

Consumption as a Measure to Assess Poverty

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Association for Public Policy and Analysis (APPAM) Conference
Super Session - Live Stream - A Discussion of the Interagency Technical Working Group on Evaluating
Alternative Measures of Poverty
(Poverty and Income Policy)

Tuesday, March 29, 2022; 10:15 AM - 11:45 PM; 3rd Floor – Room Lone Star D



My Remarks Today Motivated by...

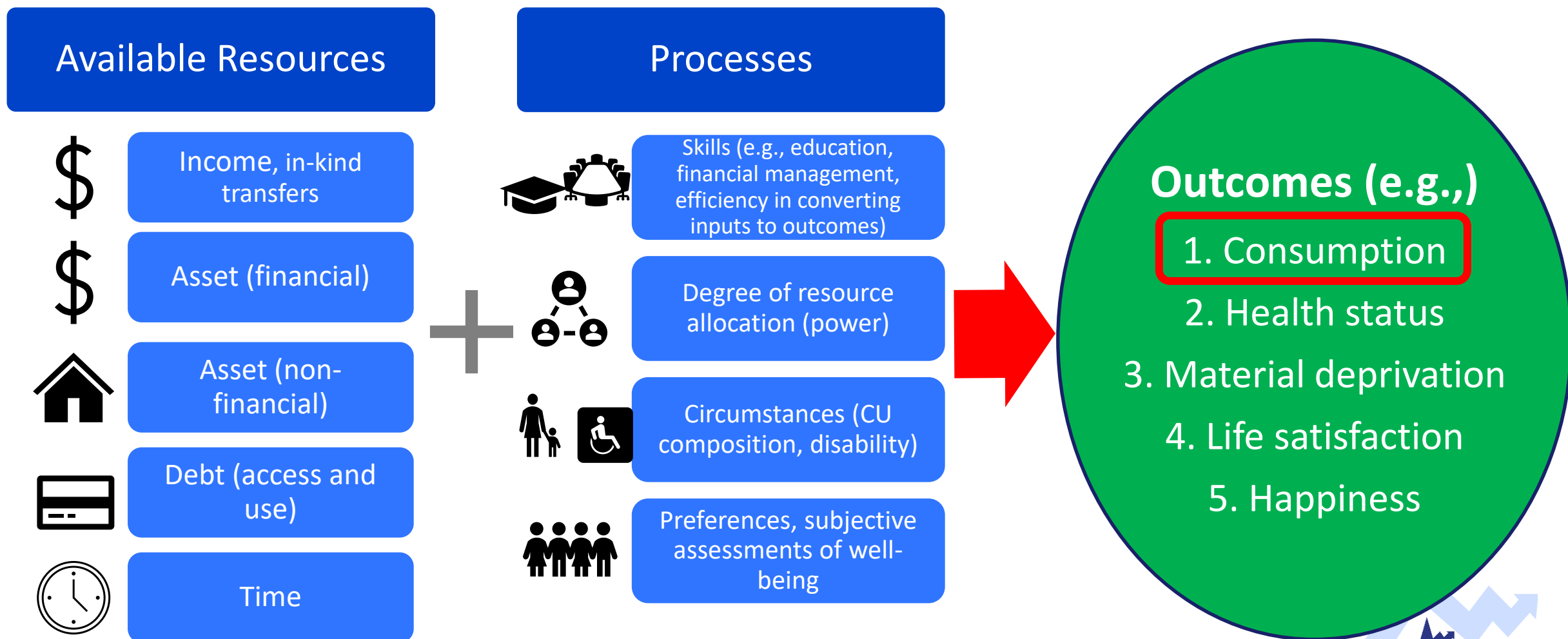
- ITWGW on Evaluating Alternative Measures of Poverty recommendations: report and discussions
- Our work at BLS to develop a consumption measure



