Sharing is Caring: Inequality, Transfers and Growth in the National Accounts

Marina Gindelsky (BEA)

1/3/20

The views expressed are those of the author and do not necessarily represent the U.S. Bureau of Economic Analysis or the U.S. Department of Commerce.

BEA Release

- BEA released updated prototype distributions of Personal Income (PI) and Disposable PI (DPI) in the National Income and Product Accounts (NIPA) in December 2020 for 2007-2018
  - Objective: Use microdata to distribute macro totals (NIPA) to households
  - PI (& DPI) is most appropriate NA concept for **households**: closest to the measure of economic resources available to households for consumption

- Methodology
  - CPS is base dataset with additional (all) public data sources
  - Adj. of "tail" (top incomes) using aggregated tax data from IRS (SOI)
  - Adjust for household size (i.e., "equivalize"): accounts for resource sharing in households (then rank on equivalized income)

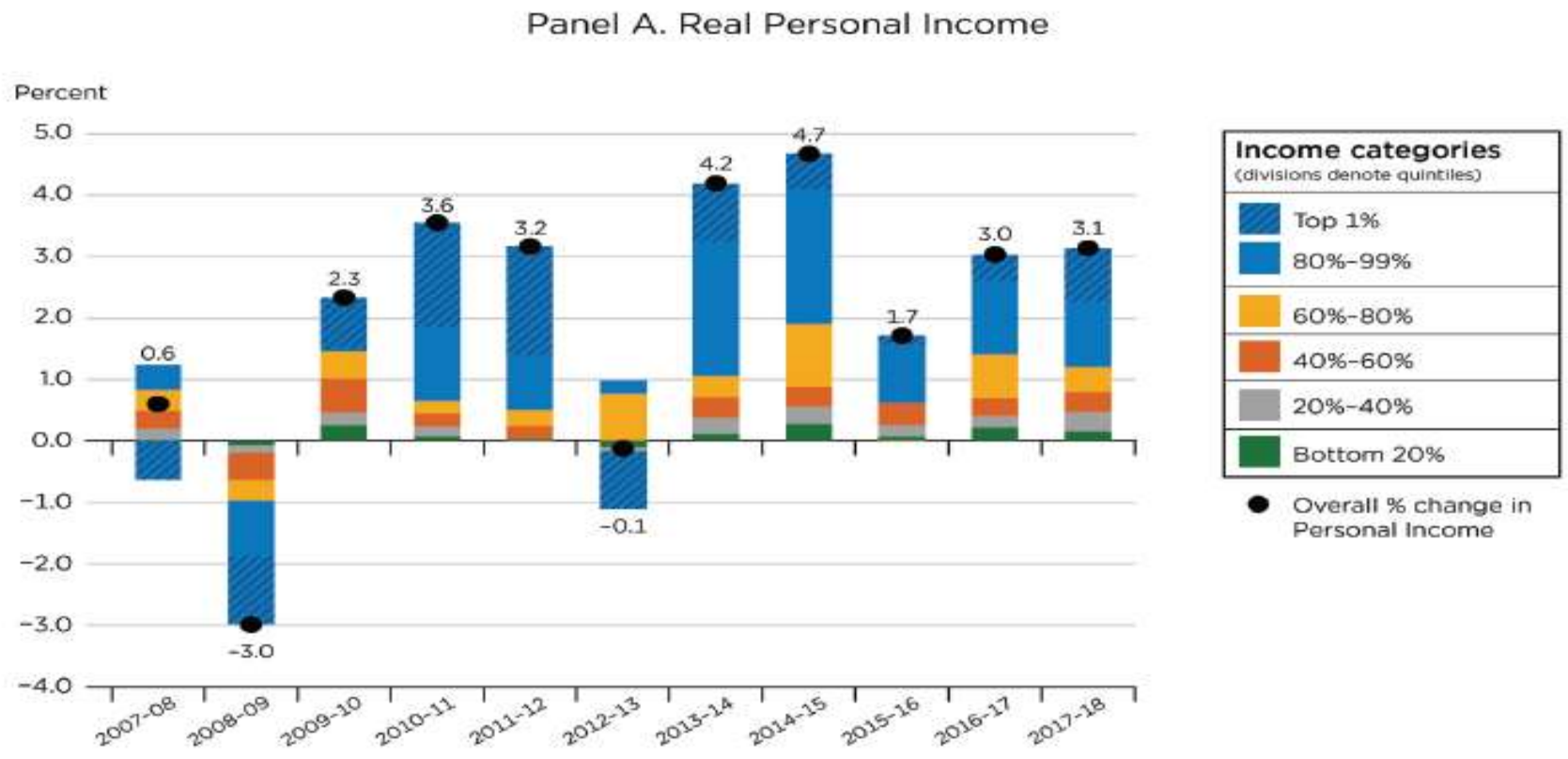
BEA: Inequality and Growth

- Total PI and DPI grew 22% from 2007-2018
  - Equivalized median DPI grew (12.1%) vs. median PI (10.2%)
  - Top 1% share of PI (DPI) increased 13.2%→14.4% (11.4%→12.1%)*
- Growth was unequal throughout distribution
  - 60.3% of growth in PI and 54.9% of growth in DPI went to top 20%* (cannot follow individuals over time, but group is relatively sticky in this time period)
  - Share of top quintile of PI went up 2pp while bottom quintile went down 0.2pp (similarly with DPI)

