More unequal we stand? Inequality in the United States from the Great Recession to the COVID pandemic

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Objective

- Heathcote, Perri Violante (RED, 2010) document dynamics of several dimensions of inequality in the United States from 1967 to 2006, using publicly available surveys
- Document dynamics of dimensions of inequality in the United States over past 15 years (which include Great Recession and COVID)
- Provide empirical references to the micro-macro literature

Organizing device: household budget constraint

$$c + a' = a + \sum_{i=1}^{N} w_i h_i + U + T^G - \tau$$

- w_i individual wage
- $w_i h_i$ individual earnings (labor supply)
- $\sum_{i=1}^{N} w_i h_i$ hh earnings (pooling)
- $\sum_{i=1}^{N} w_i h_i + U$ hh market income (unearned income)
- $\sum_{i=1}^{N} w_i h_i + U + T^G$ hh pretax income (govt transfers)
- $\sum_{i=1}^{N} w_i h_i + T^G + U - \tau$ hh disposable income (taxes)
- a' end of period wealth (capital gains, saving)
- c consumption expenditures

Five Surveys

1. Current Population Survey (March CPS), 1967-2021
   - repeated cross-section (+short panel), $\simeq$60,000 households per year: income
2. American Community Survey (ACS), 2000-2020
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4. Panel Study of Income Dynamics (PSID), 67-96, 98(2)18
   - long panel, $\simeq$6000 households: income, consumption, wealth
5. Survey of Consumer Finance (SCF), 1988(3)2018
   - repeated cross section, $\simeq$4000 households: income and wealth

Sample selection

1. Sample A
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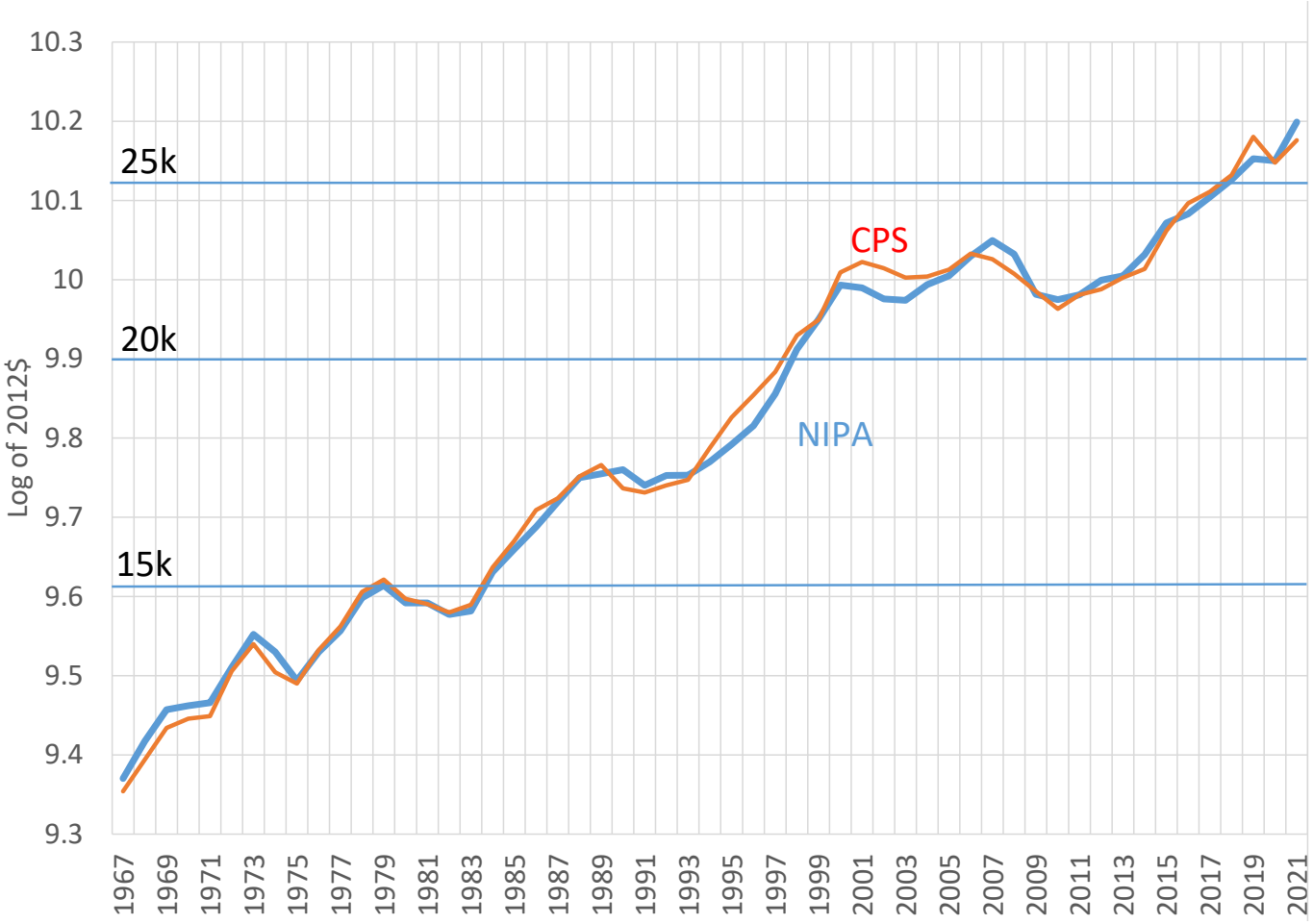
3. Sample C
   - individuals from households B, age 25-60 who work at least 260 hours per year
   - used for individual-level (wages, hours) statistics

