



# What is poverty? How do we measure it?

- Three general approaches
  - Absolute
  - Relative
  - Capabilities & Well-being
- Two primary measures in the US
  - Official
  - Supplemental Poverty Measure
    - WI Poverty Measure
- Measuring poverty dynamics

# Measuring poverty

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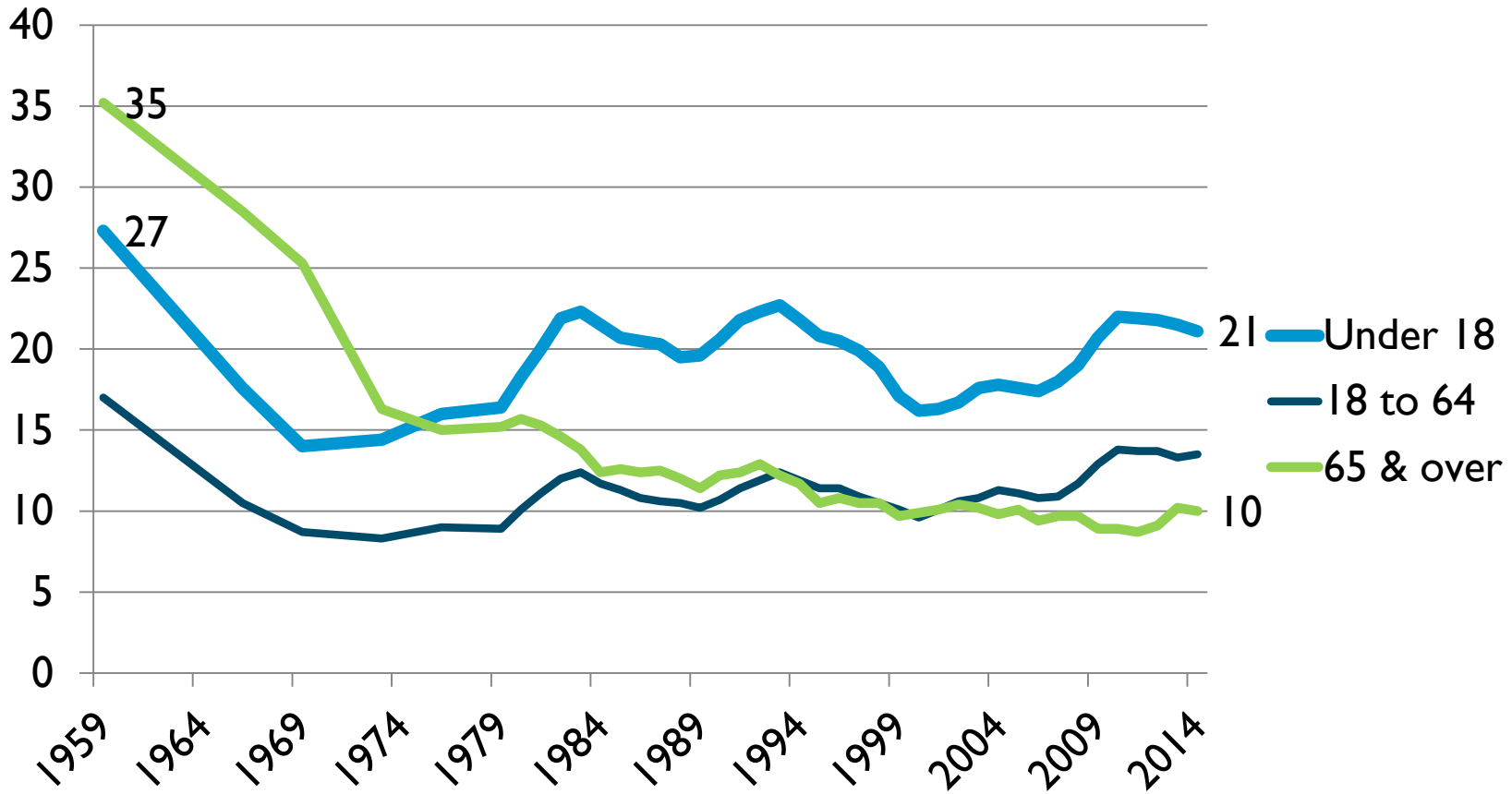
- Poverty is a social indicator, a status determined by a comparison of **needs** vs. **resources** for individuals in a **family unit**
  - **Needs: How do you set the poverty line?**
  - **Resources: What do you include in the income/package?**
    - Cash earnings
    - Pre-tax, post-tax
    - Cash benefits
    - Non-cash benefits
  - **Over what family unit? (& how adjust for family size & economies of scale)**

# Definitions of Poverty (1)

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- Absolute poverty
  - Income below some dollar amount
  - Used in the U.S.
    - ~\$25,000 for family of 4, in 2017
  - Advantages
    - Easy to measure
    - Easy to see trends
  - Disadvantages
    - What about changes in standard of living?
    - Cannot do international comparisons

