

Estimating the Supplemental Poverty Measure from the 2014 Panel of the Survey of Income and Program Participation

FCSM
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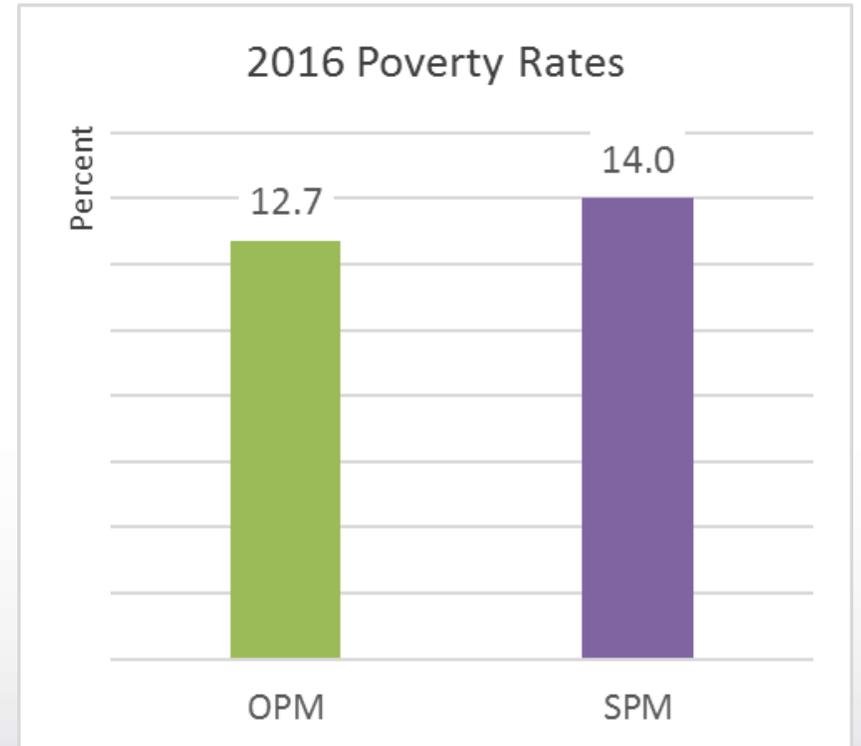
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The Supplemental Poverty Measure

- For 2016, the Census Bureau estimated that 12.7% of the population was in poverty using the Official Poverty Measure (OPM)
- The Supplemental Poverty Measure (SPM) calculates a 2016 poverty rate of 14.0%
- Both measures derived from the Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC)



| | Official Poverty Measure (OPM) | Supplemental Poverty Measure (SPM) |
|------------------------------|---|--|
| Measurement Units | <ul style="list-style-type: none"> Families (related by birth, marriage, or adoption) Unrelated Individuals | <ul style="list-style-type: none"> Resource units (add coresident children, and unmarried partners) Unrelated Individuals |
| Poverty Threshold | Three times the cost of a minimum food diet in 1963 | Based on expenditures of food, clothing, shelter, and utilities (FCSU) |
| Threshold Adjustments | <ul style="list-style-type: none"> Family size and composition Age of householder | <ul style="list-style-type: none"> Family size and composition Housing tenure Geographic adjustments for housing costs |
| Updating Thresholds | Consumer Price Index | 5-year moving average of CE on FCSU |
| Resource Measure | Gross before-tax cash income | <ul style="list-style-type: none"> Adds value of noncash FCSU benefits Post tax Minus work expenses, medical expenses, and child support paid |

Implementing NAS & SPM Measures Across Surveys

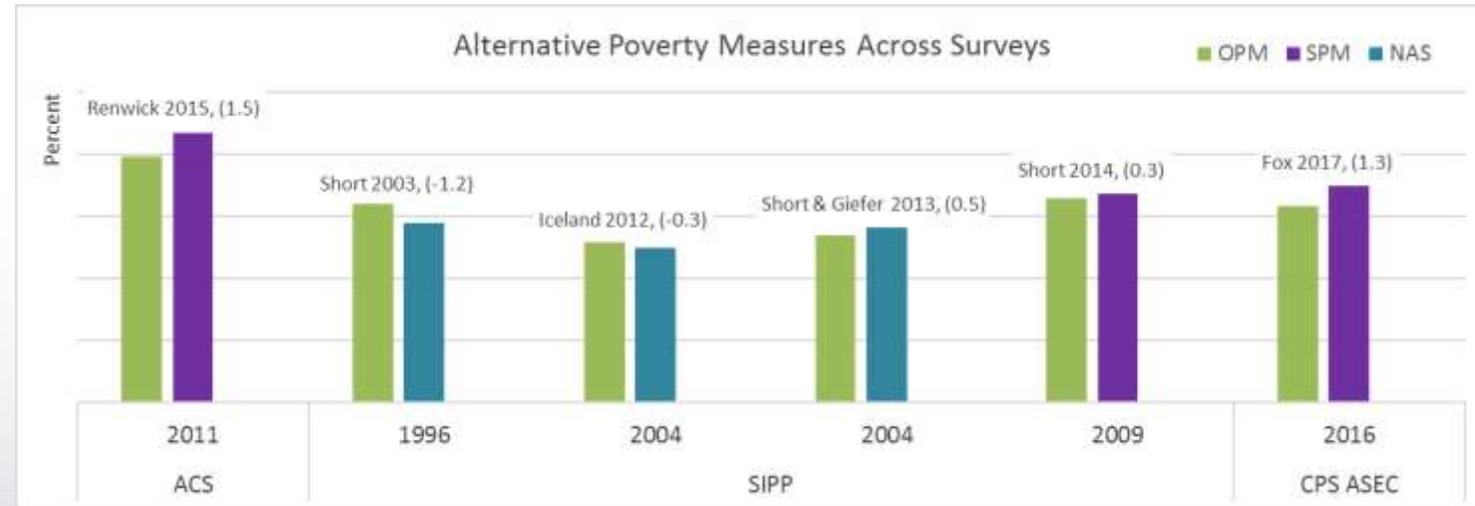
Since the first estimates were released for 2009, the SPM has been calculated from CPS ASEC.