Macro facts in micro data (DNA)

Wage and salary income pc, sample A



- March CPS matches NIPA well

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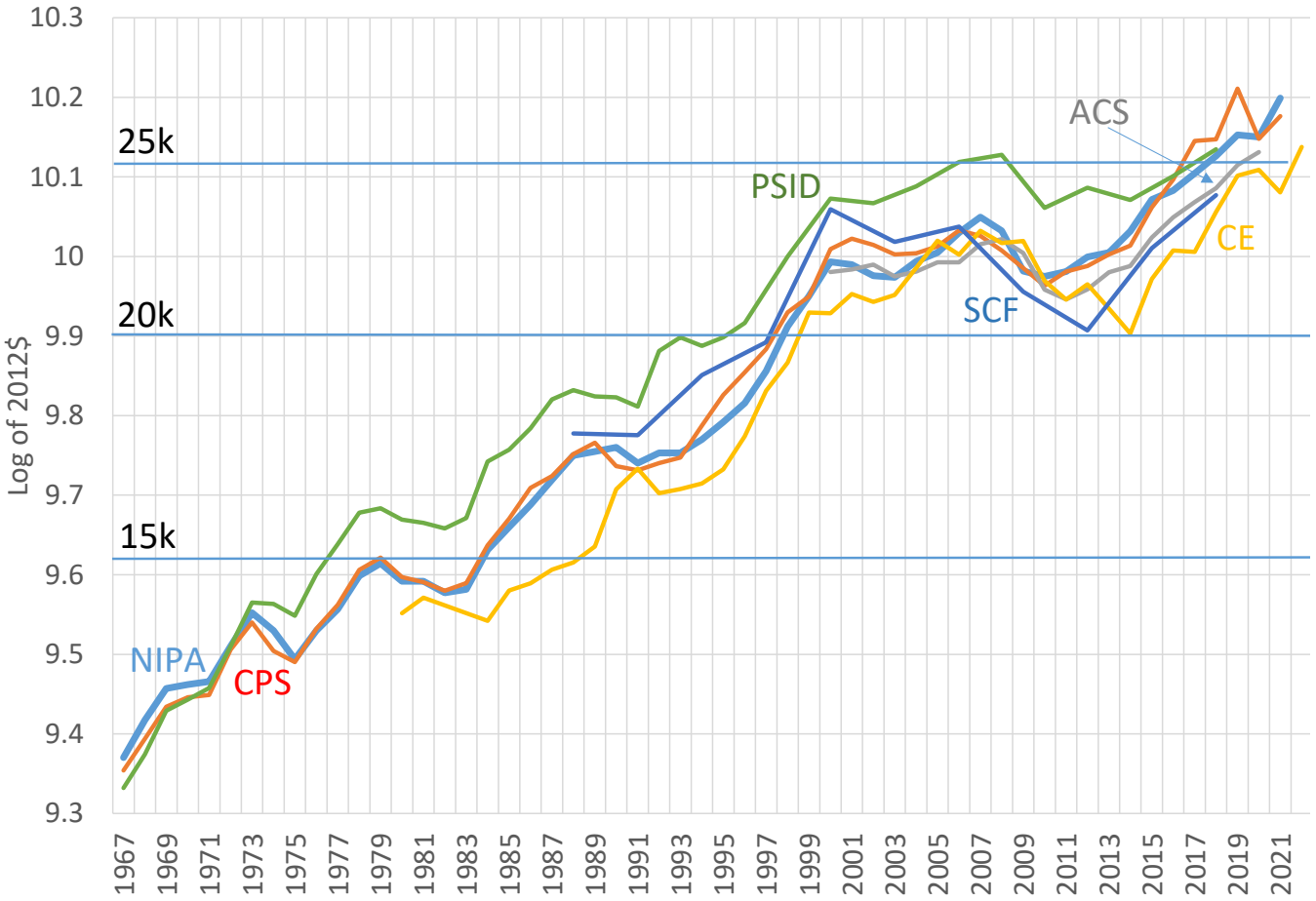
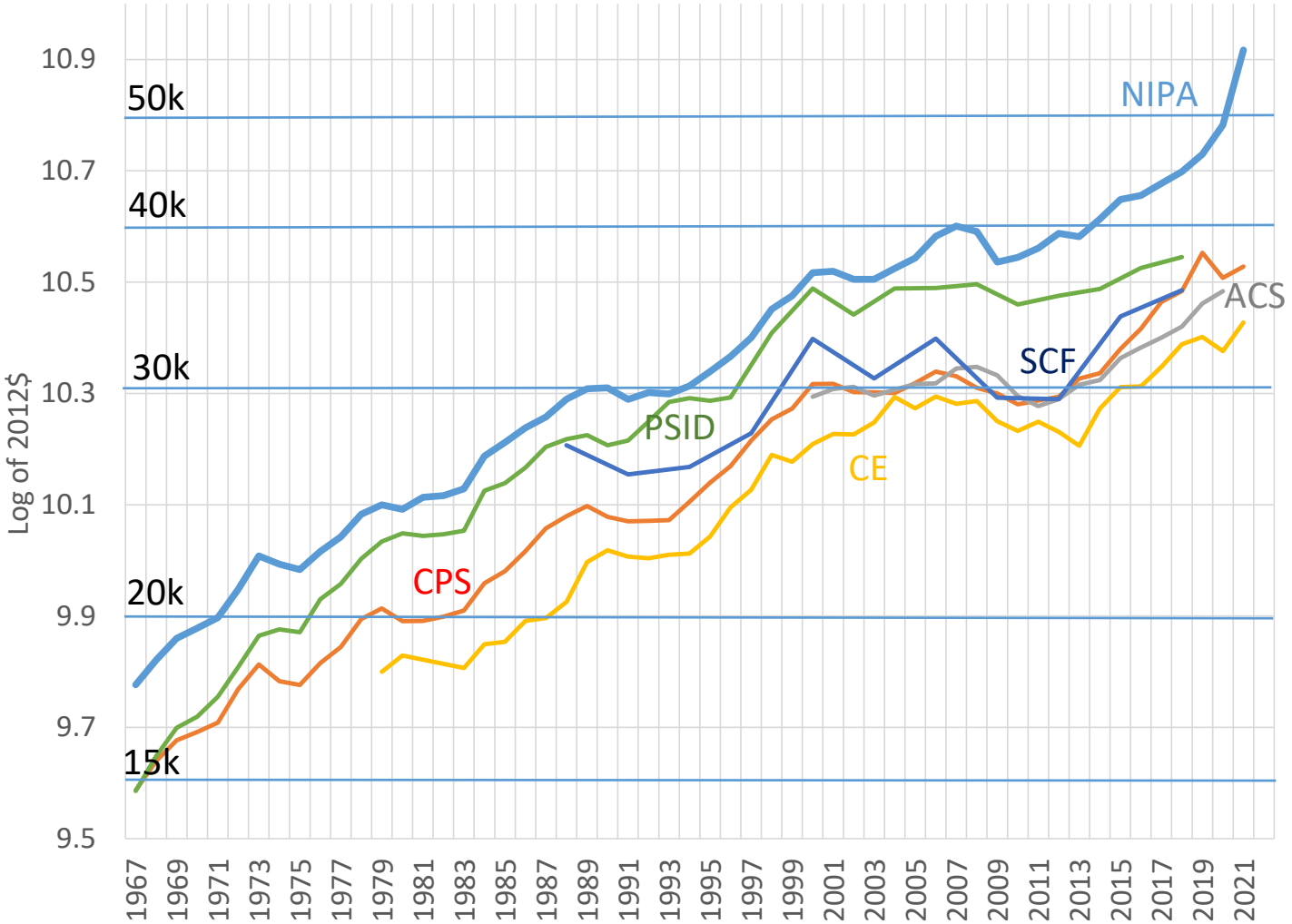