Outline

- Consumption as a well-being measure
- Consumption as a measure for poverty assessment
- Defining consumption
- ITWG recommendations and discussions
 - ▶ Stakeholders
 - ▶ Challenging components (i.e., education, health, non-financial assets)
 - ▶ Other
 - ▶ Topics discussed but no recommendations
- Implementation issues and ongoing research
- Initial results

Consumption as a Well-being Outcome: A Function of Resources and Processes



Consumption as a Measure for Poverty

- Focus on not how we could live, *but how we do live...*
- Consumption reflects what *is achieved, not what could be achieved*
- Conceptually, such a measure reflects access to resources and one's ability to achieve a certain level of consumption (e.g., defined as a some line that may or may not represent minimum needs – this is a threshold issue)
- I, personally, do not consider consumption as a better measure than income or wealth to ascertain “poverty” status; instead I consider consumption a complementary measure
- Examples of pros and cons
 - ▶ Pro: good measure to identify who is “poor” or less well-off based on material deprivation
 - ▶ Con: *may not be* a good measure if concerned with indebtedness as a resource to support consumption

ITWG: Include in Consumption

■ Expenditures for own consumption



■ In-kind benefits public and private



■ Flow of services



■ Health insurance

- ▶ Measure with
- ▶ Measure without



ITWG Recommendations



Recommendation Regarding Stakeholder Engagement

- Recommendation 1. *The Working Group recommends that the Census Bureau and the **Bureau of Labor Statistics** engage with stakeholders and other experts throughout the development of the recommended measures...*

Current status

- In response to ITWG Report
 - Federal Committee on Statistical Methodology (FCSM) Research and Policy Conference November 2021
 - Southern Economics Association Annual Meeting (SEA) November 2021
 - American Economics Association (AEA) Annual Meeting January 2022
 - Society of Government Economists (SGE) April 2022
 - Joint Statistical Meetings (JSM) August 2022
 - International Association for Research on Income and Wealth (IARIW) August 2022
- Related BLS research initiative to develop a consumption measure of economic well-being
 - Consumption Symposium, virtual in September 2021 (see https://stats.bls.gov/cex/consump_symposium.htm)
 - Federal Statistics Advisory Committee (FESAC) meeting December 2021



Recommendations Regarding Health

- Recommendations regarding the treatment of health are in 5, 13, 14, 15, 16
- Focus on Recommendation 5. *The Working Group recommends that the **Bureau of Labor Statistics develop and publish two new sets of research measures of consumption-based resources***
 1. *Includes a value of health insurance*
 2. *Does not include a value of health insurance*
- Further research needed on how to treat **non-premium medical out-of-pocket expenditures not covered by insurance**, e.g., co-pays, deductibles, prescription drugs, and over the counter items
- Current status
 - Related: BLS research initiative to develop a consumption measure of economic well-being
 - In response to report: initial results presented at ASSA/AEA January 2022



Recommendations Regarding Education

- Recommendation 17. *The Working Group recommends that expenditures on **education be excluded** from the recommended extended income-based and consumption-based resource measures because education is generally considered an investment in human capital.*
 - Recommendation 19. *The Working Group recommends **continued research and additional stakeholder and expert engagement** on whether and how to treat education within resource measures.*
- Current status
- Related: BLS research initiative to develop a consumption measure of economic well-being
 - In response to report: initial results presented at ASSA/AEA January 2022

Recommendation Regarding Service Flows from Non-financial Assets

- *27. The Working Group recommends that the value of service flows from owner-occupied shelter and the value of the service flows from owned vehicles be included in the consumption resource measures.*



➤ Current status

- Related: BLS research to produce flow of services cars and trucks for consumption measure
- In response to report: initial results presented at ASSA/AEA January 2022

Consumption: Options to Impute Service Flows

■ ***Costs of producing (using) the service: ...user cost approach***

- ▶ Attempts to measure the *changes in the cost* to owner of using one's dwelling, vehicle, or durable
- ▶ User costs account for both recurring costs and the opportunity cost of having money tied up in the dwelling, vehicle, or durable rather than being used for some other purpose

