

# Improving the Accuracy of Poverty Measurement: Summary of the Work of the Conference of European Statisticians Task Force on Disaggregated Poverty Measures

IARIW-World Bank Conference: New Approaches to Defining and Measuring Poverty in a Growing World

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This presentation meets all of the U.S. Census Bureau's Disclosure Review Board (DRB) standards and has been assigned DRB approval number CBDRB-FY-20-POP001-0021

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# UNECE Task Force on Disaggregated Poverty Measures

- Goal: to consolidate current and emerging good practices in disaggregating poverty indicators and assessing their robustness
- Recommendations on the production, analysis and dissemination of disaggregated indicators
- Report to be published early next year - four chapters:
  - Standard core variables for disaggregation
    - Policy relevant target groups for poverty disaggregation
    - Defining target groups and analytic/geographic location variables
    - Examples of applications of poverty disaggregation
  - Addressing coverage problems in poverty measurement
    - Innovative survey programs to address hard-to-reach populations
    - Adjusting survey methodology for hard-to-reach populations
    - Specific sampling strategies to reach the poor
  - Improving response rates and sampling precision for target groups
  - Supplementary poverty measures

# Supplemental poverty measures

Chapter will discuss a number of issues in poverty measurement and how supplemental poverty measures can inform our understanding of the impact of technical measurement decisions/the robustness of our methods:

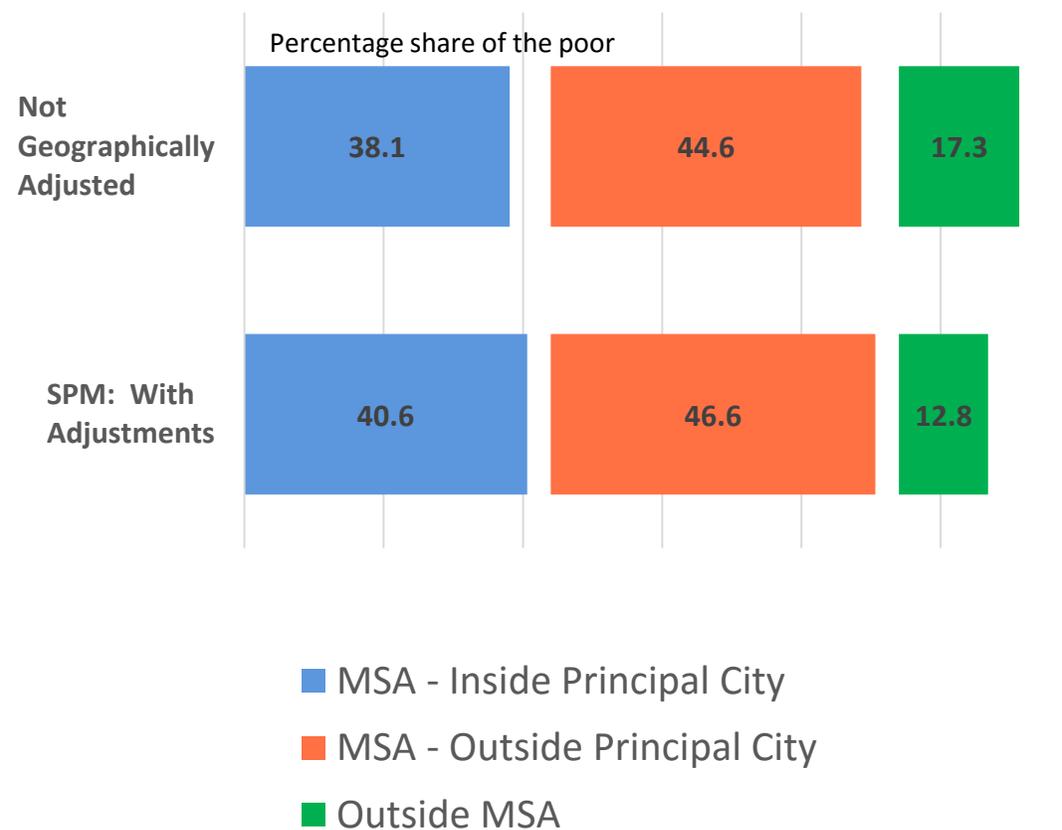
- the role of differences in the cost of living
- the treatment of social transfers in kind
- equivalence scales and assumptions about resource sharing within the household
- role that assets play in determining well-being
- multi-dimensional poverty measures.

