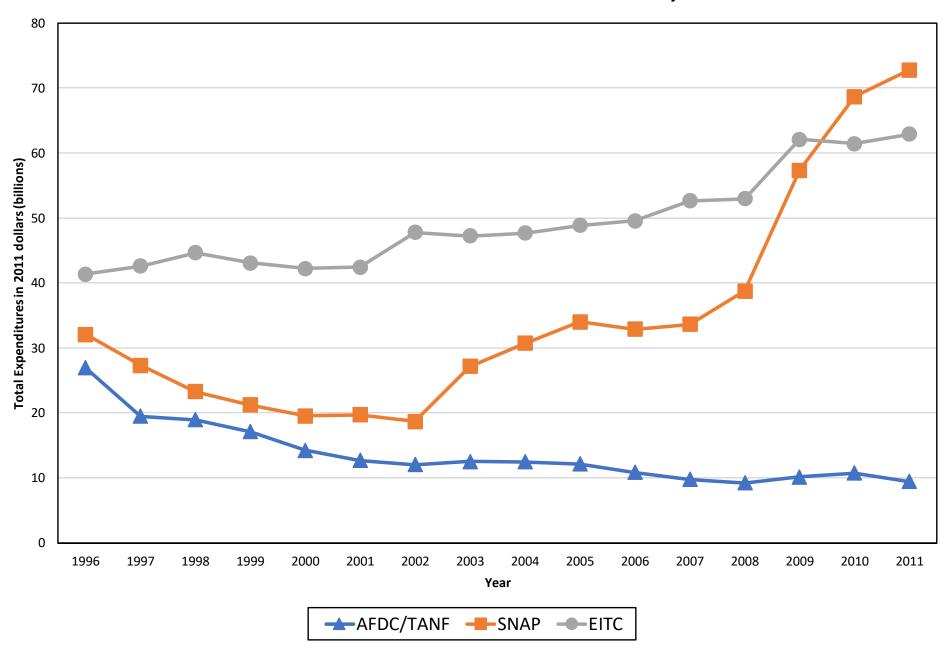
- Studies examining household spending find few spend less than \$10/person/day and that the percentage has been declining
- Meyer and Sullivan (2003, 2004, 2008, 2012) CE, PSID: argue that should use consumption at very bottom, low income households have high consumption; low percentiles of consumption rise in period after welfare reform; deep consumption poverty has fallen sharply over time
- Preceded by series of papers by Jencks, Mayer
- Chandy and Smith (2014) CE consumption: level of \$2/day consumption poverty low
- Winship (2016) CPS income including health benefits, with better price index, using TRIM3: low level and LR trend down, SR up
- Hall and Rector (2018) CE: \$4/day poverty nonexistent; deep poverty fallen to 25 percent earlier level

## Why are Extreme Poverty Rates from Survey Cash Reports so High?

#### Calculations ignore in-kind transfers

- Most means-tested transfers in-kind; generally accepted that they should be counted as income
  - See Ellwood and Summers (1986), Citro and Michael (1995), Blank (2008), Winship (2016), SPM reports
- SNAP payments are close to cash (Ben-Shalom, Moffitt, and Scholz 2012), and gross rents are close to market rents (Olsen 2017)
- Some studies argue value of transfers exceeds dollars provided as transfer programs insure income shocks
  - See Blundell, Pistaferri, and Preston (2003), Blundell (2014), Deshpande (2016)
- Research needs to include in-kind transfers to provide valid comparisons over time

#### **Trends in Benefits for Selected Transfers, 1996-2011**



## Why are Extreme Poverty Rates from Survey Cash Reports so High? (cont.)

#### They rely on survey income data with substantial errors

- There are significant holes in income data
  - 63% and 44% of Public Assistance recipients do not report in the CPS and SIPP (Meyer and Mittag 2015)
  - 46% of pension income recipients do not report in CPS (Bee and Mitchell 2017)
  - 43% and 19% of SNAP recipients do not report in CPS and SIPP (Meyer and Mittag 2015)
- These holes have gotten bigger over time

## Why are Extreme Poverty Rates from Survey Cash Reports so High? (cont.)

#### Errors in income likely pronounced at the very bottom

- From Blank and Schoeni (2003):
  - "Incomes at the very bottom and at the very top of the distribution may be reported with substantial error in the CPS. This makes us wary of conclusions based on observed movements in the bottom or top few percent of the distribution."
- Reported expenditures usually a multiple of reported income in left tail suggesting income reports errors
  - Patterns found in U.S., British, and Canadian data
  - See Jencks; Meyer and Sullivan (2004, 2008), Brzozowski and Crossley (2011), Brewer, Etheridge, and O'Dea (2017), Hall and Rector (2018)

## This Paper

- Clearly many households are severely deprived but we want to get facts straight on who they are and their prevalence
- Re-examine extreme poverty rates in 2011 starting from some of the most cited estimates
- Correct the measurement of extreme poverty using more fully the survey information and employing administrative data
  - We find that at most one-quarter of one percent of households are living on less than \$2/person/day
- Validate the corrections to reports using multiple sources
  - 53-76% of those naïve estimates call extreme poor, but we reclassify--those with under-reported earnings or substantial assets are above poverty line per admin data (approx. \$20/person/day)
  - These same groups have material hardship levels similar to the U.S. mean
- Since extreme poverty is so low post-reform, it cannot be meaningfully higher due to welfare reform

## Data: SIPP

- Survey of Income and Program Participation (SIPP)
- Responses include information about income (sources and amount), program participation, assets, hardships, housing, education, and demographics
- Interviews are conducted in staggered 4-month waves
- We use wave 9 of the 2008 panel, which covers January-July of 2011
  - Also bring in information from topical modules corresponding to waves 6, 7, 9, and 10, which refer to time periods spanning January 2010 to November 2011
- 32,524 households
- Does not include the homeless

## **Data: Administrative Sources**

Income Source	Administrative Source	Income Unit	Income Frequency
Earnings	DER (SSA)	Individual	Annual
Asset Income	Form 1040 (IRS)	Tax Unit	Annual
Retirement Distributions	Form 1099-R (IRS)	Individual	Annual
OASDI	PHUS (SSA)	Individual	Monthly
SSI	SSR (SSA)	Individual	Monthly
EITC	Form 1040 (IRS)	Tax Unit	Annual
SNAP	State Agencies	Household	Monthly
Housing Assistance	PIC & TRACS (HUD)	Household	Monthly

## Methodology: Outline

- Start with survey-reported pre-tax cash income: calculate households living on less than or equal to \$2/person/day
- Use average amounts within a wave
- Incorporate in-kind transfers, undertake conservative corrections for errors in reported earnings, and account for assets
- Bring in administrative data on taxable income, transfer programs, and tax credits like the EITC
- Separate into mutually exclusive and exhaustive household types: elderly, single parents, multiple parents, single individuals, multiple adults
- Importantly, we validate our choices with info on hardships, living conditions, incomes from administrative data

### Definitions: Cash Extreme Poor

- We start by considering a household to be in extreme poverty if its total money income is ≤ \$2/person/day
  - This is Shaefer and Edin (2013) headline definition
  - We consider others as well, such as including in-kind transfers
  - Our base measure is the average over a 4-month wave

## Incorporate Additional Information (Survey)

- Add in-kind transfers
  - SNAP
  - WIC
  - Public and subsidized housing
- Calculate lower-bound earnings based on reported hours worked
  - Consider wage/salary and self-employment hours separately
  - Calculate hours worked each month for each member of the household
  - Multiply monthly hours worked by the federal minimum wage
- Account for substantial assets
  - Real estate equity > \$25,000 or
  - Liquid assets > \$5,000 or
  - Total assets > \$50,000