- Working to develop SPM measure in American Community Survey (ACS)

- Renwick 2015; Renwick et al., 2012*

- The 1995 NAS Panel on Poverty & Family Assistance recommended using data from the Survey of Income and Program Participation (SIPP)

- Short 2014; Short & Gieffer 2013; Iceland 2012; Short 2009; Short 2003*



Calculating 2013 SPM Rates in the SIPP

The 2014 SIPP Panel is a longitudinal household survey which runs 4 years and provides nationally representative data, most of which is reported at a monthly level. There are several advantages using the SIPP:

- The SIPP collects detailed earnings data
- 2014 Panel can capture SPM resource units on a monthly basis which is unique among Census surveys
- Collects data on all components of the SPM resource definition
- Allows for the measurement of poverty dynamics

SPM Resource Units

We reassign families to monthly SPM Resource Units

- Combine unmarried partner families
- Combine foster children with foster parents
- Add unrelated children to the primary resource unit

9.7% of people are assigned to new SPM Resource Units at any point over the year

SPM Thresholds

Vary by

- **Family Composition**
- Housing Tenure
- Geography

Like the CPS ASEC, annual base thresholds are provided from BLS

- Currently just divide by 12

Housing Tenure

- Reported monthly
- Mortgage status based on residency in December

Geography

- Match to ACS consistent with CPS ASEC

Income

While many income sources are reported, high variability in time period and reporting unit

- Monthly
- Annual
- Person
- Family
- Household

When possible, attempt to tie income, benefits, expenditures, and taxes back to source.

Tie income taxes and FICA taxes to month earned. Distribute tax credits and annual expenses evenly across months. Then aggregate up at SPM Resource Unit each month as well as thresholds and sum across months for each respondent to get annual poverty rates.

Cash Income

Person-Level, Reported Monthly (can vary month-to-month):

- Employment/Business Earnings
- Retirement Income
- SSI
- TANF
- Workers Comp
- Unemployment
- Disability
- Survivors Income
- Child Support (Received)
- Foster Care Payments
- Alimony

Person-Level, Reported Annually:

- Lump Sum Payments
- Rental/Real Estate Income
- Dividends
- Annuities/Trusts
- Interest Income
- Owned Business Income
- “Other” Income

In Kind Benefits

| Benefit | Reporting Level | Frequency | Amount Reported? |
|------------------------|-----------------|-----------|------------------|
| WIC | Family | Monthly | No |
| SNAP | Family | Monthly | Yes |
| Housing subsidies | Household | Monthly | No |
| School Lunch/Breakfast | Family | Annual | No |
| LIHEAP | Person | Annual | No |

Necessary Expenses

| Expense | Reporting Level | Frequency | Amount Reported? |
|--------------------|-----------------|-----------|--------------------------|
| Commuting | Person | Monthly | No-flat deduction |
| Child care | Family | Annual | Based on December Amount |
| Child support paid | Person | Annual | Yes |
| Medical expenses | Person/Family | Annual | Yes |

Taxes

Filing Status: Person Level, Reported Annually

- Filed or plan to file
- Filing status
- If they claimed child tax filers as dependents
- Receipt of EITC

Use TAXSIM to estimate federal and state taxes as well as any credits received. Calculate FICA separately.