*significant portion of increase due to CPS survey redesign

Inequality and Growth: BEA Chart 2 (PI)

BEA release highlights relationship between inequality and pre-tax growth in working paper



Motivation: Inequality and Growth

- Unequal distribution of growth persists. Why?
  - "Macro" events: "Great Recession" & aftermath (2007-2011) (Bitler & Hoynes 2015; Armour et al. 2015), tax law (2013, 2018) (CBO 2020), pandemic (2020-?)
    - Hard to predict, may lead to short-run movements in metrics (2008-2011), changes in income reporting (e.g., 2012/2013), or perhaps long-run shifts
  - Structural elements: SBTC (& RBET) increasing labor incomes (Autor et al. (2008, 2020); Goldin & Katz (2007)), assortative mating (Greenwood et al. 2014), concentration of capital at the top (Piketty et al. 2018 (PSZ); Hoffmann et al. 2020)
    - Long-term impact – best seen in extended time series (especially post-1980)
  - Measurement differences: changing definition of income (e.g., PI? NI? Money income? Market income?) (Auten & Splinter (A&S) 2019, Fixler et al. 2020) changes in survey (CPS redesign e.g., 2014) (Rothbaum 2019)
    - Makes it difficult to contextualize and interpret levels and trends
  - **Changes in composition of income: share of labor income** (PSZ 2018) **and role of transfers** (Larrimore et al. 2020, Meyer & Wu 2018, Hoynes & Patel 2018)
    - Often target for policy intervention ("inclusive growth")

Motivation: Role of Transfers

- Focus of DINA literature is on levels and growth of top incomes
  - Attention paid to disaggregating top 1%, not bottom of distribution
  - But transfers make up 17.4% of PI in 2018 (up from 15.3% in 2007)
  - Most households receive at least one transfer in BEA exercise

- Transfers reduce poverty (e.g., Social Security, Medicare & Medicaid, Refundable Tax Credits (esp. EITC), SNAP TANF (Meyer & Wu 2018, Meyer et al. 2015, Hoynes & Patel 2018, PSZ 2018)) → should affect inequality

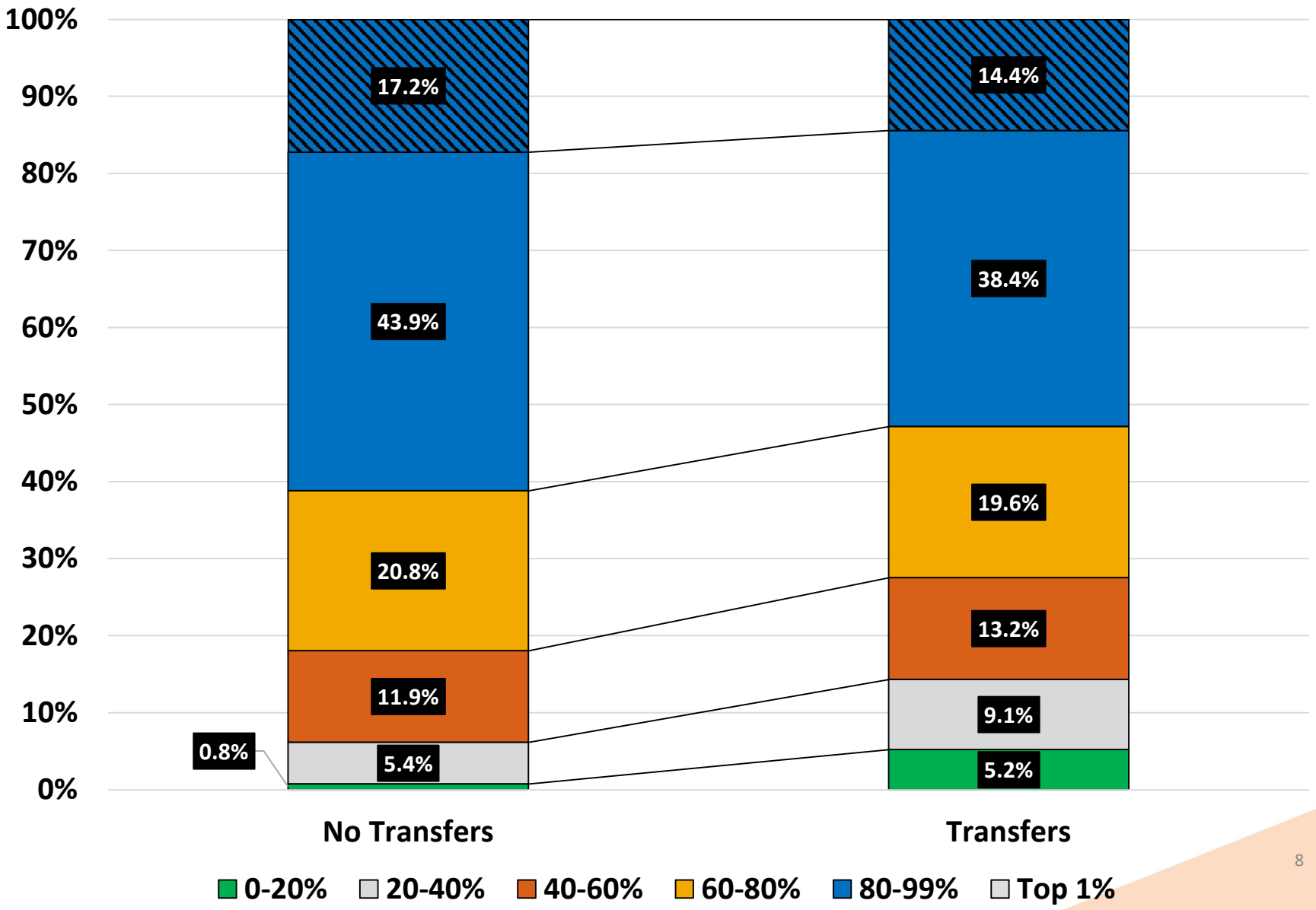
- Transfers underreporting: recipiency and amount (Meyer & Mittag 2019)
  - BEA adjusts for this (somewhat) through CBO imputation
  - Scaling to NIPA totals raises amounts

