

# Discussion of "Challenges in Measuring Income and Poverty: Why Is It So Hard? Why Is It So Important?"

CNSTAT
September 26, 2024
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<sup>\*</sup>Disclaimers: Any views expressed here are those of the author and not necessarily those of the Bureau of Economic Analysis or Department of Commerce.



# **Measuring Income and Poverty**

1. Why is it so hard?

2. Why is it so important?

Will focus on income measurement

# Why is it so hard?



# Key challenges

- 1. Data availability and quality
- 2. Determining the "right" measure of income, consumption, or wealth
- 3. Coordination among statistical agencies
- 4. Creating a consistent, sufficiently long time series

# Data Availability and Quality



### **FCSM Data Quality Framework**

### **Utility**—

Relevance

Accessibility

**Timeliness** 

**Punctuality** 

Granularity

### Objectivity-

Accuracy & reliability Coherence

### **Integrity**—

Scientific Integrity Credibility Computer/physical security Confidentiality

SOURCE: A Framework for Data Quality,2020

https://www.fcsm.gov/assets/files/docs/FCSM.20.04 A Framework for Data Quality.pdf

### Where BEA, BLS, and Census stand on this framework

- Utility
  - All three agencies produce annual inequality measures (different definitions) that are publicly available and well documented
  - Smallest current lag is 9mo from CY (Census CPS)
  - Estimates at decile level and top 5% (all 3), top 1% (BEA)
  - State estimates via ACS and BEA
- Objectivity and Integrity
  - o Agencies all produce accurate, reliable, and coherent estimates
  - Agencies maintain a high level of integrity
- What is missing here? Technical measures of quality
  - Measurement error
  - Impact of assumptions
  - Replicability

# **BEA Measurement Objectives**



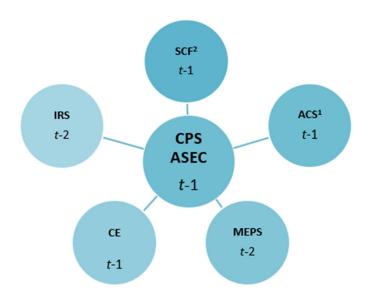
- To produce a distribution of income that is:
  - Valid: minimal measurement error and subsequent revisions
  - Informative: provide non-noisy information on the income distribution, capturing business cycle fluctuation appropriately
  - o **Transparent**: replicable methodology with minimal opaque assumptions
- Need to distribute the most appropriate national accounts (NIPA) measure of income for households with the least amount of assumptions
- BEA distributes **personal income**, which is the income received by persons from
  - o participation in production
  - o government and business transfers
  - o service flows from homeownership
  - holding interest-bearing securities and corporate stock
- Also distribute disposable personal income (personal income less taxes) which is closest to the measure of economic resources available to households to purchase goods and services



#### To produce an income distribution, we have the following data sources available:

CPS ASEC: Current Population Survey, Annual Supplement conducted every March (Census Bureau/BLS)
IRS SOI: Public use distributional summary tables by the Statistics of Income program (IRS)
SCF: Survey of Consumer Finances conducted every 3 years (Federal Reserve)
ACS: American Community Survey conducted every year (Census Bureau)
CE: Consumer Expenditure Survey conducted every year (BLS)
MEPS: Medical Expenditure Panel Survey, household sample conducted in rounds annually (AHRQ)

# The graphic on the left shows how each source feeds into the CPS ASEC, while the table on the right summarizes the available data for each dataset in December of year t.



	Availability	Reference Period
CPS ASEC	Fall t	t-1
IRS	Fall t	t-2
ACS <sup>1</sup>	Fall t	t-1
MEPS	Fall t	t-2
SCF <sup>2</sup>	Fall t	t-1
CE	Fall t	t-1
		State of the state

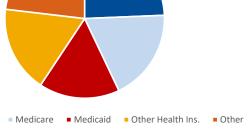
<sup>1</sup>Release rescheduled due to delays with COVID data collection.

<sup>2</sup>Conducted every 3 years.

# **BEA Methodology Summary**



- Construct a distribution of personal income from publicly available data to provide insight to the income distribution
- Strategy (<u>Technical document</u> and <u>working paper</u> on BEA web landing page provide details)
  - 1. Identify a NIPA total to be distributed (over 70 components of PI)
  - 2. Identify CPS ASEC variable (s) (+ outside data) to allocate component
  - 3. Sum all household components to subtotals of interest, PI, and DPI.



Transfers in PI (2022)

Personal Income = Household Income - Household Current Transfer Receipts from Nonprofits

- Nonprofit Institution Transfer Receipts from Households + Nonprofit Institution Income
- 4. Equivalize (divide by  $\sqrt{household\ size}$ ) and rank households to compare households of different sizes to each other

