The Population Association of America

Moderator: Dr. Erica Groshen

FORMER COMMISSIONER BUREAU OF LABOR STATISTICS

Dr. Constance Citro

NATIONAL ACADEMY OF SCIENCES, COMMITTEE ON NATIONAL STATISTICS

Dr. Robert Moffitt

JOHNS HOPKINS UNIVERSITY

Dr. Timothy Smeeding

UNIVERSITY OF WISCONSIN

Drawing a Line:

July 23, 2019

How We Measure Poverty and Why it Matters

The Rate of Poverty in the U.S.: How it is Measured and How it is Used

Robert A. Moffitt
Professor of Economics
Johns Hopkins University

PAA Congressional Briefing
July 23, 2019

- The U.S. has an official poverty rate
- Not all countries do
- The U.S. measure was created in 1963
- One of the very first: the U.S. was extremely innovative for the time

Outline

1. How does the US government measure the poverty rate?
2. What is it used for and why is it important?
3. What are past trends?
4. What are the major problems with the way we measure it?
5. Have any alternatives been proposed?

1. How Do We Measure the Poverty Rate?

The General Idea:

- A. Define a "poverty line" as the minimum income that a family must have to be considered *not* to be poor

The General Idea:

- A. Define a “poverty line” as the minimum income that a family must have to be considered *not* to be poor

- B. Get data on the incomes of U.S. families and, for each one, determine the family’s income

The General Idea:

- A. Define a “poverty line” as the minimum income that a family must have to be considered *not* to be poor
- B. Get data on incomes of U.S. families and determine each family’s income
- C. Call a family poor if its income is below the line

Some Details

- Defining the poverty line income
- Stats showed that families in 1963 spent 1/3 of their income on food

Some Details

- Defining the poverty line income
- Stats showed that families in 1963 spent 1/3 of their income on food
- USDA experts in 1963 calculated a minimally nutritious diet and how much it cost to purchase it

Some Details

- Defining the poverty line income
- Stats showed that families in 1963 spent 1/3 of their income on food
- USDA experts in 1963 calculated a minimally nutritious diet and how much it cost to purchase it
- They then just multiplied by 3

But What About Today?

- Since 1963, the poverty line has been updated only for inflation
- As prices rise, of course more money is needed to purchase the minimal diet
- So the amount of income needed rises, too
- But it is still supposed to be the income needed to spend 1/3 on a 1963 minimal diet

It’s often called the

“Official Poverty Measure” or “OPM”

U.S. Poverty Rate in 2017 (OPM)

- Census Bureau calculates it annually
- 2017: 12.3% of all U.S. individuals were poor
- 39.7 million people
- Children: 17.5% of all US children were in poor families
- Almost 13 million children

2. What is it Used for and Why is it Important?

- It is a social indicator that everyone cares about
- Everyone wants to see the rate be low

- But also: It is used to allocate federal funds to states
  - DoEd allocates school assistance using state poverty rate
  - Medicare Prescription Drug funds
  - Community Development Block Grant
  - Many others: about 40 grants in total

- A change in the poverty definition would have major effects on the *distribution* (although maybe not the total) of federal funds to states

- It is used by many welfare programs to define eligibility
- SNAP, Medicaid and CHIP, Head Start, Job Corps, and many others use it
- A reduction in the official poverty line would reduce the number of adults and children eligible for these programs

3. What Are Past Trends in US Poverty?

Poverty Dropped Tremendously from 1959 to 1975 but then stopped dropping: Why?

4. What Are the Problems with the Way We Measure It?

<u>One</u>: People spend less of their income on food today than in 1963

- (I.e., less than 1/3)

Two: Food is important, but what about other things?

- Housing? Don't we want families to be able to afford minimally decent housing in today's cities?
- Clothing? Don't we want families to have enough money to buy clothing for their children?
- Health care?
- And so on (For ex: childrens' books, sports equipment, arts and music, etc)

Three: Census counts only money, cash income, before tax

- So Food Stamps, subsidized housing, Medicaid and Medicare: none count
- Neither do tax credits (e.g., Earned Income Tax Credit)
- This is one of the main reasons poverty appears not to have fallen since 1975
- Just bad measurement

Four: Many other problems

- no adjustment for geographic differences in cost of living
- no account taken of costs of working: child care, transportation, etc.

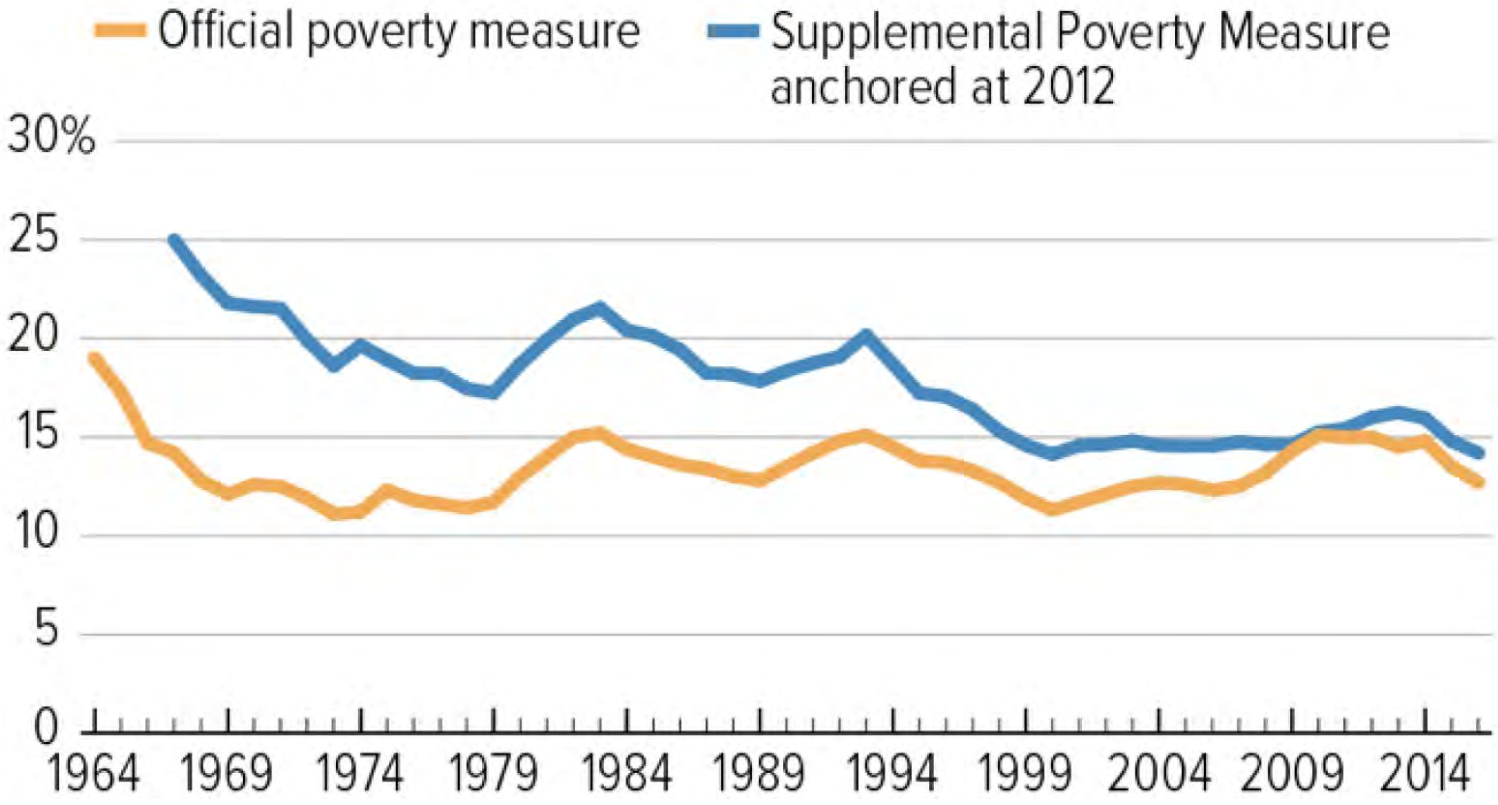
5. Are There Any Alternative Measures?