# Example 1 : US poverty 1959-2014

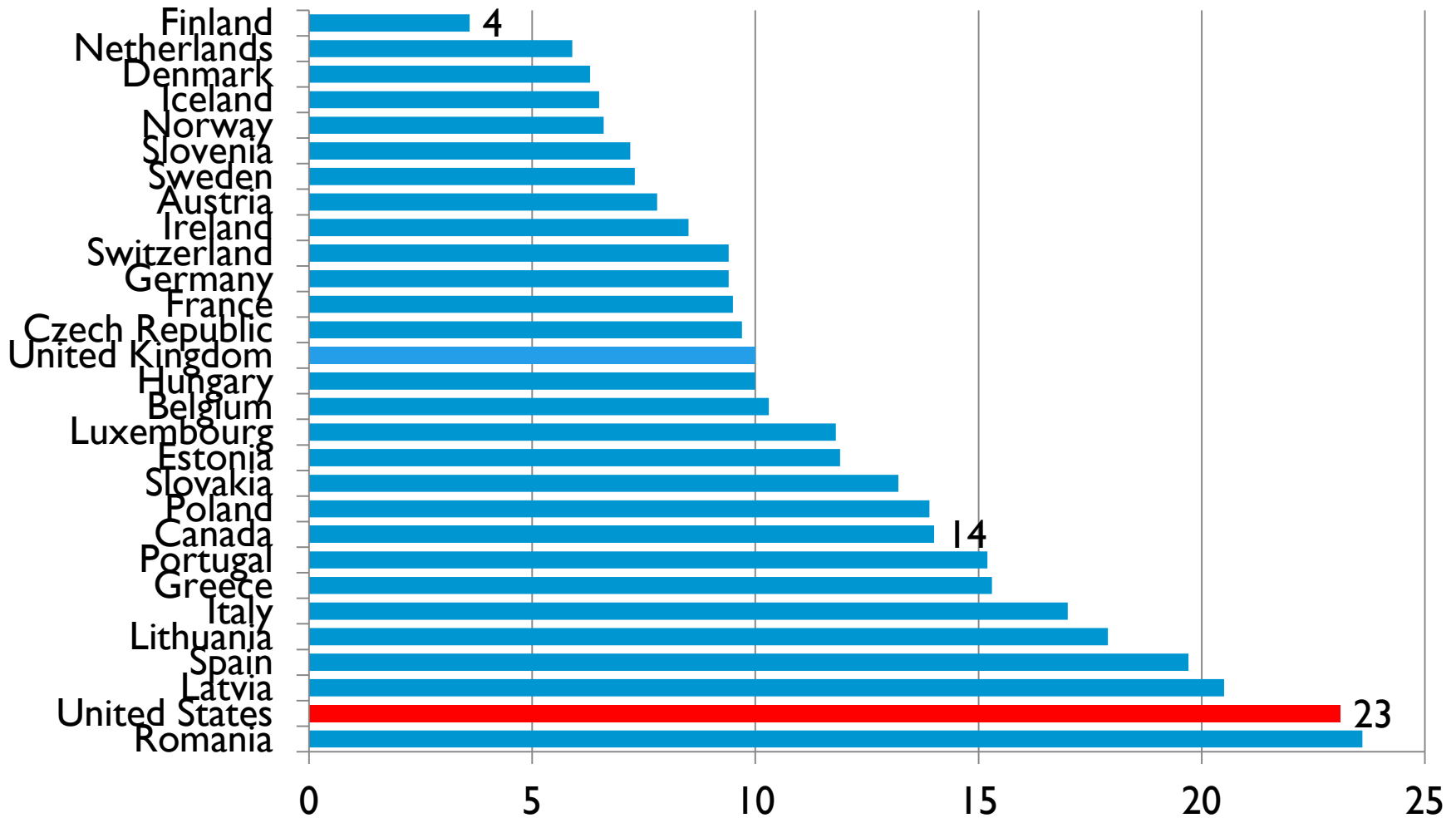


# Definitions of Poverty (2)

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- Relative Poverty
  - Income below some point on the distribution
  - Used in the rest of the developed world
    - Below half of median income is one approach (~\$29,500 in US in 2017)
  - Advantages
    - Reflects that individuals live in social contexts (inequality; social distance)
    - Allows for international comparison
  - Disadvantages
    - Can never “end” poverty
    - No sense of need

## Example 2: Child poverty in 29 countries\*



\* Child lives in family with income less than half of the median family income for the country Source: UNICEF Office for Research on Children, 2013)

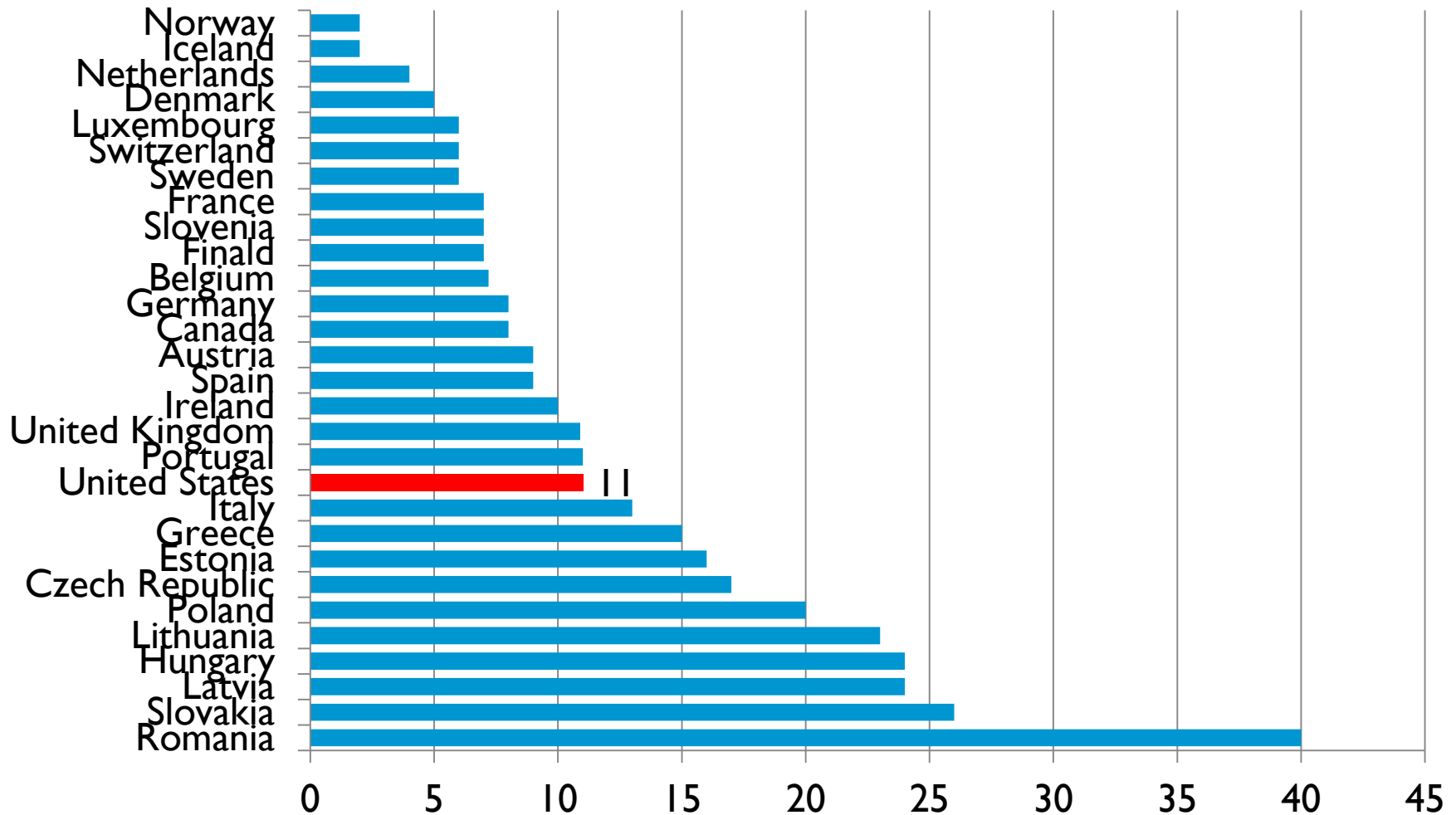
# Definitions of Poverty (3)

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- Poverty as low capabilities
  - Low levels of health, education, well-being
  - Experiences of hardship
  - Advantages
    - Better measure of people's actual life circumstances
  - Disadvantages
    - Wellbeing and/or hardship is hard to measure
    - Expectations of capabilities change over time
      - e.g. health, education