## The Right Measure

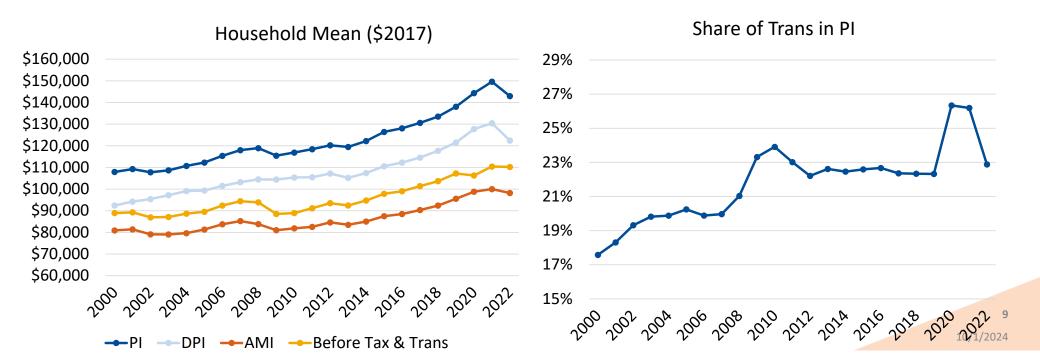


- Question: what's the purpose of an inequality metric? What does it measure?
  - o Technical: Quantifying distribution and differences between households
  - o "Beyond GDP"
    - Proxy for (or component of) well-being
    - Policy evaluation and implementation
- Significant disagreement on which measures to choose, especially regarding
  - o Inclusion or exclusion of transfers, taxes, capital gains
  - Scaling to national accounts
  - o Unit of observation: individuals, tax units, or households
- Returning to objectives...
  - o Inclusion of transfers is very important for measuring available household resources, especially at the bottom
  - o Capital gains and retirement disbursements are important too, especially at the top, but not in national accounts
  - Distributing personal income involves making fewer assumptions than national income
  - Closer to internationally-comparable measure (OECD)

# Comparing PI to Money Income

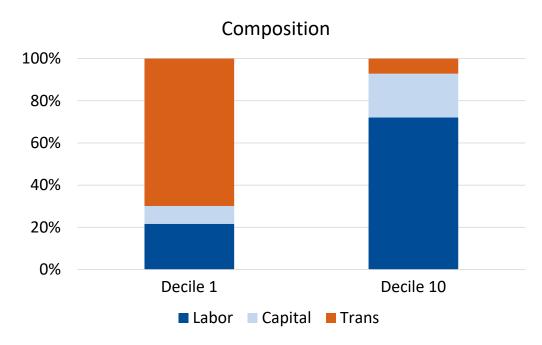


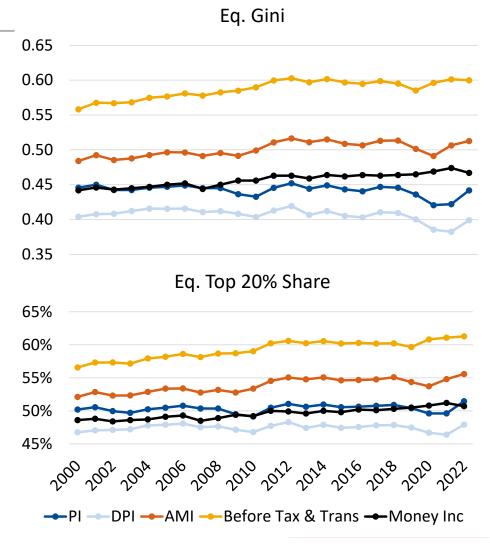
- PI is significantly greater than Adjusted Money Income (most components of money income, but no retirement) scaled to NIPA totals
  - o Addition of Health Insurance, Employer Contributions, and Imputed Interest
  - o Growth in PI is greater due to growth in transfers



# Impact on Inequality

- All series show effectively flat Gini with some volatility – consistent story
- Flatness at top of the distribution appears due to increasing role of transfers





## Coordination Among Statistical Agencies: Priority is Data Access



- BEA cannot produce distributional accounts alone
  - Methodology relies heavily on CPS ASEC
  - o Title 26 does not permit BEA to received individual income tax microdata
- BEA, BLS, and Census coordinate to produce BEA distributional accounts
  - o Census provides access to internal CPS & 1040 microdata in order for BEA to construct provisional estimates with 1-year lag
  - BLS coordinated with BEA to produce joint distribution of DPI & PCE, and subsequently personal saving
  - Hoping to incorporate results of important Census NEWS project
  - **Challenges:** data accessibility and disclosure protocols
- Optimal: statistical agencies cooperate to produce a single set of consistent measures of income, consumption, and wealth which scale to national accounts totals
  - o This measure should be as close to household resources as possible (should include transfers)
  - o Academics and policy makers can customize depending on research/policy question
  - Need survey data linked to administrative data
    - Neither is sufficient alone to get bottom (underreported transfers and gig economy) and top (assets and capital)
    - Administrative data is not always preferred and doesn't cover all income sources

## Creating a Consistent Time Series



- CPS ASEC goes back to 1967, but BEA series does not. Why?
  - o Important non-CPS source data on health care does not exist at an annual level pre-2000
  - No disaggregated IRS SOI data before 1996
  - o Potential room for modeling/imputation to expand series backwards, given additional resources
- Need strategies to address structural breaks which exist in all data sources
- BEA revises series backwards with every release creates a consistent series, but resource intensive

# Why is it important?



- General agreement that measuring the distribution of income is important for going "beyond GDP"
  - Inequality metrics provide valuable information about the state of the economy
  - o Timely information is valuable for data users and policy makers
- How are produced inequality series being used?
  - Depends on interest of data users
  - Census: inequality of money income is often cited, whether national (CPS) or state (ACS) in academic work, and sometimes in policy work or media
  - BEA: ?
- Significant interest has been shown in series of work by Saez and Zucman and some in Distributional Financial Accounts (wealth) produced by Federal Reserve Board

### Where to focus with limited resources?



### Challenges

- Survey nonresponse is increasing
- Need to ensure quality of statistics, to minimize revisions
- o Resources at statistical agencies are **increasingly limited**, with many competing priorities
- Data access is becoming more restrictive
- BEA would like to to improve methodology on existing products, subject to budget constraints, including:
  - Nowcasting distributional accounts to improve timeliness of annual estimates
  - Coordination with Federal Reserve to produce joint distribution of Income, Consumption, and Wealth (with BLS)
  - Developing "cash" measures of PI & PCE (with BLS)
  - Constructing PCE-based deflators for distribution of DPI (with BLS)
- Question for participants: what are key priorities for distributional accounts?



# Thank you!

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