■ ***Selling price of the service: ...rental equivalence approach***

- ▶ Attempts to measure the *change in the price* of the housing, vehicle, or durable services consumed by owners
- ▶ Based on estimating the market value of those services

Adapted from ILO 2004, pp. 179-180

Other ITWG Recommendations for Consumption Poverty Measure and BLS

- Data and methods to produce
 - ▶ Consumer Expenditure Survey Interview (#26)
 - ▶ Use administrative data when available to supplement or replace survey data (#6) and advisory structure to support (#23)
 - ▶ Improve quality of estimates through model-based approaches for imputation (#22)
- Additional research: improve data quality and reduce respondent burden (#24)
- Support funding for BLS to produce the measure (#25)
- Produce estimates at state level using CE data (#28)
- As interim, produce at Census Division level (#29)



ITWG Discussions Related to Poverty Measurement but No Specific Recommendations

- **Thresholds (the “line”)**
 - ▶ Determine how best to set based on research, and input from stakeholders and experts
 - ▶ May or may not reflect basic needs
- **Price indexes for updating thresholds**
 - ▶ Conduct a study regarding appropriate index
- **Geographic adjustment of thresholds**
 - ▶ Consult experts on whether and, if so, how to implement
- **Equivalence scales**
 - ▶ Conduct a study that will provide a recommendation regarding which are most appropriate
 - ▶ Could differ for a consumption versus income measure



Implementation Issues and Continuing Research

■ Implementation

▶ Consumer Expenditure Survey

- Interview, Diary, both
- Sample size, geography
- No to little data collected on in-kind transfers (public, private)
- Misreporting and under-estimates
- Redesign efforts could complicate production of a consistent measure of consumption over time

▶ Administrative data (e.g., public in-kind benefits)

- Availability, coverage, quality, timeliness
- Permission to use
- Alignment with survey concepts
- Disagreement between administrative and survey sources