- Key Questions: What impact do transfers have on the DINA (PI & DPI)?
  - Do they raise bottom incomes sufficiently to impact overall inequality?
  - Which ones are most consequential for reduction in inequality?
  - How does aging population affect inequality?

Impact of Transfers: BEA Classification

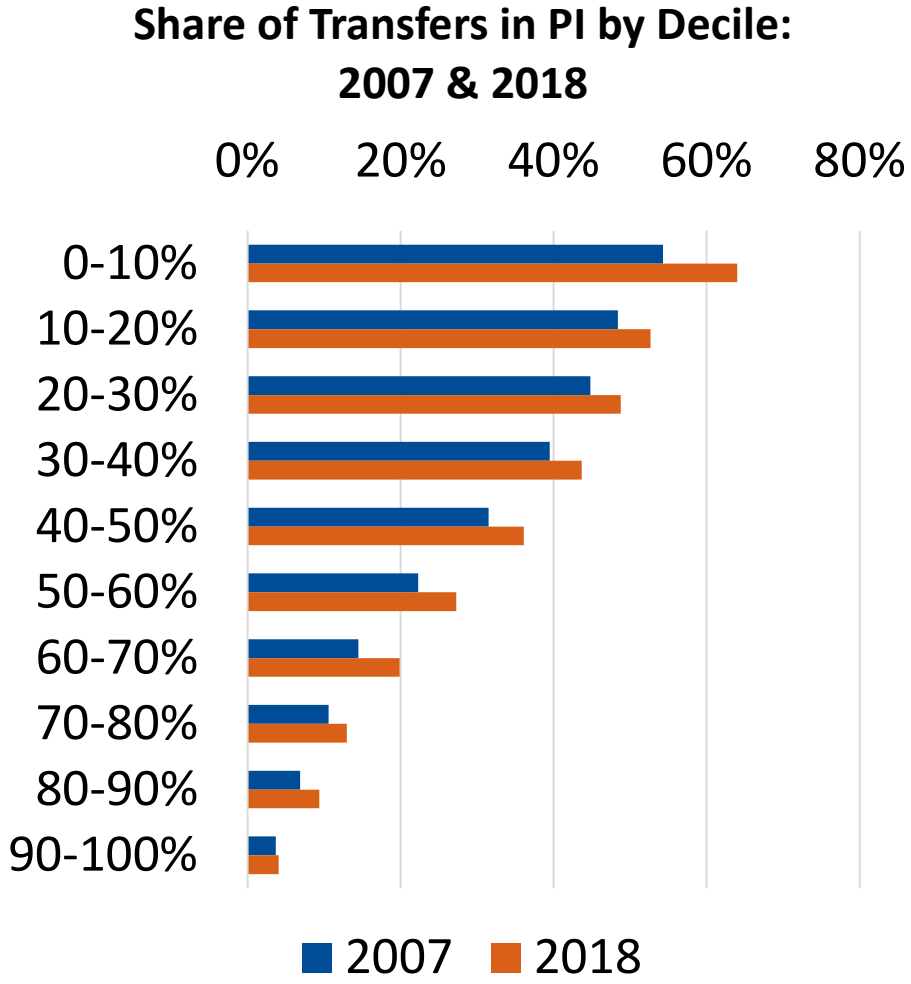
- Different classification and treatment by different studies
- PI is post-trans and pre-tax
- Transfers in PI (and DPI) include
  - Social Security
  - Unemployment Insurance
  - SSI
  - Veteran's Benefits
  - Educational Assistance
  - Workers' Compensation
  - Railroad Retirement
  - Black Lung
  - Medicare
  - Medicaid
  - CHIP
  - Medical Assistance
  - SNAP
  - Refundable Tax Credits
  - WIC
  - Energy Assistance
  - State and Local Assistance: Education, Employment, etc.