## Example 3a: Children of “low family affluence” \*

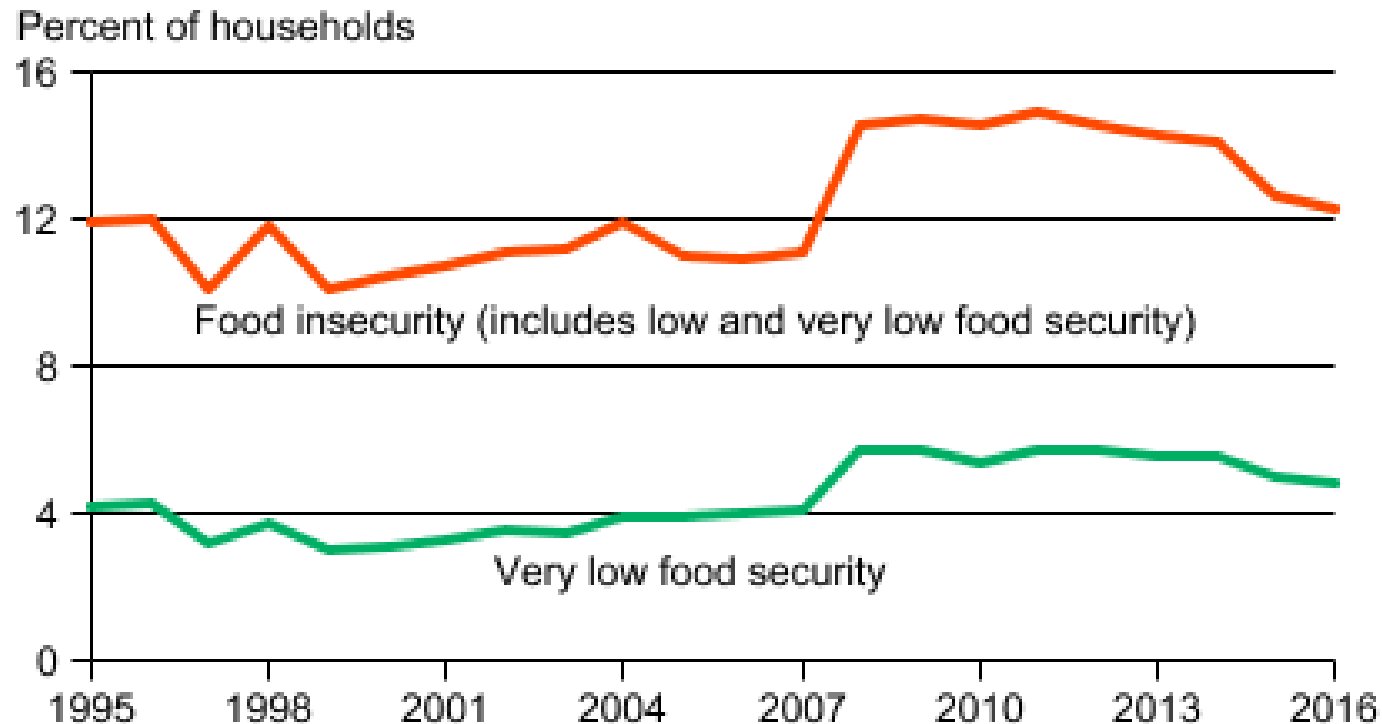


\*Scale of “low family affluence” based on # of family cars, family vacations, computers, and whether child has own bedroom.

Source: UNICEF Office for Research on Children, 2013)

## Example 3b: Food insecurity

Trends in prevalence rates of food insecurity and very low food security in U.S. households, 1995-2016



Note: Prevalence rates for 1996 and 1997 were adjusted for the estimated effects of differences in data collection screening protocols used in those years.

Source: USDA, Economic Research Service, using data from Current Population Survey Food Security Supplement.

# Measuring poverty in the U.S.

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# U.S. Official Poverty Measure

- Absolute approach (Approach #1)
- Compare income to a defined poverty threshold
  - Set in 1963
    - Minimal nutritional requirements of a typical American family,
    - Multiplied the costs of low food diet by 3
    - Adjusted for family size, # of children, urban/rural
- Compare gross (pre-tax) income to thresholds
- Family units are married parents and children
- Only adjustment over time is to adjust poverty thresholds for inflation (CPI)

# Current U.S. Poverty Thresholds

- Thresholds for official measure are the 1963 thresholds, adjusted for 50+ years of inflation
  - 1963 - \$3,130 (family of 4)
    - 36 million people
    - 20% of population
  - 2016 ~ \$24,560 (family of 4)
    - 41 million people
    - 13 % of population
- Do these amounts buy the same things in both periods?

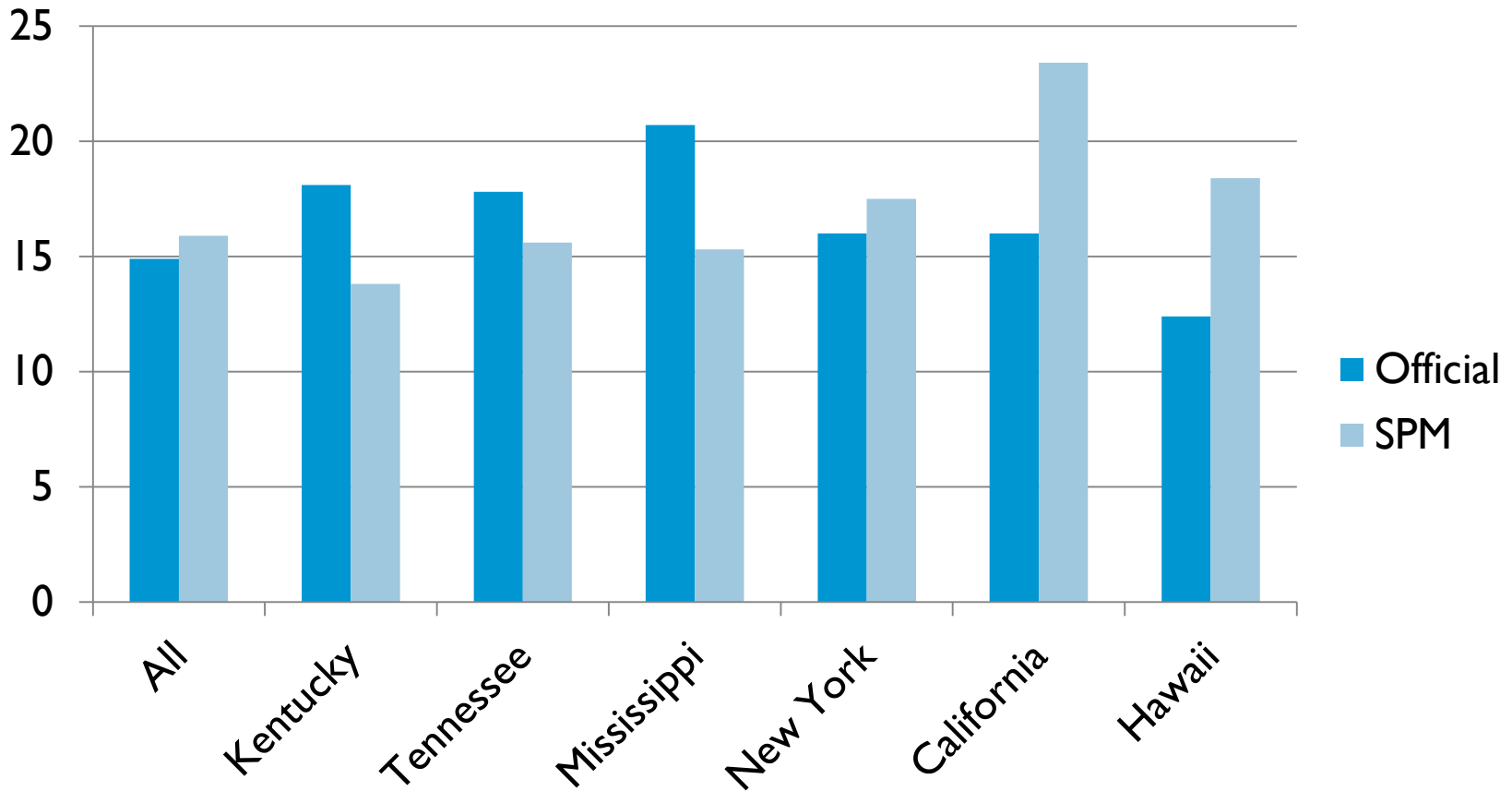
# Criticisms of U.S. Official Poverty Measure

- Thresholds not adjusted for changes in standard of living over time
  - not adjusted for geographic cost of living adjustments
- Resources do not include non-cash benefits (e.g., SNAP) or tax credits (e.g., EITC)
  - Do not account for costs of payroll & income taxes, medical expenses, child care & other work-related expenses
- Many other more detailed criticisms in 1995 NAS report
- 2010 adoption of federal Supplemental Poverty Measure for research purposes