2013

IRS SOI Returns

- 147.4 million

SIPP

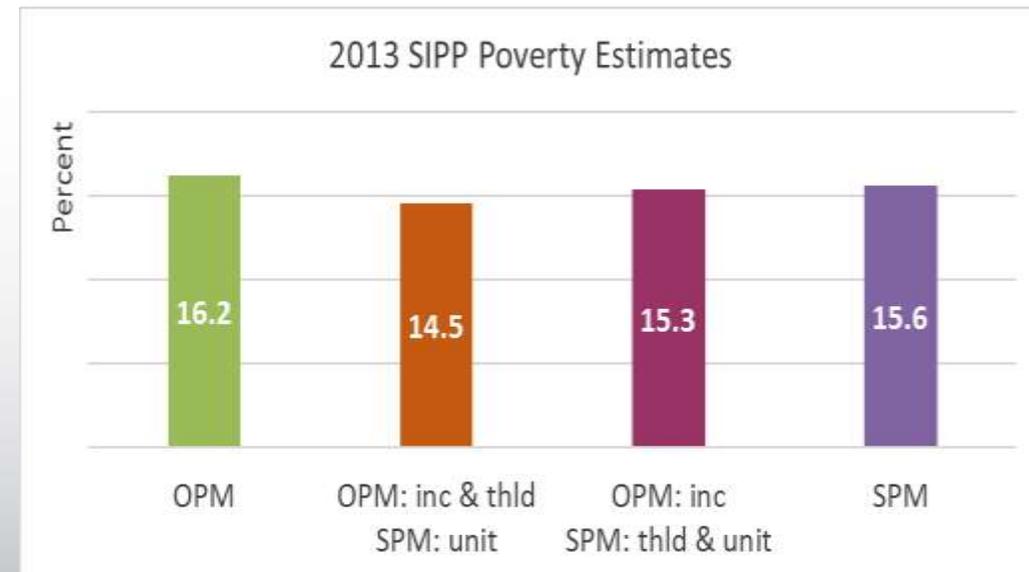
- 142.3 million

| Filing Status | SIPP Reported Relationship | | | | | | Total |
|--------------------|----------------------------|----------------|-----------|------------|-----------|---------------|-------------|
| | Married-Present | Married-Absent | Widowed | Divorced | Separated | Never Married | |
| Single | 5,223,825 | 634,060 | 6,394,317 | 15,200,000 | 1,147,073 | 39,500,000 | 68,099,275 |
| Married-Jointly | 101,000,000 | 1,836,614 | 763,771 | 828,968 | 899,726 | 412,000 | 105,741,079 |
| Married-Separately | 3,554,754 | 391,229 | 51,464 | 271,889 | 574,852 | 65,477 | 4,909,664 |
| Head of Household | 3,343,888 | 330,728 | 1,620,153 | 5,209,571 | 890,778 | 4,956,471 | 16,441,589 |

2013 SPM in the SIPP

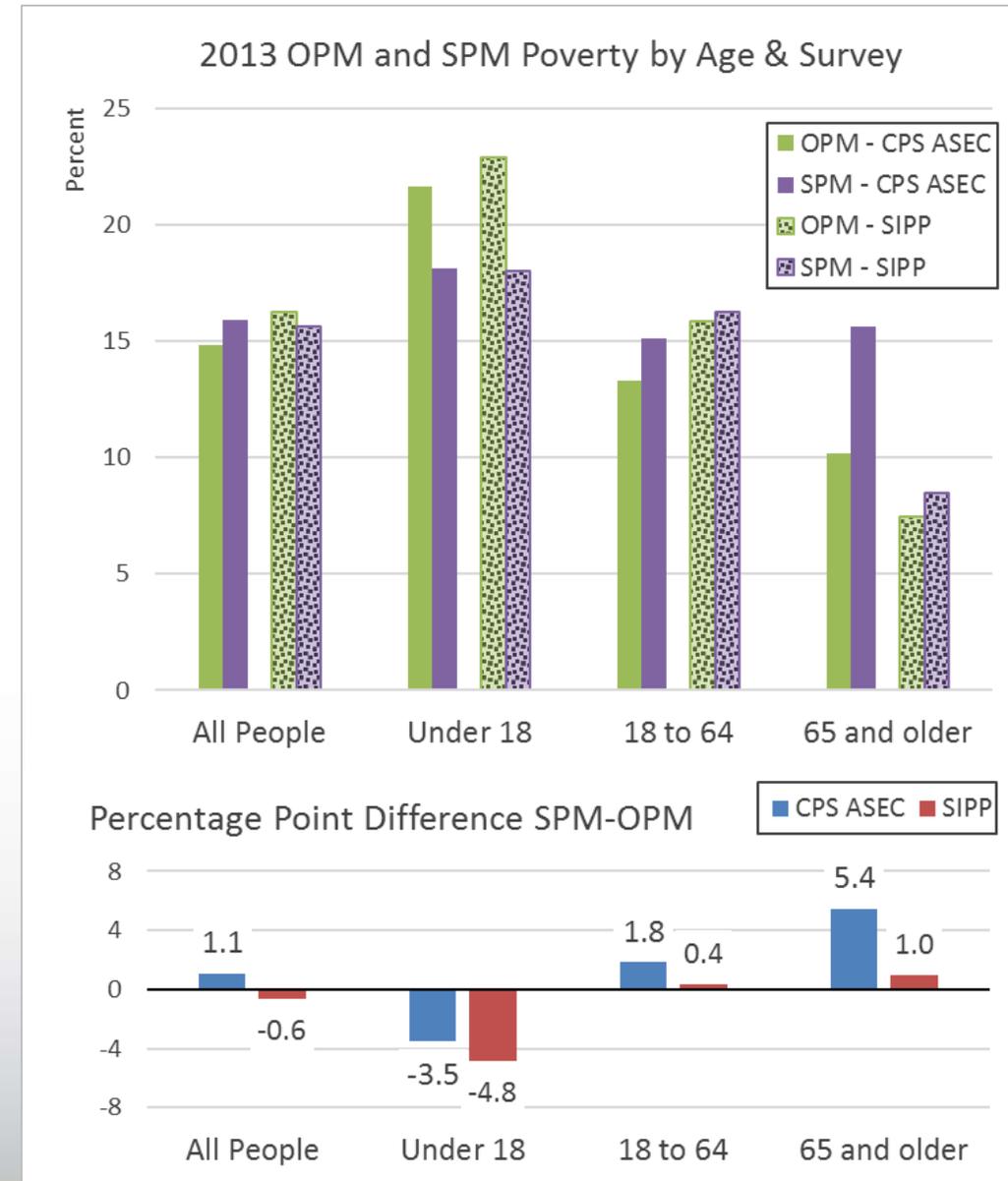
Incrementally:

- 2013 **OPM estimates** in the SIPP are 16.2%
- Using **SPM Units** with (recalculated) **OPM Income and OPM Threshold**
 - Poverty declines to 14.5%
- Using **SPM Units** with (recalculated) **OPM Income and SPM Thresholds**
 - 64% of individuals are assigned higher annual thresholds
 - Poverty rate of 15.3%
- 2013 **SPM estimates** in the SIPP are 15.6%
 - SPM rates are 0.6 percentage points *lower* than the OPM rate

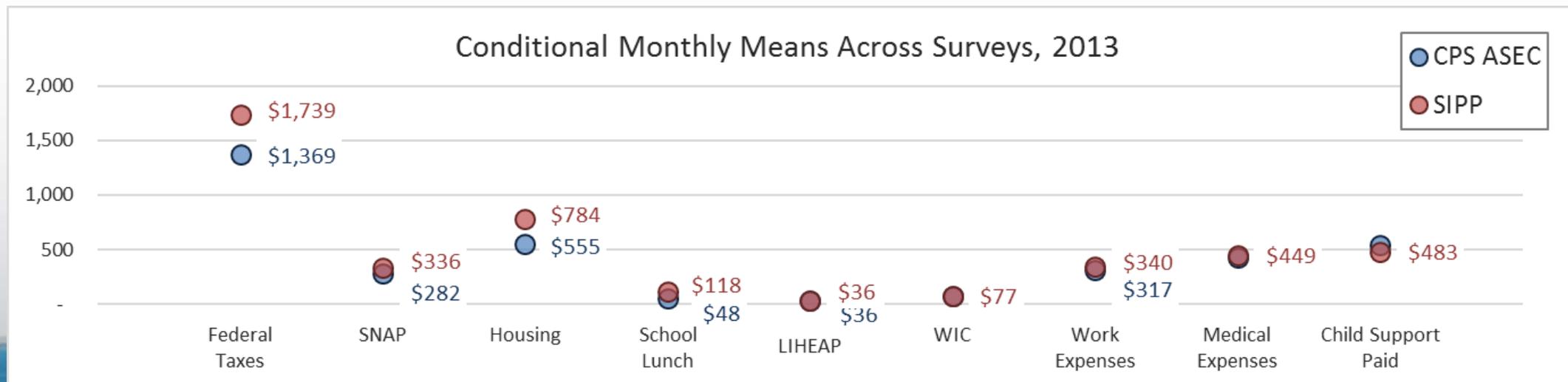
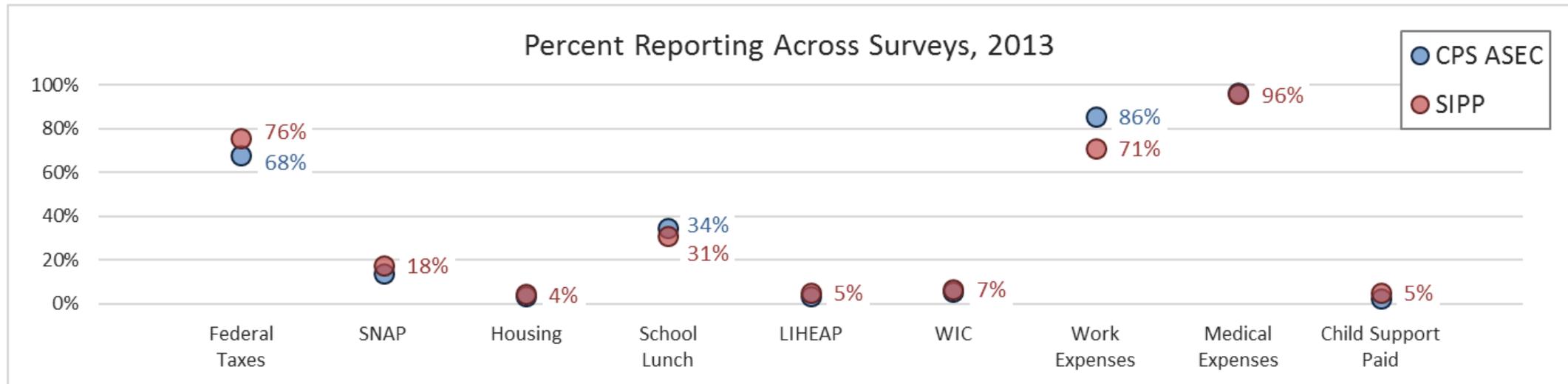