## Incorporate Additional Information (Admin)

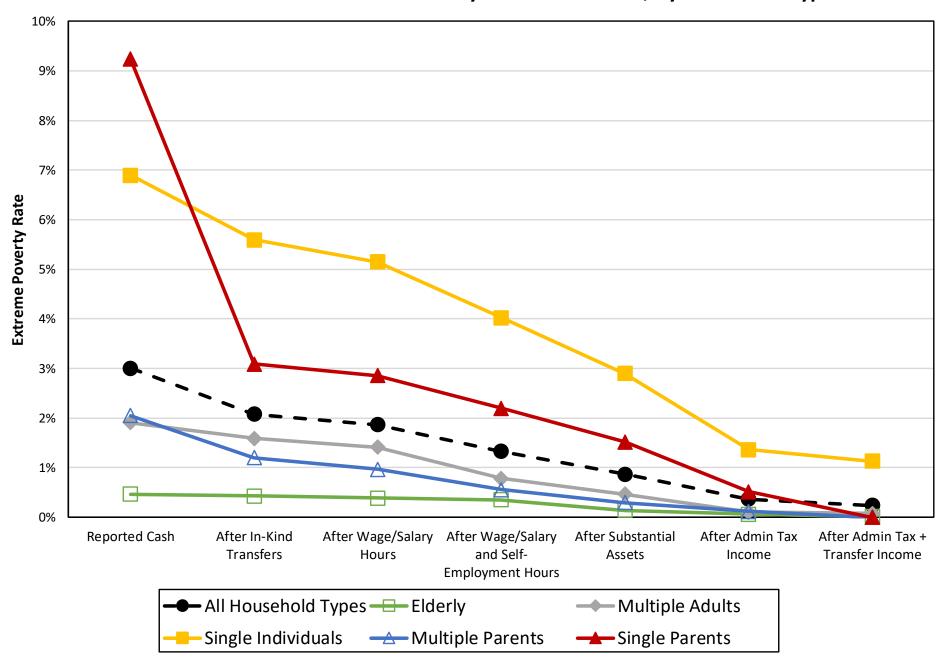
- For earnings, asset income, and housing assistance: use maximum values from survey and administrative data
- Key assumption is that some individuals do not report income to the IRS and that surveys capture some of it

### Household Characteristics

- Validate our decisions to consider various groups to be not in extreme poverty by examining:
  - Material hardships
  - Housing characteristics (e.g., appliances owned, home quality)
  - Income levels from administrative data

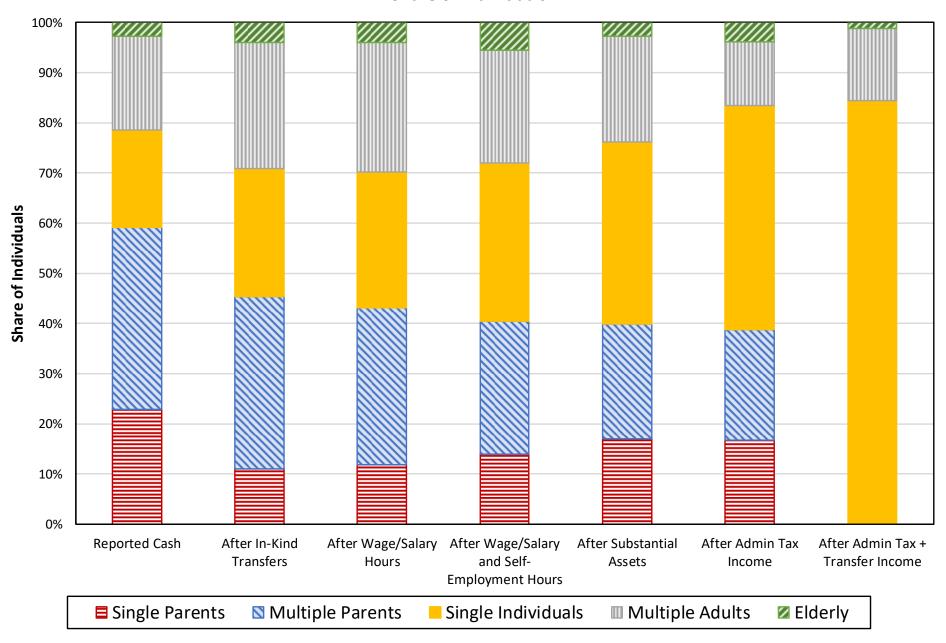
## **Estimates of Extreme Poverty**

#### Share of Households in Extreme Poverty After Corrections, by Household Type



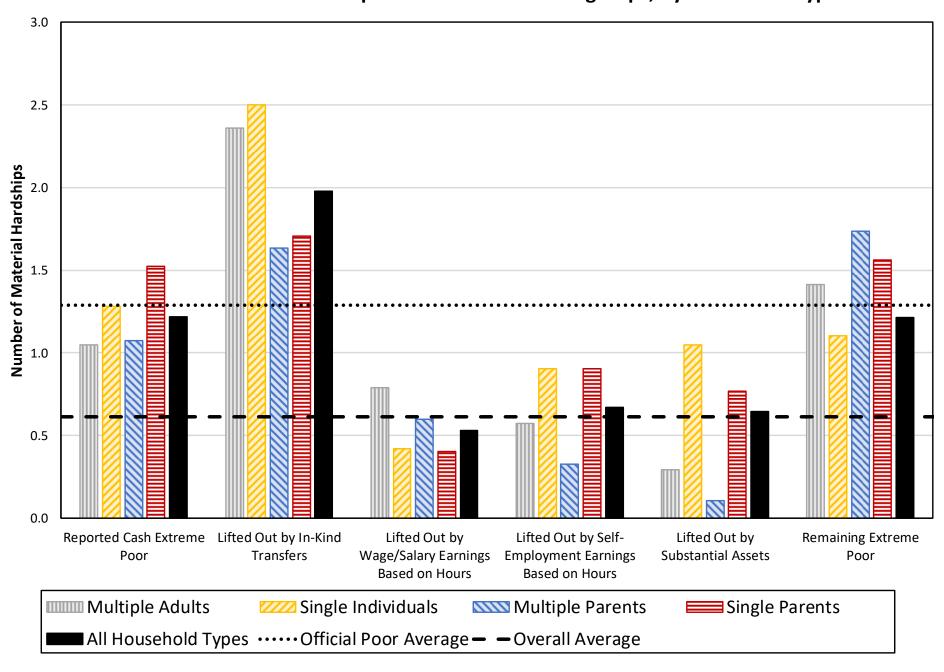
#### **Household Type Distribution of Extreme Poor Subgroups After Corrections**