▶ Imputation methods

■ Continuing research

▶ Support BLS initiative

▶ Consumption-based poverty measure

Initial Results



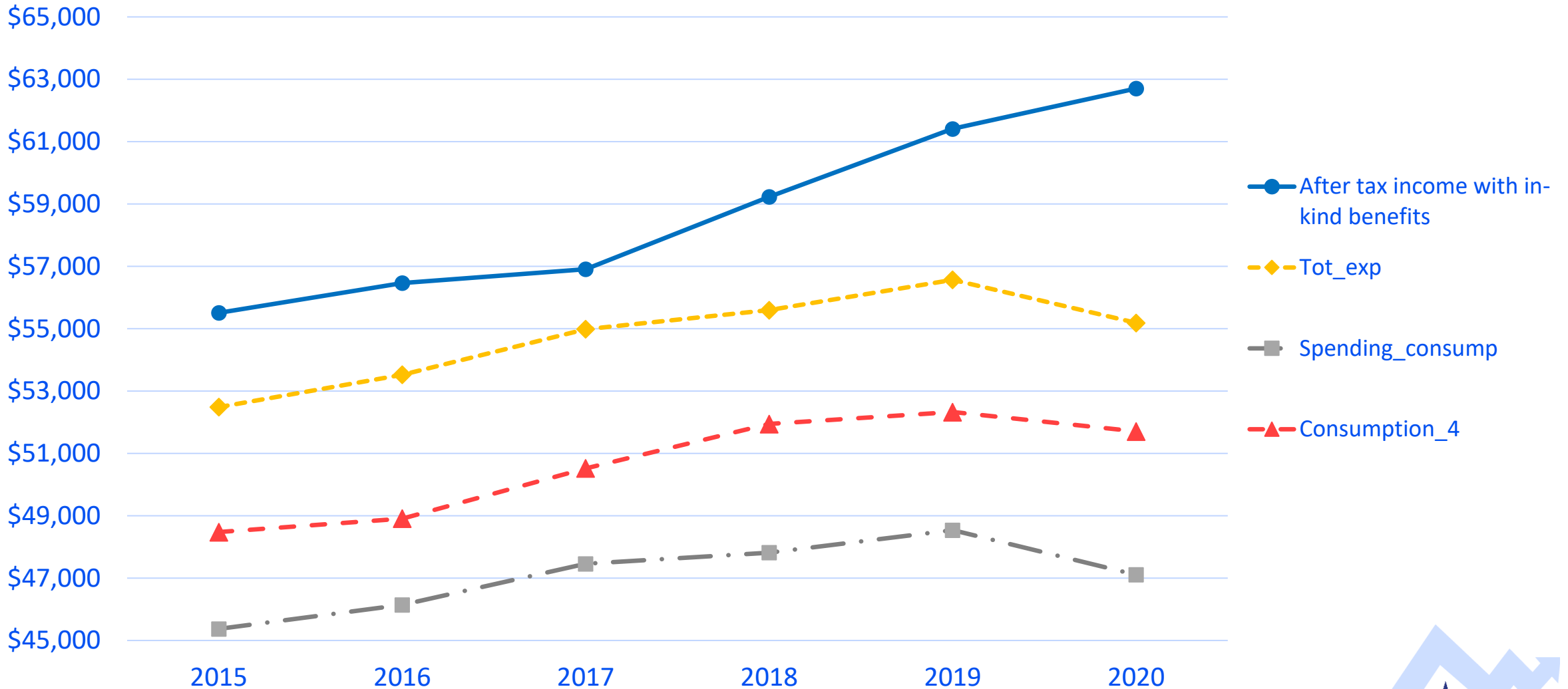
Construction of Consumption Measure

Measure	Base	Not Include	Addition
Consumption (consumption_4)	Total expenditures (tot_exp)	<p>Cash contributions; allocations to and purchases of life insurance, endowments, annuities, and other personal insurance; retirement, pensions, and Social Security</p> <p>Owner expenses for primary residence; purchases of stoves, refrigerator/freezer, dishwasher, clothes washer/dryer AC window units for owners and renters; shelter expenses associated with vacation homes</p> <p>Expenditures for: health; education; housing while away at school; daycare centers, nursery, pre-school</p> <p>Vehicle purchases in transportation, motorized vehicles for entertainment; vehicle finance charges</p>	<p>Rental equivalence of primary residence</p> <p>Rental equivalence of vacation homes (but not time shares)</p> <p>User costs or flow of services from cars and trucks</p> <p>LIHEAP, NSLP, WIC, rental assistance in-kind transfers</p>

