

An Analysis of Poverty Through a Consumption Lens: Research from the U.S. Bureau of Labor Statistics

Jake Schild

Co-authored with Thesia Garner and Brett Matsumoto

2023 APPAM Fall Research Conference

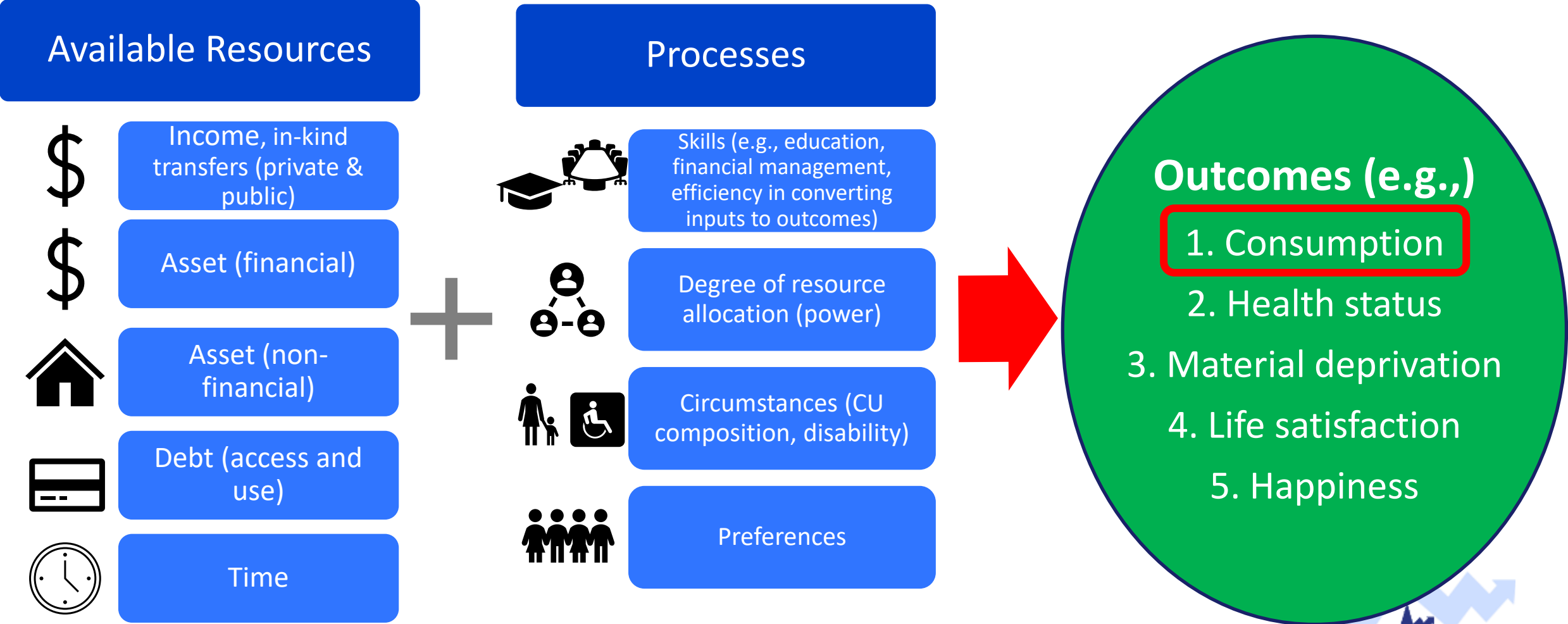
November 11, 2023

The Measurement of Poverty: New Results 10:15 – 11:45 a.m.

CORRECTIONS MADE ON NOV 17, 2023



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



Why Produce Consumption Measures?

■ Alternative measure of well-being based on outcomes

▶ Supports work and recommendations

- CNSTAT Panel An Integrated System of U.S. Household Income, Wealth, and Consumption Data and Statistics to Inform Policy and Research (present)
- OECD expert groups on distributions of income, consumption, and wealth (micro groups)

▶ Allows us to go beyond expenditures: Period of COVID-19 and consumption of home production

■ Poverty measurement

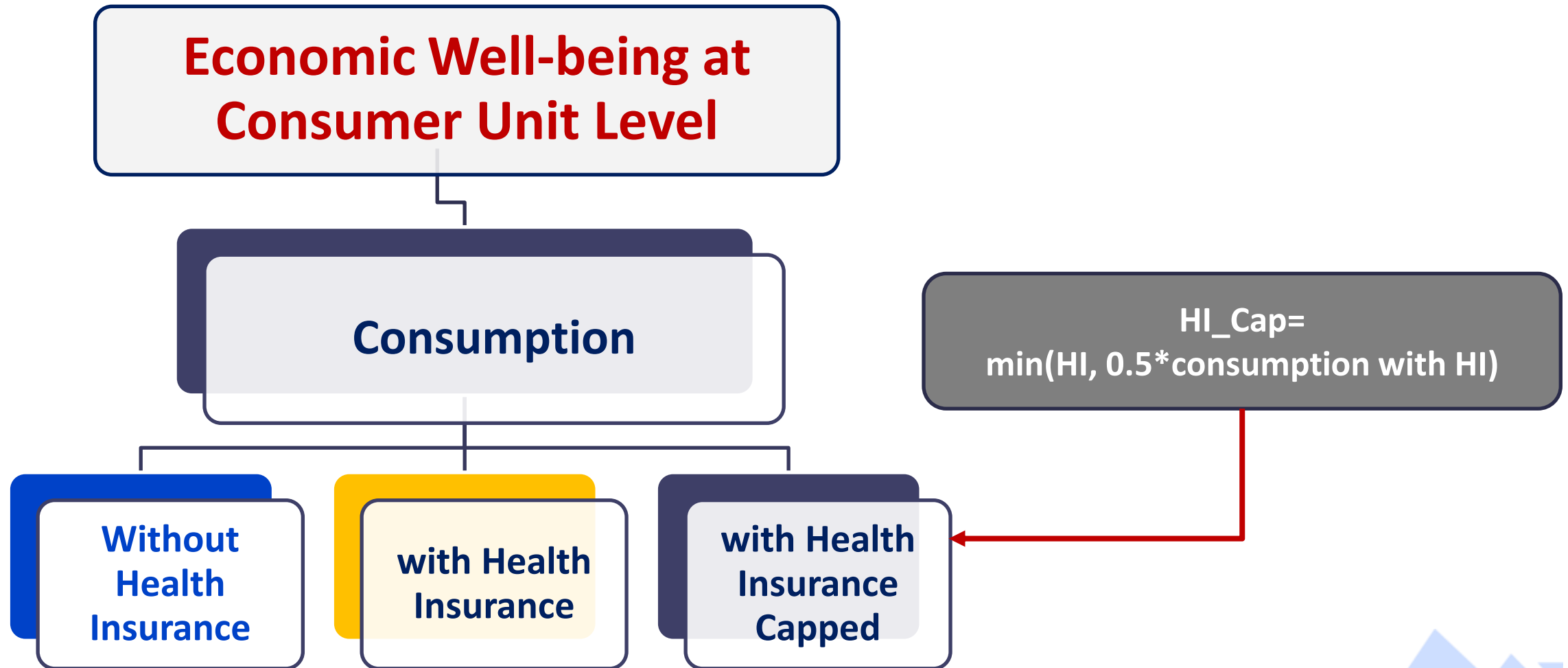
▶ Supports the work of the Interagency Technical Working Group (ITWG) on Evaluating Alternative Measures of Poverty (2020)