Share of Individuals

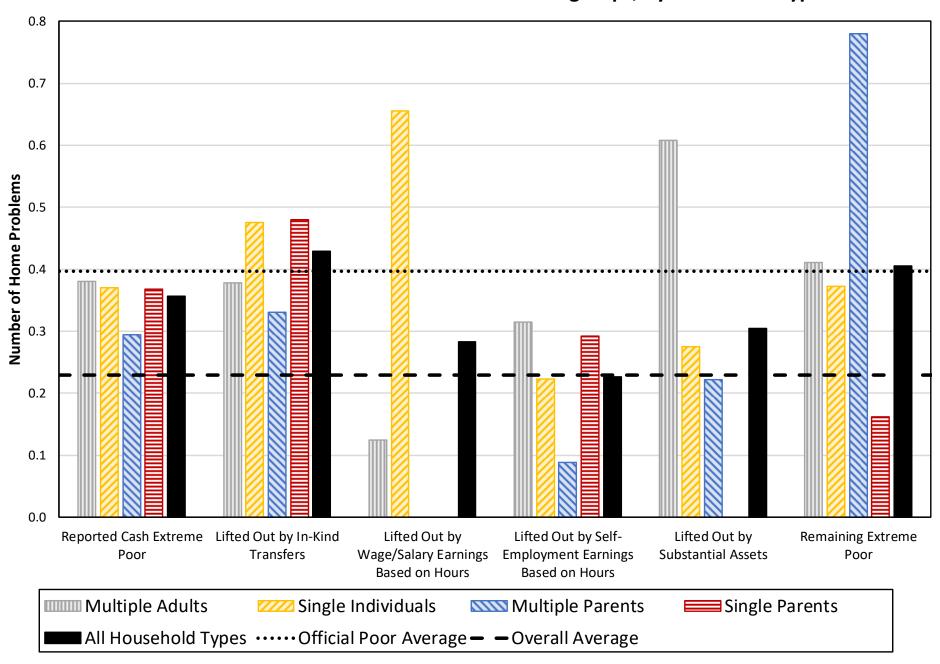


## Selected Characteristics of Extreme Poor and Comparison Households

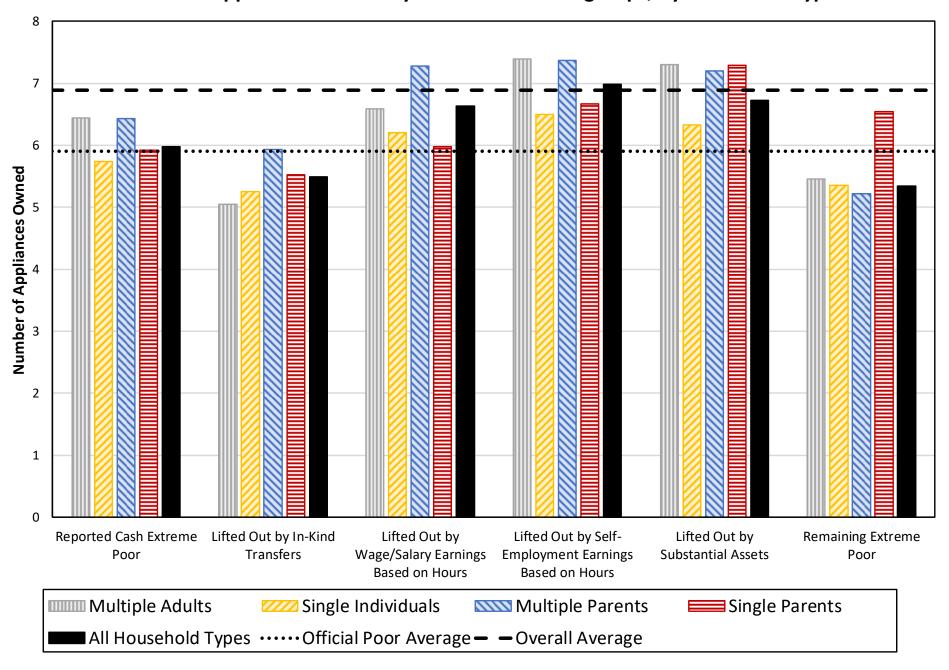
#### Number of Material Hardships for Extreme Poor Subgroups, by Household Type



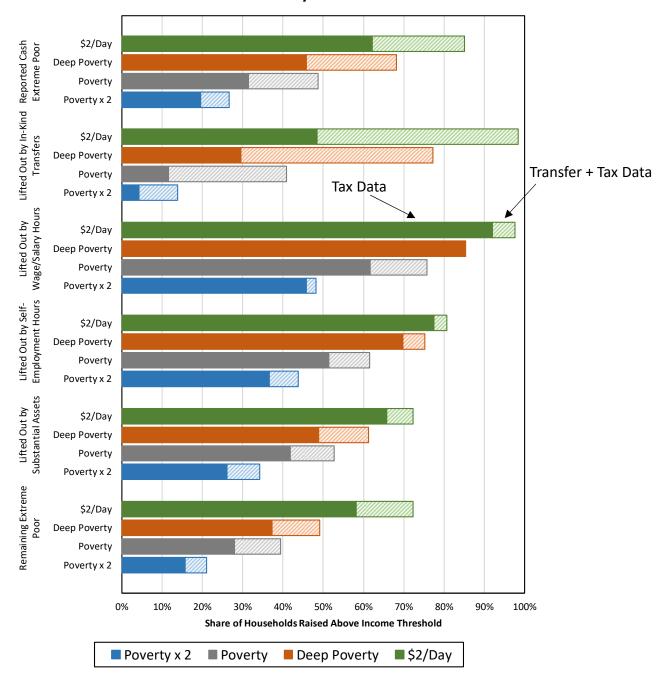
#### Number of Home Problems for Extreme Poor Subgroups, by Household Type



#### Number of Appliances Owned by Extreme Poor Subgroups, by Household Type



## Share of Households in Extreme Poor Subgroups Raised Above Income Thresholds by Administrative Data



#### **Admin Income Receipt for Remaining Extreme Poor Households**

	All	Elderly	Single Parents, Non-Elderly	Multiple Parents, Non-Elderly	Single Individuals, Non-Elderly	Multiple Adults, Non-Elderly
Earnings	56.55%	15.57%	75.03%	70.17%	48.30%	83.13%
Asset Income	26.39%	15.57%	20.78%	10.57%	26.68%	41.61%
Retirement Dist.	11.61%	42.69%	6.51%	3.79%	12.58%	7.97%
OASDI	6.21%	58.26%	0.00%	7.21%	5.19%	1.63%
SSI	2.89%	35.97%	0.00%	14.17%	0.00%	2.75%
Housing	3.61%	20.75%	1.18%	10.93%	2.82%	0.00%
EITC	26.73%	0.00%	64.49%	42.28%	20.09%	28.16%
SNAP	19.76%		63.54%	73.69%	3.77%	22.37%
Any Transfer	40.69%	89.60%	96.07%	79.14%	28.32%	29.76%

**Notes:** These shares reflect the percent of households and individuals in each group that receive each source of income (per the admin data). For the elderly, we omit SNAP (meaning "any transfer" refers to OASDI, SSI, housing assistance, or the EITC).

## Do Our SIPP Results Generalize to CPS?

- Use 2012 CPS ASEC (covering reference year 2011)
- Results are remarkably similar between surveys, with a few differences:
  - CPS has considerably fewer inconsistencies between reported earnings and reported hours worked
  - "Final" extreme poverty rate for CPS slightly lower than for SIPP – consistent with annual poverty ≤ monthly poverty

#### **Comparison of CPS and SIPP Extreme Poverty Estimates for All Households**

	•		
	CPS	SIPP (aligned)	SIPP (original)
Sources Included in Income			
Cash	2.12%	3.00%	3.00%
Add earnings calculated from hours worked for pay	2.07%	2.10%	2.10%
Add in-kind transfers*	1.34%	1.34%	1.33%
Other Adjustments			
Substantial assets**	0.82%	1.01%	0.87%
Add income from administrative tax data	0.36%	0.42%	0.36%
Add income from administrative tax + transfer data	0.12%	0.28%	0.24%
		·	

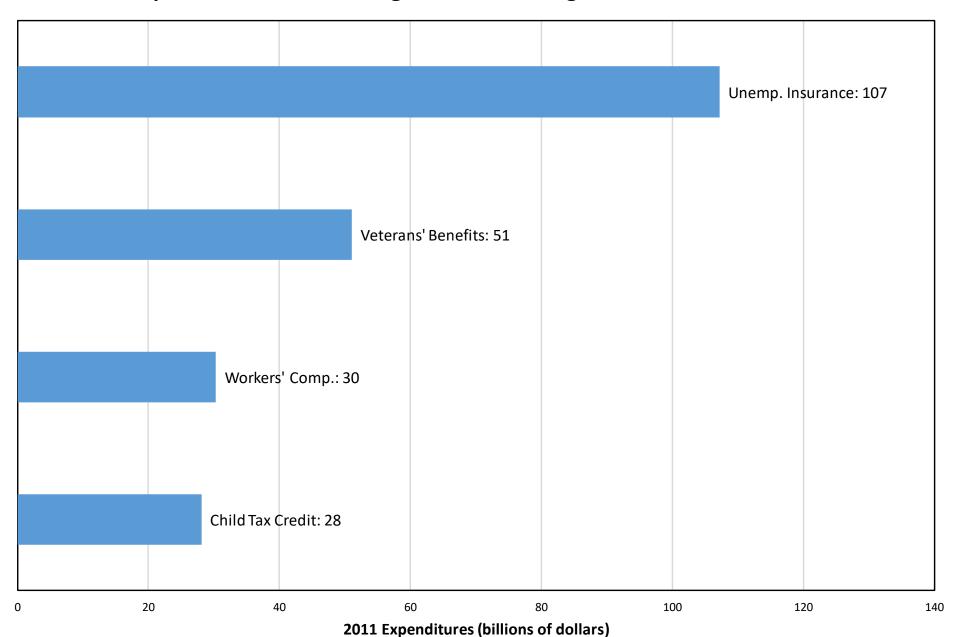
<sup>\*</sup>SNAP, WIC, and housing in SIPP (original). SNAP and housing in CPS and SIPP (aligned).

<sup>\*\*</sup>For SIPP (original), owns real estate equity > \$25,000, liquid assets > \$5,000, or total assets > \$50,000. For CPS and SIPP (aligned), household has property value > \$25,000 and has no mortgage, or has property value > \$100,000 and has a mortgage.