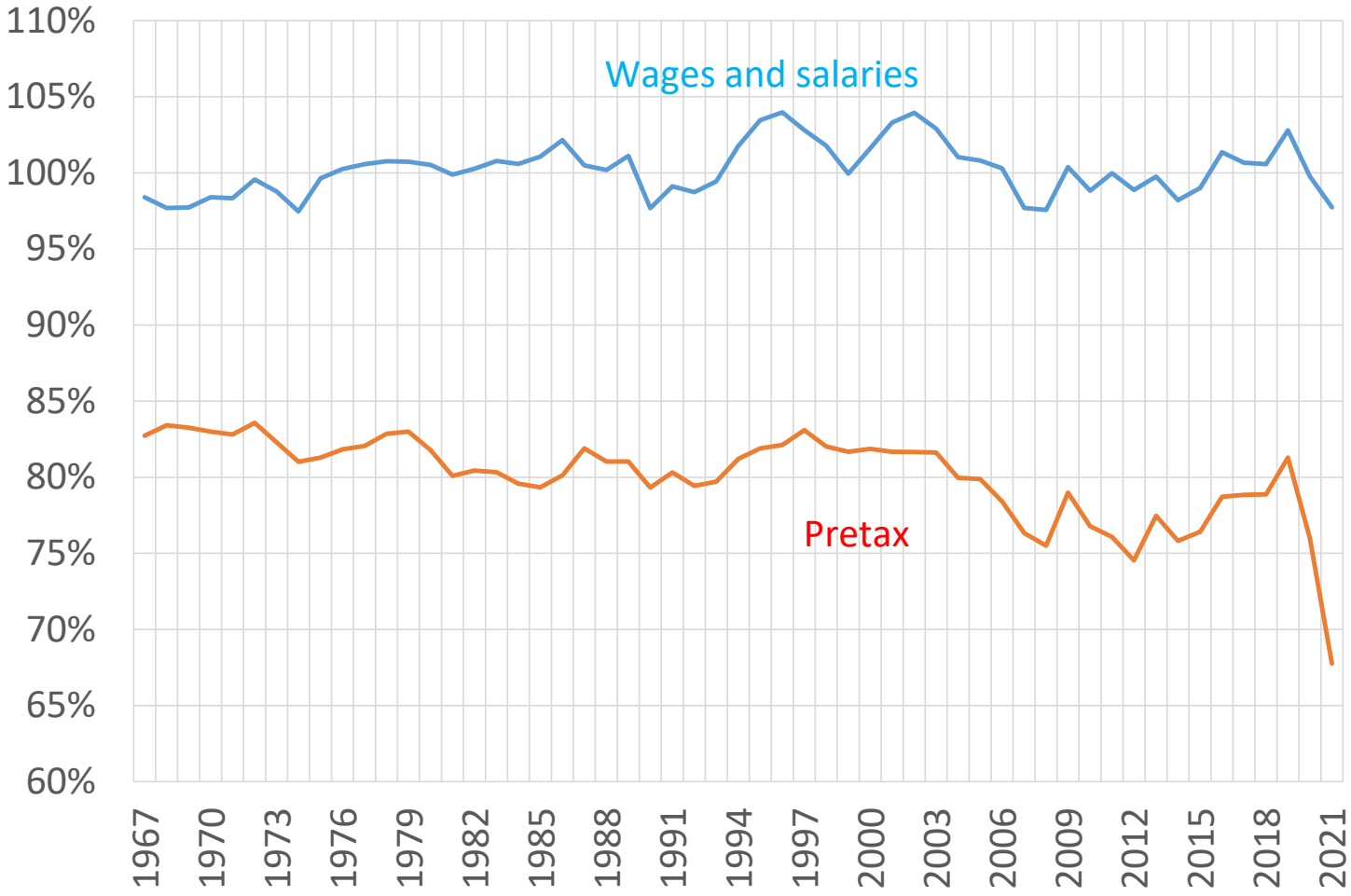
- March CPS matches NIPA well
- Broad agreement with NIPA for other surveys
- In PSID & CE more persistent Great Recession