Yes

- A 1995 Committee of the National Academy of Sciences recommended a superior measure
- Census Bureau adopted a modified version in 2011
- Addresses almost every one of the problems noted above:

- It bases the poverty line on needs for food, clothing, housing, and utilities: not just food!
- It adds non-cash transfers to income (SNAP, subsidized housing)
- It subtracts taxes but adds tax credits (Earned Income Tax Credit, etc.)
- It has geographic cost of living adjustments
- It considers child care to be a work expense, not a discretionary expense
- The only thing it doesn't address is Medicaid—not included—but that is being worked on

We have made much more progress against poverty



The Rate of Poverty in the U.S.: How it is Measured and How it is Used

Robert A. Moffitt
Professor of Economics
Johns Hopkins University

PAA Congressional Briefing
July 23, 2019

Updating Poverty Thresholds: How and Why It Matters

Constance F. Citro, *Senior Scholar,* CNSTAT

PAA Congressional Briefing

July 23, 2019

Role of an Inflation Index in Poverty Measurement

- Once you have poverty thresholds set, what thresholds do you use going forward?

- Not realistic or fair to do nothing—prices typically rise for items people need to buy
  - OPM uses Consumer Price Index for All Urban Consumers (*CPI-U*, BLS flagship)
  - OPM is an ***absolute*** poverty measure (adjusts for price changes only, ***not*** changes in living standards)

Is There a Better Inflation Index to Adjust OPM Thresholds?

- OMB asked for comments* on using a different inflation measure to adjust OPM thresholds
- Why does this matter?
- How would a different price index likely affect poverty rates and program eligibility?
- Why make this one change and not fix everything that's wrong with the OPM?

**Federal Register*, May 5, 2019, pp. 19961-63

Alternative Inflation Indexes Cited in *Federal Register*

- Produced by BLS
  - *CPI-W*: CPI for Urban Wage Earners and Clerical Workers (used to adjust Social Security benefits)
  - ***C-CPI-U***: "chained" version of CPI-U
  - ***CPI-U-RS*:** research series version of CPI-U (consistent historical time series with all improvements to CPI-U to date)
  - *CPI-E*: experimental version of CPI-U for elderly
- Produced by BEA
  - ***PCE***: personal consumption expenditures index ("chained" index used to adjust GDP for price change)

How Is Inflation Measured? Resembles Sausage-Making

- Goal is to measure price change for (as consistent as possible) set of goods over time *> > > DECISIONS. . . .*
  - Select goods to include in ***market basket*** and how much ***weight*** each gets (e.g., housing nearly 40% of CPI-U)
  - Decide when to ditch ***old goods*** (e.g., rotary phones) and add ***new goods*** (e.g., smart phones)
  - Decide where to measure prices and when to ditch ***old outlets*** (e.g., full-service gas stations) and add ***new outlets*** (e.g., Walmart, Amazon)

BLS uses surveys about what people buy and where they shop to make these decisions

Committee on National Statistics
The National Academies of SCIENCES · ENGINEERING · MEDICINE

How Is Inflation Measured? More Sausage-Making

- Determine how much of a price increase is really increase in ***quality*** (e.g., rear vision in cars) and shouldn't count as inflation

- Determine what kinds of ***substitutes*** to allow
  - substitute *Fuji* apples if *Galas* become more expensive; substitute *oranges* for *apples, Metro* for *driving* (and vice versa)
  - without substitution, market basket would look pricier than really is, assuming families aren't fixated on buying Galas

- Decide how to ***"chain"*** inflation index for ***cross-category substitution*** (e.g., Metro for driving)
  - currently, CPI-U adjusts for substitution every 2 years
  - chained C-CPI-U (introduced in 2002) adjusts every month

BLS uses surveys, other data, and research to make these decisions

Committee on National Statistics
The National Academies of
SCIENCES · ENGINEERING · MEDICINE