# Supplemental Poverty Measure (SPM) for the U.S.

- Official measure developed more than 50 years ago – widely criticized but still used to distribute federal anti-poverty funds, thresholds are often tied to eligibility criteria for federal programs.
- SPM provides an alternative indicator of economic well-being
  - Thresholds based on consumer spending on food, clothing, shelter and utilities (FCSU)
    - Updated with changes in spending on FCSU at the 33<sup>rd</sup> percentile
    - Different thresholds for renters, owners with a mortgage and owners without a mortgage
    - Adjusted for differences in rental housing costs across geographies
  - Resource sharing unit includes co-habiting couples and their relatives
  - Equivalence scales use a 3-parameter scale
  - Resources
    - After tax and tax credits
    - Include social transfers in kind if, and only if, they support spending on FCSU
    - Subtract out work-related expenses and medical spending
- New inter-agency working group looking at other alternative measures, including consumption-based and full-income. Federal register notice due before the end of the year.

# Impact of Geographic Adjustments on Poverty Rates: SPM

- 349 adjustment factors – 260 largest metropolitan statistical areas (MSAs), bundle smaller MSAs by state, non-MSA for each state
- Gross rents for 2 bedroom units from five years of data from the American Community Survey (ACS)
- Only the housing portion of the threshold is adjusted (about 50% for renters and owners with a mortgage, 40% for owners w/out mortgage)
- Increase poverty within MSAs, decrease poverty outside MSAs



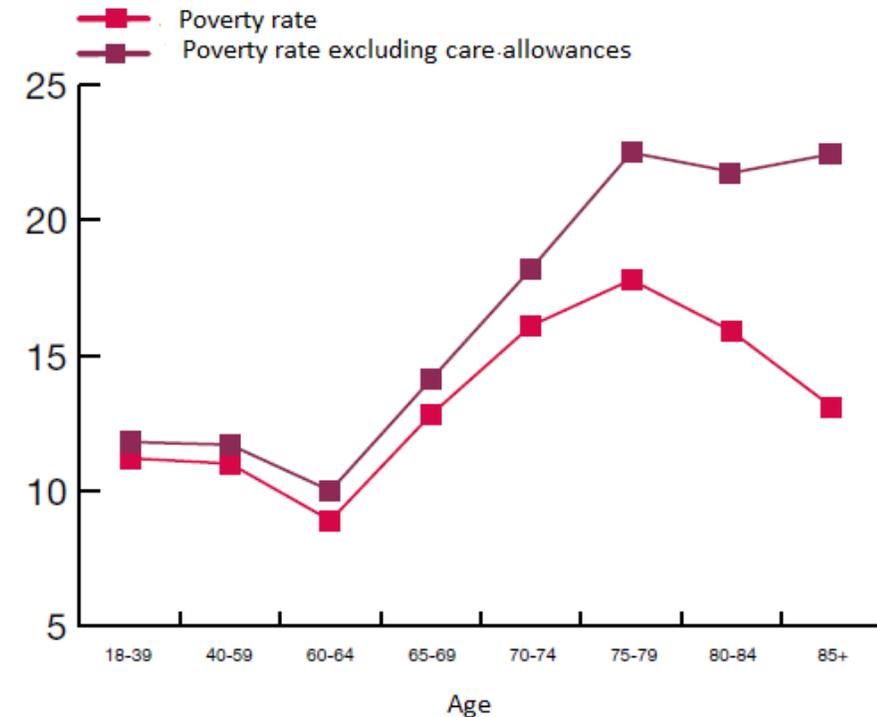
# Other examples of geographic adjustment

- Canada's market basket measure of low-income based on the price of a basket of goods and services lower-income persons would consume.
- Russian Federation – adjusts both the contents of the market basket and the prices regionally.
- European Union thresholds based on 60 percent of median income but incomes vary more than prices across the EU.
  - Using purchasing power parities to adjust the thresholds, the threshold in Luxemburg is more than 5 times the value in Romania.