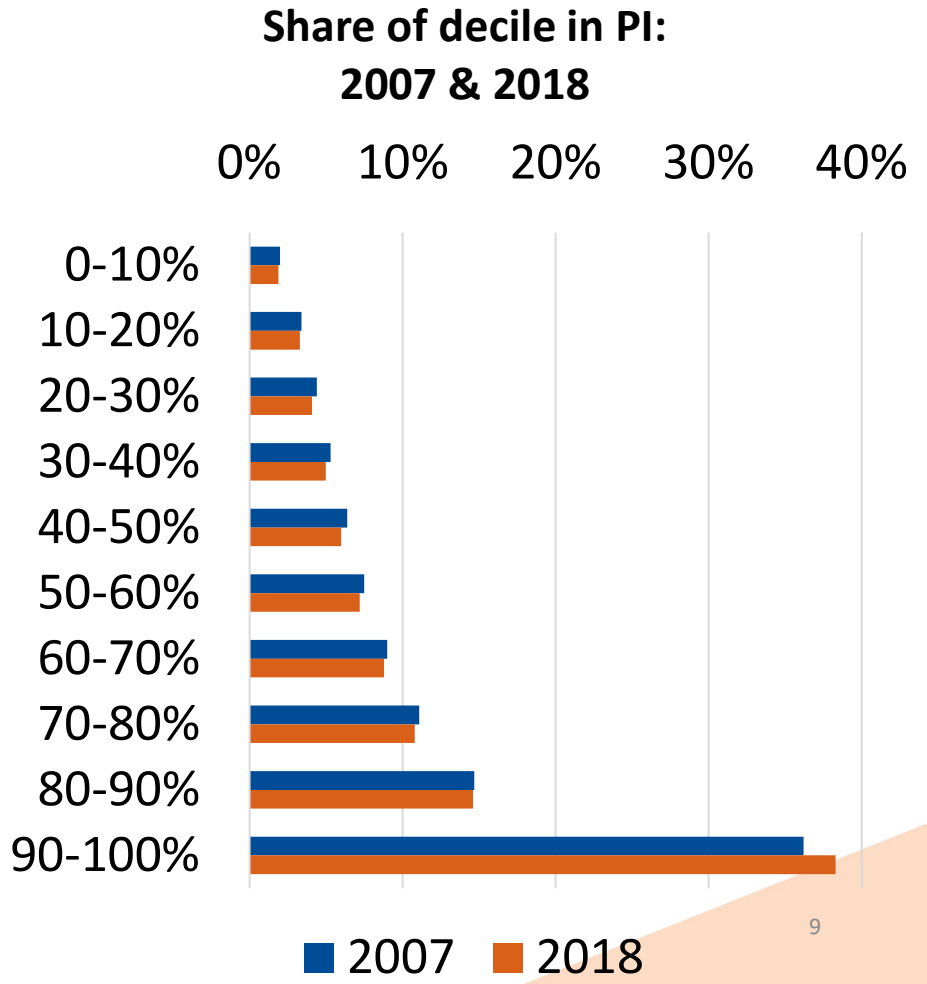
Impact of Transfers on PI Distribution (2018)