▶ Builds on work presented at APPAM 2022

▶ Follows along with the CNSTAT panel (2023) focus on consumption needs for the Principle Poverty Measure

❖ *In addition, have presented earlier work on progressions of our measure and used in inequality and poverty at various venues (e.g., ASSA, SGE, OECD, CNSTAT, FESAC, JSM, SEA). See Monthly Labor Review 2022 for details about comprehensive consumption measure*

Concepts of Consumption for Poverty Analysis



NOTE: None of these measures include "Education"

Data and Methods

■ Data

- ▶ Base is U.S. Consumer Expenditure Survey Interview, 2019 through 2022
- ▶ Assuming independent quarters
- ▶ Supplemented with data from CPS-ASEC, MEPS Insurance Component, CMS National Health Expenditure Database, USDA Administrative Data, National Center for Education Statistics

■ Methods

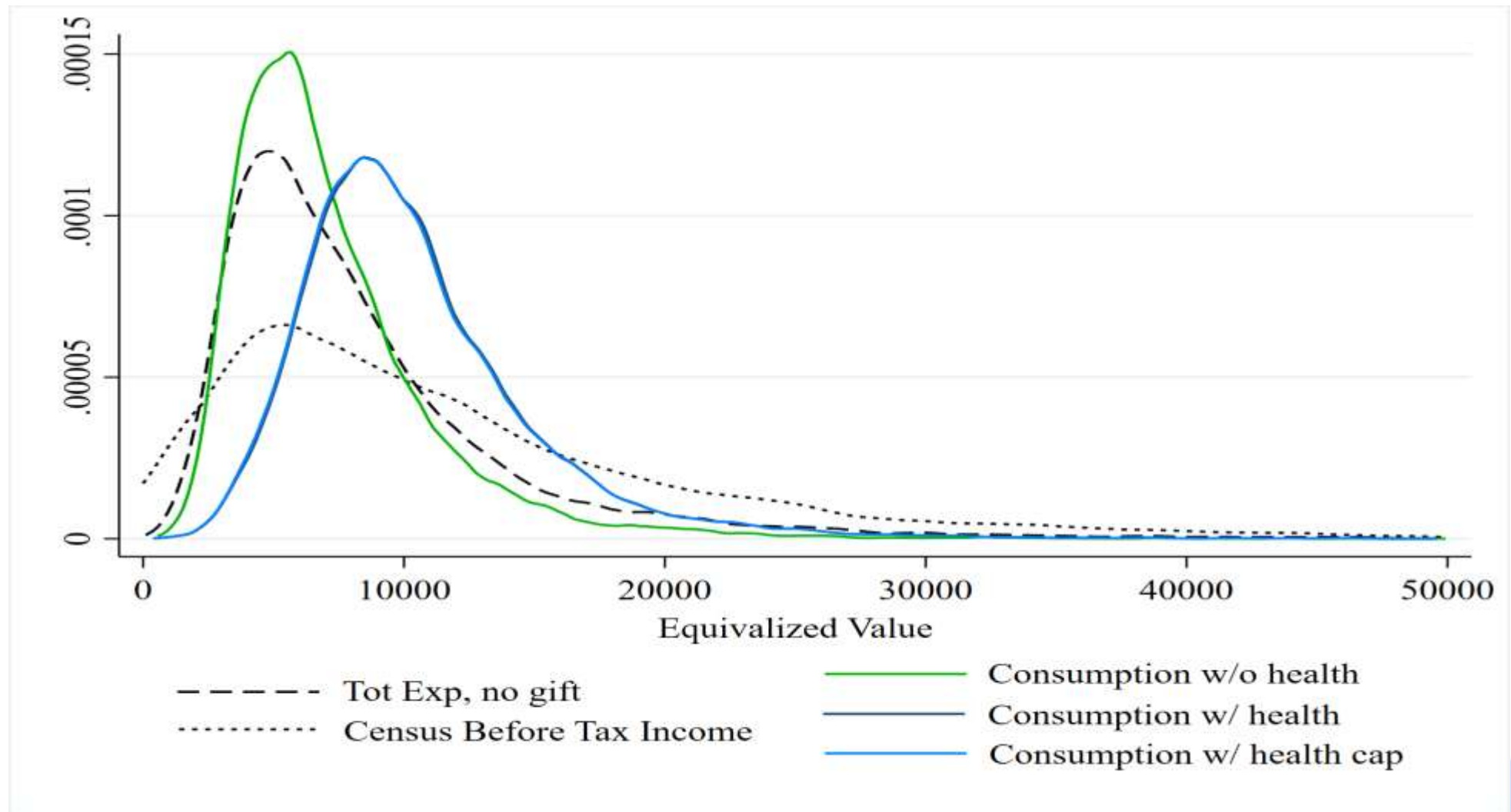
- ▶ Thresholds
 - Relative threshold based on 60% of median equivalized values
 - Anchored relative threshold, anchored to 2019 and updated using Chained CPI-U
- ▶ Poverty Statistics (Foster-Greer-Thorbecke, 1984)
 - Headcount rates: percent of individuals below the poverty line
 - Average poverty intensity: average poverty gap relative to the threshold (only for poor)
 - Poverty severity: how poor the poorest is relative to the average poor