# Adjusting for disability status/high medical expenditures

- Austria: sensitivity analysis of the impact of excluding care allowances from income
  - With allowances, poverty for those 75+ is 30 percent higher than working age adults; excluding allowance poverty rates twice as high
- US – SPM: subtracts medical out-of-pocket expenditures from resources
  - For individuals 65+, this increases their SPM rate by 4.0 percentage points (from 9.6 to 13.6 percent)

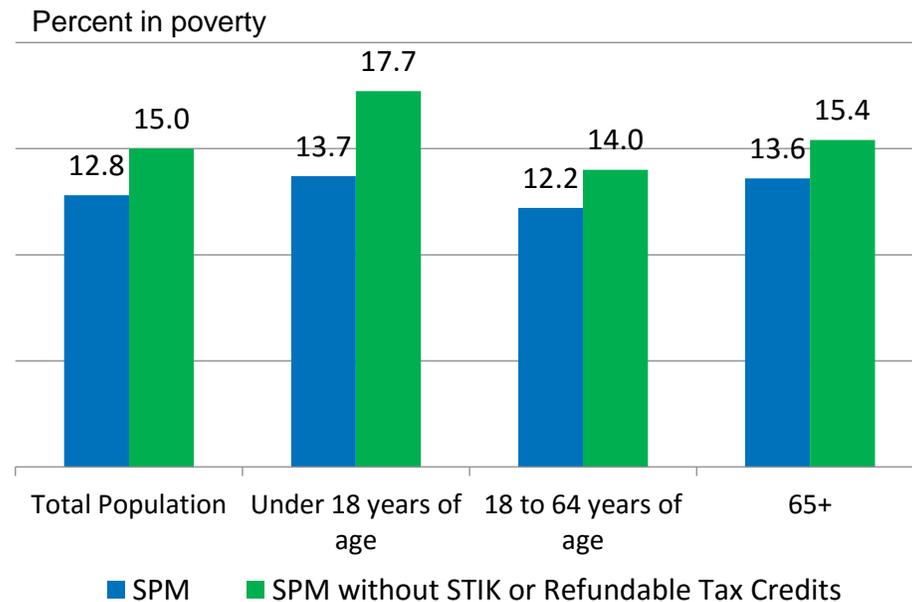
Poverty Rates with and without Care Allowances



Q: STATISTIK AUSTRIA, EU-SILC 2008

# Social Transfers In Kind (STIK)

Cumulative Impact of STIK and Refundable Tax Credits on Supplemental Poverty Measure Rates: 2018



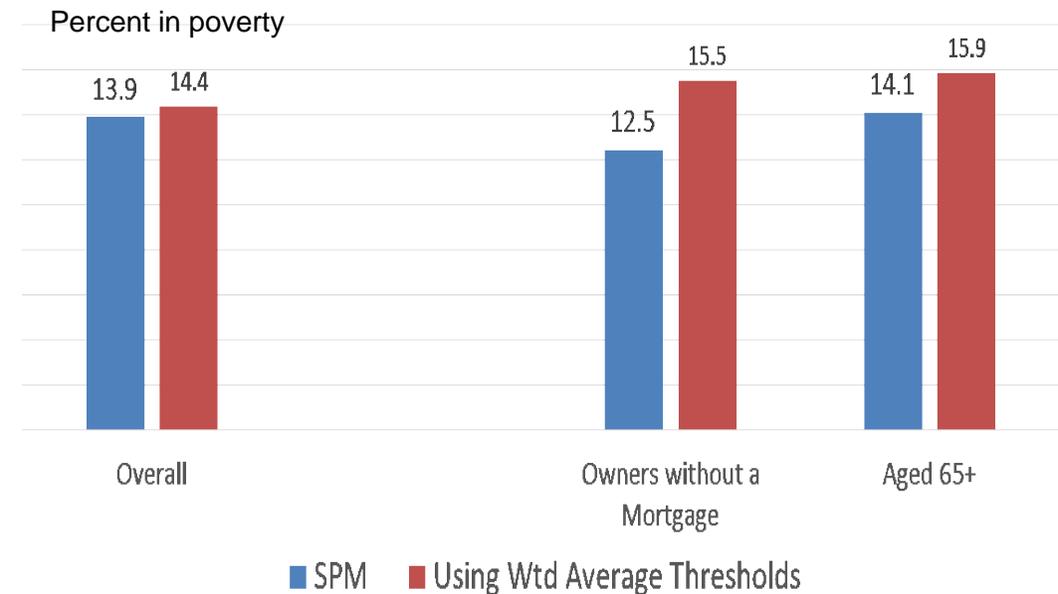
Source: US Census Bureau, Current Population Survey, 2019 Annual Social and Economic Supplement.