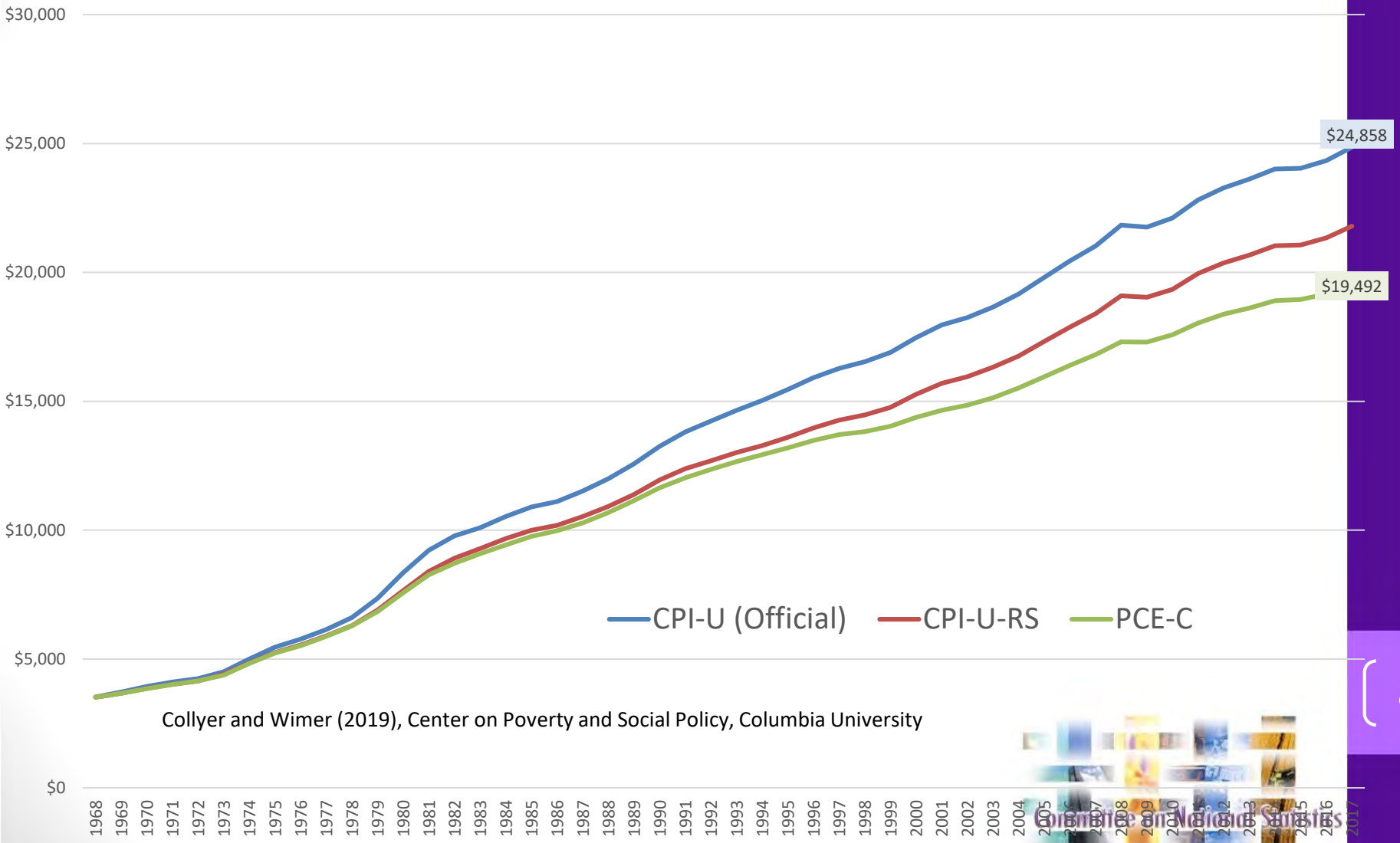
Improvements in CPI-U—Implications for OPM Thresholds

- BLS has made significant improvements to CPI-U over time—most have lowered measured inflation
  - 1983—changed from owned housing value to rental equivalent value
  - 2000—allowed for cross-category substitution of goods every 2 years instead of much longer interval

- If CPI-U changes had been there from get-go, then OPM thresholds would be lower

OPM Thresholds for 2 Adult/2 Child Family with Different Consumer Inflation Measures, 1968-2017

OPM increased 13% more than CPI-U-RS and 28% more than PCE



Collyer and Wimer (2019), Center on Poverty and Social Policy, Columbia University

Committee on National Statistics
The National Academies of
SCIENCES · ENGINEERING · MEDICINE

Arguments for Using Different Price Index for OPM Thresholds

- CPI-U still believed to overstate inflation
  - Other indexes substitute less expensive goods when prices on preferred goods rise more often
  - Other indexes introduce new goods more quickly
- Chained C-CPI-U and PCE historically don't increase as fast as CPI-U
  - Differences are slight (~0.3 percentage points) but cumulate over time

Counterarguments

- Evidence that low-income households face higher prices than higher income households—
  - Low-income households spend more on housing—especially rent (rising faster than overall CPI-U)
  - Low-income households can't substitute as readily as higher income households (have access to fewer goods and shopping outlets)
  - Retailers cater to higher income, not low-income, households with price breaks

More Counterarguments

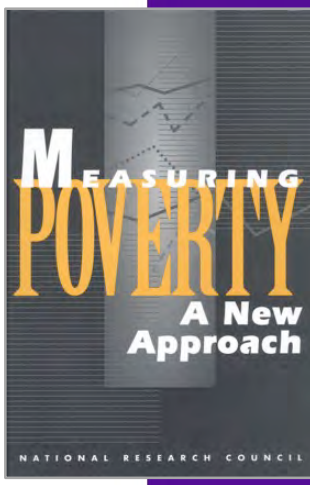
- "Chained" indexes (PCE and C-CPI-U) sensitive to falling prices for high-tech items that fewer low-income households buy (e.g., latest laptops)

- PCE downweights housing relative to CPI-U; includes items that consumers don't buy (e.g., medical care that insurers cover)

- Better approach could be to develop ***"CPI-LI"*** index
  - Base CPI-LI on low-income household spending patterns—what they buy and where—and what goods are readily available to them

Committee on National Statistics
The National Academies of
SCIENCES · ENGINEERING · MEDICINE

What Did NAS Recommend?



- 1995 National Academies report recommended complete redo of OPM >>> *Supplemental Poverty Measure*
  - Base thresholds on food, clothing, shelter, utilities (FCSU), plus a little more (from spending of lower-income families)
  - Update thresholds for real changes in ***living standards*** (e.g., every car has rear vision) by change in FCSU spending

- SPM threshold updating procedure is ***quasi-relative***—spending on necessities rises at slower rate than all spending (but faster than price changes alone)

- Some countries use ***relative*** updating (e.g., one-half median household income)

Committee on National Statistics
The National Academies of
SCIENCES · ENGINEERING · MEDICINE

Why Update Thresholds for Changes in Living Standards?