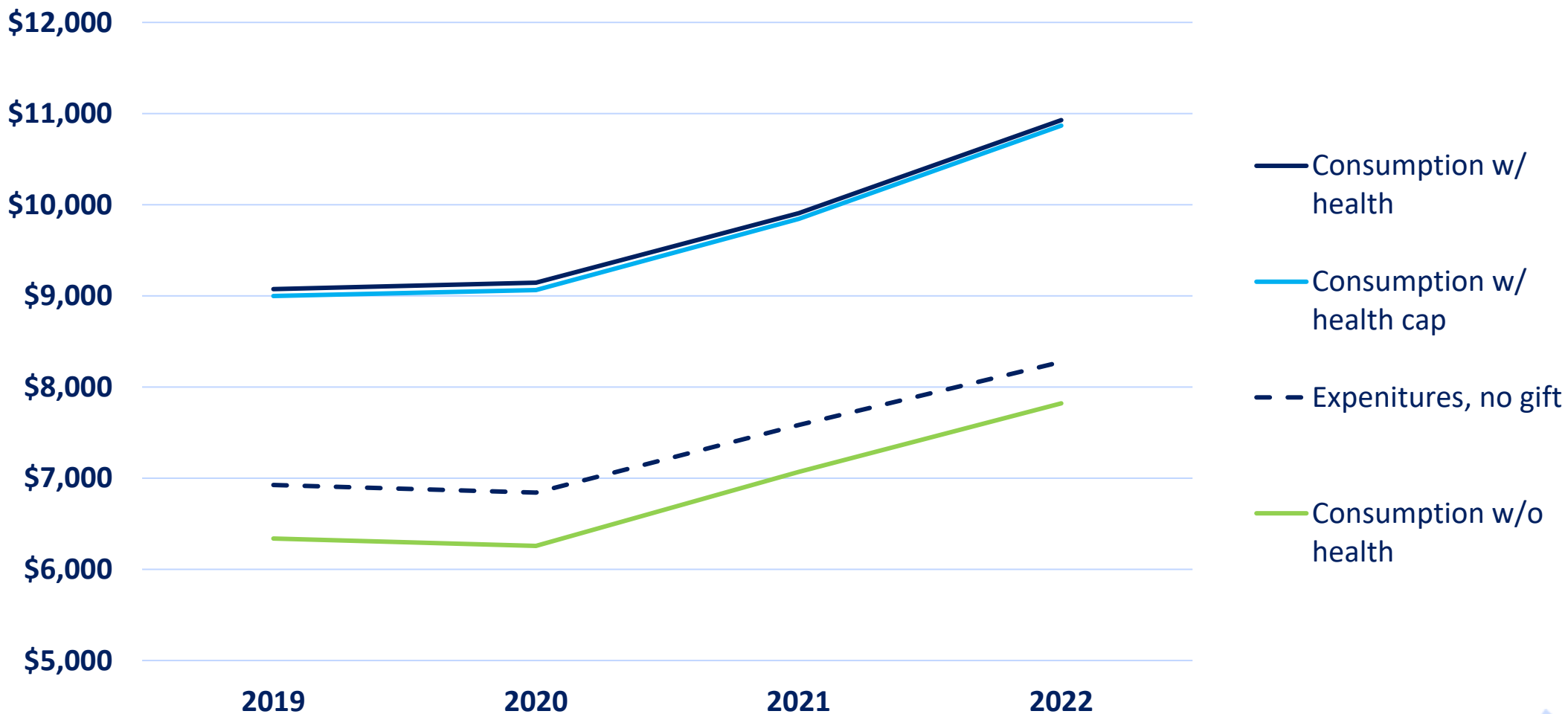
Moving from Expenditures to Consumption



Quarterly Equivalized Consumption, Spending, and Income for 2020



Over Time: Quarterly Equivalized Medians (Current Year Dollars)



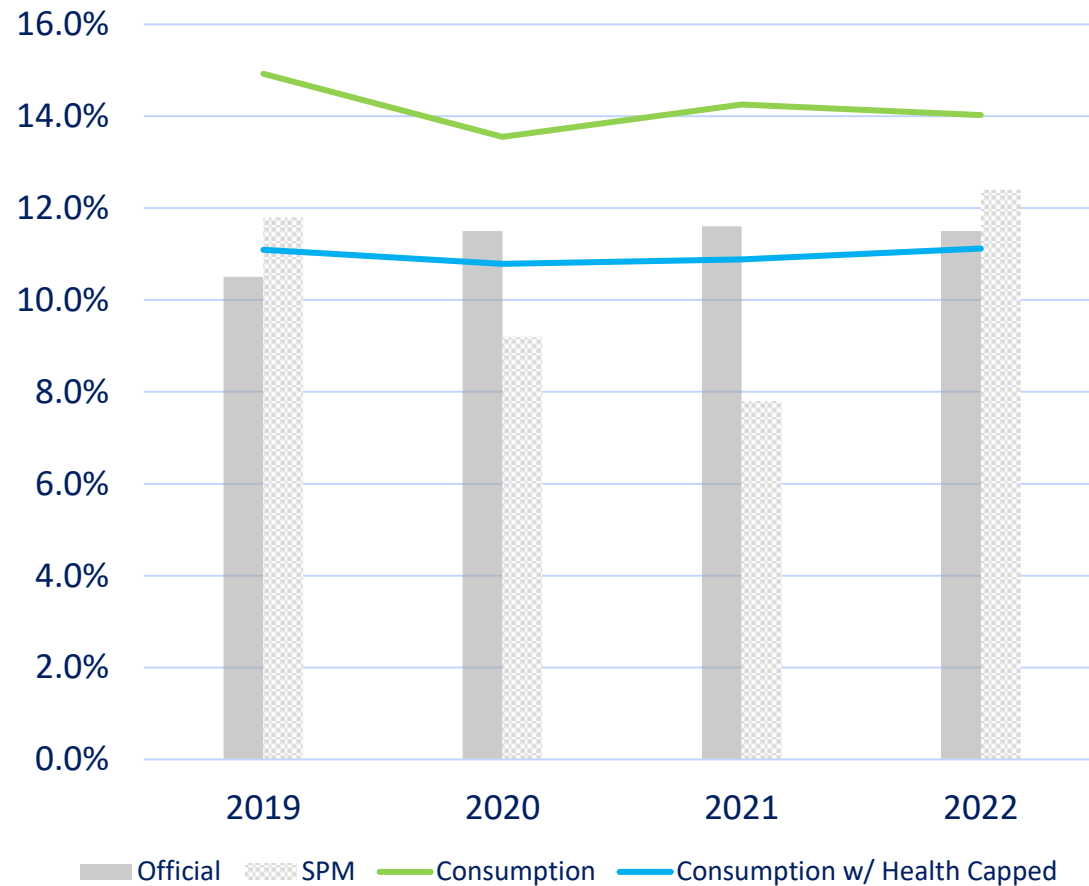
NOTE: Population weighted (FINLW21); consumption does not include education.



Poverty Analysis



Poverty Rates based on Relative Threshold for Total Population: Consumption without vs Consumption with Health Capped



2019

| | | Con w/ HI Poor | |
|----------|-----|----------------|------|
| | | No | Yes |
| Con Poor | No | 81.9% | 3.2% |
| | Yes | 7.0% | 7.9% |

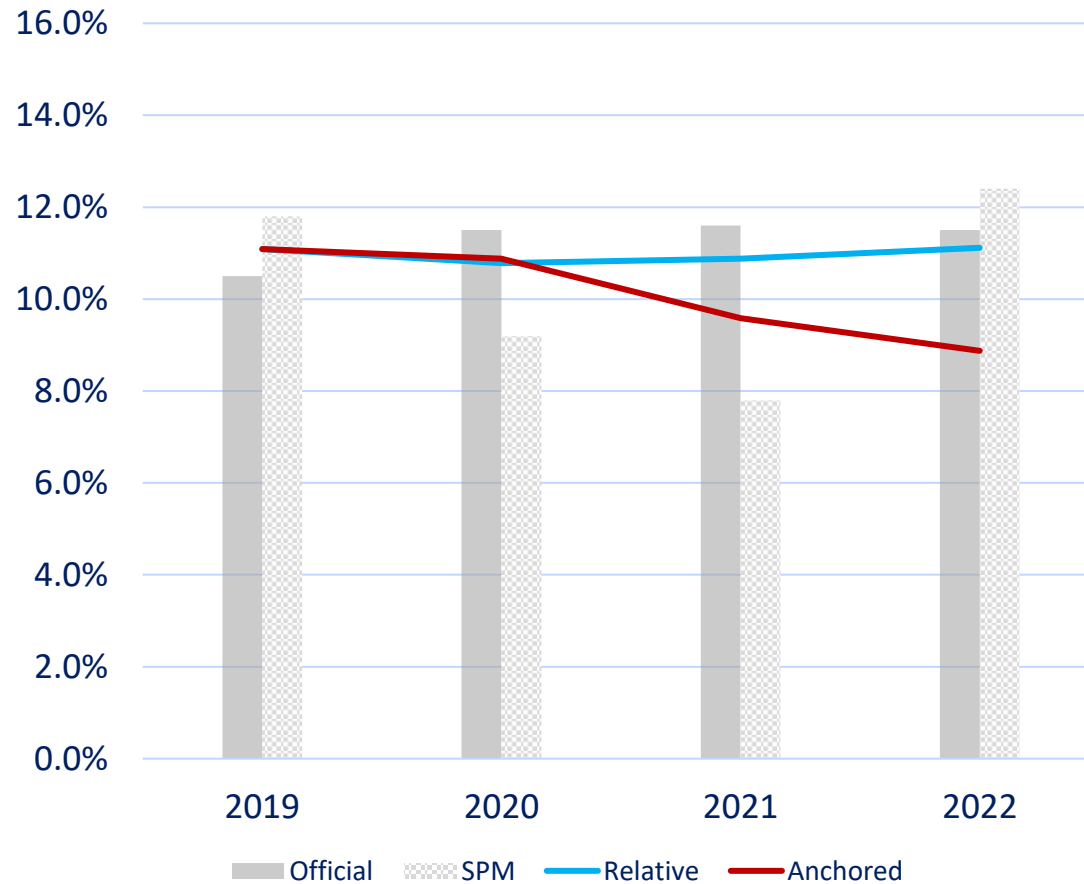
2022

| | | Con w/ HI Poor | |
|----------|-----|----------------|------|
| | | No | Yes |
| Con Poor | No | 82.3% | 3.7% |
| | Yes | 6.6% | 7.4% |