- SPM narrowly defines benefits to those included in the thresholds – food, clothing, shelter and utilities
- United Kingdom – “Effects of Taxes and Benefits on Household Income” looks at income distribution after STIK but NOT poverty.
  - Education services
  - Health services
  - Travel subsidies
- Mexico looks at both governmental and employer transfers/payments in kind as well as self-consumption from small businesses.
- Need to look at changes to equivalence scales if STIK broadly defined is incorporated into poverty measurement

# Accounting for Housing Wealth

- US SPM uses thresholds that vary by tenure status: renters, owners with a mortgage, owners without a mortgage
- Great Britain publishes poverty rates before and after housing costs

## SPM Uses Three Thresholds: Renters, Owners with a Mortgage and Owners without a Mortgage

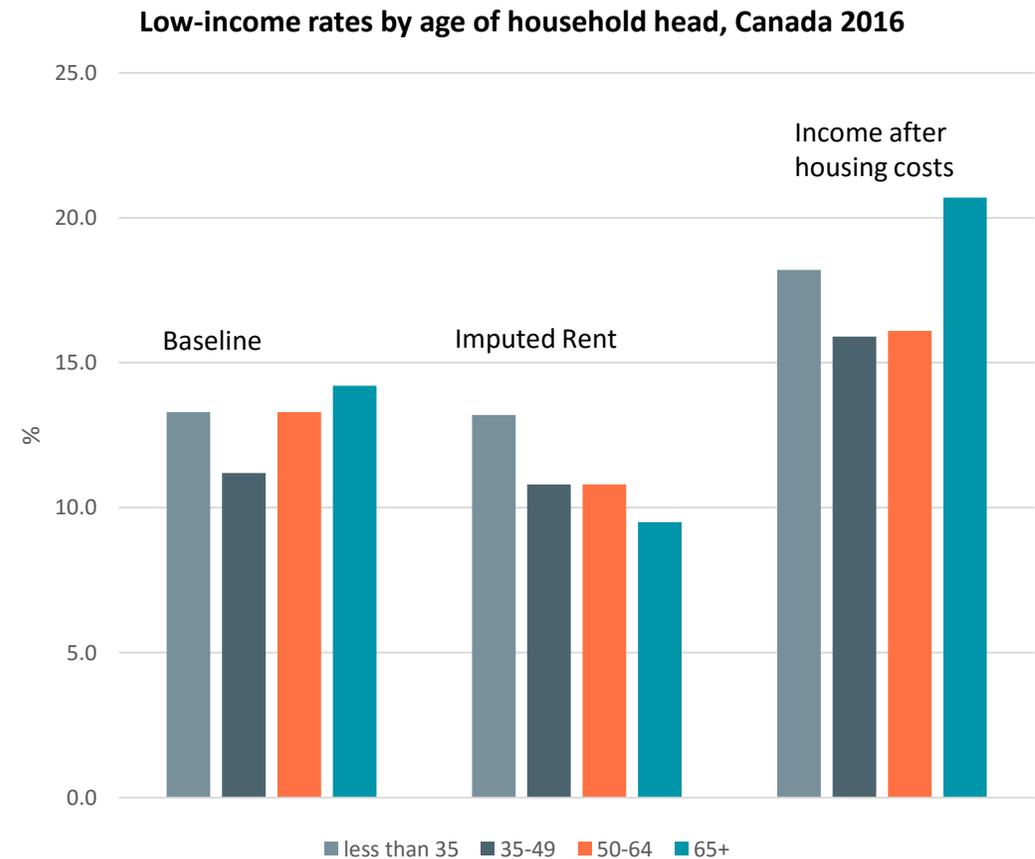


Source: U.S. Census Bureau, Current Population Survey, 2018 Annual Social and Economic Supplement.