- Poverty is always ***RELATIVE*** to time and place—just look around the world and back in time
  - 45% of U.S. households lacked indoor plumbing in 1940 versus only 7% in 1970

- [Informal] U.S. poverty lines relative to 1963—
  <WWI = 43-54%; 1935 = 65%; 1957 = 88%

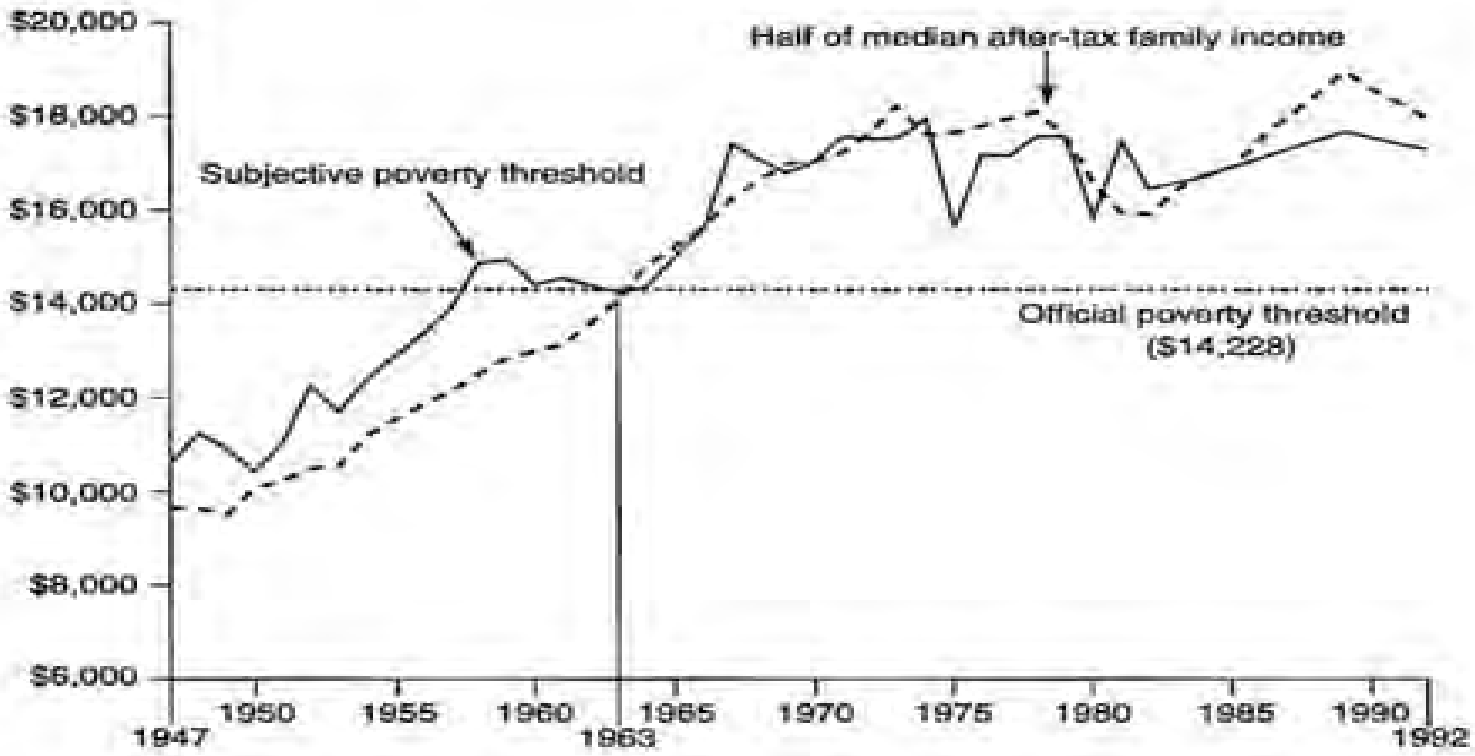
- 1969 proposal to update 1963 thresholds in real terms vetoed by Budget Bureau—didn't want to increase transfer program costs (food stamps et al.)

Committee on National Statistics
The National Academies of
SCIENCES · ENGINEERING · MEDICINE

OPM Thresholds Out-of-Date in Real Terms—

20-25% *less* than subjective/relative lines

Figure 1-1, 1995 NAS report (1992$-CPI-U)



Committee on National Statistics
The National Academies of
SCIENCES · ENGINEERING · MEDICINE

Real Issue—Long-Term Use of *Absolute* Poverty Measure

- 55 years is ***really long time*** to maintain poverty thresholds in inflation-adjusted dollars and not also adjust for changes in living standards

- Switch to price index that measures lower inflation would lead to even lower poverty thresholds and eligibility for SNAP and other programs

- What if different index had been used since 2000 for OPM? Estimates for 2017:
  - C-CPI-U = 1.6 million fewer poor
  - PCE = 1.9 million fewer poor

Committee on National Statistics
The National Academies of
SCIENCES · ENGINEERING · MEDICINE

4-person Family Poverty Thresholds

	2016	
OPM (food*3)	$24,300	100%
OPM method updated (food*7)	$56,800	234%
Subjective (AEI/*LATimes* survey)	$30,000	124%
Subjective (Gallup)	$42,500	175%
Relative (1/2 before-tax median income, CPS)	$45,400	187%
United Way household survival budget (ALICE project, Iowa)	$56,800	234%
SPM (adjusted to add child care, taxes, medical, work expenses back to thresholds)	*similar to ALICE*	

Note: Rough estimates, rounded to nearest $100

Committee on National Statistics
The National Academies of SCIENCES · ENGINEERING · MEDICINE

Full Review of OPM and SPM

- 1995 NAS report said revisit (and improve) SPM every ***10*** years (not let it sit around for 50+ years)

- President's budget proposes funding for such a review

- Also look at continued usefulness of OPM
  - If switch to SPM, could use % of thresholds for program eligibility to lessen budget shock (many programs currently use >100% of OPM thresholds)

Makes no sense to change price index for updating OPM thresholds without ***FULL REVIEW***

Committee on National Statistics
The National Academies of
SCIENCES · ENGINEERING · MEDICINE

THANK YOU

With grateful acknowledgement to:

Bureau of Labor Statistics; Center on Budget and Policy Priorities; Gordon Fisher (retired ASPE); David Johnson (PSID); Robert Moffitt (JHU); U.S. Census Bureau; U.S. Collaborative of Poverty Centers; Denton Vaughan (retired SSA)