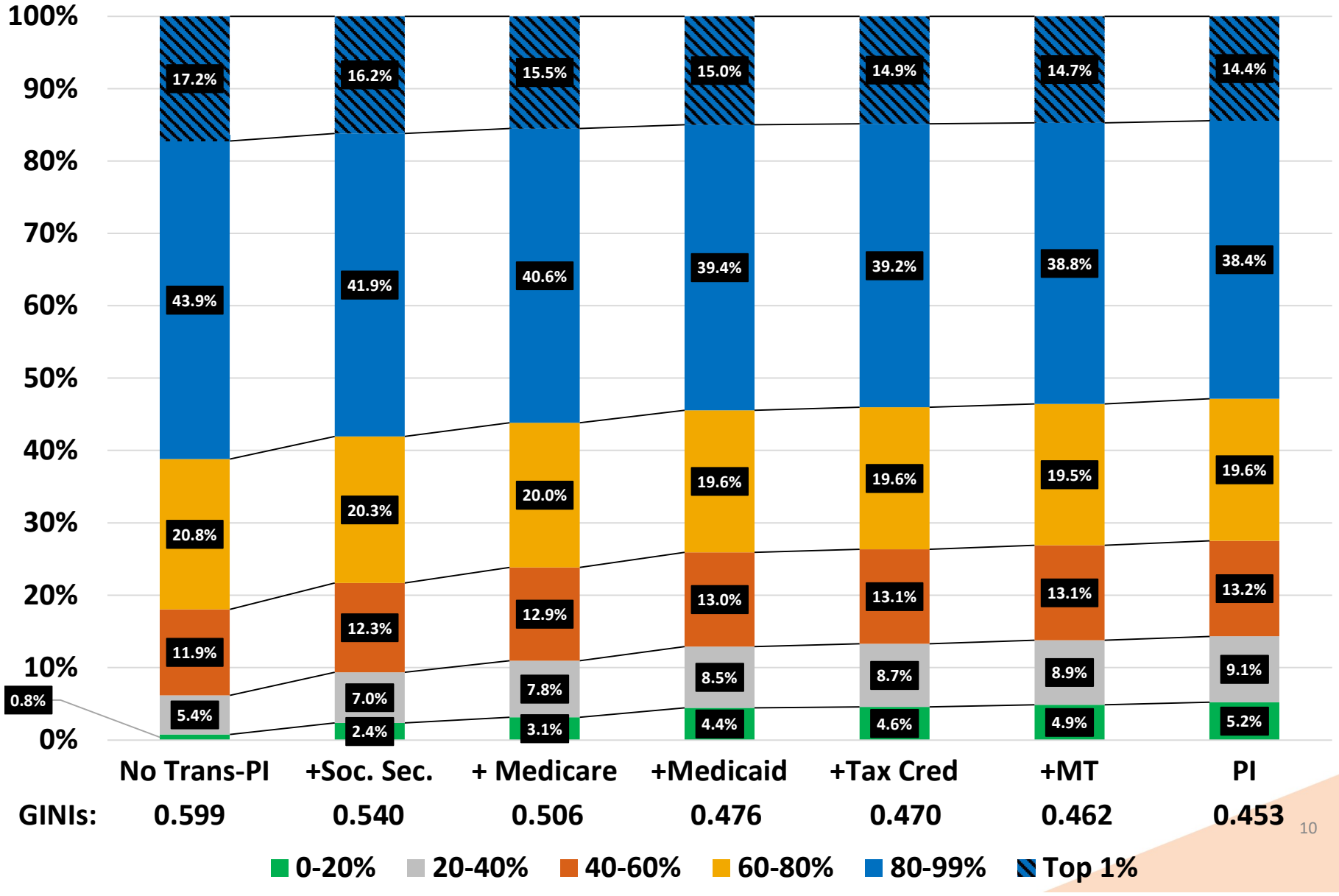
Distributional Impact of Transfers Over Time

- For both PI & DPI: share of transfers **increases** over time (esp. for bottom deciles), but income share of lower deciles **decreases**



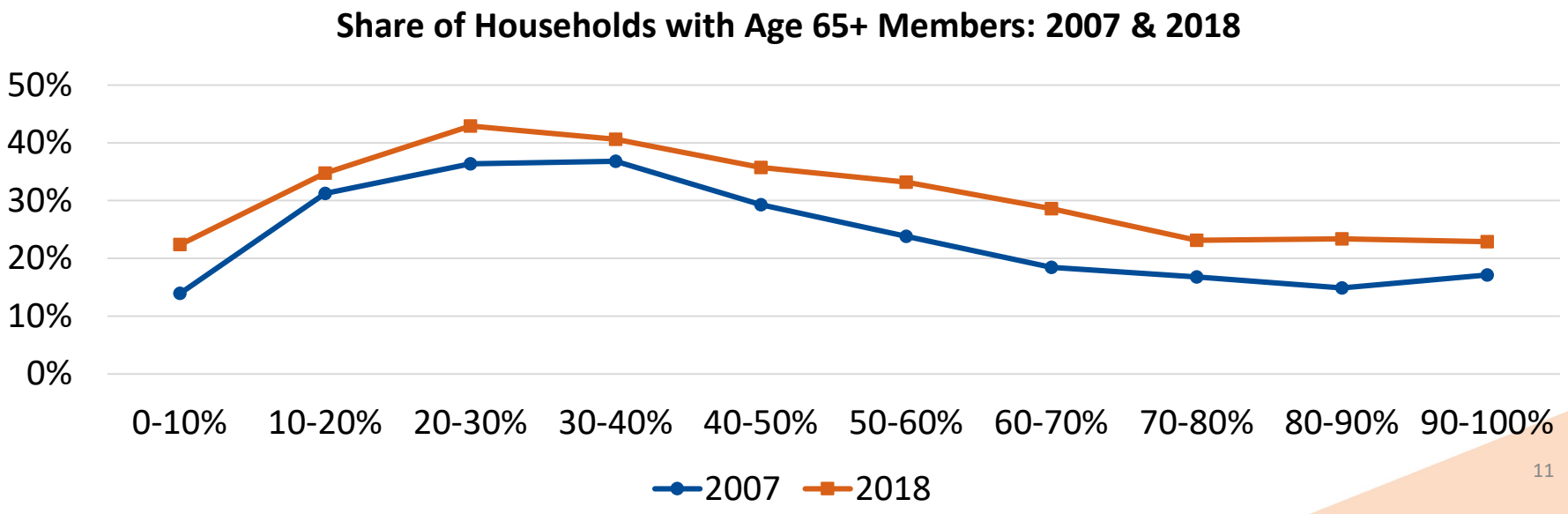


Shares of PI with Iterative Trans Add. (2018)