NOTE: Thresholds based on quarterly adult equivalized values; population weighted (FINLWT21*Cuize); consumption with health insurance capped at 50% of total; measures do not include education



Consumption with Health Insurance Capped Poverty Rates for Total Population: Relative vs Anchored Thresholds



2021

| | | Anchored | |
|----------|-----|----------|------|
| | | No | Yes |
| Relative | No | 89.1% | 0.0% |
| | Yes | 1.3% | 9.6% |

2022

| | | Anchored | |
|----------|-----|----------|------|
| | | No | Yes |
| Relative | No | 88.9% | 0.0% |
| | Yes | 2.3% | 8.9% |

NOTE: Thresholds based on quarterly adult equivalized values; population weighted (FINLWT21*Cuize); consumption with health insurance capped at 50% of total; measures do not include education



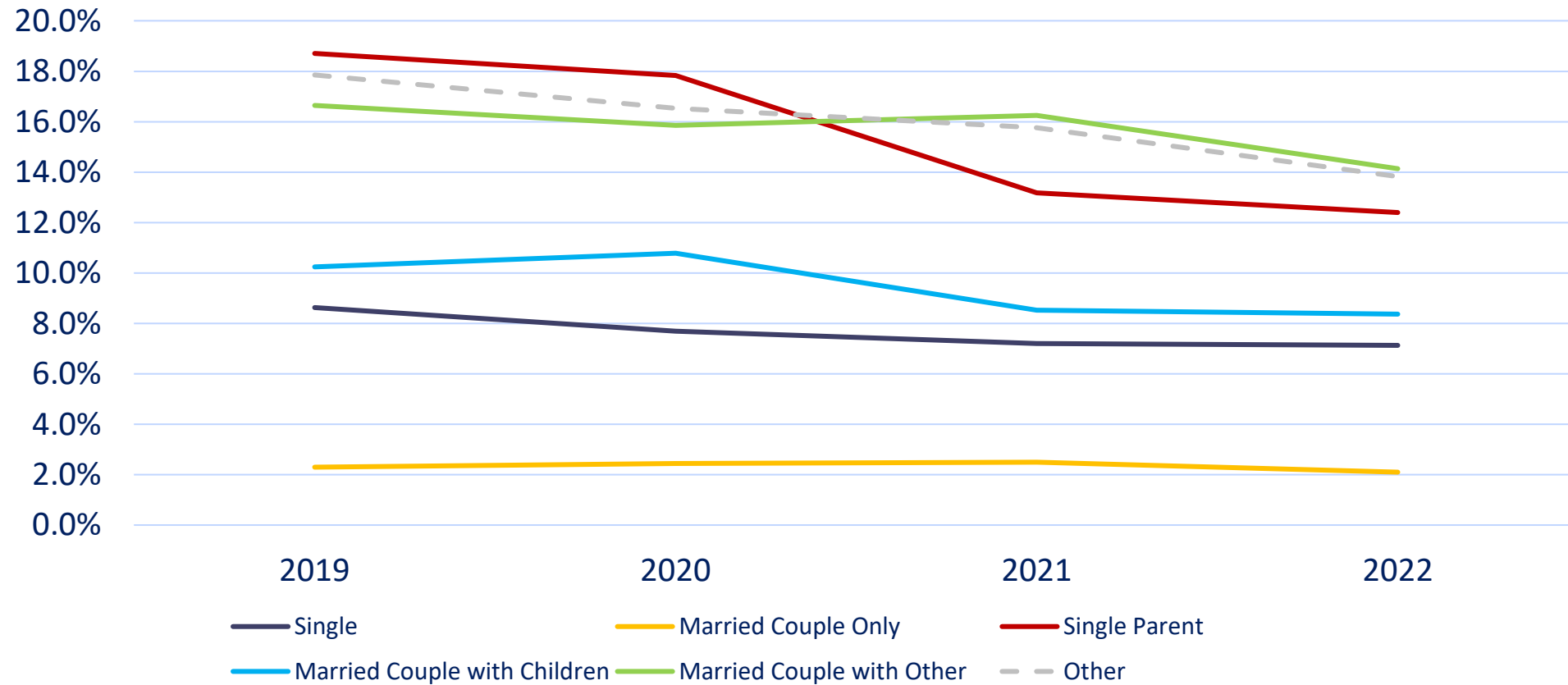
Consumption with Health Insurance Capped Poverty Statistics for Total Population (Anchored Thresholds)

| Year | Head Count | Average Intensity | Severity |
|------|------------|-------------------|----------|
| 2019 | 11.1% | 2.2% | 0.7% |
| 2020 | 10.9% | 2.2% | 0.7% |
| 2021 | 9.6% | 1.9% | 0.6% |
| 2022 | 8.9% | 1.7% | 0.6% |

NOTE: Thresholds based on quarterly adult equivalized values; population weighted (FINLWT21*CuSize); consumption with health insurance capped at 50% of total; measures do not include education



Poverty Rate Based on Consumption with Health Insurance Capped by Family Type (Anchored Thresholds)