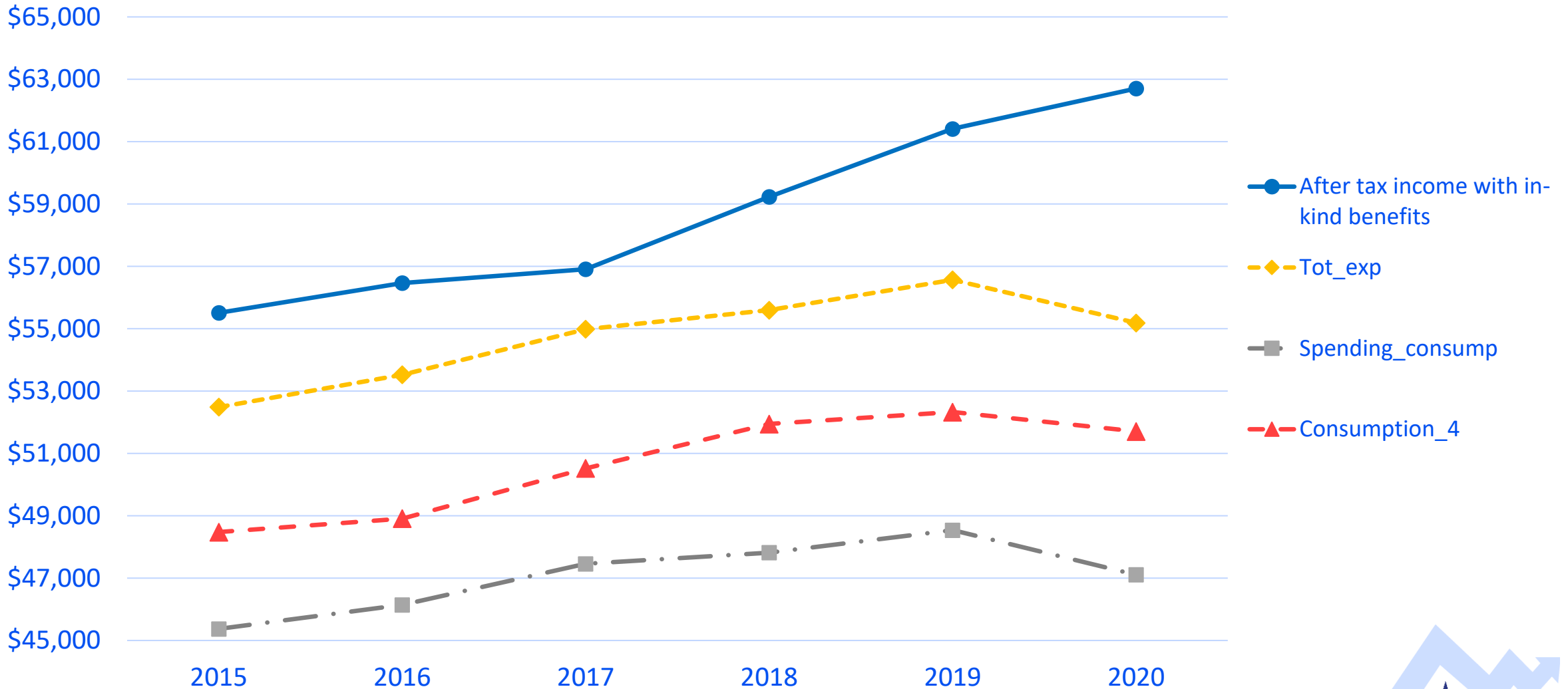
Construction of Comparison Measures

Measure	Variable Name	Base	Not Included	Addition
Total Expenditures	tot_exp	Total Expenditures CE Publication Definition		
Consumption Expenditures	spending_consump	tot_exp	Cash contributions; allocations to and purchases of life insurance, endowments, annuities, and other personal insurance; retirement, pensions, and Social Security	
Income	CE defined after tax income with in-kind benefits	CE defined after tax income		LIHEAP, NSLP, WIC, rental assistance in-kind transfers

Annualized Medians in Real 2015 Dollars for All Consumers Units Equivalized to CUs with 2 Adults+2 Children (2A+2C)