# Two Poverty Measures

	Official Measure	Supplemental Poverty Measure
<b>Threshold (Economic need)</b>	Official poverty line 3x cost of minimum food diet in 1963, adjusted for prices (CPI) only	<ul style="list-style-type: none"> <li>Basic expenses (food, clothing, shelter, utilities x 1.2) averaged over 5 yrs</li> <li><b>Adjusted for geographic costs of living differences</b></li> </ul>
<b>Resources</b>	Gross (before tax) cash income Includes cash government benefits like social security, workers comp., and unemployment ins.	More Family Resources Cash income as in left panel: <b>+/- Taxes &amp; tax credits</b> <b>+ Non-cash benefits (inc. SNAP)</b> <b>- Work expenses (inc. childcare)</b> <b>- Out-of-pocket medical expenses</b> <b>- Child support paid to another family</b>
<b>Family Unit</b>	Census “family” unit	Expanded Family Unit Census family + <b>unmarried partner &amp; foster children;</b>

# SPM rates differ from official rates (poverty by state)

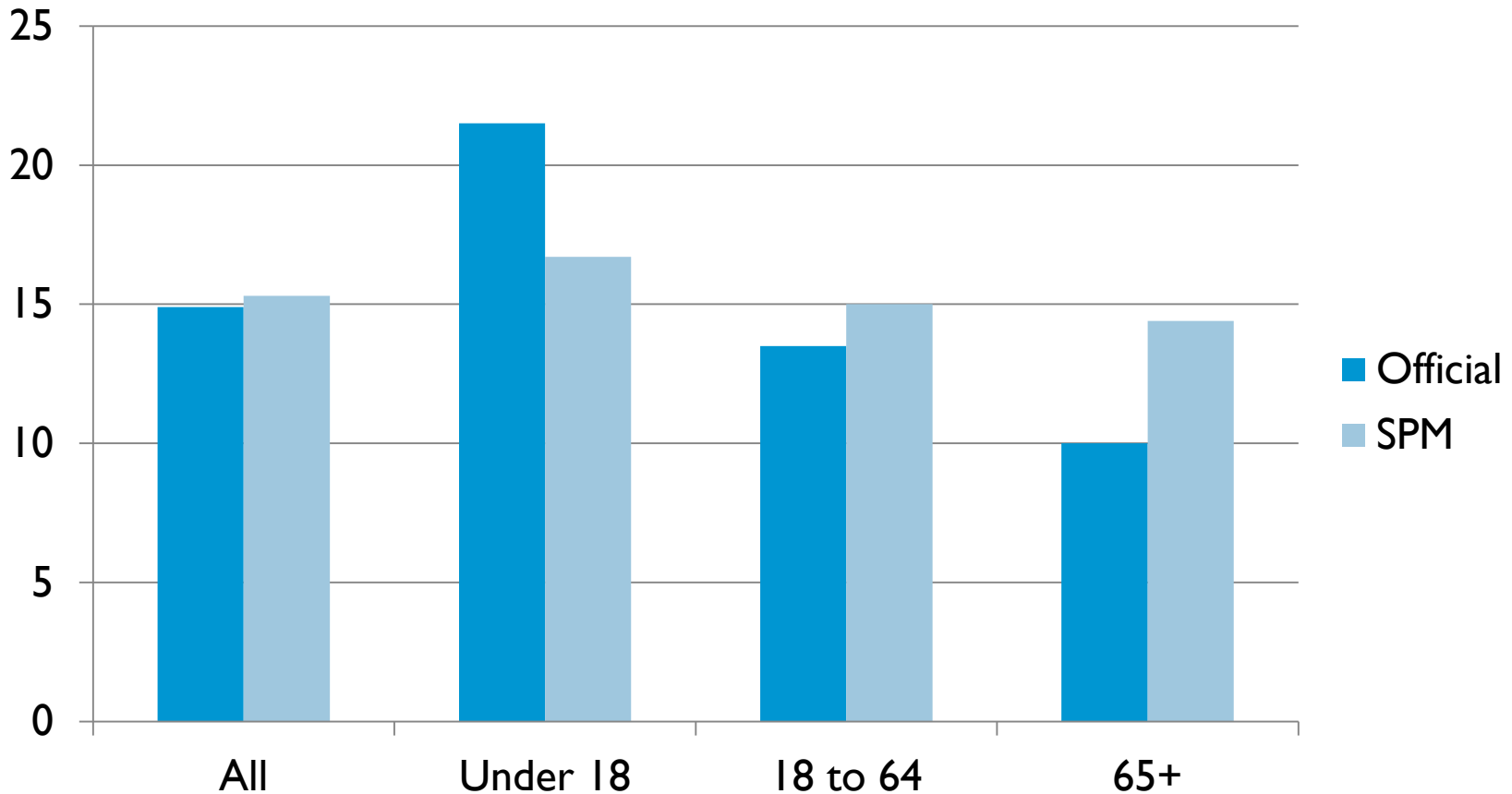


Based on 3 years of CPS data (2011-2013).

Source: Short (2014). Supplemental Poverty Measure: 2013.