2013 OPM/SPM by Survey

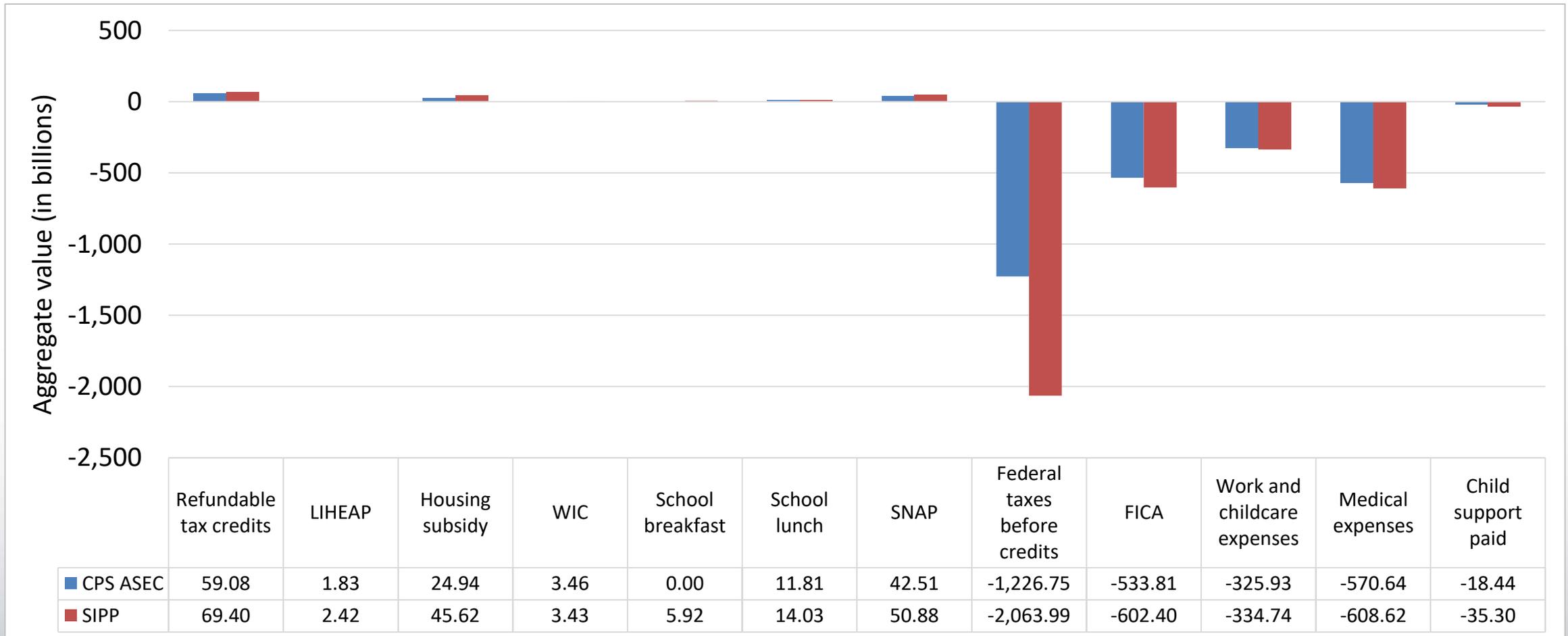
- The SPM is 0.6 percentage points *lower* than the OPM rate in the SIPP, while in the CPS ASEC the SPM rate is 1.1 percentage points *higher* than OPM
- Both CPS ASEC and SIPP have higher OPM than SPM rates for children
- Difference between OPM and SPM for adults aged 18-64 not statistically different in SIPP
- Disparities in 65+ population highlight need for additional examination