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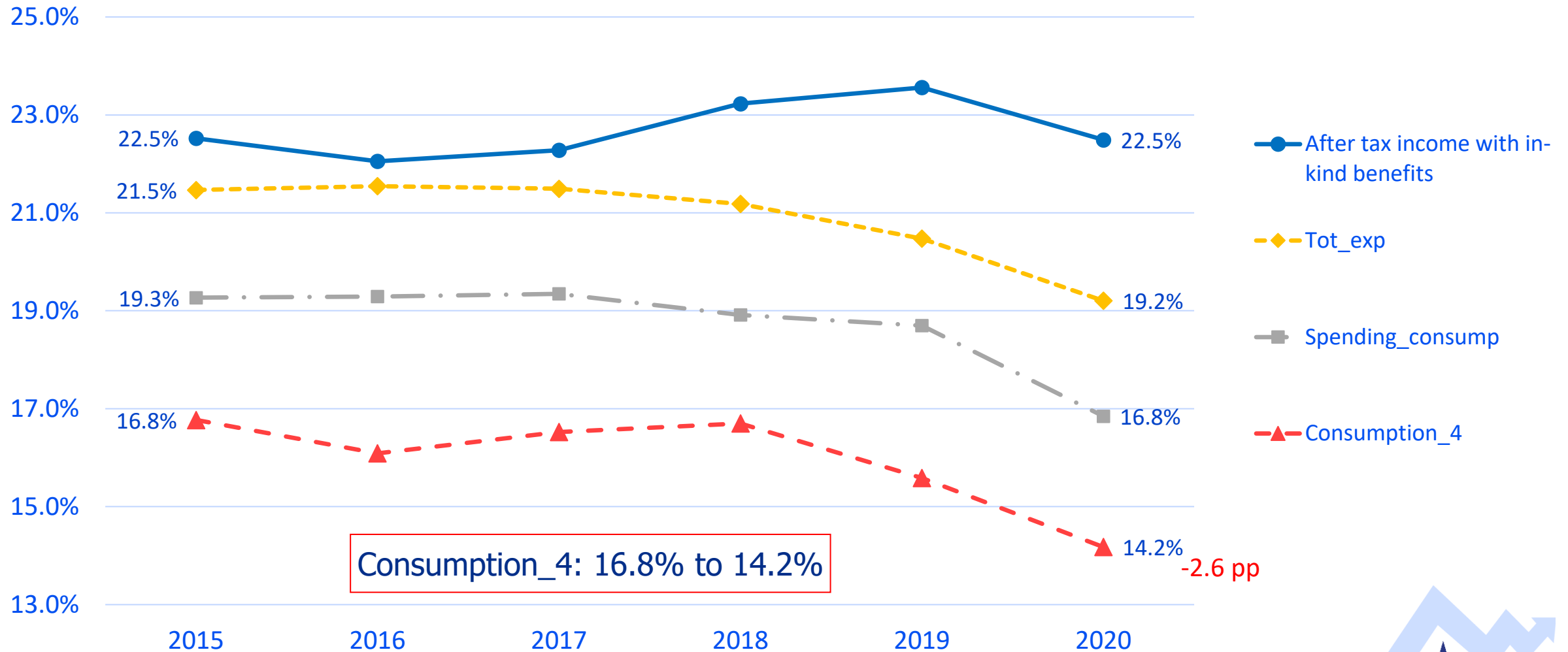
Thresholds and Population Estimates

- Thresholds defined in 2 different ways
 1. Purely relative as 60% of median (i.e., threshold is a function of the same “resource”)
 2. Absolute thresholds for all measures set at values such that poverty rates for all measures anchored to be the same in 2015 as rate for consumption_4 poor (i.e., 16.8% in 2015) with 2015 thresholds adjusted by Chained Consumer Price Index for All Urban Consumers (CPI-U) to derive thresholds up to 2020
- Thresholds used not designed to represent “minimum” or “basic needs”
- Thresholds are not geographically adjusted
- To produce thresholds and poverty estimates use a 3-parameter equivalence scale (accounting for differences in needs for adults, children, single parents, economies of scale)
- All poverty rates are for populations (CU weight*CU size)
- Consumption based on CE quarterly data; annual income/4