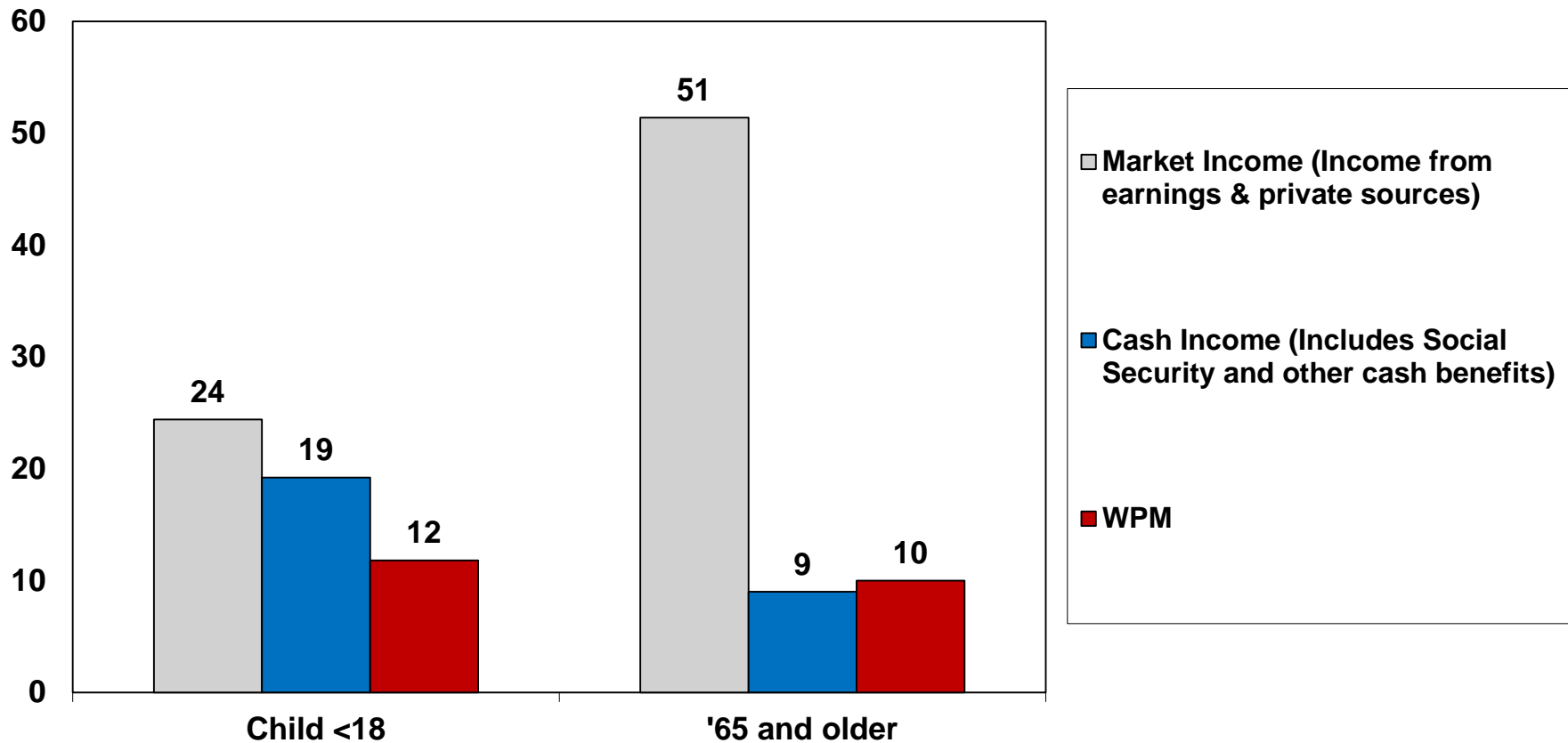


## SPM shows lower child poverty rate & higher elderly poverty rate than the official measure



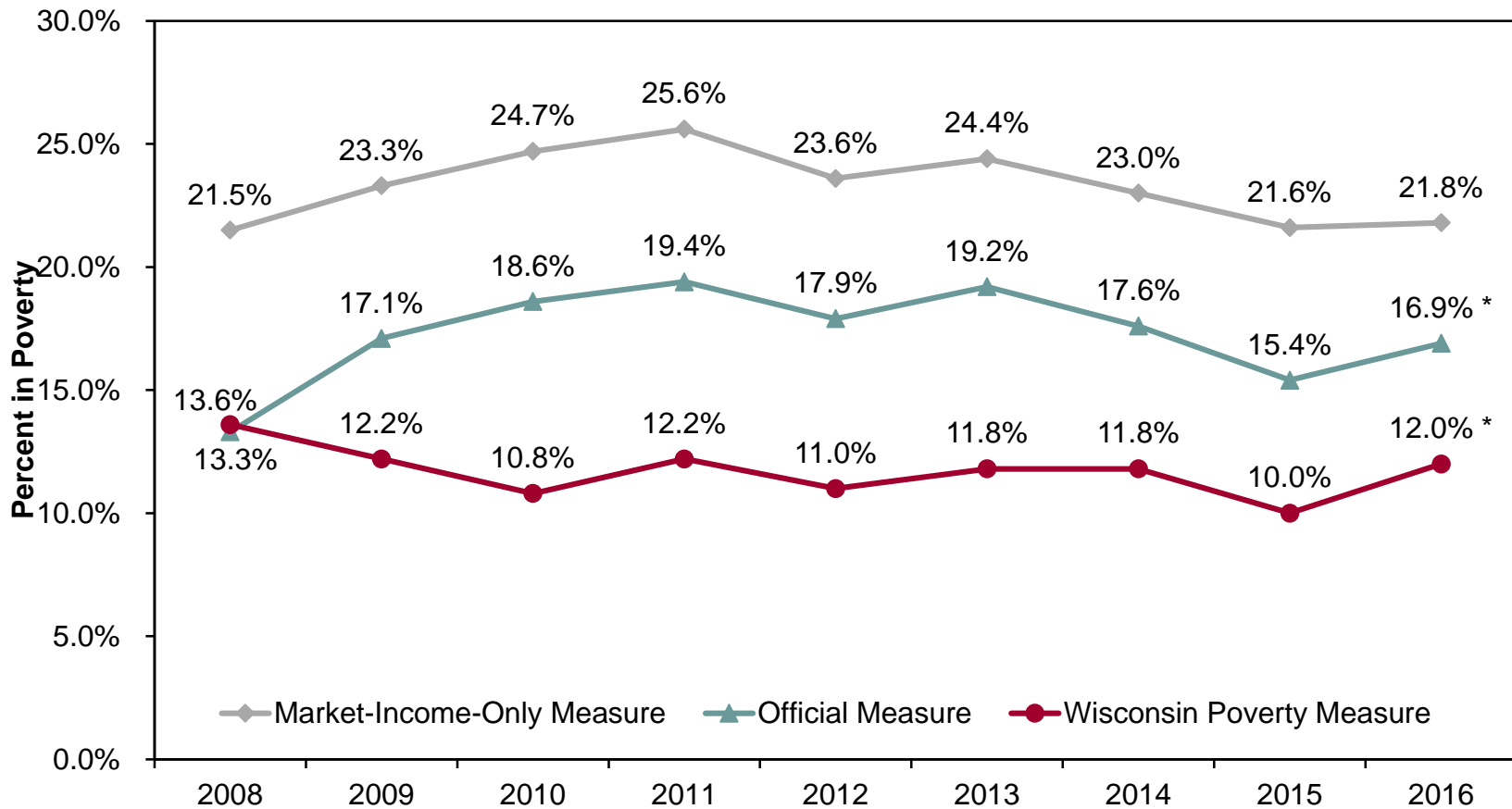
Source: Short (2015). Supplemental Poverty Measure: 214 (Census Bureau)

# Child and Elderly Poverty in Wisconsin in 2013, Under Different Poverty Measures



Note: All poverty rates measured with WPM thresholds and include adjustments for work expenses. Source: IRP tabulations of 2013 ACS data. (IPUMS)

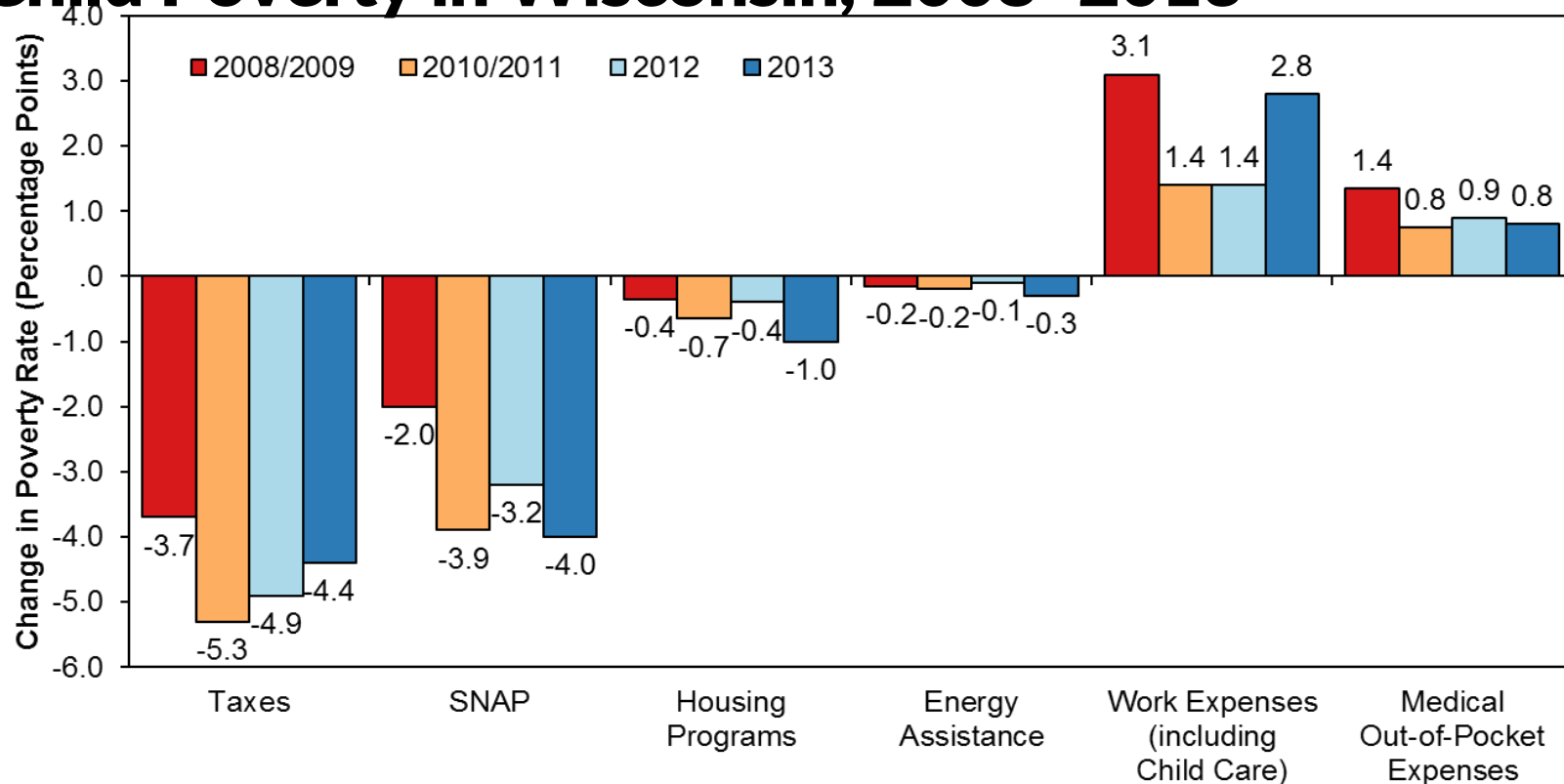
# Child Poverty Rates in Wisconsin under Different Poverty Measures, 2008–2016