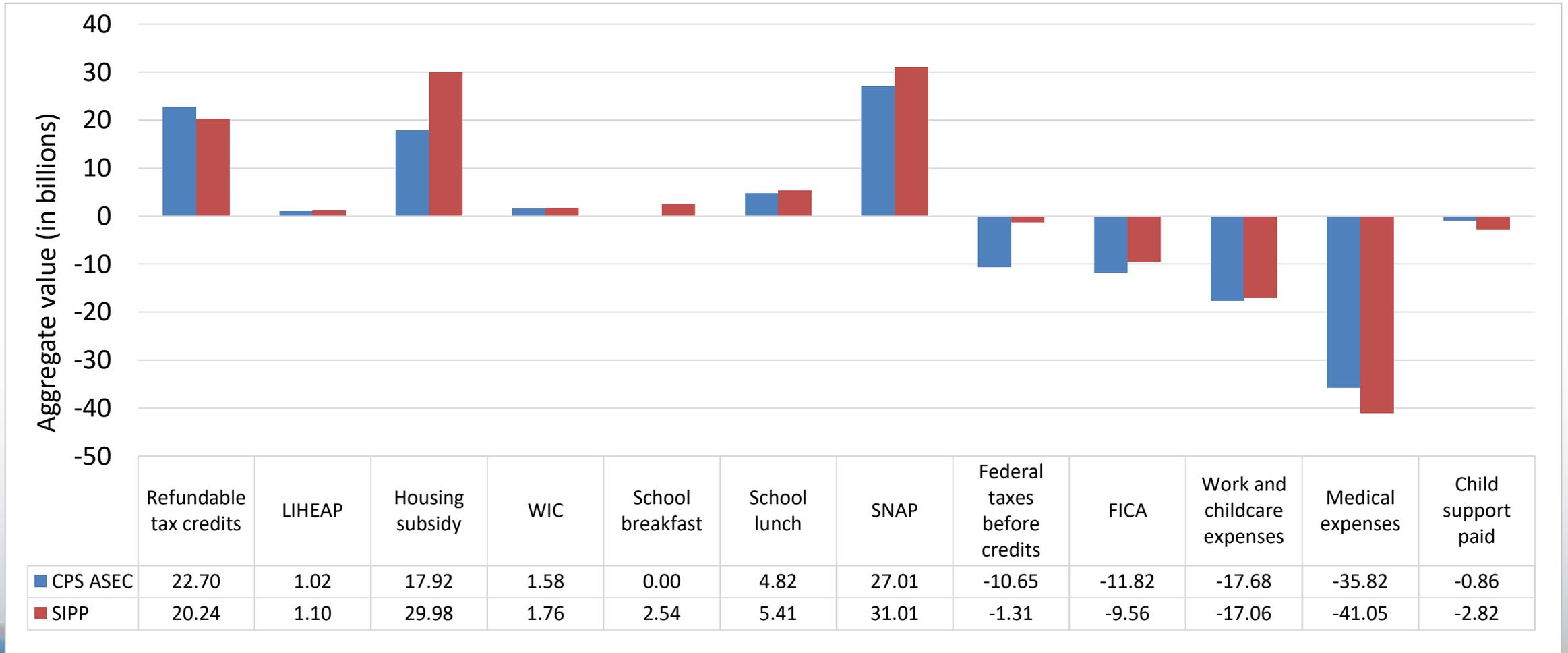
Prevalence and Conditional Means of SPM Components, 2013