### Robustness Checks

- Results for last month of wave similar to wave average
- Estimates for \$4/person/day cutoff about 20% higher
  - We also examine deep poverty (half the poverty line)
- 11 states with administrative SNAP have similar characteristics to entire U.S.
- Distinction between household and family not key as 94% of reported extreme poor households have one family
- Results excluding housing assistance from in-kind transfers similar (SNAP much more important)
- Industries and occupations not unusual for those reporting low (mostly zero) earnings but substantial hours

#### **Expenditures on Four Largest Transfer Programs Not in Admin Data**



## What Other Income Sources Might We Miss?

- From Christopher Jencks' introduction to Making Ends Meet (by Kathy Edin):
  - "Making Ends Meet shows that almost all poor single mothers supplement their regular income with some combination of offthe-books employment and money from relatives, lovers, and the fathers of their children. Few keep a record of such income. Even if they knew the annual total, they would not necessarily report it to the Census Bureau, since they do not report it to the Internal Revenue Service." (p. xi)

## Conclusions: Main Takeaways

- When we look closely at the SIPP and incorporate admin data, we find that almost no one (≤0.24% of households) lives on less than \$2/day in U.S.
  - All survey households with children not in extreme poverty
  - Many of those that naïve analyses include in extreme poverty are better-off than the average household
  - Consistent with finding in literature that survey income data at the very bottom are error-ridden and likely to be outliers
  - Consistent with low rates of deep consumption poverty
- Face of extreme poverty quite different from what has been previously emphasized
  - Vast majority of extreme poor are single individuals
- Transfers, especially in-kind benefits, are well-targeted to the needy

## Conclusions: Main Takeaways (cont.)

- Extreme poverty could not have risen due to welfare reform because it is rare for households with children
- We provide an explanation for the poor ability of the SPM to select those with low material well-being – it reclassifies as non-poor those with in-kind transfers (who are very needy) and leaves as poor those who are misclassified because of assets or unreported income
- We lay out a methodology for how income data can be better used to measure poverty
- Extreme poverty probably not a useful concept—should focus on deep poverty and poverty
- The same errors undermine estimates of deep poverty and poverty as many of those reported to be at bottom truly above poverty line

## Conclusions: Next Steps

- Bring in additional administrative data (including veterans' benefits, unemployment and workers' compensation, etc.) to further improve measurement of extreme poverty
- Examine post-tax measures of poverty
- Apply similar methodology of addressing survey errors to other cutoffs. Initial results suggest will change our understanding of who is deep poor and poor
- Use richness of the SIPP to better understand the barriers to success faced by those who are truly poor
- Use rich SIPP data and admin data to better examine program targeting

## Conclusions: Later Steps

- Further examine the single individual households that appear to have significant numbers in extreme poverty
- Examine homeless using administrative data such as SNAP and Medicaid files that include information on the homeless
  - Also examine shelter homeless in ACS
- Link administrative homeless to surveys over time to understand persistence of homelessness
  - To what extent do the homeless move in and out of survey households?

## Extra Slides

## **UN Report Presented Today**



English > News and Events > DisplayNews

#### "Contempt for the poor in US drives cruel policies," says UN expert

GENEVA (4 June 2018) – The United States' principal strategy for dealing with extreme poverty is to criminalise and stigmatise those in need of assistance, a report by a UN independent expert has found.

"For one of the world's wealthiest countries to have 40 million people living in poverty and over five million living in 'Third World' conditions is cruel and inhuman," the UN Special Rapporteur on extreme poverty and human rights, Philip Alston, said in a new report.

The report, to be presented to the UN Human Rights Council on 21 June, delivers Alston's findings from a fact-finding visit to California, Alabama, Georgia, Puerto Rico, West Virginia and Washington, D.C. from 1 to 15 December 2017.

## Data: Linking

Protected Identification Key (PIK): anonymized version of SSN

SIPP PIK rate, nearly 97% of households have an individual with a PIK

Admin data PIK rate over 99% for most types of admin records

 Link survey and admin data by PIK and adjust for incomplete linkage to PIKs in SIPP at household level

## Definitions: Household types

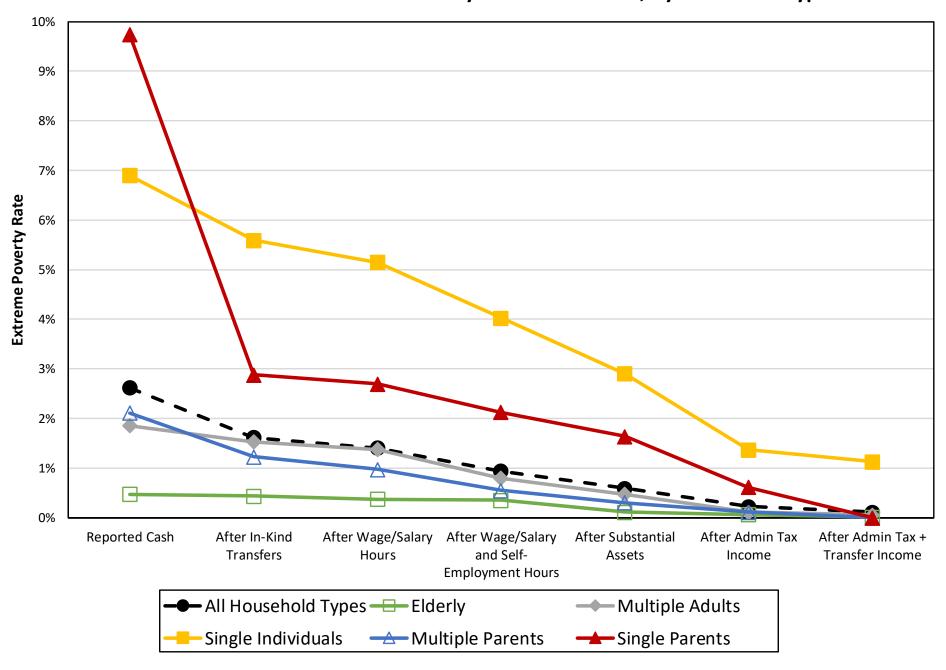
- Disjoint household types
  - <u>Elderly:</u> headed by someone 65 or older (can be with or without children)
  - Single parent (Non-elderly): contains one person 18 or older and at least one child (defined as any person under age 18)
  - Multiple parent (Non-elderly): contains multiple people 18 or older and at least one child
  - Single individual (Non-elderly): contains one person
  - <u>Multiple childless adults (Non-elderly):</u> contains multiple adults and zero children

## **Estimates of Extreme Poverty for All Households**

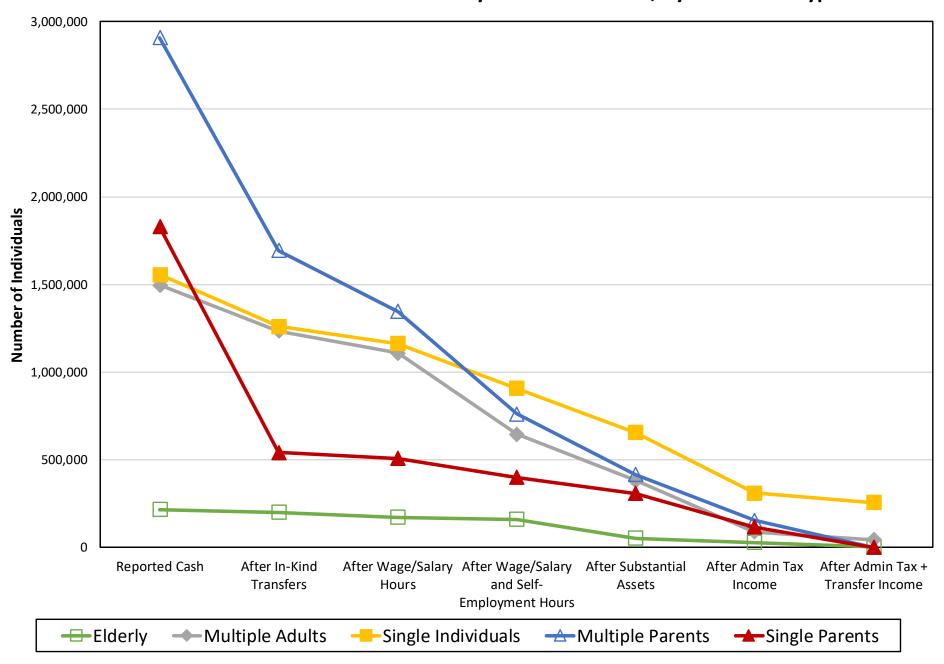
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Sources Included in Income							
Cash	X	Х	Х	X	Х	Х	X
SNAP, WIC, housing assistance		Χ	Χ	X	X	X	Χ
Minimum wage earnings calculated from hours worked for pay (wage/salary jobs only)			x	x	x	x	X
Minimum wage earnings calculated from hours worked for pay (wage/salary + self-employment jobs)				x	x	x	X
Other Adjustments							
Substantial assets*					X	X	Χ
Income from administrative tax data						X	X
Income from administrative tax + transfer data							Х
Weighted number of households	3,565,000	2,466,000	2,211,000	1,575,000	1,033,000	432,000	286,000
Share of households	3.00%	2.08%	1.86%	1.33%	0.87%	0.36%	0.24%
Unweighted number of households	900	600	550	400	250	100	70
Weighted number of individuals	8,005,000	4,926,000	4,292,000	2,868,000	1,806,000	691,000	326,000
Share of individuals	2.62%	1.61%	1.40%	0.94%	0.59%	0.23%	0.11%
Unweighted number of individuals	2,000	1,200	1,000	700	400	150	70

<sup>\*</sup> Owns real estate equity > \$25,000, liquid assets > \$5,000, or total assets > \$50,000.