# Accounting for Housing Wealth cont.

Canada looks at three approaches: rental equivalence, user costs and subtracting housing costs from income.

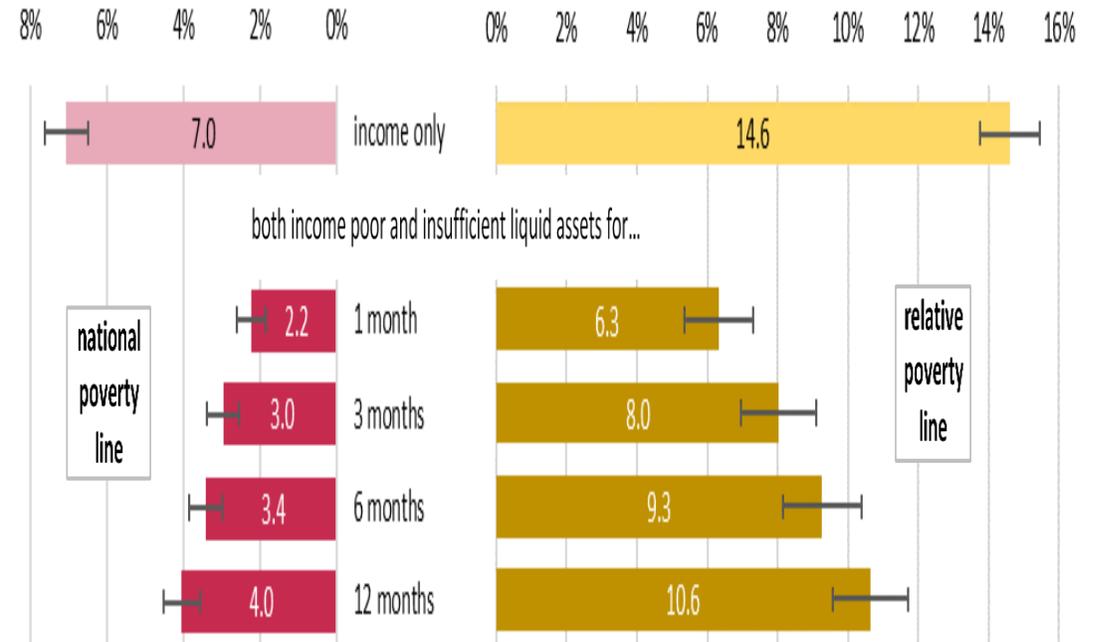
- This figure compares low-income rates by age using
  - no adjustment
  - imputed rent
  - income after housing costs.



Source: Calculations using the Canadian Income Survey, 2016

# Asset Poverty

- Two approaches
  - Unidimensional approach: annuitization of assets
  - Two-dimensional: income poverty and asset poverty
- Switzerland has operationalized the two-dimensional approach



Notes: Only liquid assets such as deposits, bonds, shares, mutual funds etc. are taken into account. The national poverty line consists of a fixed amount for living expenses, individual housing costs and CHF 100 per month and per person aged 16 or over. The relative poverty line is calculated as 60% of median equivalised income including imputed rent.

Source: FSO – CH-SILC 2015 (provisional data on wealth, version 07.06.2018)

# Unequal sharing of resources

At-risk-of-poverty by sex: Austria

	At-risk-of-poverty %		Ratio
	Men	Women	
Standard approach	8.0	8.0	1.0
Personal equivalised income approach (Ponthieux)	9.2	17.2	1.9
Individual personal income approach and alternative threshold for couples with personal income >0 (Heuberger and Knittler)	1.9	23.2	12.2

Source: Statistics Austria, EU-SILC 2010.  
Couple households in the dataset of the EU-SILC module 2010.

Using EU-SILC 2010 module on intra-household sharing of resources that asks, “what proportion of your personal income do you keep separate from the common household budget?” researchers have calculated individual poverty rates that show women with a higher “at-risk-of-poverty” rate than men. Magnitude of the difference depends on assumptions made about resource pooling, etc.

# Final Report on Disaggregation of Poverty Measures

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- Improving response rates and sampling precision for target groups
- Supplementary poverty measurement
- Recommendations on the production, analysis and dissemination of disaggregated indicators

# Thank you

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