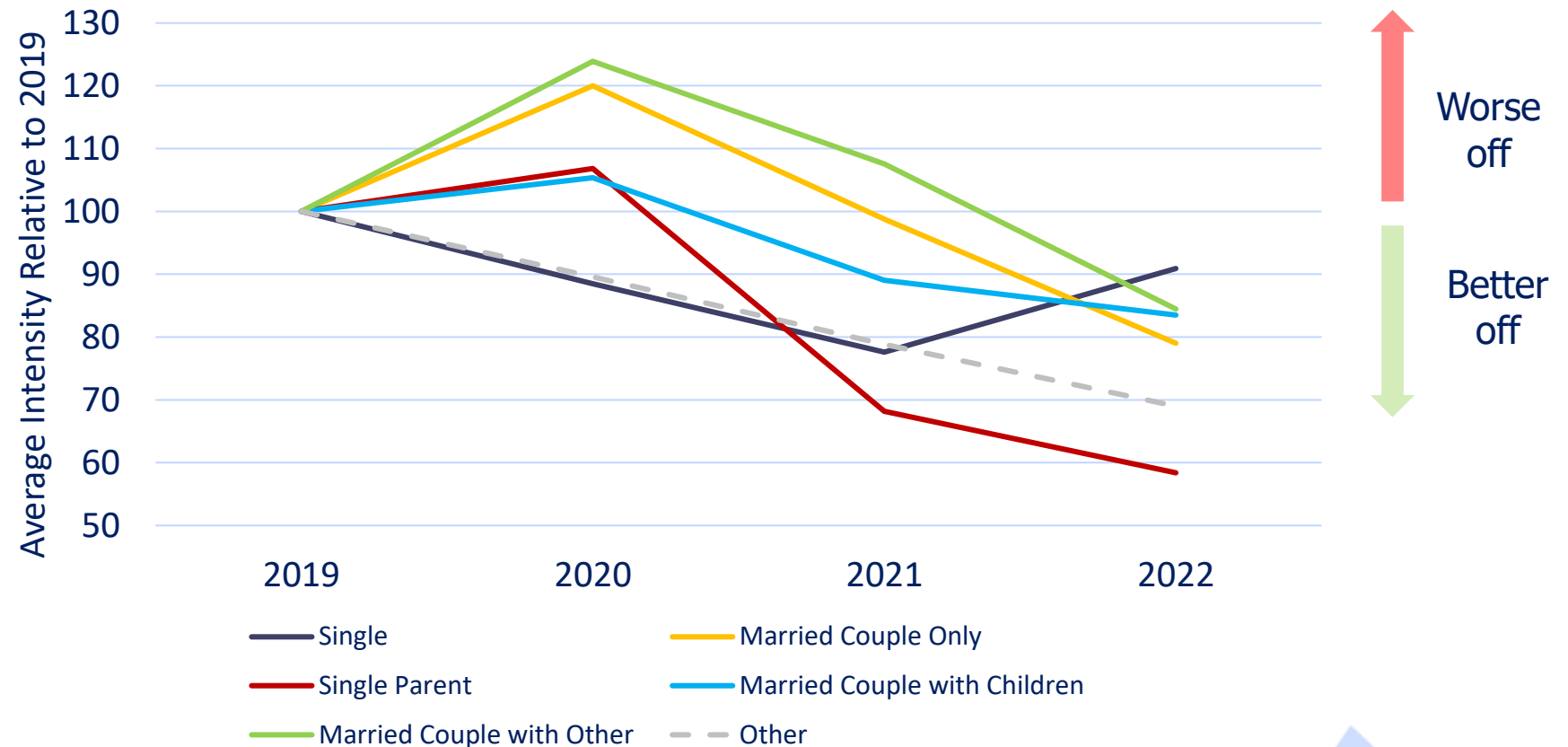


NOTE: Thresholds based on quarterly adult equivalized values; population weighted (FINLWT21*Cusize); consumption with health insurance capped at 50% of total; measures do not include education



Average Poverty Intensity (Gap) Based on Consumption with Health Insurance Capped by Family Type (Anchored Thresholds)

| 2019 | Avg Poverty Intensity |
|------------------------------|-----------------------|
| Single | 2.0% |
| Married Couple Only | 0.4% |
| Single Parent | 3.5% |
| Married Couple with Children | 1.9% |
| Married Couple with Other | 3.1% |
| Other | 3.9% |

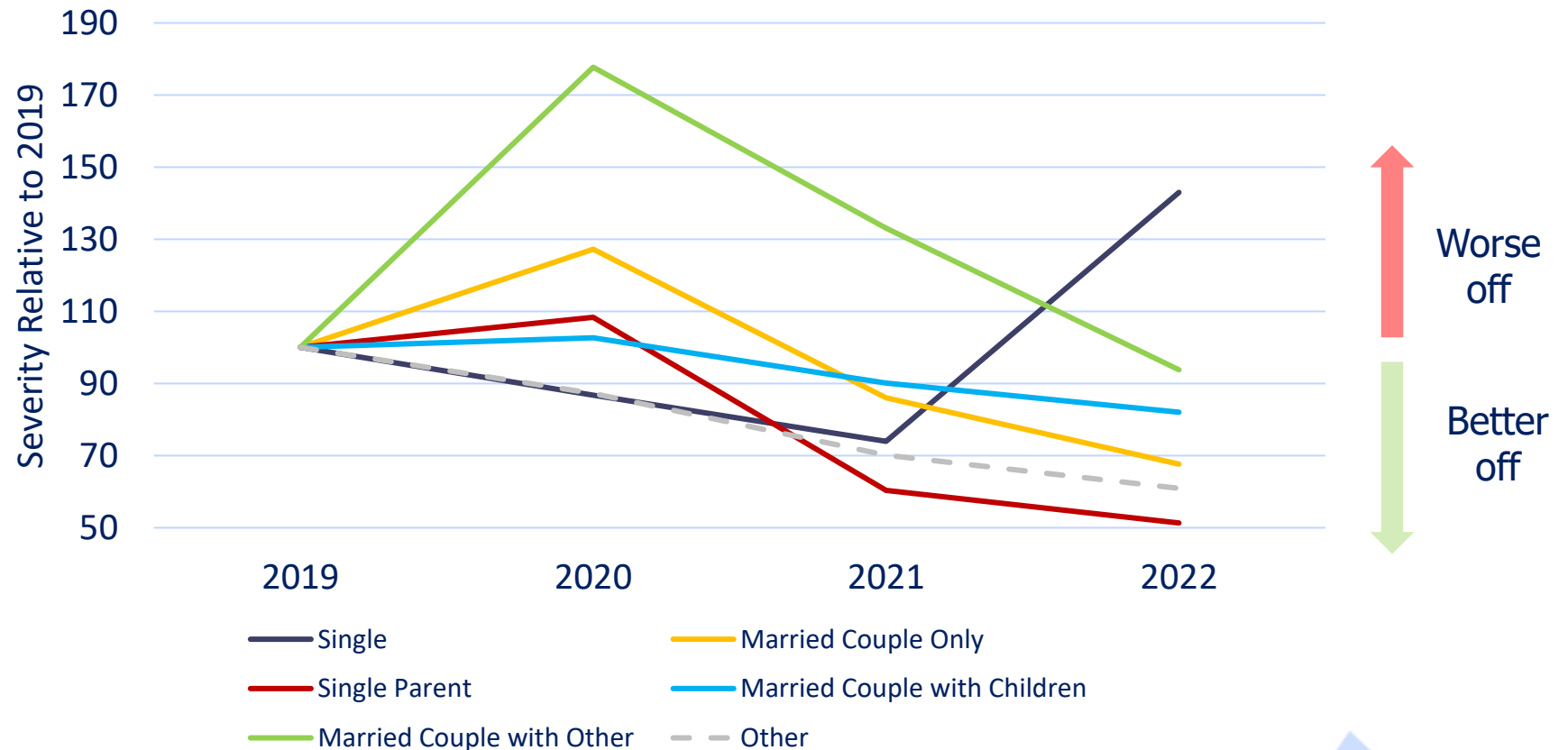


NOTE: Thresholds based on quarterly adult equivalized values; population weighted (FINLWT21*Cuize); consumption with health insurance capped at 50% of total; measures do not include education



Poverty Severity Based on Consumption with Health Insurance Capped by Family Type (Anchored Thresholds)

| 2019 | Severity |
|------------------------------|----------|
| Single | 0.8% |
| Married Couple Only | 0.1% |
| Single Parent | 1.1% |
| Married Couple with Children | 0.6% |
| Married Couple with Other | 0.8% |
| Other | 1.3% |



NOTE: Thresholds based on quarterly adult equivalized values; population weighted (FINLWT21*CuSize); consumption with health insurance capped at 50% of total; measures do not include education



Next Steps

■ Data improvements

- ▶ Integrate CE Survey Diary data
- ▶ Add value of home production for own consumption
- ▶ Continuing research on health insurance
- ▶ Consider the treatment of education