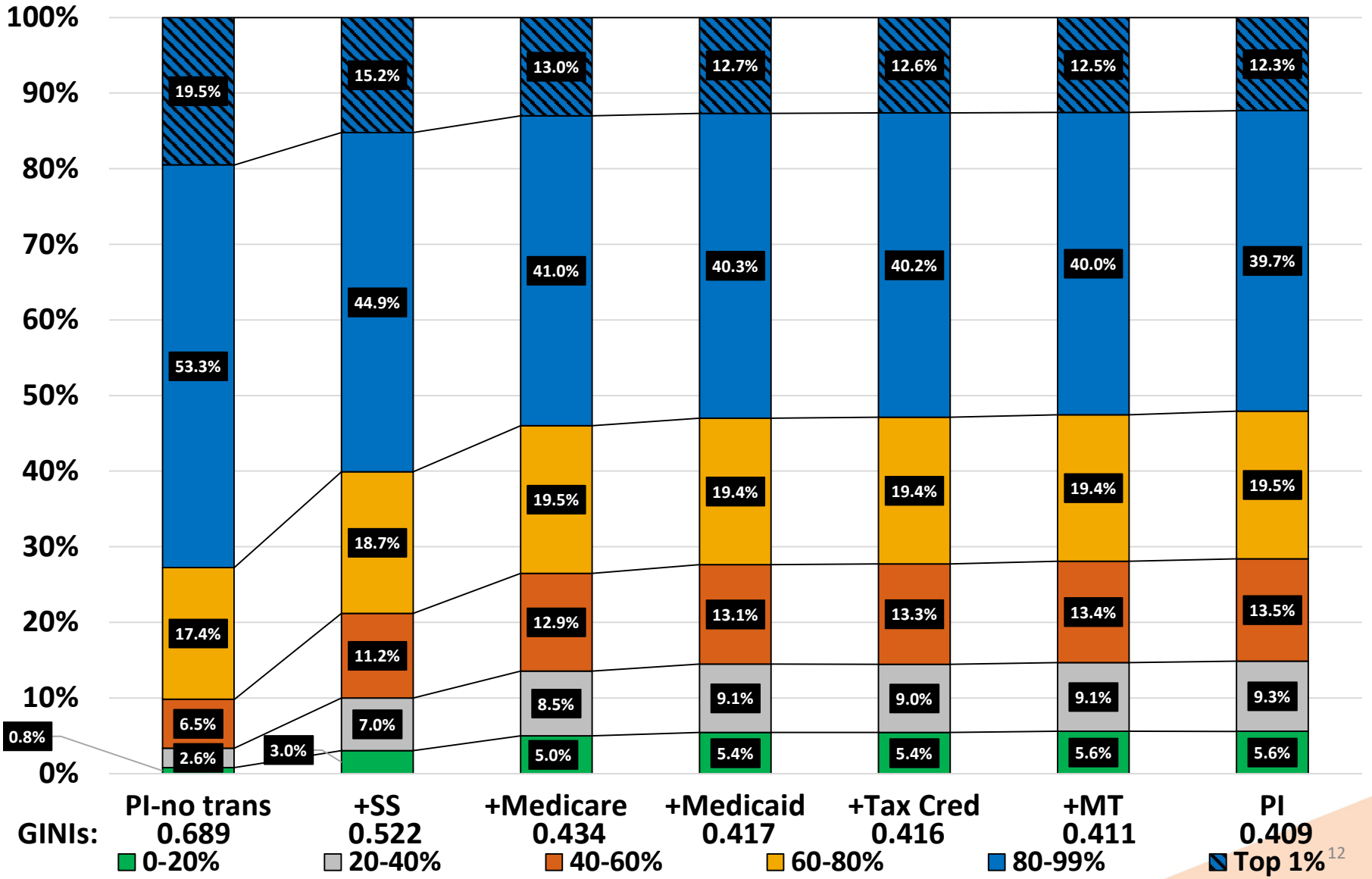


Age Composition

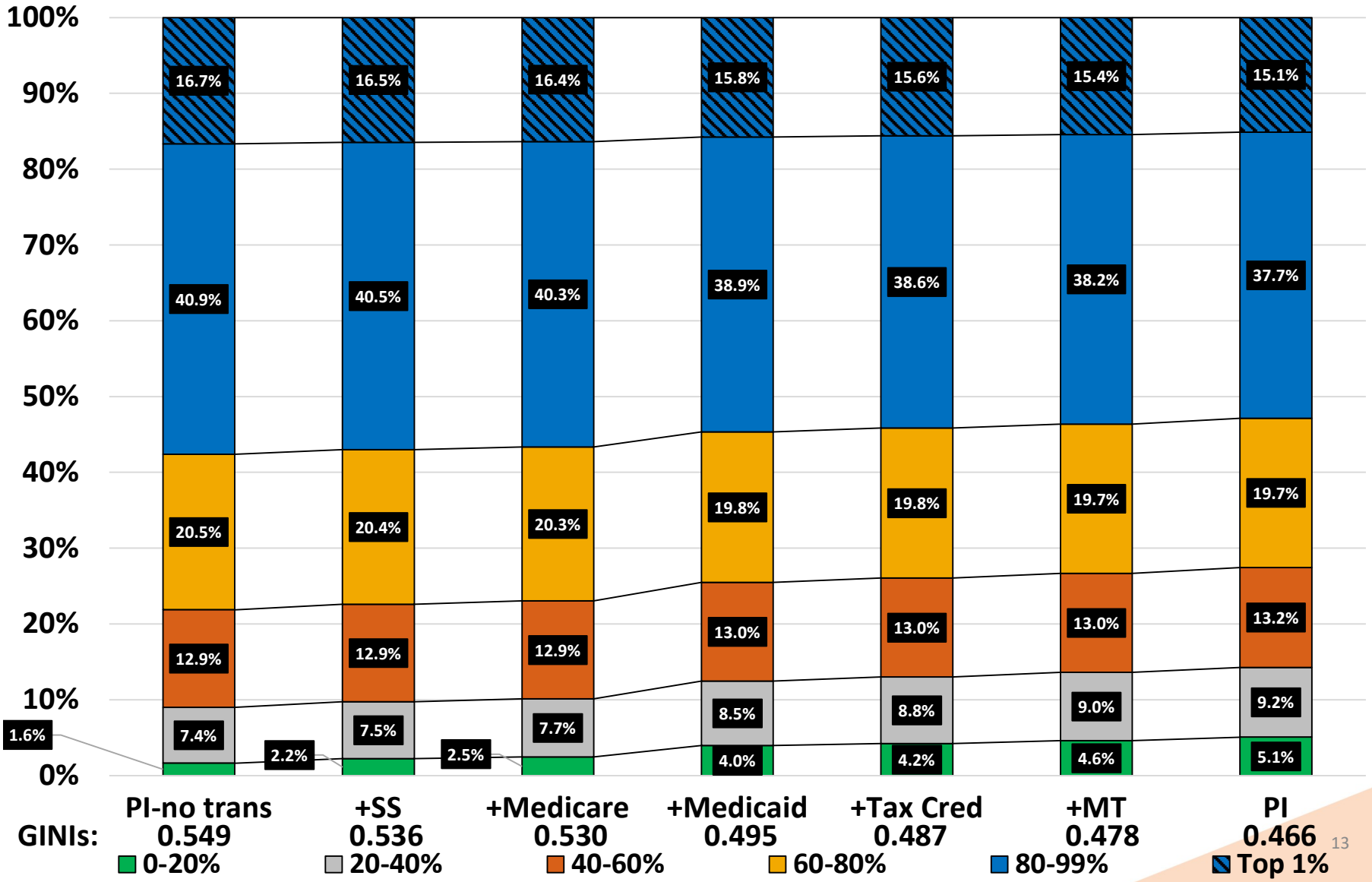
- Transfers significantly reduce inequality, but
  - Redistribution from younger hh in labor force to elderly hh through SS & Medicare (hh with members age 65+ benefit most)
- Share of elderly hh increases from 24%-31% from 2007-2018
  - Over ¼ of households in 2018 had both SS & Medicare benefits
  - Significant impact on overall inequality results



Shares of Income with Iterative Trans Add. for elderly households (2018)



Shares of Income with Iterative Trans Add. for non-elderly households (2018)



Households without Age 65+ members

- What transfers have an impact on hh without age 65+ members?
- Expect: Medicaid, tax credits, and other means-tested transfers
- However, Medicaid has small impact on inequality (but more than tax credits)
- Refundable tax credits and means tested transfers have a minimal impact, likely due to small share of NIPA totals

Comparisons to Published Estimates

- PSZ, A&S, CBO

- Measurement challenges
  - Important differences (good discussion in BEA working paper)
    - Unit of measurement
    - Income concept
    - Source data
    - Allocation strategy
  - Lead to different conclusions in levels & trends
    - Top 1% income shares of PSZ > CBO > BEA > AS
    - Changes in source data (e.g., CPS) can lead to artificially large increases in inequality

Comparisons to Published Estimates

- PSZ: Compare post-tax-and-transfer NI distribution to BEA DPI
  - BEA share of top decile is 4pp lower & share of bottom 50% in 3pp higher
  - PSZ include transfers in post-tax income, but don't consider SS a transfer
  - PSZ include "collective expenditures" (government spending on public goods) as transfers (part of NI) → higher share of non-health transfers
- A&S: Compare pre-tax/post-transfer top 1% share to BEA PI
  - Similar decrease in top 1% share from add. of transfers, despite level diff
  - In 2017, add. of SS, Cash Transfers, Medicare reduces top 1% share in A&S by 1.4pp (vs. 2pp for BEA)
- CBO: Compare "income before taxes & transfers" to modified PI
  - Similar shares of transfers in income, but CBO shares grow more than BEA
  - Lower quintiles gain more from transfers in BEA analysis (scaling to NIPA)
- All show similar fall in inequality from addition of transfers