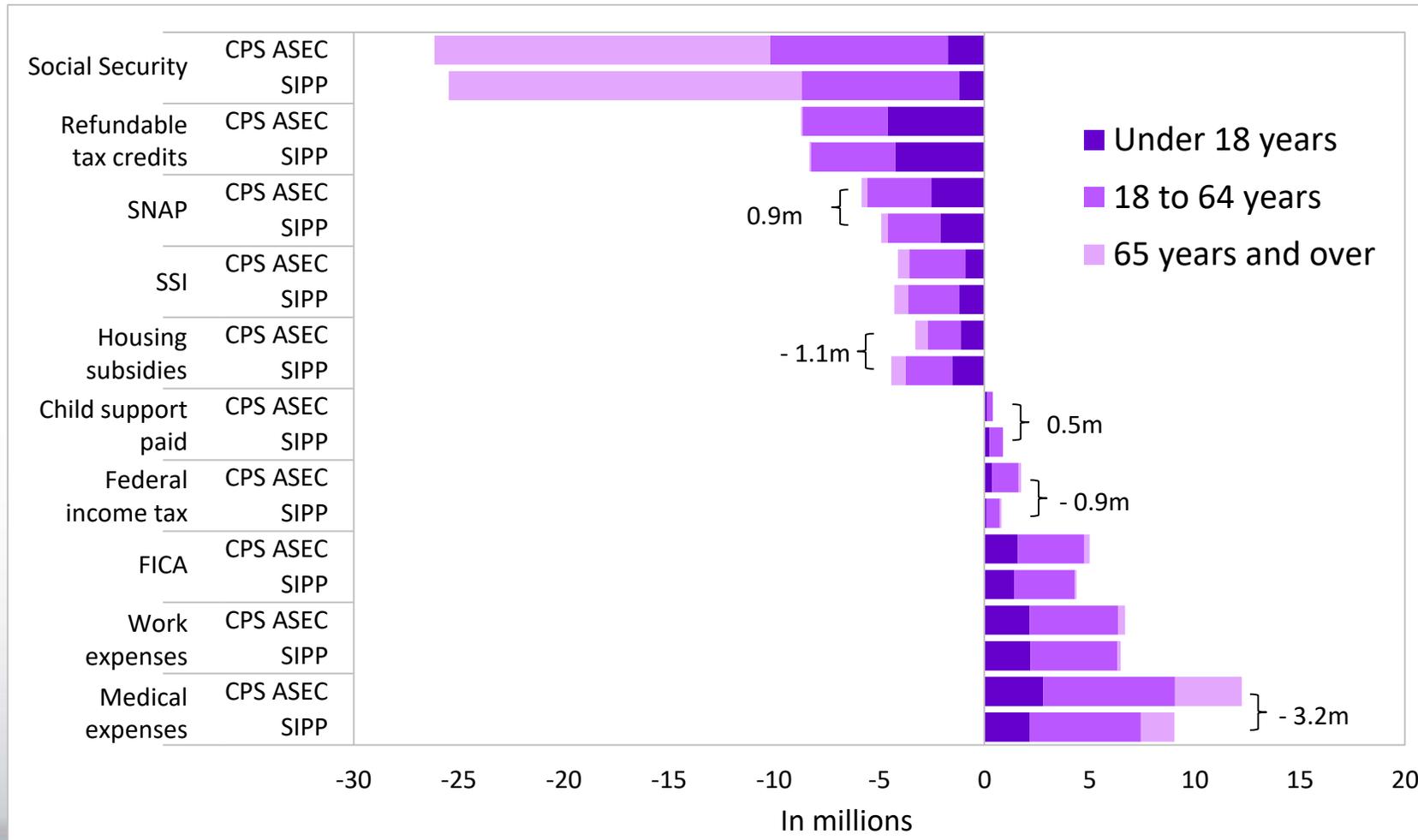
Aggregate Value of SPM Components by Survey, 2013



Aggregate Value of SPM Components Among Those in Official Poverty by Survey, 2013

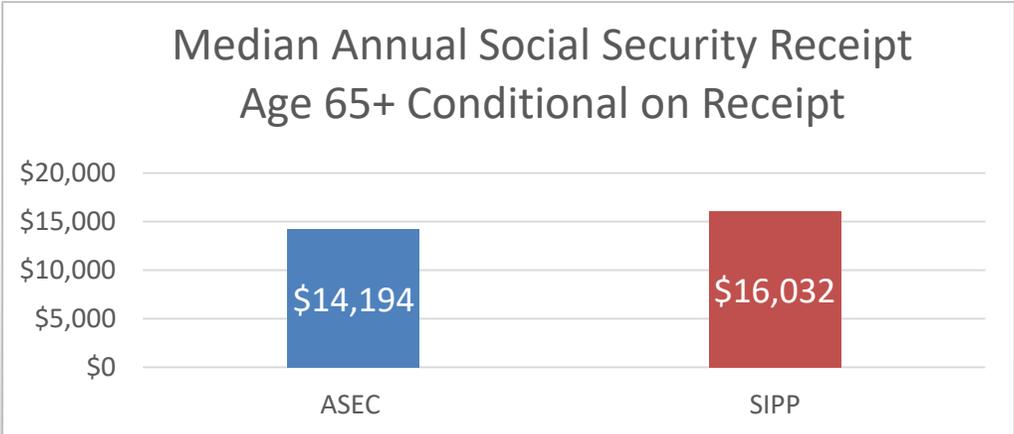
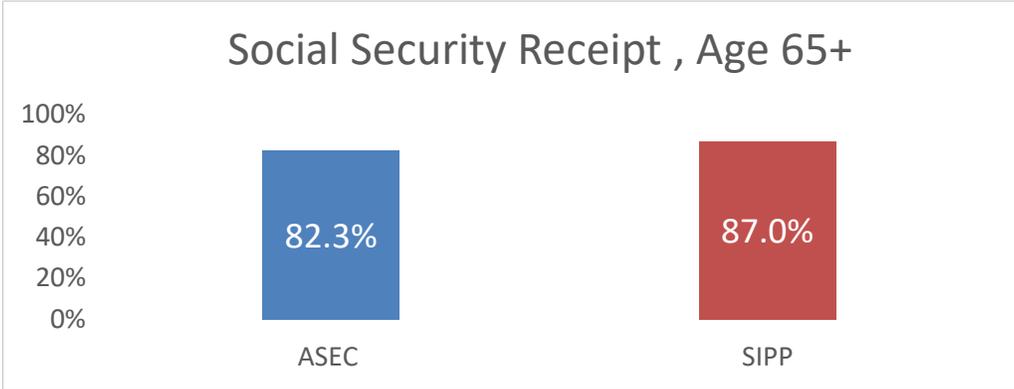