#### Share of Individuals in Extreme Poverty After Corrections, by Household Type

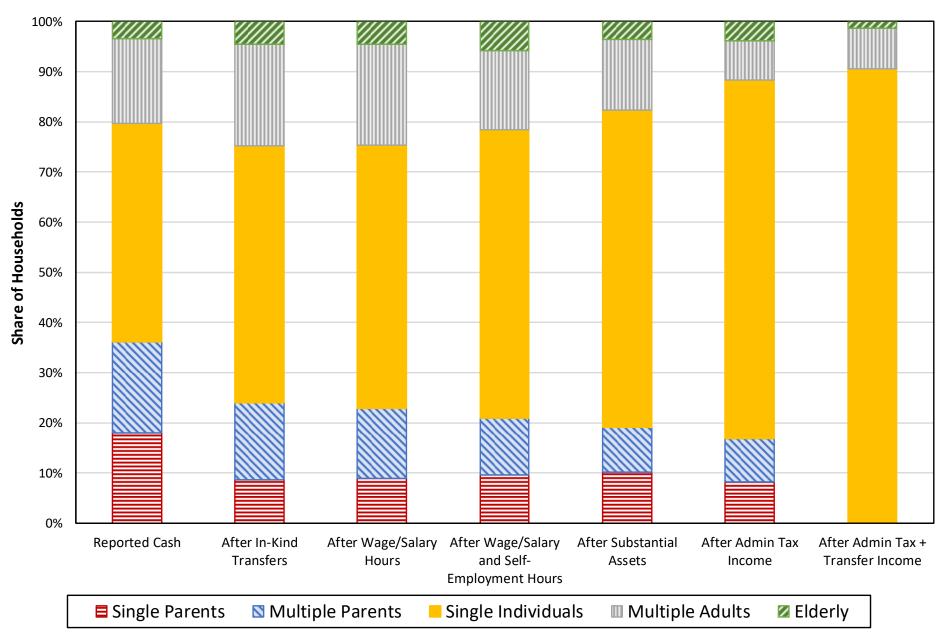


#### Number of Individuals in Extreme Poverty After Corrections, by Household Type

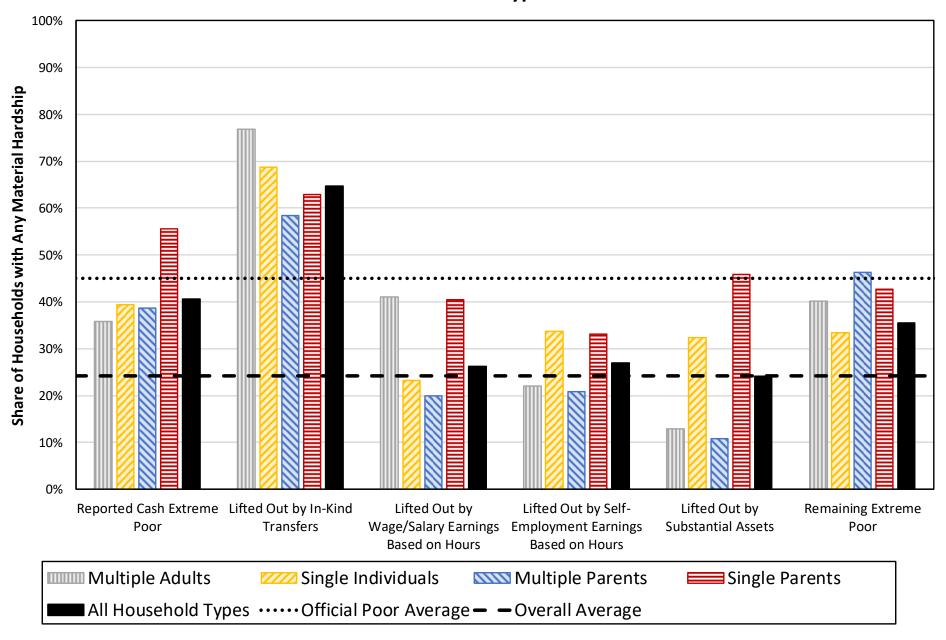


#### **Household Type Distribution of Extreme Poor Subgroups After Corrections**

Share of Households



# Share of Households with Any Material Hardship for Extreme Poor Subgroups, by Household Type



## **Additional Caveats**

- Various issues with the administrative data
  - EITC amounts are eligible rather than actual amounts
  - Take maximum of survey and admin values for select income sources (may include false positives in survey)
  - Still miss admin data on veterans' benefits, workers' comp., unemployment insurance, TANF, GA, Child Tax Credit
  - Do not account for taxes paid
- SIPP does not include homeless in survey frame
- Cannot link information in topical modules from other waves to some households due to attrition across waves
- Do not exclude imputed values
  - But find little evidence that imputation leads to false positives for these populations
- Time period (2011) corresponds to economic downturn

# **Appendix**

## **Estimates of Extreme Poverty for All Households (Independent Corrections)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Sources Included in Income							
Cash	Х	Х	Х	Х	Х	Х	Х
SNAP		Χ					
WIC			Х				
Housing subsidies				Х			
Minmum wage earnings imputed from hours worked for pay (wage/salary jobs only)					X		
Minimum wage earnings imputed from hours worked for pay (wage/salary + self-employment jobs)						x	
Other Adjustments							
Substantial assets*							Х
Weighted number of households	3,565,000	2,525,000	3,501,000	3,115,000	3,225,000	2,496,000	2,344,000
Share of households	3.00%	2.13%	2.95%	2.63%	2.72%	2.10%	1.98%
Unweighted number of households	900	600	900	800	800	600	550
Weighted number of individuals	8,005,000	5,089,000	7,749,000	6,622,000	7,085,000	5,384,000	5,168,000
Share of individuals	2.62%	1.67%	2.54%	2.17%	2.32%	1.76%	1.69%
Unweighted number of individuals	2,000	1,200	1,900	1,700	1,800	1,300	1,300

<sup>\*</sup> Owns real estate equity > \$25,000, liquid assets > \$5,000, or total assets > \$50,000.

## **Estimates of Extreme Poverty for All Households, Reference Month 4**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sources Included in Income								
Cash	x	Х	Х	Х	Х	Х	Х	X
SNAP, WIC, housing subsidies		Χ				Χ	Χ	Χ
Minimum wage earnings imputed from								
hours worked for pay (wage/salary jobs			X			Х	X	X
only)								
Minimum wage earnings imputed from								
hours worked for pay (wage/salary + self-				X			X	Х
employment jobs)								
Other Adjustments								
Substantial assets*					Х			Х
Weighted number of households	4,533,000	3,229,000	3,899,000	3,102,000	2,878,000	2,713,000	2,018,000	1,289,000
Share of households	3.82%	2.72%	3.29%	2.61%	2.43%	2.29%	1.70%	1.09%
Unweighted number of households	1,100	800	950	750	700	650	500	300
Weighted number of individuals	10,249,000	6,438,000	8,565,000	6,679,000	6,398,000	5,160,000	3,569,000	2,169,000
Share of individuals	3.35%	2.11%	2.80%	2.19%	2.09%	1.69%	1.17%	0.71%
Unweighted number of individuals	2,500	1,600	2,100	1,600	1,500	1,200	850	500

<sup>\*</sup> Owns real estate equity > \$25,000, liquid assets > \$5,000, or total assets > \$50,000.