Connie Citro, Senior Scholar, CNSTAT

ccitro@nas.edu

The 1995 poverty report and other NAS reports are available from the National Academies Press: http://www.nap.edu

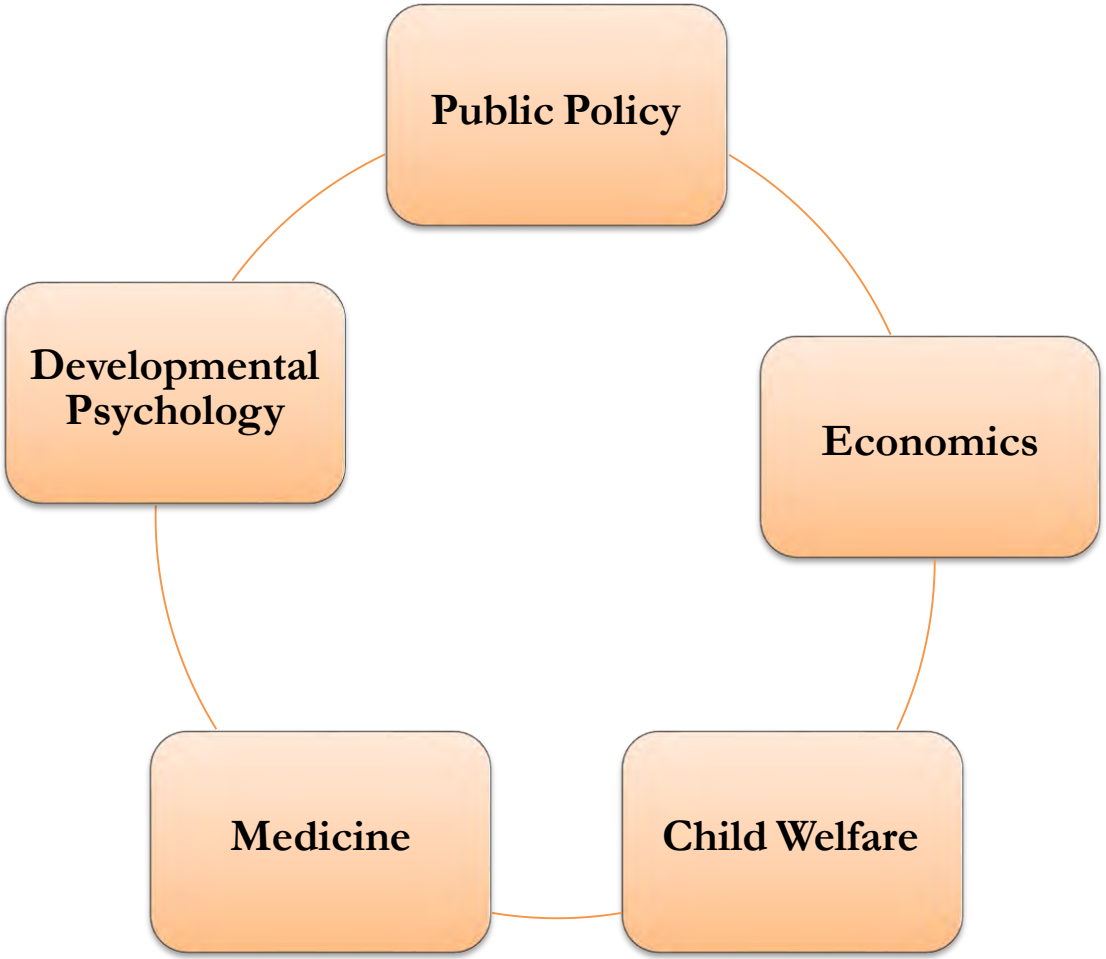
A Roadmap to Reducing Child Poverty

Tim Smeeding
Professor of Public Affairs and Economics
LaFollette School of Public Affairs
University of Wisconsin-Madison
Member of Committee

for the PAA Congressional Briefing
Washington, DC July , 23, 2019

The National Academies of
SCIENCES · ENGINEERING · MEDICINE

Interdisciplinary Committee with Broad Perspectives



Committee

GREG J. DUNCAN(*Chair*)
School of Education
University of California, Irvine

J. LAWRENCE ABER
Steinhardt School of Culture, Education and Human Development
New York University

DOLORES ACEVEDO-GARCIA
The Heller School for Social Policy and Management
Brandeis University

JANET CURRIE
Department of Economics
Princeton University

BENARD P. DREYER
New York University School of Medicine

IRWIN GARFINKEL
School of Social Work
Columbia University

RON HASKINS
Brookings Institution

HILARY HOYNES
Department of Economics and the Goldman School of Public Policy,
University of California, Berkeley

CHRISTINE JAMES-BROWN
Child Welfare League of America

VONNIE C. MCLOYD
Department of Psychology
University of Michigan

ROBERT MOFFITT
Department of Economics
Johns Hopkins University

CYNTHIA OSBORNE
Lyndon B. Johnson School of Public Affairs
University of Texas at Austin

ELDAR SHAFIR
Woodrow Wilson School of Public and International Affairs
Princeton University

TIMOTHY SMEEDING
Robert M. La Follette School of Public Affairs
University of Wisconsin-Madison

DON WINSTEAD JR.
Don Winstead Consulting, LLC

Statement of Task

The U.S. Congress asked the National Academies to provide a non-partisan, evidence-based report that:

- Reviews research on linkages between child poverty and child well-being. And find causal impacts of poverty on child and adult well-being, all else equal
- Provides objective analyses of the poverty-reducing effects of major assistance programs directed at children and families. And find we have made some progress, but not enough
- Provides policy and program recommendations for reducing the number of children living in poverty (and deep poverty) in the U.S. by half within 10 years. The task for today

Statement of Task and Task at Hand

- Committee instructions were to use the superior poverty measure that was earlier discussed, the SPM, and have the Urban Institute simulation conduct the estimates including program options and behavioral responses using a model funded by DHHS (TRIM3)

- Today we concentrate on the third task: recommendations for programs and polices to reduce child poverty

The Committee Developed and Considered

20 individual policy and program options

4 policy and program packages

Criteria for Selecting Programs and Policies

- Strength of the research & evaluation evidence
- Magnitude of the reduction in child poverty
- Poverty reduction within high-risk subgroups
- Cost
- Impacts on work, marriage, opportunity & social inclusion

Summary of Simulated Programs and Policies

Program and policy options tied to work:

- Expand EITC
- Expand child care subsidies
- Raise the federal minimum wage
- Implement a promising training and employment program called WorkAdvance

Modifications to existing provisions relating to immigrants:

- Increasing immigrants' access to safety net programs

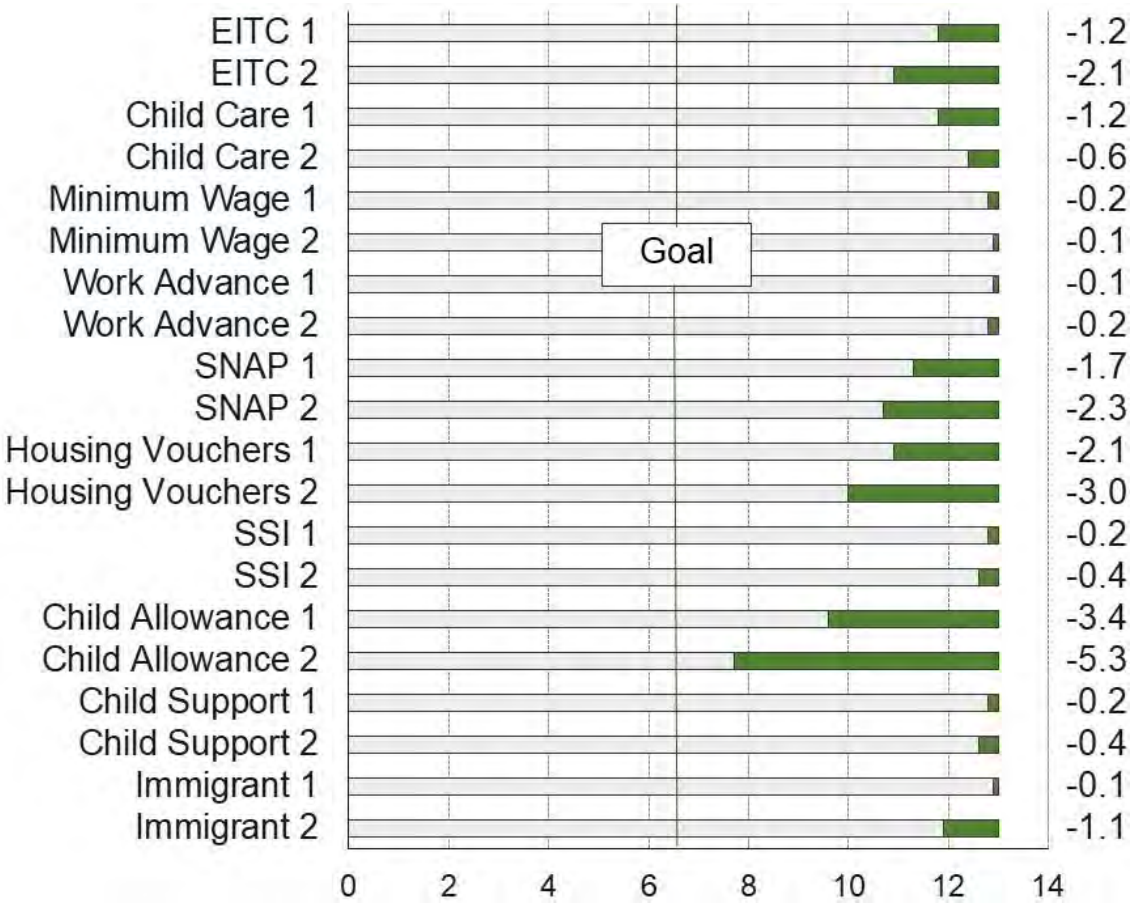
Modifications to existing safety net programs:

- Expand SNAP
- Expand the Housing Choice Voucher Program
- Expand SSI

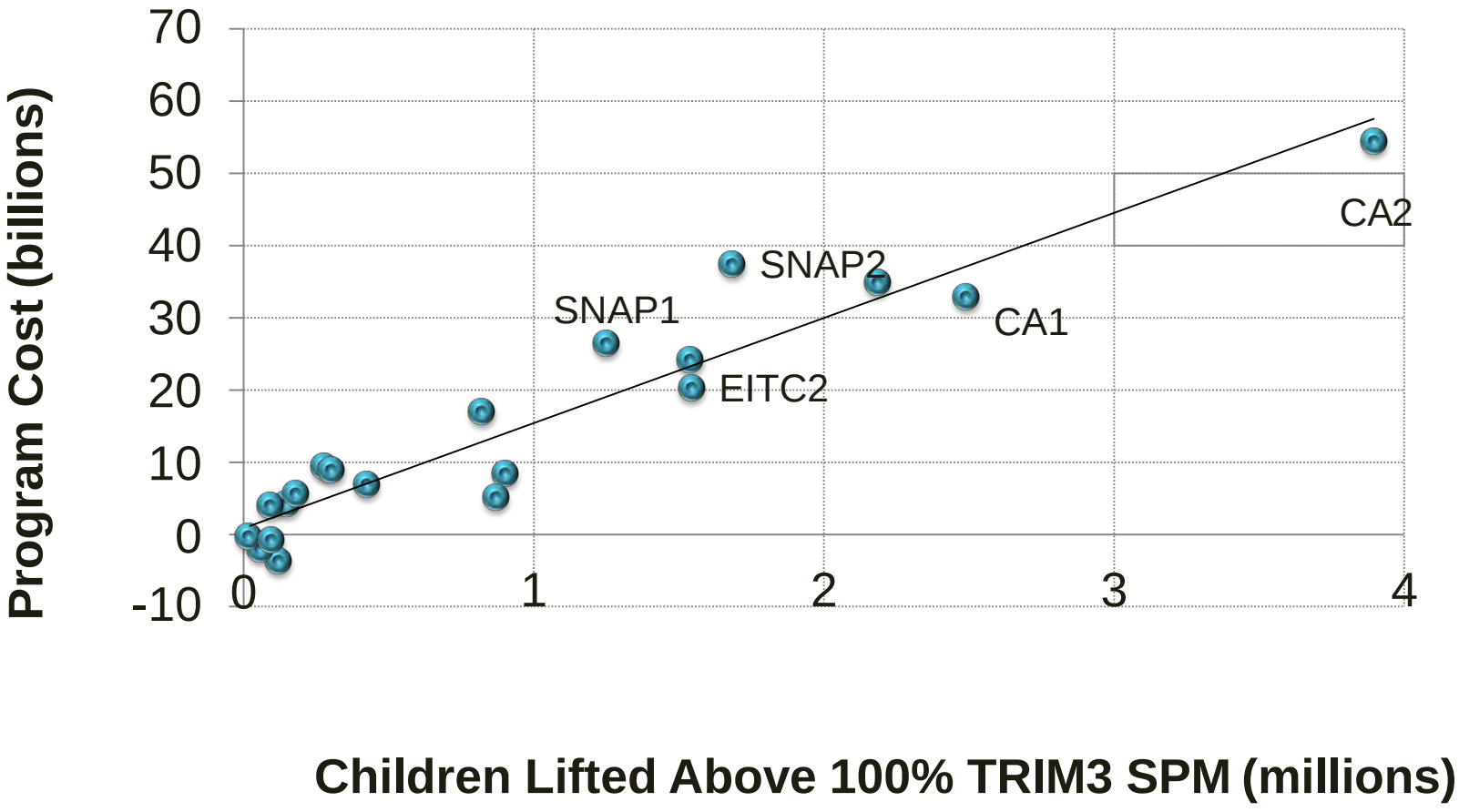
Policies used in other countries:

- Replace Child Tax Credit with a universal child allowance
- Introduce a child support assurance program

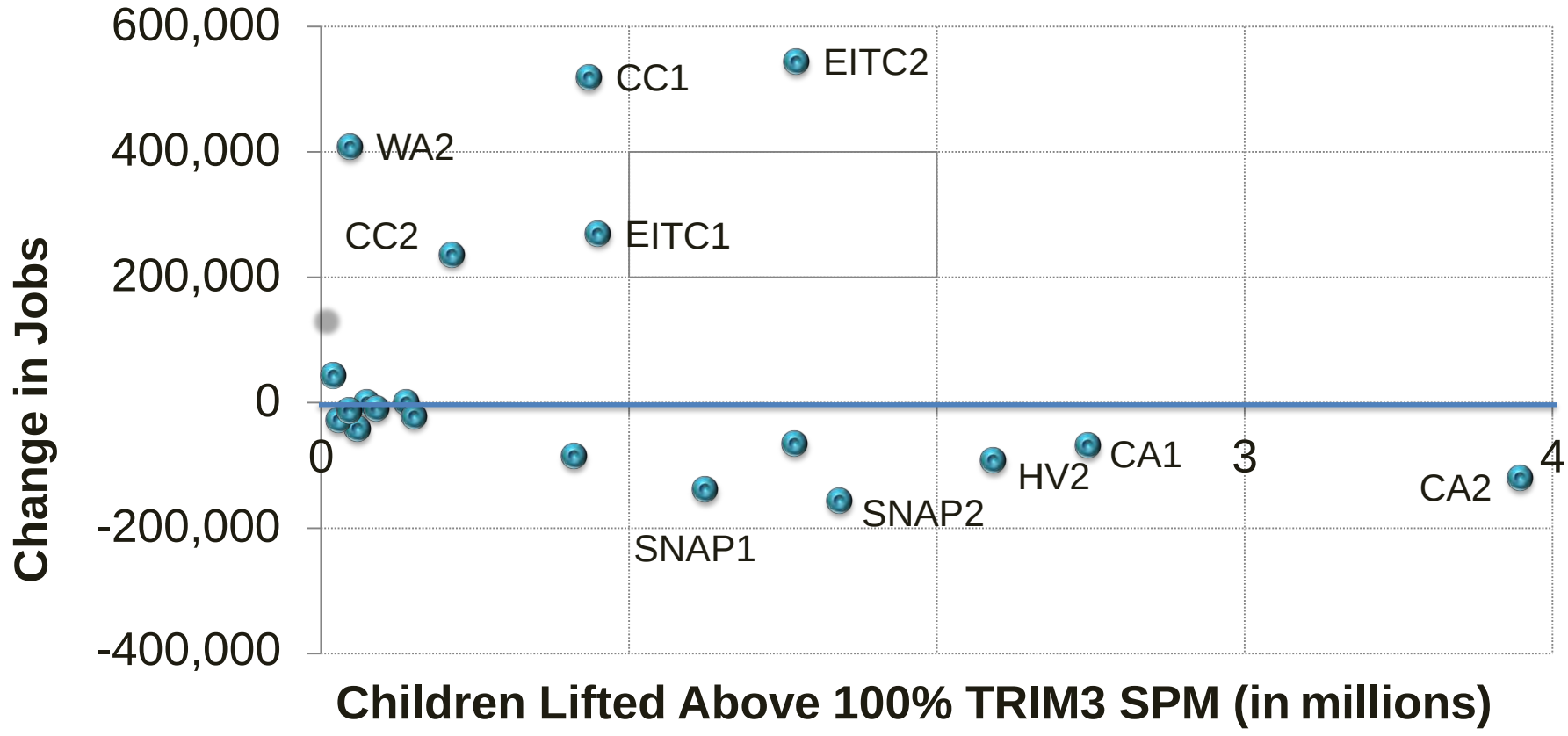
No Single Program or Policy Option Met the Whole 50% Reduction Goal



More Effective Policies Generally Cost More



Some Policies Incentivized Employment , Others Had Very Modest Negative Effects



The Committee developed:

20 individual policy and program options

4 policy and program packages

Why Did We Make "Packages" ?

- Combinations of programs into : "packages" allows us to cover multiple groups (workers and non-workers) with multiple programs, to serve multiple needs (food, housing, cash, child care)
- It also allows us to counter work-dis-incentivizing programs with work-incentivizing policies and programs to reach a net positive work effect

Composition and Impacts of Program and Policy Packages

	Work-oriented package			
Expand EITC	X			
Expand Child Care Tax Credit	X			
Increase the minimum wage	X			
Roll out WorkAdvance	X			
Expand housing voucher program				
Expand SNAP benefits				
Begin a child allowance				
Begin child support assurance				
Eliminate 1996 immigration eligibility restrictions				
Percent Reduction in the number of poor children	-18.8%			
Percent Reduction in the number of children in deep poverty	-19.3%			
Change in number of low-income workers	+1,003,000			
Annual cost, in billions	$8.7			