■ Research

- ▶ Impact of “shutdown” and “stay-at-home” policies on economic well-being
- ▶ Impact of COVID specific benefits on economic well-being
- ▶ Expand analysis to other subpopulations impacted by COVID
- ▶ Decompose poverty by differences within and between subgroups

Contact

Jake Schild

Office of Prices and Living Conditions
Bureau of Labor Statistics
Washington, DC 20212

Schild.Jake@BLS.gov



Data Sources for *Current Consumption Measure*

For Most Goods and Services:

U.S. Consumer Expenditure Survey Interview

- Time period: (T)Q2 to (T+1)Q1 to represent T year
- Interviewed up to 4 times, 3-month recall
- Consumer unit (CU)
- Out-of-pocket spending for most goods and services
- Rental equivalence for owned shelter
- Rent paid & characteristics to impute market rents when in-kind rental assistance
- Stock of cars and trucks to produce flow of services

In-kind Employer Health Insurance Benefits

- Medical Expenditure Panel Survey (MEPS-IC) from the Agency for Healthcare Research and Quality

College Room and Board

- U.S. Department of Education Statistics

Other In-kind Federal Government Benefits

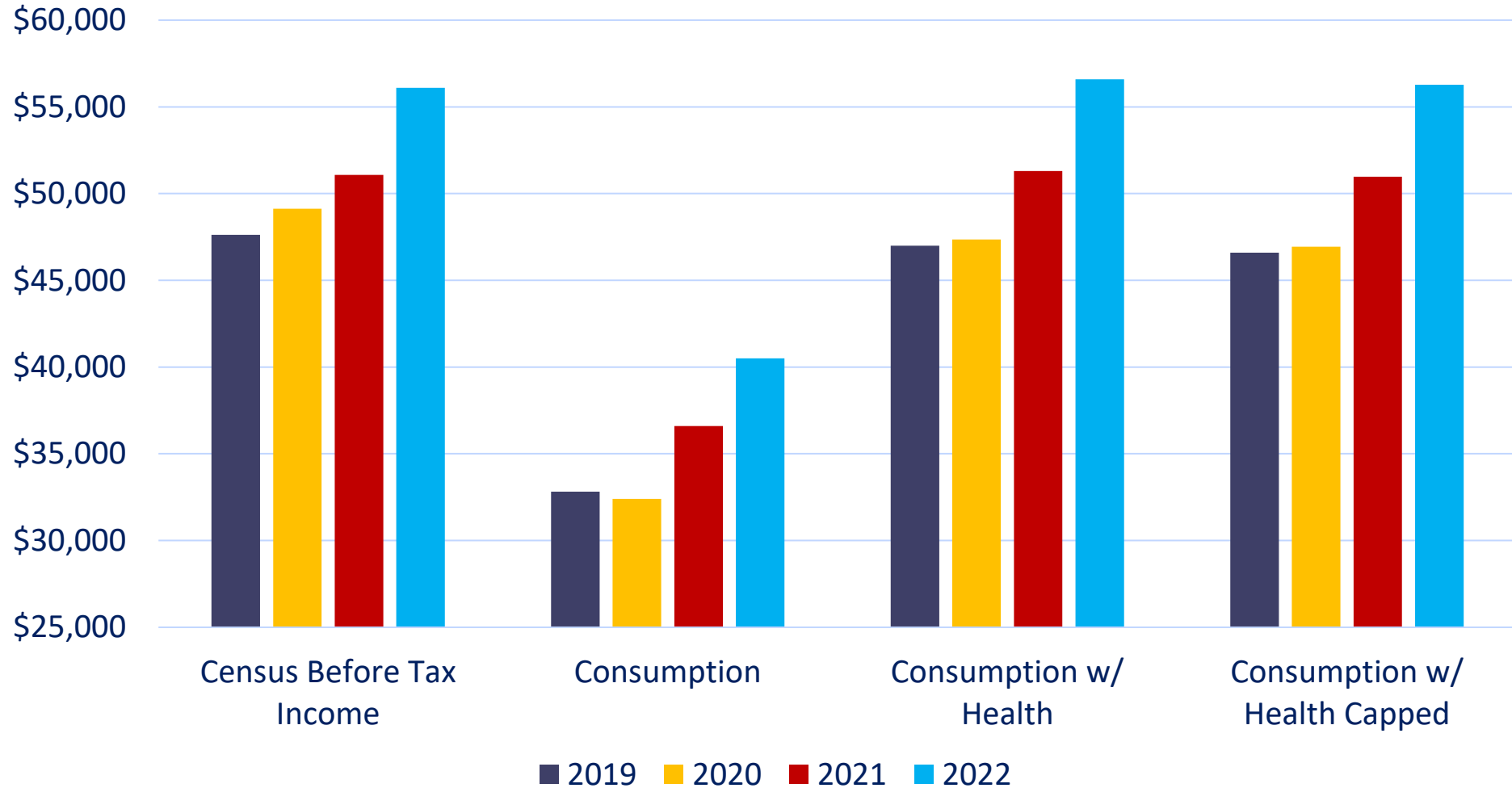
- CPS-ASEC (households/members): reported receipt of government provided in-kind benefits
 - ▶ School meals (NSLP)
 - ▶ Women, infants, and children (WIC)
 - ▶ LIHEAP (receipt and values)
- USDA: food assistance programs
- Center for Medicare and Medicaid Services (CMS) National Health Expenditure (NHE)
 - ▶ Medicare
 - ▶ Medicaid
- National Health Expenditure Tables



Quarterly Means for 2020

| Category | Total Expenditures | Total Expenditures, excluding gifts | Consumption without health insurance | Consumption with health insurance | Consumption with health insurance capped |
|---------------------------------------|--------------------|-------------------------------------|--------------------------------------|-----------------------------------|--|
| Quarterly Expenditures or Consumption | \$14,555 | \$14,386 | \$12,140 | \$16,748 | \$16,656 |
| Percent that is imputed | - | - | 9.01% | 34.05% | 33.69% |
| <i>Shelter</i> | \$3,133 | \$3,114 | \$5,027 | \$5,027 | \$5,027 |
| Utilities | \$1,049 | \$1,044 | \$1,047 | \$1,047 | \$1,047 |
| Household Operations | \$362 | \$357 | \$309 | \$309 | \$309 |
| Household Furnishings | \$493 | \$480 | \$408 | \$408 | \$408 |
| <i>Transportation</i> | \$2,430 | \$2,404 | \$2,015 | \$2,015 | \$2,015 |
| <i>Health</i> | \$1,227 | \$1,225 | - | \$4,609 | \$4,517 |
| Investments | \$2,440 | \$2,379 | - | - | - |
| Other | \$3,423 | \$3,382 | \$3,333 | \$3,333 | \$3,333 |