### Estimates of Extreme Poverty for Households with Children, Reference Month 4

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sources Included in Income								
Cash	Х	X	Х	X	Χ	X	Х	X
SNAP, WIC, housing subsidies		X				X	Χ	Χ
Minimum wage earnings imputed from								
hours worked for pay (wage/salary jobs			X			X	X	X
only)								
Minimum wage earnings imputed from								
hours worked for pay (wage/salary + self-				X			X	Х
employment jobs)								
Other Adjustments								
Substantial assets*					Х			Х
Weighted number of households	1,651,000	799,000	1,356,000	1,081,000	1,113,000	596,000	392,000	232,000
Share of households	4.28%	2.07%	3.52%	2.80%	2.89%	1.55%	1.02%	0.60%
Unweighted number of households	400	200	350	250	250	150	90	60
Weighted number of individuals	6,158,000	2,985,000	4,977,000	3,936,000	4,020,000	2,176,000	1,390,000	811,000
Share of individuals	3.92%	1.90%	3.17%	2.51%	2.56%	1.39%	0.89%	0.52%
Unweighted number of individuals	1,500	750	1,200	950	950	550	350	200

<sup>\*</sup> Owns real estate equity > \$25,000, liquid assets > \$5,000, or total assets > \$50,000.

### Estimates of Extreme Poverty for All Households, \$4/Day

						-		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sources Included in Income								
Cash	x	Х	Х	Х	Х	Х	Х	Х
SNAP, WIC, housing subsidies		Х				X	Χ	Х
Minimum wage earnings imputed from								
hours worked for pay (wage/salary jobs only)			x			x	X	X
Minimum wage earnings imputed from								
hours worked for pay (wage/salary + self-				Х			X	Х
employment jobs)								
Other Adjustments								
Substantial assets*					Х			Х
Weighted number of households	4,391,000	2,979,000	3,878,000	3,036,000	2,926,000	2,623,000	1,858,000	1,205,000
Share of households	3.70%	2.51%	3.27%	2.56%	2.47%	2.21%	1.57%	1.02%
Unweighted number of households	1,100	750	950	750	700	650	450	300
Weighted number of individuals	10,750,000	6,533,000	9,213,000	7,207,000	7,157,000	5,535,000	3,713,000	2,316,000
Share of individuals	3.52%	2.14%	3.01%	2.36%	2.34%	1.81%	1.21%	0.76%
Unweighted number of individuals	2,700	1,600	2,400	1,800	1,800	1,400	900	550

<sup>\*</sup> Owns real estate equity > \$25,000, liquid assets > \$5,000, or total assets > \$50,000.

#### **Household Structure**

Number of Families		Α	VII	Reported Cash	Extreme Poor
Number of Families in Household	Household Structure	Share of Households	Share of Individuals	Share of Households	Share of Individuals
	Family, no related subfamilies	60.27%	72.14%	47.52%	67.63%
1	Family, with related subfamilies	2.67%	5.99%	1.15%	3.15%
1	Individual	29.42%	11.42%	45.30%	20.17%
	Total	92.36%	89.55%	93.97%	90.96%
	Family and unrelated individual	3.21%	4.94%	2.70%	4.36%
	Family and unrelated subfamily	0.18%	0.35%	0.10%	0.37%
2	Individual and roommate	0.98%	1.03%	1.09%	1.31%
2	Individual and cohabiting partner	2.20%	2.27%	1.36%	1.49%
	Individual and other <sup>1</sup>	0.33%	0.34%	0.27%	0.32%
	Total	6.91%	8.93%	5.52%	7.84%
	Individuals only	0.34%	0.65%	0.47%	1.07%
2.	One family and unrelated individuals	0.34%	0.76%	0.05%	0.13%
3+	Multiple families <sup>2</sup>	0.05%	0.11%	0.00%	0.00%
	Total	0.73%	1.52%	0.51%	1.20%
Total		118,656,341	305,650,697	3,564,749	8,004,585

<sup>1. &</sup>quot;Other" could be a foster child or any non-relative of the reference person not included in the other categories.

<sup>2.</sup> Includes households that have at least two non-individual-only families, and potentially living with independent individuals, such that the total number of families is at least 3.

### **Characteristics of Full Sample and SNAP States**

	Full Sample	SNAP States
Transfer Receipt		
OASDI Receipt Rate	31.25%	31.02%
Average OASDI \$ Received	\$444	\$459
SSI Receipt Rate	5.71%	5.24%
Average SSI \$ Received	\$41	\$39
SNAP Receipt Rate	12.57%	13.70%
Average SNAP \$ Received	\$39	\$43
PA Receipt Rate	1.67%	1.80%
Average PA \$ Received	\$6	\$6
Housing Assistance Receipt Rate	5.07%	5.96%
Income Sources		
Average Earnings	\$4,023	\$4,323
Average Asset Income	\$103	\$101
Average Retirement & Pension Distributions	\$2	\$2
Household Head Demographics		
Age < 18	0.02%	0.02%
Age 18-39	28.31%	27.28%
Age 40-64	49.86%	51.26%
Age 65 and Over	21.80%	21.43%
Education < High School	10.28%	9.52%
Education High School	24.34%	24.80%
Education Some College	34.95%	34.01%
Education College	19.24%	19.69%
Education Graduate Degree	11.19%	11.98%
Black	12.72%	14.36%
Hispanic	11.85%	9.80%
Poverty Status		
Extreme Poverty Rate	3.00%	3.04%
Deep Poverty Rate	6.39%	6.28%
Poverty Rate	14.92%	14.84%
Near Poverty Rate	35.84%	33.69%
Poverty Gap (per poor household)	\$718	\$719

### Material Well-Being for Extreme Poor Subgroups and Comparison Households

	Reported Cash Extreme Poor (1)	Lifted Out by In- Kind Transfers (1)-(2) <sup>1</sup>	Lifted Out by Wage/Salary Earnings Based on Hours (2)-(3) <sup>2</sup>	Lifted Out by Self- Employment Earnings Based on Hours (3)-(4) <sup>3</sup>	Lifted Out by Substantial Assets (4)-(5) <sup>4</sup>	Remaining Extreme Poor (5)	Official Poor	All Households
Material Hardship								
Over the past 12 months, there was a time someone in the household								
did not meet all essential expenses	31.77%	55.25%	18.88%	15.30%	15.82%	28.45%	32.35%	16.07%
did not pay full amount of rent or mortgage	17.68%	28.06%	8.32%	9.28%	7.45%	19.49%	16.91%	8.06%
was evicted for not paying rent or mortgage	2.03%	2.21%	0.63%	0.00%	1.28%	3.83%	1.33%	0.51%
did not pay full amount of energy bills	21.11%	37.05%	8.69%	9.73%	7.67%	21.25%	23.10%	10.54%
had energy service disrupted	4.62%	7.42%	0.63%	2.98%	2.84%	4.58%	4.49%	1.74%
had telephone service disconnected	9.61%	14.69%	2.19%	5.38%	7.03%	9.98%	10.38%	3.81%
needed to see a doctor but did not go	13.06%	17.58%	7.27%	11.55%	9.82%	12.30%	14.40%	7.93%
needed to see a dentist but did not go	14.36%	19.38%	6.52%	11.33%	8.84%	15.71%	18.01%	9.89%
had not enough food (past 4 months)	7.59%	16.34%	0.00%	1.70%	3.97%	5.69%	7.77%	2.88%
Number of hardships	1.22	1.98	0.53	0.67	0.65	1.21	1.29	0.61
Any hardships	40.57%	64.70%	26.21%	26.98%	24.09%	35.45%	45.01%	24.25%
Five or more hardships	7.45%	12.26%	2.53%	3.98%	3.96%	7.52%	7.59%	2.92%
Housing Characteristics								
Home does not have								
Microwave	9.85%	9.19%	4.20%	4.50%	2.62%	19.03%	6.84%	3.21%
Dishwasher	47.99%	61.55%	37.59%	29.67%	31.18%	56.23%	55.03%	30.75%
Air conditioning (room or central)	16.36%	14.49%	6.74%	11.40%	11.78%	26.18%	16.59%	11.32%
Color television	8.02%	3.62%	5.53%	8.39%	4.21%	15.08%	3.90%	1.71%
Computer	35.17%	50.25%	28.32%	13.67%	26.30%	38.69%	41.81%	22.04%
Washer in unit	32.65%	43.81%	23.15%	12.32%	18.01%	43.31%	31.26%	14.82%
Dryer in unit	35.25%	46.75%	24.44%	15.74%	18.69%	46.38%	34.63%	16.60%
Cell phone	16.52%	21.38%	6.40%	6.05%	14.58%	21.29%	19.10%	11.03%
Number of appliances owned	5.98	5.49	6.64	6.98	6.73	5.34	5.91	6.89
Own at least one appliance	96.61%	99.57%	100.00%	100.00%	98.94%	89.33%	98.96%	99.78%
Problems with Home Quality								
Problem with pests	11.57%	13.23%	8.95%	8.27%	12.07%	12.23%	14.92%	8.74%
Leaking roof	7.79%	7.39%	5.65%	5.86%	4.95%	11.41%	7.49%	4.71%
Broken windows	3.71%	6.39%	2.89%	1.23%	3.07%	2.92%	5.22%	3.05%
Exposed electrical wires	1.60%	2.32%	1.23%	0.83%	0.00%	2.24%	1.19%	0.62%
Plumbing problems	4.05%	3.83%	4.86%	3.66%	3.82%	4.46%	3.87%	2.15%
Cracks or holes in the walls or ceiling	5.39%	7.49%	3.53%	2.77%	5.59%	5.13%	5.35%	2.91%
Holes in the floor	1.52%	2.21%	1.23%	0.00%	0.93%	2.09%	1.65%	0.70%
Number of problems with home	0.36	0.43	0.28	0.23	0.3	0.4	0.4	0.23
Have at least one problem	20.93%	21.71%	11.03%	16.82%	17.56%	26.82%	23.07%	15.15%