Source: IRP tabulations of American Community Survey Data, 2008-2016

Notes: \*2016 significantly different from 2015 in official poverty & WPM

# Effects of Taxes, Public Benefits, and Expenses on Child Poverty in Wisconsin, 2008–2013



Source: IRP tabulations using 2008–2012 American Community Survey data.

Note: SNAP = Supplemental Nutrition Assistance Program. To simplify the figure, effects averaged over two years are shown for 2008–2009 and 2010–2011; for year-to-year impacts in 2008–2011, see earlier reports.

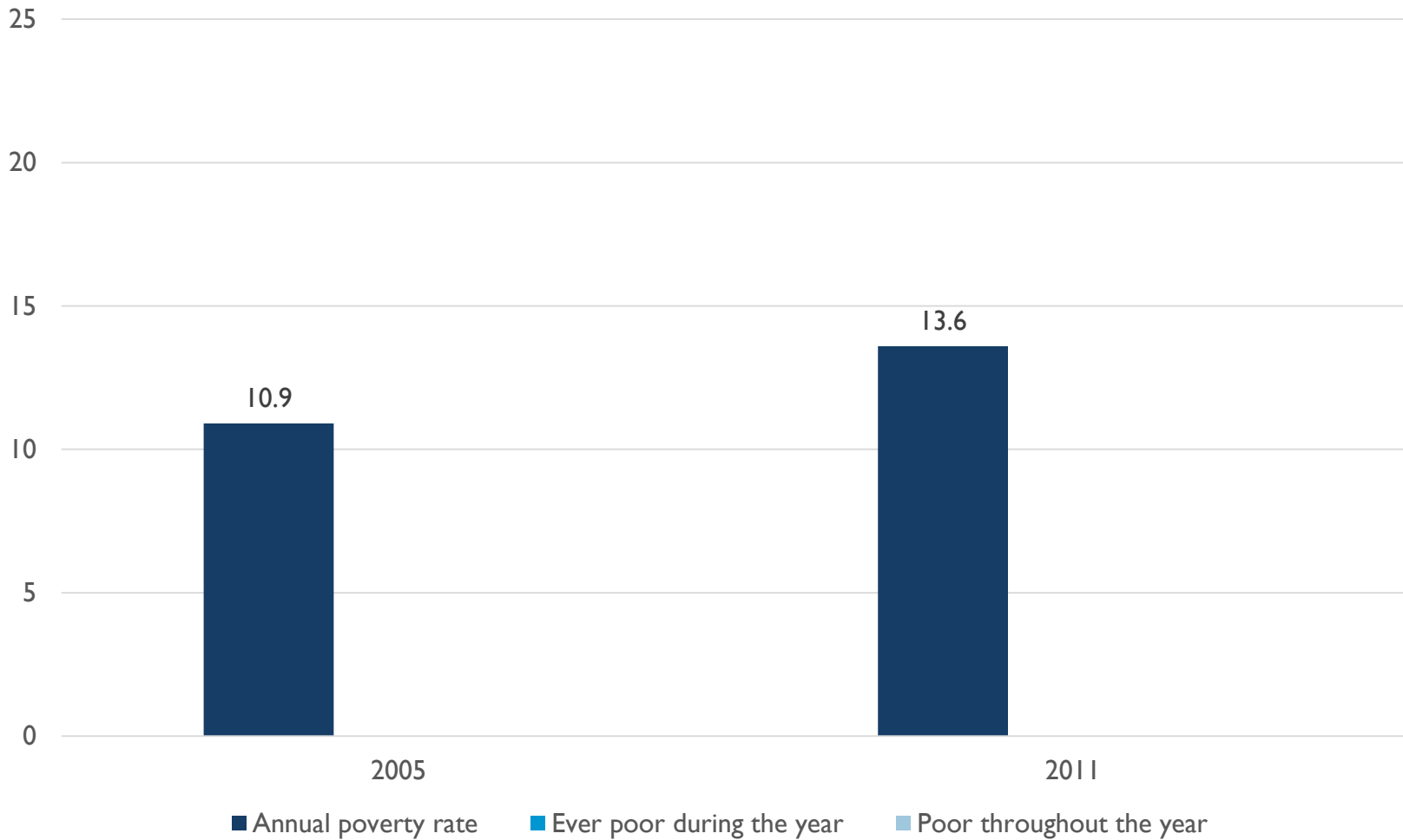
# Both Measures Valuable

- **Official measure**
  - Used as basis of eligibility for assistance, & for distributing funds across states
  - Easy to track poverty over time (CPS trend back to 1959)
  - Readily available at state, county, level (ACS data)
  - Can measure (crudely) on any survey that gathers income information & family size
- **Supplemental Poverty Measure** (for research purposes)
  - More comprehensive measure
  - Better at capturing effect of government benefits
  - Threshold is tied to current conditions (& geography)
  - Requires MUCH more data, hard to estimate unless using CPS, (hard to implement in other survey research)

# Measuring Poverty Dynamics

- How does monthly poverty differ from annual poverty? How many people are poor once (for a two-month spell) over the course of a year?
- How many children are poor at least one year in their 18-year childhood? For 9 or more years?