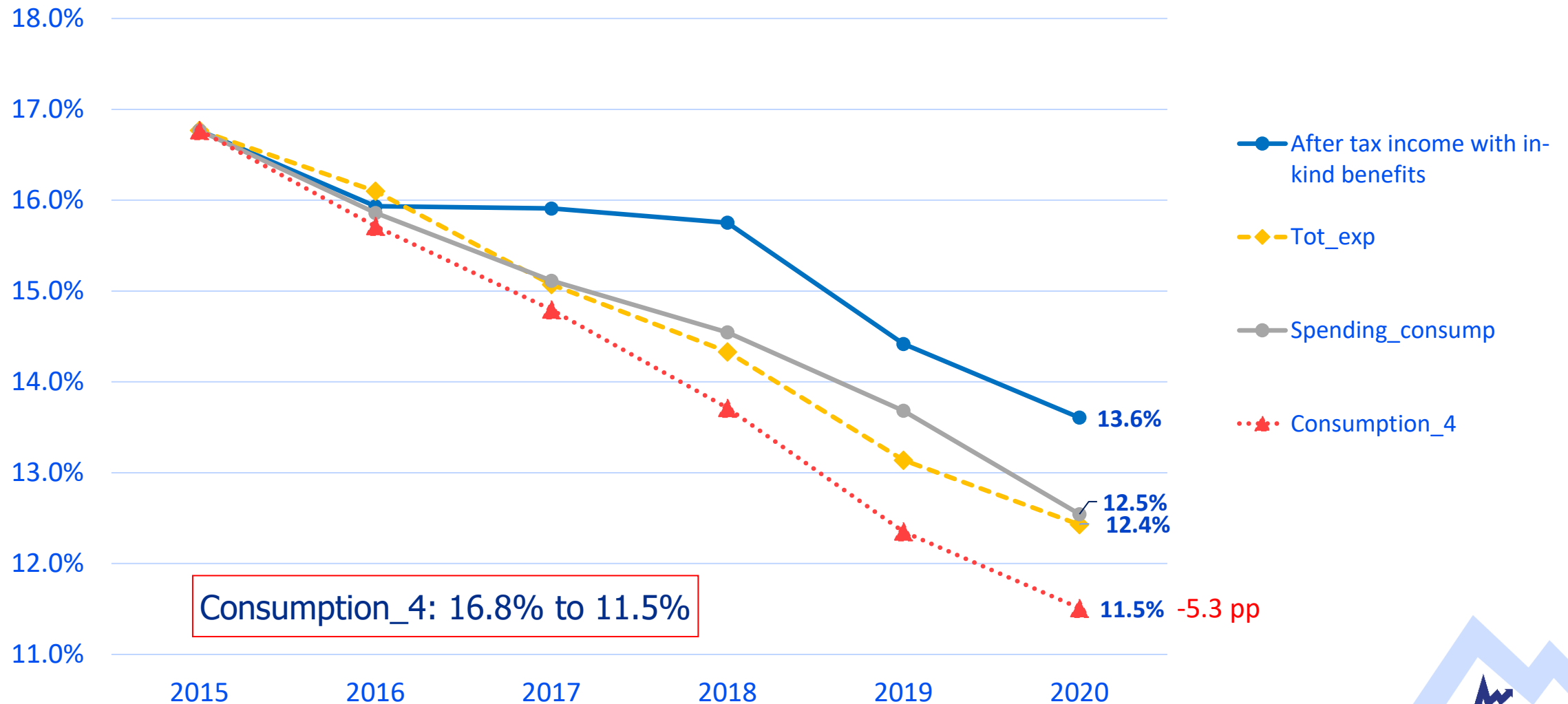


Poverty Rates

Based on Purely Relative Thresholds: 2015-2020



Poverty Rates Based on Absolute Thresholds for 2015 Set to Values that Result in Poverty Rates of 16.8% in 2015: 2015-2020



Income Poor, Consumption Poor, or Both?

Rates Based on Thresholds Set to Levels that Result in Same Rates as 2015 Consumption_4 Rate (16.8%)

2015		After Tax Income Poor	
		Yes	No
Consumption_4 Poor	Yes	7.9%	8.9%
	No	8.9%	74.3%

Income Poverty Rate 16.7%

Consumption Poverty Rate
16.8%

2020		After Tax Income Poor	
		Yes	No
Consumption_4 Poor	Yes	4.7%	6.8%
	No	8.9%	79.6%

Income Poverty Rate 13.6%

Consumption Poverty Rate
11.5%



Summary

- Using ITWG recommendations in combination with BLS work to build a consumption measure of economic well-being: research only
 - ▶ CE Interview
 - ▶ Imputed rents for less than market rents
 - ▶ Imputed user costs or flow of services from cars and trucks
- Challenges for research
 - ▶ Treatment of health insurance (private, employer provided, Medicaid, Medicare)
 - ▶ Valuing additional private in-kind transfers
 - ▶ Thresholds
 - ▶ Equivalence scales
 - ▶ Geographic adjustment
 - ▶ Treatment of education
 - ▶ Role of assets and liabilities
- Challenge for production: resources/funding



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