<sup>1.</sup> Extreme poor in Table 2 column 1 but not in column 2.

<sup>3.</sup> All wage/salary hours and self-employment hours. Extreme poor in Table 2 column 3 but not in column 4.

<sup>2.</sup> Extreme poor in Table 2 column 2 but not in column 3.

<sup>4.</sup> Extreme poor in Table 2 column 4 but not in column 5.

#### **Selected Demographics for Extreme Poor Subgroups and Comparison Households**

	Reported Cash Extreme Poor (1)	Lifted Out by In- Kind Transfers (1)-(2) <sup>1</sup>	Lifted Out by Wage/Salary Earnings Based on Hours (2)-(3) <sup>2</sup>	Lifted Out by Self- Employment Earnings Based on Hours (3)-(4) <sup>3</sup>	Lifted Out by Substantial Assets (4)-(5) <sup>4</sup>	Remaining Extreme Poor (5)	Official Poor	All Households
<b>Household Characteristics</b>								
Someone in household is								
unemployed	26.09%	38.32%	5.77%	5.29%	24.33%	31.82%	18.23%	8.59%
a displaced worker	1.22%	1.93%	5.34%	0.00%	0.77%	0.45%	1.73%	1.41%
a child with a severe disability	1.69%	3.71%	0.00%	0.00%	2.11%	0.66%	3.17%	1.87%
severely disabled	19.50%	27.26%	3.77%	11.70%	23.47%	17.41%	33.68%	25.29%
severely disabled (mental/emotional)	6.84%	10.97%	2.46%	6.86%	5.39%	4.03%	9.93%	5.97%
a care provider for an ill or disabled person	4.48%	3.49%	4.52%	7.74%	6.36%	2.54%	4.86%	5.84%
Education of Household Head								
Full time student	12.00%	13.68%	4.67%	1.14%	13.13%	18.12%	7.19%	2.63%
Full or part time student	13.48%	16.26%	8.46%	1.63%	13.13%	19.24%	10.07%	5.00%
Receives educational assistance if a student	52.74%	57.70%	26.71%	23.72%	54.79%	51.90%	57.99%	51.48%
Years of education	12.90	11.98	12.99	13.70	13.90	12.84	12.26	13.59
Health Insurance of Household Head								
Medicaid	19.07%	49.93%	1.87%	4.41%	3.20%	7.83%	32.01%	9.40%
Private Insurance	28.62%	4.12%	57.49%	49.87%	53.77%	21.31%	25.70%	69.73%
Medicaid or Medicare or Private Insurance	48.08%	53.46%	60.24%	55.40%	58.20%	29.55%	62.98%	84.76%
Assets								
Own a home	33.95%	14.24%	32.37%	69.21%	72.90%	9.14%	31.25%	61.73%
Total real estate equity > \$25,000	26.31%	9.95%	27.43%	48.41%	74.68%	0.00%	24.38%	50.08%
Own a car, van, or truck	64.69%	47.40%	69.28%	89.71%	78.49%	58.30%	63.57%	84.37%
Liquid assets > \$5,000	11.68%	1.15%	6.15%	20.65%	43.17%	0.00%	8.50%	33.05%
Total assets > \$50,000	32.28%	10.87%	31.92%	68.90%	84.33%	0.00%	26.44%	57.29%
Weighted number of households	3,565,000	1,099,000	255,000	636,000	542,000	1,033,000	17,710,000	118,700,000
Share of households	3.00%	0.93%	0.21%	0.54%	0.46%	0.87%	14.92%	100.00%
Unweighted number of households	900	300	70	150	150	250	4,800	32,500

<sup>1.</sup> Extreme poor in Table 2 column 1 but not in column 2.

<sup>3.</sup> All wage/salary hours and self-employment hours. Extreme poor in Table 2 column 3 but not in column 4.

<sup>2.</sup> Extreme poor in Table 2 column 2 but not in column 3.

<sup>4.</sup> Extreme poor in Table 2 column 4 but not in column 5.

#### Other Demographics for Extreme Poor Subgroups and Comparison Households

	Reported Cash Extreme Poor (1)	Lifted Out by In- Kind Transfers (1)-(2) <sup>1</sup>	Lifted Out by Wage/Salary Earnings Based on Hours (2)-(3) <sup>2</sup>	Lifted Out by Self- Employment Earnings Based on Hours (3)-(4) <sup>3</sup>	Lifted Out by Substantial Assets (4)-(5) <sup>4</sup>	Remaining Extreme Poor (5)	Official Poor	All Households
<b>Household Head Characteristics</b>								
Age	41.69	36.65	40.01	47.76	48.28	40.27	45.83	51.06
Female	56.24%	74.64%	42.39%	45.26%	47.89%	51.22%	62.38%	52.58%
Unmarried	76.81%	85.16%	60.22%	58.25%	70.79%	86.61%	73.50%	51.42%
Non-white	29.49%	47.83%	12.44%	17.58%	20.39%	26.30%	30.06%	19.01%
Hispanic	14.07%	18.97%	18.28%	5.36%	5.99%	17.42%	19.75%	11.85%
Does not speak English at home	20.14%	18.14%	22.13%	18.61%	14.93%	25.43%	23.27%	15.22%
Does not speak English well	5.98%	6.34%	10.91%	4.50%	0.00%	8.43%	10.21%	4.09%
Not a U.S. citizen	9.42%	5.85%	14.81%	11.38%	4.72%	13.17%	11.17%	5.96%
Does not live in a metro area	19.23%	23.32%	29.92%	22.79%	14.16%	12.69%	23.64%	20.81%
Veteran	5.68%	3.80%	1.30%	8.92%	7.04%	5.96%	4.95%	11.50%
<b>Education of Household Head</b>								
Less than high school	14.86%	25.65%	19.01%	5.75%	4.87%	13.21%	22.49%	10.29%
High school diploma	29.10%	36.34%	25.09%	25.03%	22.54%	28.32%	29.77%	24.40%
Some college	37.10%	34.95%	26.24%	37.35%	37.33%	41.80%	34.65%	34.87%
College degree	14.18%	2.07%	18.71%	24.33%	28.11%	12.38%	9.43%	19.25%
Graduate degree	4.76%	1.00%	10.96%	7.54%	7.14%	4.29%	3.66%	11.19%
Years of education	12.90	11.98	12.99	13.70	13.90	12.84	12.26	13.59

<sup>1.</sup> Extreme poor in Table 2 column 1 but not in column 2.

<sup>3.</sup> All wage/salary hours and self-employment hours. Extreme poor in Table 2 column 3 but not in column 4.

<sup>2.</sup> Extreme poor in Table 2 column 2 but not in column 3.

<sup>4.</sup> Extreme poor in Table 2 column 4 but not in column 5.