Pretax (personal) income pc, sample A



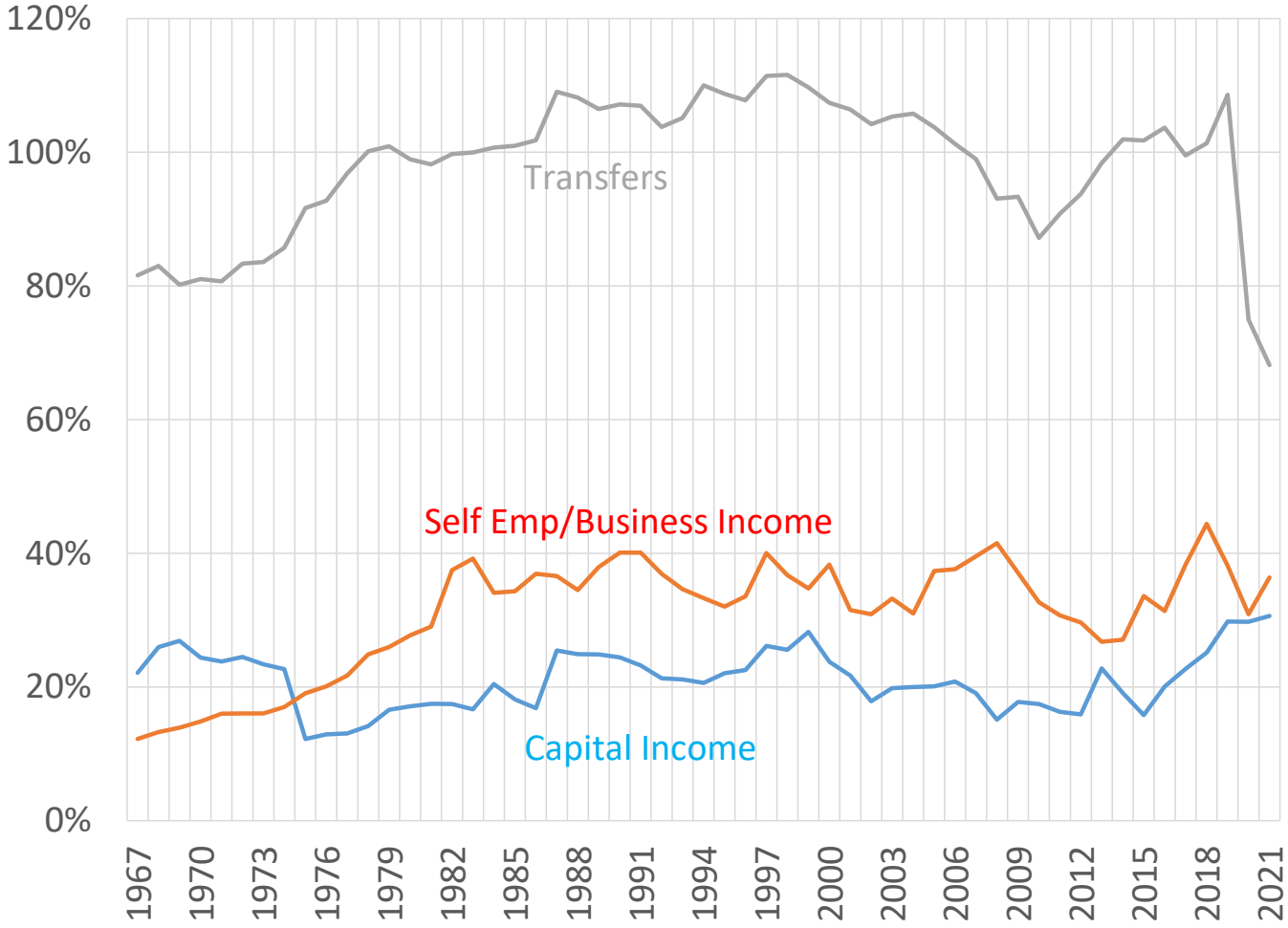
Pretax Income includes: earnings, business income, capital income, transfers, FICA