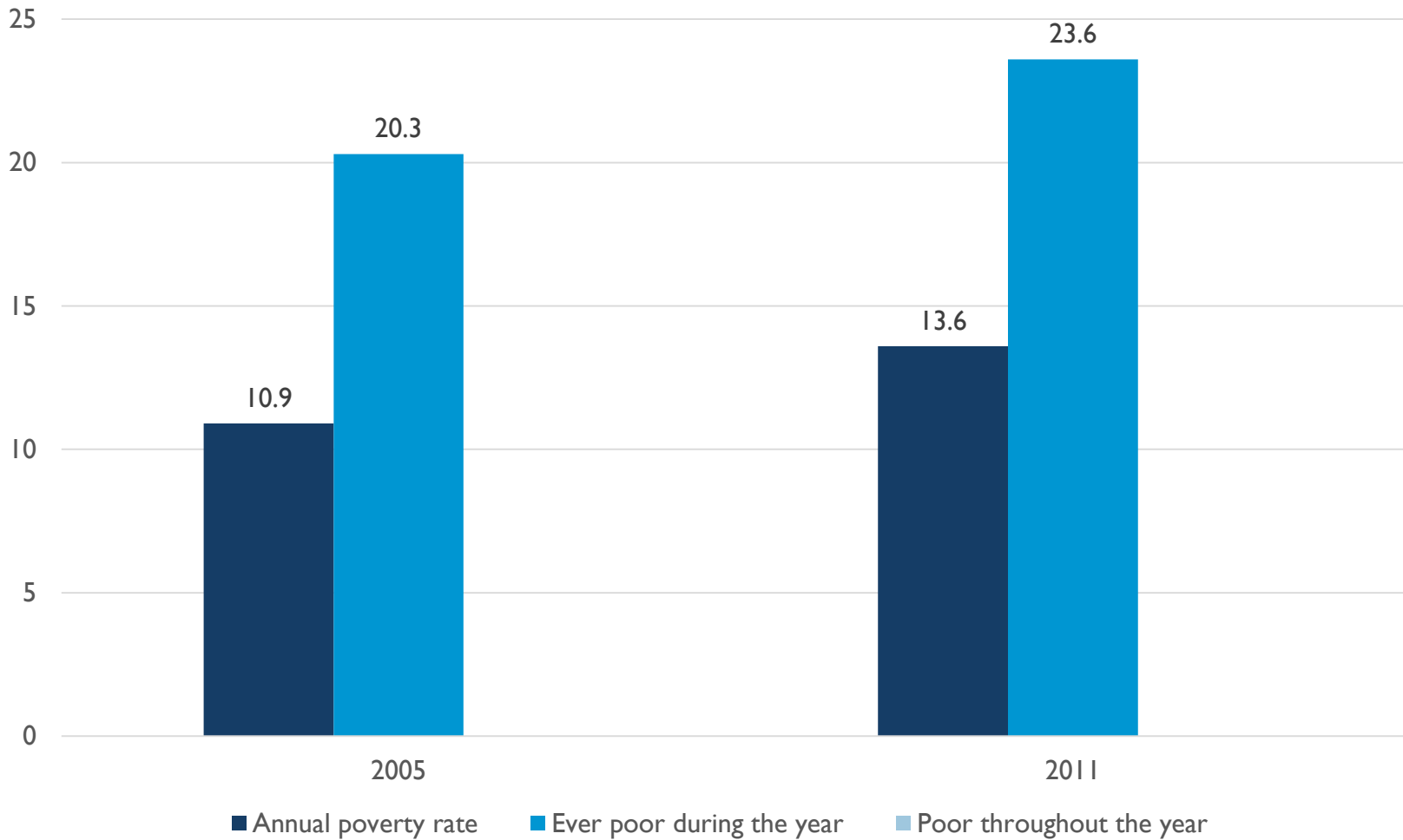
# Poverty rate under different time frames (SIPP data)



Source: Edwards, Dynamics of Economic Well-being: Poverty, 2009-2012 (Census Bureau, Jan 2014)

Notes: Using methods of official poverty rate

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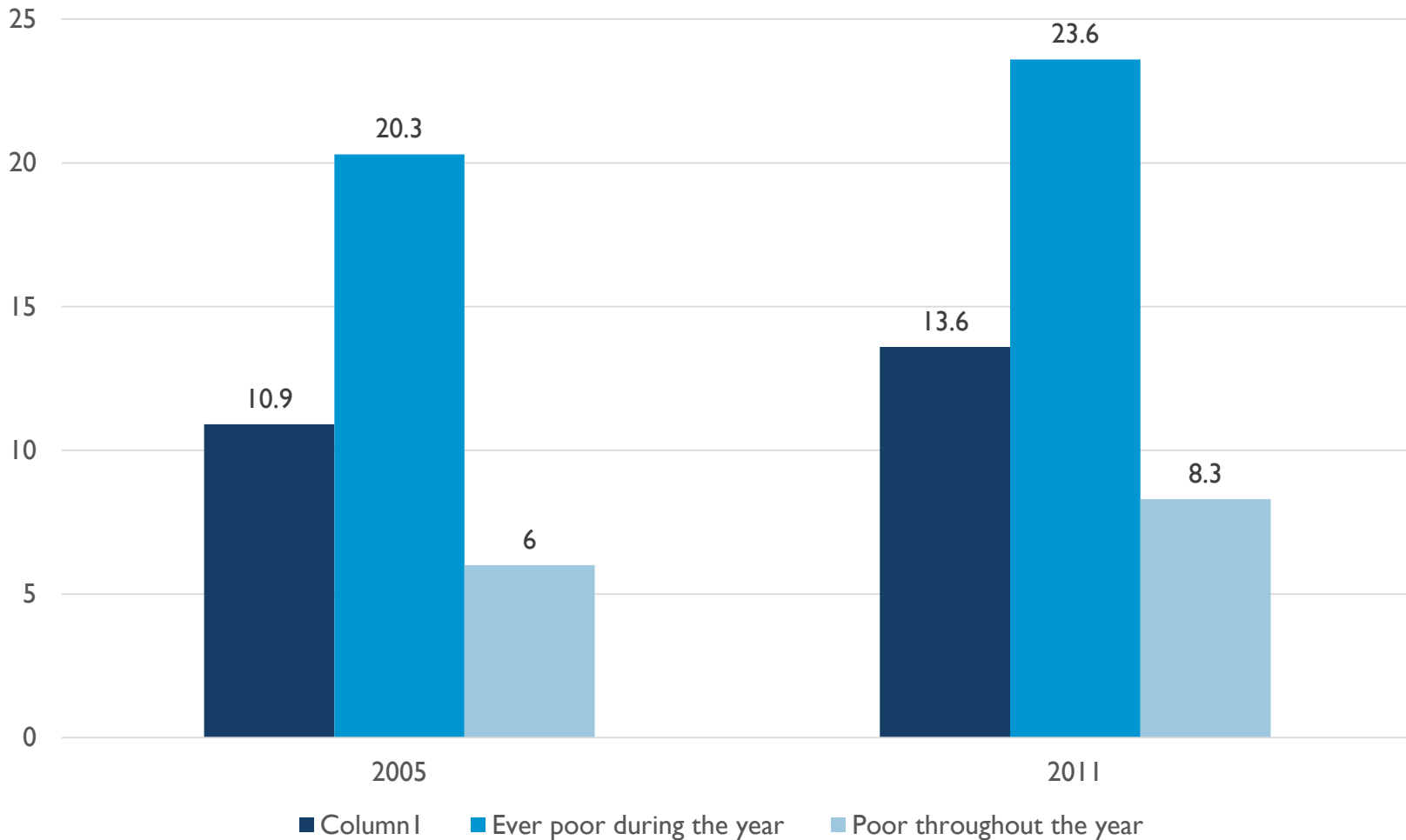


Source: Edwards, Dynamics of Economic Well-being: Poverty, 2009-2012 (Census Bureau, Jan 2014)