#### Imputation Rates for Major Income Sources of Extreme Poor Subgroups and Comparison Households

	Reported Cash Extreme Poor (1)	Lifted Out by In- Kind Transfers (1)-(2) <sup>1</sup>	Lifted Out by Wage/Salary Earnings Based on Hours (2)-(3) <sup>2</sup>	Lifted Out by Self- Employment Earnings Based on Hours (3)-(4) <sup>3</sup>	Lifted Out by Substantial Assets (4)-(5) <sup>4</sup>	Remaining Extreme Poor (5)	Official Poor	All Households
Self-employment hours imputed	1.63%	0.26%	1.74%	6.34%	1.32%	0.32%	1.24%	1.22%
Self-employment or wage/salary hours imputed	3.20%	3.20%	6.53%	6.34%	1.32%	1.41%	4.84%	7.41%
Overall hours worked or self-employment or wage/salary hours imputed <sup>5</sup>	18.79%	12.17%	46.79%	54.40%	4.45%	4.48%	18.83%	20.06%
SSI imputed	0.15%	0.47%	0.00%	0.00%	0.00%	0.00%	9.50%	4.44%
OASDI imputed	0.41%	0.65%	0.00%	0.00%	0.88%	0.27%	18.27%	26.98%
Unemployment Insurance imputed	1.44%	2.33%	2.36%	0.83%	0.82%	0.95%	3.68%	3.28%
SNAP imputed (receipt)	1.21%	2.91%	0.00%	0.00%	2.08%	0.00%	1.54%	0.79%
SNAP imputed (amount)	19.48%	58.83%	0.00%	0.55%	3.40%	3.50%	29.05%	8.42%
WIC imputed	0.47%	1.28%	0.00%	0.00%	0.52%	0.33%	0.72%	0.29%
Unearned income imputed	0.19%	0.13%	0.00%	0.00%	0.00%	0.50%	1.14%	1.00%
Public assistance imputed	0.96%	3.12%	0.00%	0.00%	0.00%	0.00%	3.61%	1.15%
Pensions imputed	0.49%	0.61%	0.00%	0.00%	1.98%	0.00%	3.87%	18.12%
Wage/salary income imputed <sup>6</sup>	7.72%	5.64%	78.50%	0.61%	1.73%	0.00%	12.85%	17.23%
Self-employment income imputed <sup>7</sup>	0.42%	0.54%	1.74%	0.70%	0.00%	0.00%	1.01%	2.02%
Major income source imputed <sup>8</sup>	27.95%	62.27%	78.50%	2.70%	9.33%	5.56%	57.47%	54.02%

<sup>1.</sup> Extreme poor in Table 2 column 1 but not in column 2.

<sup>3.</sup> All wage/salary hours and self-employment hours. Extreme poor in Table 2 column 3 but not in column 4.

<sup>2.</sup> Extreme poor in Table 2 column 2 but not in column 3.

<sup>4.</sup> Extreme poor in Table 2 column 4 but not in column 5.

<sup>5.</sup> In addition to reporting their hours worked in each wage/salary or self-employment job, respondents can report their average weekly total hours worked in all activities in a reference period. In general, if a respondent reports "hours vary" as the number of hours worked in a job, the overall hours worked is logically imputed.

<sup>6.</sup> Either "earnings [from job 1] received in this month" or "earnings [from job 2] received in this month" is imputed (not income we calculate based on hours worked imputed).

<sup>7.</sup> Either "income [from business 1] received in this month" or "income from [business 2] received in this month" is imputed (not income we calculate based on hours worked imputed).

<sup>8.</sup> Major income sources include wage/salary income, self-employment income, unearned income, pensions, OASDI, SSI, public assistance, unemployment insurance, WIC, or SNAP. Defined as imputed if *any* of these income sources for *anyone* in the household is imputed in wave 9. Defined as imputed if either receipt indicator or amount of income is imputed.

Top 10 Occupations of Workers in Households Lifted Out of Extreme Poverty by Wage and Salary Hours

Occupation	Lifted Out by Wage/Salary Hours	Reported Cash Extreme Poor	Official Poor	All
Customer service representatives	4.35%	2.36%	1.66%	1.50%
Elementary and middle school teachers	4.25%	2.31%	1.17%	2.52%
Driver/sales workers and truck drivers	3.95%	3.38%	2.62%	2.10%
Computer software engineers	3.26%	1.77%	0.20%	0.66%
Other installation, maintenance, and repair workers	3.14%	1.71%	0.20%	0.15%
Retail salespersons	3.12%	2.11%	3.97%	2.93%
Office and administrative support workers, all other	2.74%	2.56%	0.31%	0.41%
Cashiers	2.62%	7.42%	5.70%	2.75%
Personal and home care aides	2.49%	2.39%	2.48%	0.97%
Computer scientists and systems analysts	2.37%	1.29%	0.16%	0.55%
Share of All Occupations	32.29%	27.31%	18.47%	14.55%

Top 10 Industries of Workers in Households Lifted Out of Extreme Poverty by Wage and Salary Hours

Industry	Lifted Out by Wage/Salary Hours	Reported Cash Extreme Poor	Offical Poor	All
Construction	13.50%	10.56%	6.77%	5.05%
Restaurants and other food services	11.01%	13.03%	14.60%	6.65%
Elementary and secondary schools	5.24%	3.48%	3.68%	6.95%
Home health care services	4.34%	2.36%	2.56%	0.88%
Services to buildings and dwellings (except cleaning during construction and immediately after construction)	3.14%	5.60%	2.21%	0.87%
Justice, public order, and safety activities	2.97%	2.67%	0.73%	2.03%
Miscellaneous general merchandise stores	2.83%	1.54%	0.82%	0.43%
Religious organizations	2.37%	1.29%	0.51%	0.88%
Advertising and related services	2.35%	1.28%	0.26%	0.27%
Hospitals	2.32%	1.38%	1.67%	4.47%
Share of All Occupations	50.07%	43.19%	33.82%	28.47%

Top 10 Occupations of Workers in Households Lifted Out of Extreme Poverty by Self-Employment Hours

Occupation	Lifted Out by Wage/Salary + Self- Employment Hours	Reported Cash Extreme Poor	Official Poor	All
First-line supervisors/managers of retail sales workers	5.51%	4.60%	4.05%	4.43%
Food service managers	4.37%	3.65%	1.77%	1.38%
Managers, all other	4.20%	3.50%	4.18%	5.74%
Real estate brokers and sales agents	3.32%	2.77%	2.27%	1.91%
Construction laborers	3.30%	5.91%	5.00%	2.49%
Construction managers	3.26%	3.14%	3.03%	2.34%
Sales representatives, wholesale and manufacturing	3.09%	2.58%	1.36%	0.81%
Farmers and ranchers	2.75%	2.30%	2.82%	2.91%
Chief executives	2.72%	2.27%	1.01%	2.90%
Carpenters	2.66%	3.17%	2.96%	2.77%
Share of All Occupations	35.17%	33.88%	28.45%	27.67%

Top 10 Industries of Workers in Households Lifted Out of Extreme Poverty by Self-Employment Hours

Industry	Lifted Out by Wage/Salary + Self- Employment Hours	Reported Cash Extreme Poor	Official Poor	All
Construction	20.70%	22.98%	22.18%	15.17%
Professional, scientific, management, administrative, and waste management services	18.10%	17.33%	18.87%	24.24%
Arts, entertainment, recreation, accommodation, and food services	10.80%	9.50%	7.24%	7.15%
Finance, insurance, real estate, and rental and leasing	8.99%	7.51%	5.57%	6.75%
Retail Trade	7.86%	7.55%	7.73%	8.85%
Other services (except public administration)	7.61%	9.28%	12.92%	10.70%
Agriculture, forestry, fishing, and hunting	6.09%	5.26%	5.96%	5.11%
Manufacturing	5.54%	4.92%	4.15%	4.00%
Educational, health care and social assistance	5.31%	6.54%	7.79%	9.98%
Transportation and warehousing, and utilities	4.47%	4.52%	3.26%	3.76%
Share of All Occupations	95.47%	95.39%	95.68%	95.72%

## Rates of Low Earnings Reports for Extreme Poor Subgroups with Under-reported Earnings

Household Type	Lifted Out by Wage/Salary Hours		Lifted Out by Wage/Salary + Self-Employment Hours			
	Zero	Single Digit	\$10 or More	Zero	Single Digit	\$10 or More
All Households	72.09%	77.92%	22.08%	87.81%	89.48%	10.52%
Elderly	91.18%	91.18%	8.82%	94.85%	94.85%	5.15%
Single Individuals	78.29%	78.29%	21.71%	93.10%	93.10%	6.90%
Multiple Adults	60.05%	76.77%	23.23%	89.30%	92.95%	7.05%
Single Parents	37.68%	37.68%	62.32%	74.20%	74.20%	25.80%
Multiple Parents	77.39%	85.15%	14.85%	80.20%	82.97%	17.03%