Conclusions

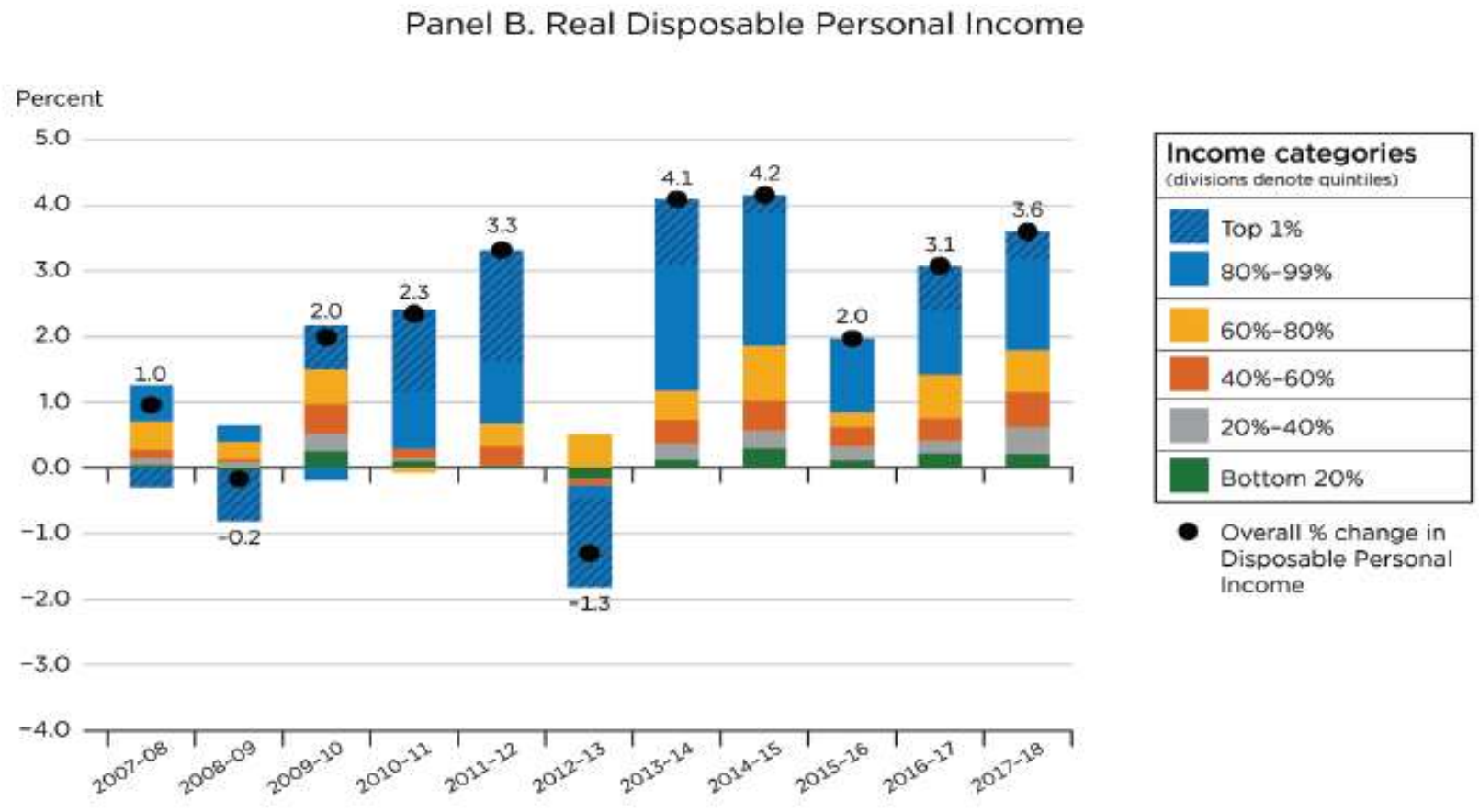
- Addition of transfers lowers inequality in levels, but redistribution is from younger hh in labor force to elderly hh, through SS & Medicare
  - Not redistribution from higher income hh to lower income hh
    - Expansion of Medicaid has a small mitigating effect on inequality
    - Refundable tax credits and means tested transfers have a minimal impact, likely due to small share of NIPA totals
  - Effect increases as population ages (baby boomer retirement)
  - Same pattern for PI & DPI

- Comparisons to other national estimates show similar effects of transfers on inequality overall, and especially for top shares
  - PI & DPI distributions provide opportunity to evaluate impact of important programs on hh through distribution, linking inequality, transfers, and growth
  - Implications beyond movements in top shares
  - Rising share of transfers in PI (2007-2018) doesn't lead to ineq. decrease

Extra Slides: DPI Results

Inequality and Growth: BEA Chart 2 (DPI)

BEA release highlights relationship between inequality and post-tax growth in working paper



Shares of DPI with Iterative Trans Add. (2018)