Notes: Ever poor means at least two months of poverty in one year



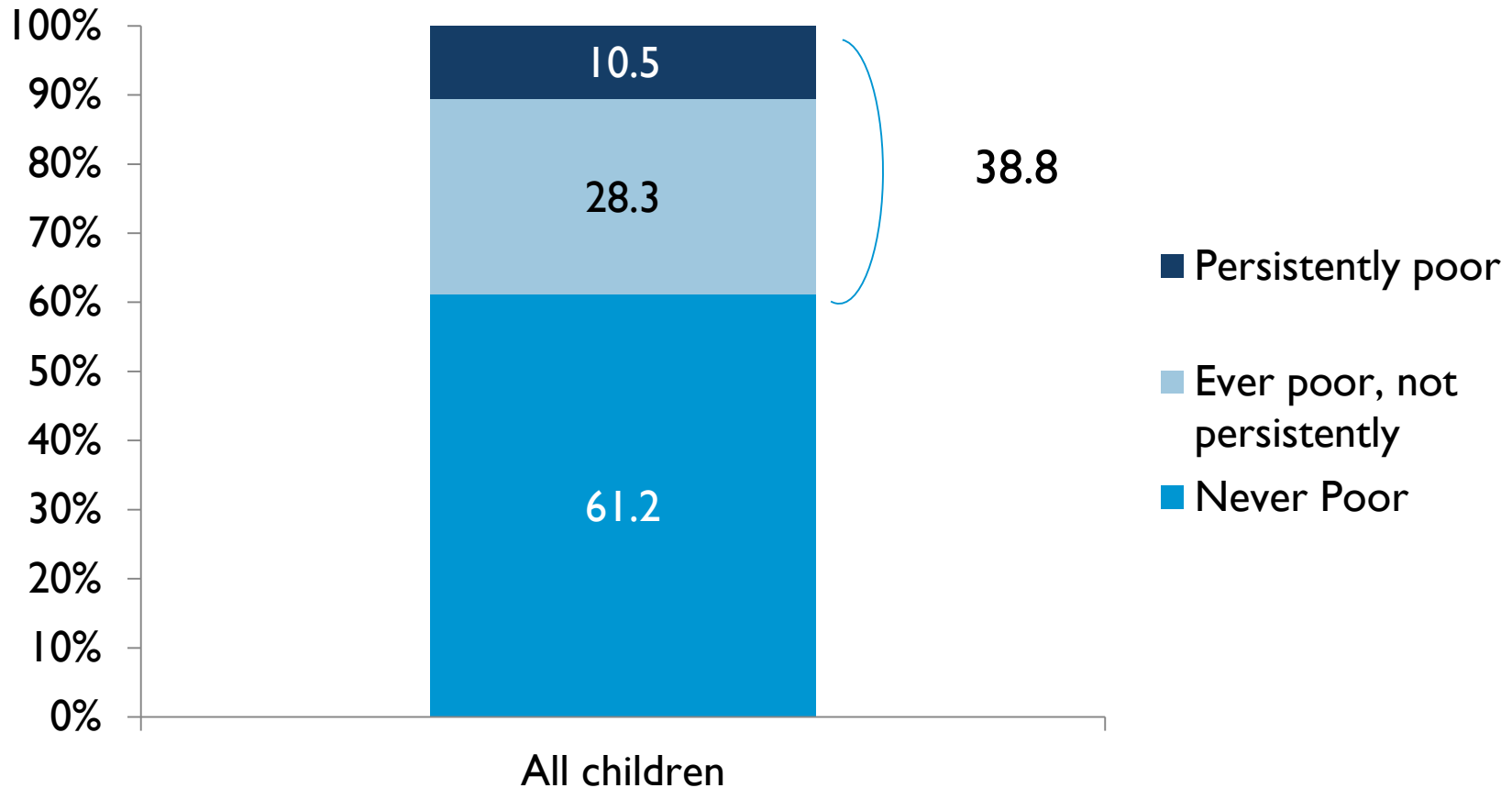
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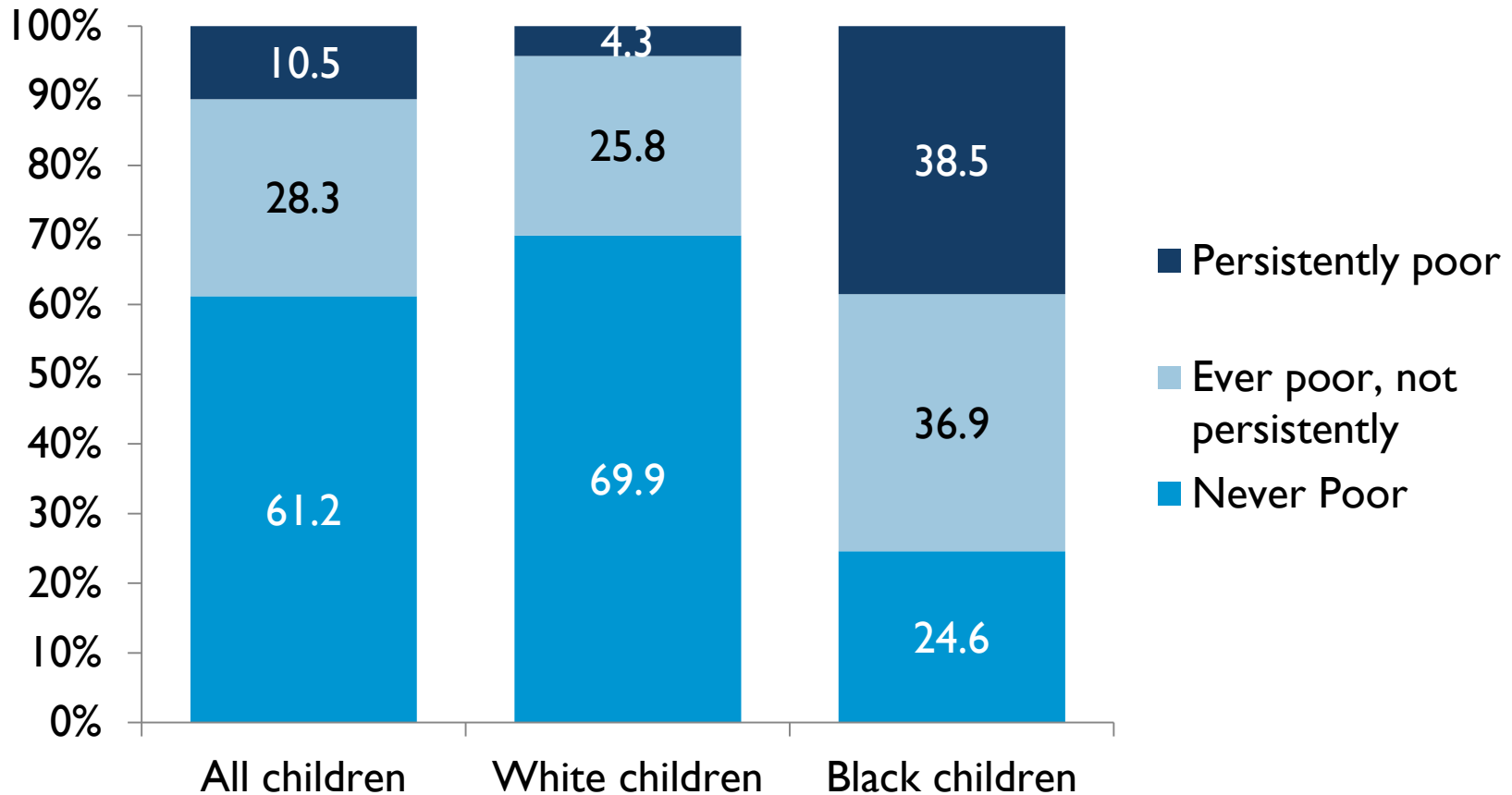
Notes: Ever poor means at least two months of poverty in a year.

# 39% of children poor at least once before age 18



Source: Ratcliffe, 2015, based on PSID data for children born between 1968 and 1989. Persistently poor- poor at least half the years from birth to 17. Ever-poor, not persistently are poor at least one year but less than half the years.

# 75% of black children ever poor



Source: Ratcliffe, 2015, based on PSID data for children born between 1968 and 1989. Persistently poor- poor at least half the years from birth to 17. Ever-poor, not persistently are poor at least one year but less than half the years.

# Recap

- Different ways to measure poverty
  - Absolute
  - Relative
  - Capabilities & Well-being
- Two primary measures in the US
  - Official
  - Supplemental Poverty Measure
    - Results differ (by state, by age)
- People move in and out of poverty