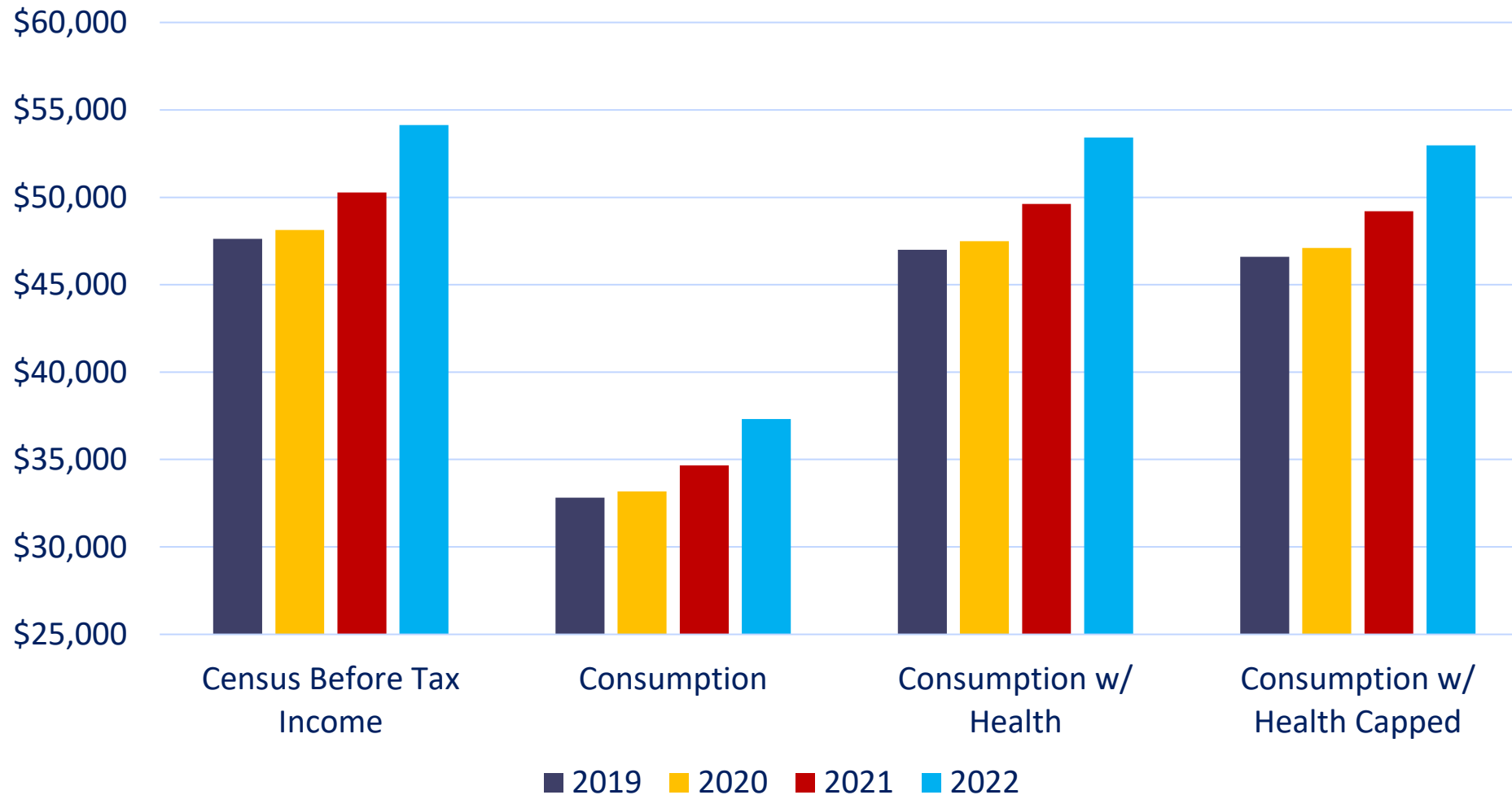
2A+2C Relative Thresholds



NOTE: Based on 60% of median; population weighted (FINLWT21*Cusize); consumption with health insurance capped at 50% of total; measures do not include education



2A+2C Anchored Relative Thresholds

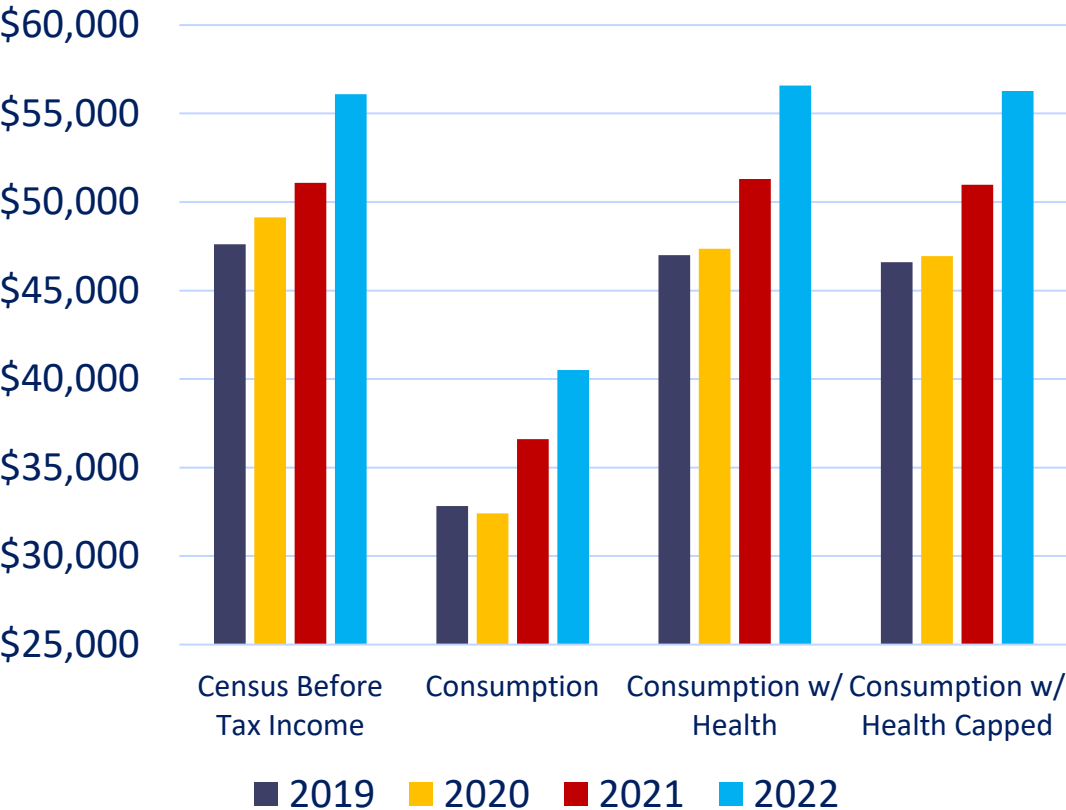


NOTE: Anchored to 2019 relative threshold; updated using Chained CPI-U; population weighted (FINLWT21*Csizs); consumption with health insurance capped at 50% of total; measures do not include education