Composition and Impacts of Program and Policy Packages

	Work-oriented package	Work-Based and Universal Support Package		
Expand EITC	X	X		
Expand Child Care Tax Credit	X	X		
Increase the minimum wage	X			
Roll out WorkAdvance	X			
Expand housing voucher program				
Expand SNAP benefits				
Begin a child allowance		X		
Begin child support assurance				
Eliminate 1996 immigration eligibility restrictions				
Percent Reduction in the number of poor children	-18.8%	-35.6%		
Percent Reduction in the number of children in deep poverty	-19.3%	-41.3%		
Change in number of low-income workers	+1,003,000	+568,000		
Annual cost, in billions	$8.7	$44.5		

Two Program and Policy Packages DID Meet the Goal

	Work-oriented package	Work-Based and Universal Support Package	Means-tested supports and work package	Universal supports and work package
Expand EITC	X	X	X	X
Expand Child Care Tax Credit	X	X	X	X
Increase the minimum wage	X			X
Roll out WorkAdvance	X			
Expand housing voucher program			X	
Expand SNAP benefits			X	
Begin a child allowance		X		X
Begin child support assurance				X
Eliminate 1996 immigration eligibility restrictions				X
Percent Reduction in the number of poor children	-18.8%	-35.6%	-50.7%	-52.3%
Percent Reduction in the number of children in deep poverty	-19.3%	-41.3%	-51.7%	-55.1%
Change in number of low-income workers	+1,003,000	+568,000	+404,000	+611,000
Annual cost, in billions	$8.7	$44.5	$90.7	$108.8

Lessons From the Packages

Individual policy and program changes are insufficient; different poor families need different solutions

Bundling work-oriented *and* income support programs can reduce poverty *and* increase employment

Summary

Substantial reductions in U.S. child poverty are an attainable goal and we have a good set of options to do so.

The cost of reaching the goal of halving child poverty are high– but the cost of not achieving them are 8-10 times higher

Some packages and programs that cost less have significant impacts on poverty even if they don't reach the full goal

Thank you!

For more on the NAS study, see the full report page :

https://sites.nationalacademies.org/DBASSE/BCYF/Reducing_Child_Poverty/index.htm

Staff Contacts:

- **Suzanne Le Menestrel, Study Director**

Phone: 202-334-3993 Email: slemenestrel@nas.edu

- **Dara Shefska , Associate Program Officer**

Phone: 202-334-1527 Email: DShefska@nas.edu

The Report—User Friendly Page

www.nap.edu/child-poverty

Additional slides :

1. Other program ideas considered

2. Contextual factors to be reckoned with

1. Other Programs Considered

Long-acting Reversible Contraception (LARC)

LARC devices reduce the incidence of unplanned births, which could in turn reduce child poverty.

Mandatory Work Policies

Evidence is insufficient to identify policies that would reliably reduce child poverty.

Marriage Promotion

Likely to reduce child poverty, but no successful models of marriage promotion

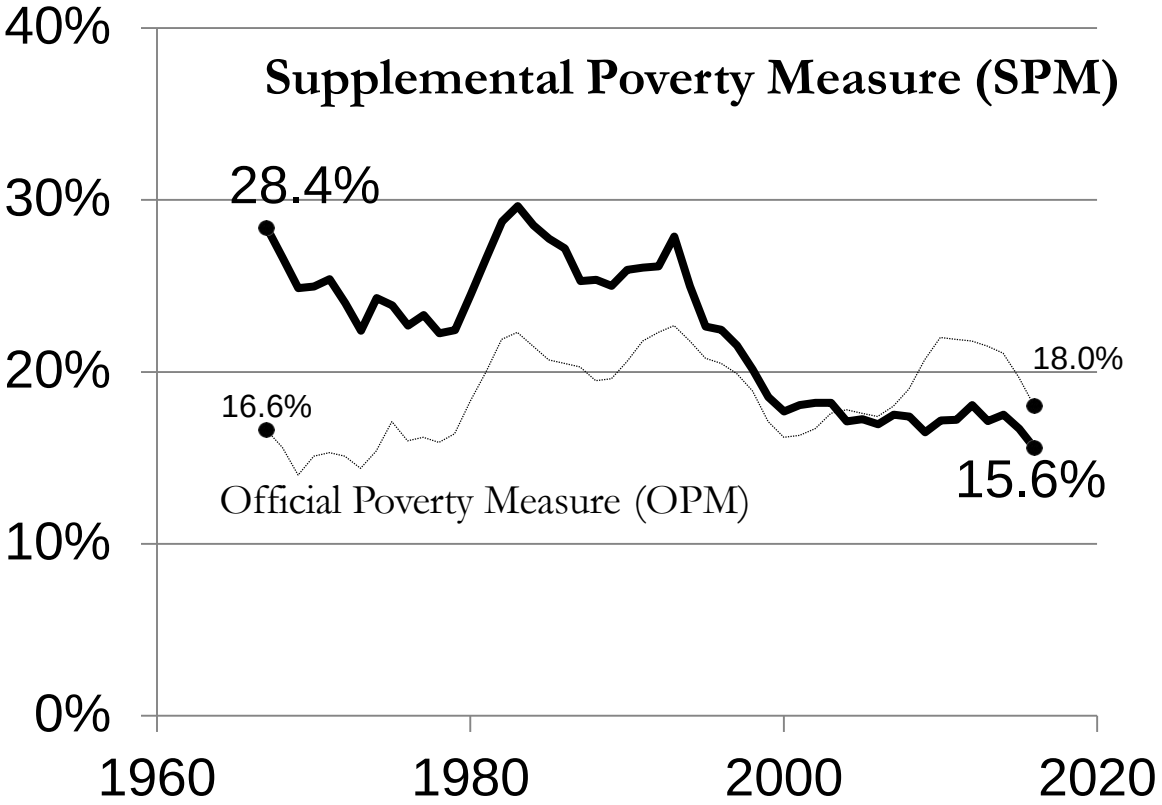
2. Important Contextual Factors

Context can greatly influence the impact and success of anti-poverty programs and policies.

- Stability & predictability of income
- Equitable & ready access to programs
- Equitable treatment across racial & ethnic groups
- Equitable treatment by the criminal justice system
- Positive neighborhood conditions
- Health & well-being

A 50% Reduction in Child Poverty is Achievable

- The U.K. cut its child poverty rate in half from 2001-2008
- Canada's Child Benefit program is on course to cut child poverty in half
- The US nearly cut its child poverty rate in half between 1967 and 2016



Anchored U.S. SPM child poverty rate. SOURCE: Original analyses commissioned by the committee from Christopher Wimer (2017, October).