Change in Number of People in Poverty After Including Each Element: 2013



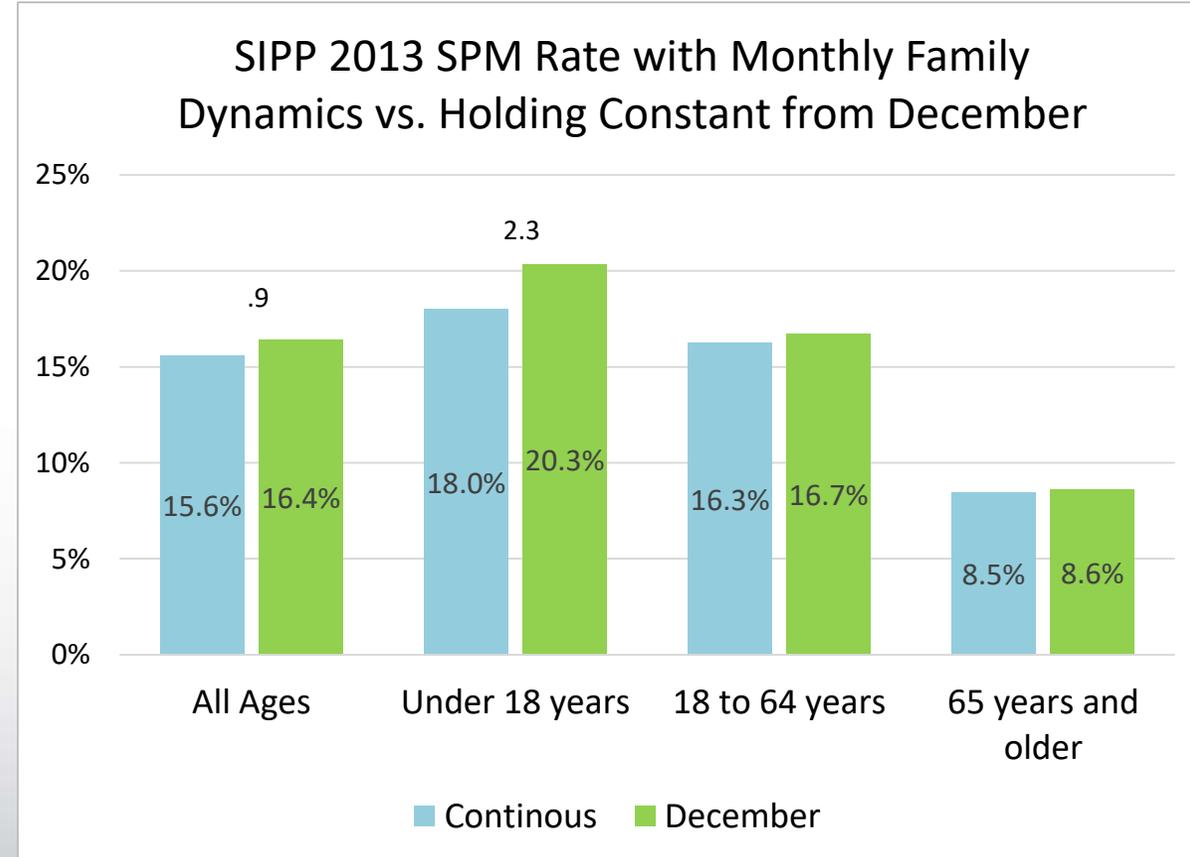
Social Security and Poverty

- For both the OPM and SPM we observe some of the largest differences in rates across the two surveys for those age 65+.
- Social Security receipt and conditional benefits amounts are higher in the SIPP than CPS ASEC, which lowers OPM and SPM rates in the SIPP, holding other things constant.



Family Composition and Poverty

- SIPP family composition is reported monthly rather than at the time of the survey
- A CPS ASEC family that has a child in January 2014 would have child included in 2013 poverty threshold, even though they were not present any time during the year
- Comparable restriction in SIPP using constant Dec. 2013 family composition
- For “All Ages” and “Under 18” the SPM rate is higher using the December family composition rather than the monthly composition



Next Steps

- Further reviewing how we determine tax units, how to correct for misreporting filing or filing status
- Examine components of SPM, focusing on 65+ population using administrative earnings and Social Security receipt
- Incorporating asset and liability measure for more comprehensive well-being

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