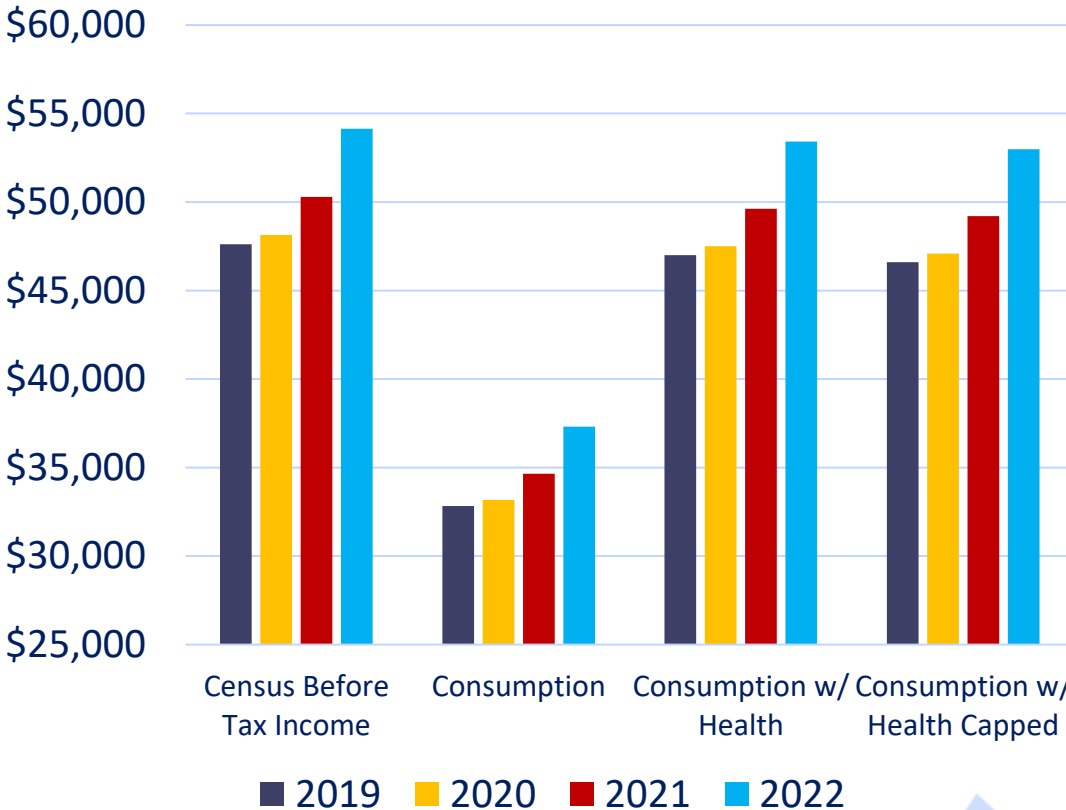


2 Adults with 2 Child Thresholds

Relative thresholds

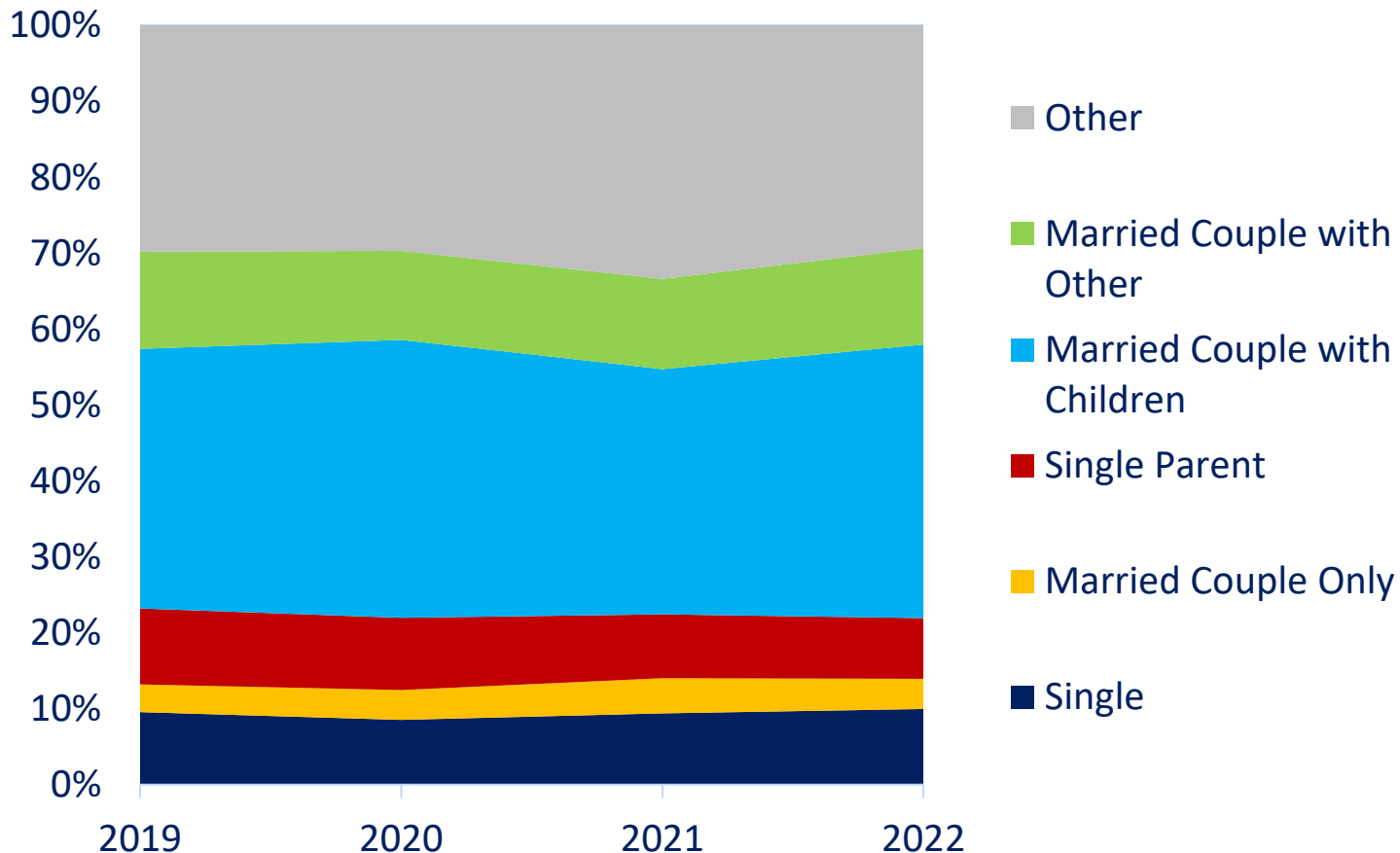


Anchored (2019) relative thresholds

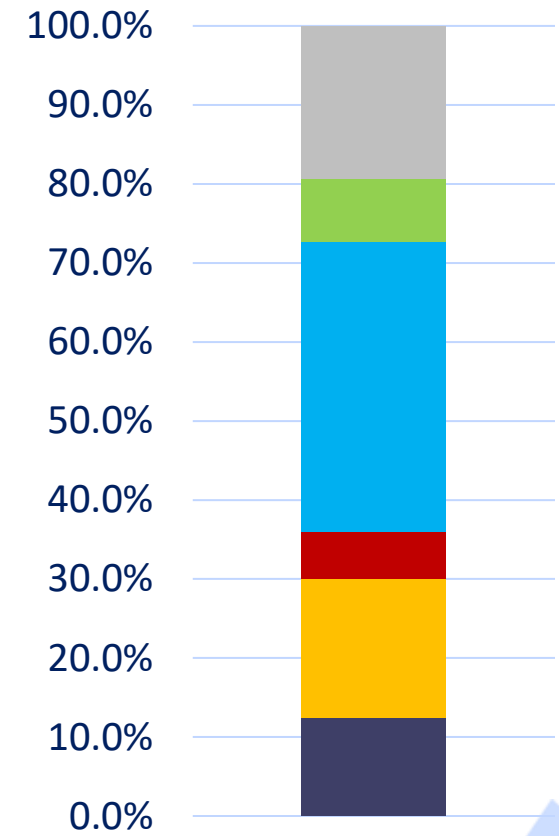


Composition of Poverty Based on Consumption with Health Insurance Capped by Family Type (Anchored Thresholds)

Distribution of Poor



Distribution of Total Population



NOTE: Thresholds based on quarterly adult equivalized values; population weighted (FINLWT21*Cusize); consumption with health insurance capped at 50% of total; measures do not include education