Gaps between NIPA and surveys (CPS)



- NIPA pretax income 20% larger than CPS pretax
- Gap larger in GR and COVID

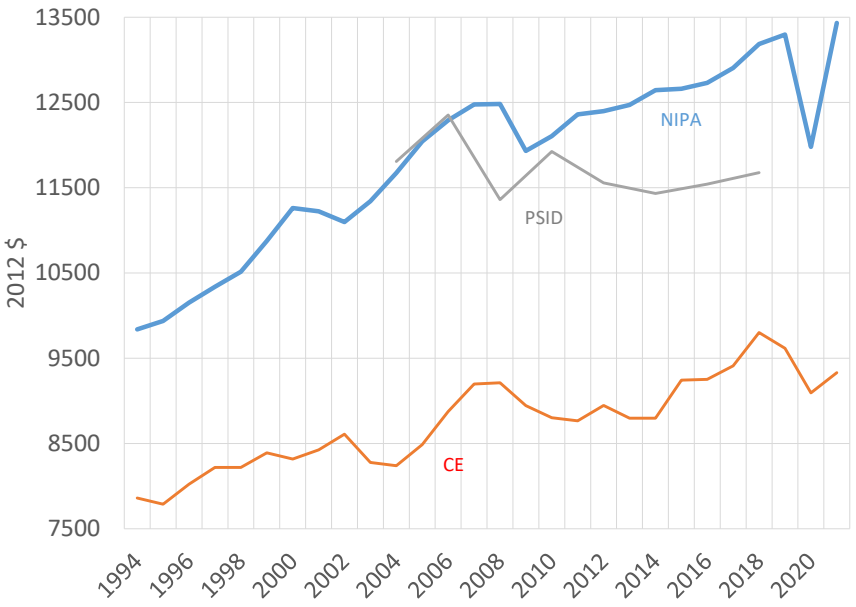
Components of the pretax income Gap



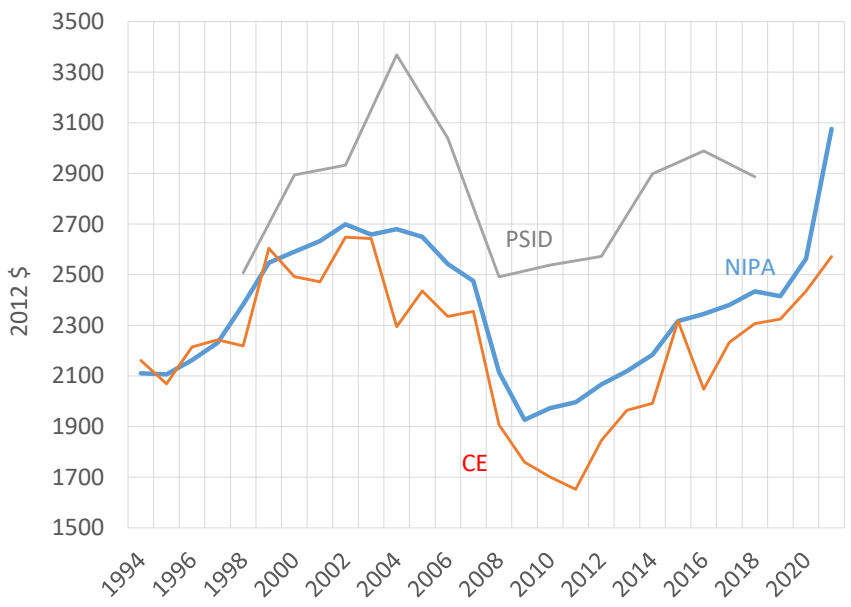
- gap in transfers small on average, large in recessions
- gap in capital and business income always large
- later assess inequality impact of gaps

Consumption expenditures pc, sample A

Non Durables



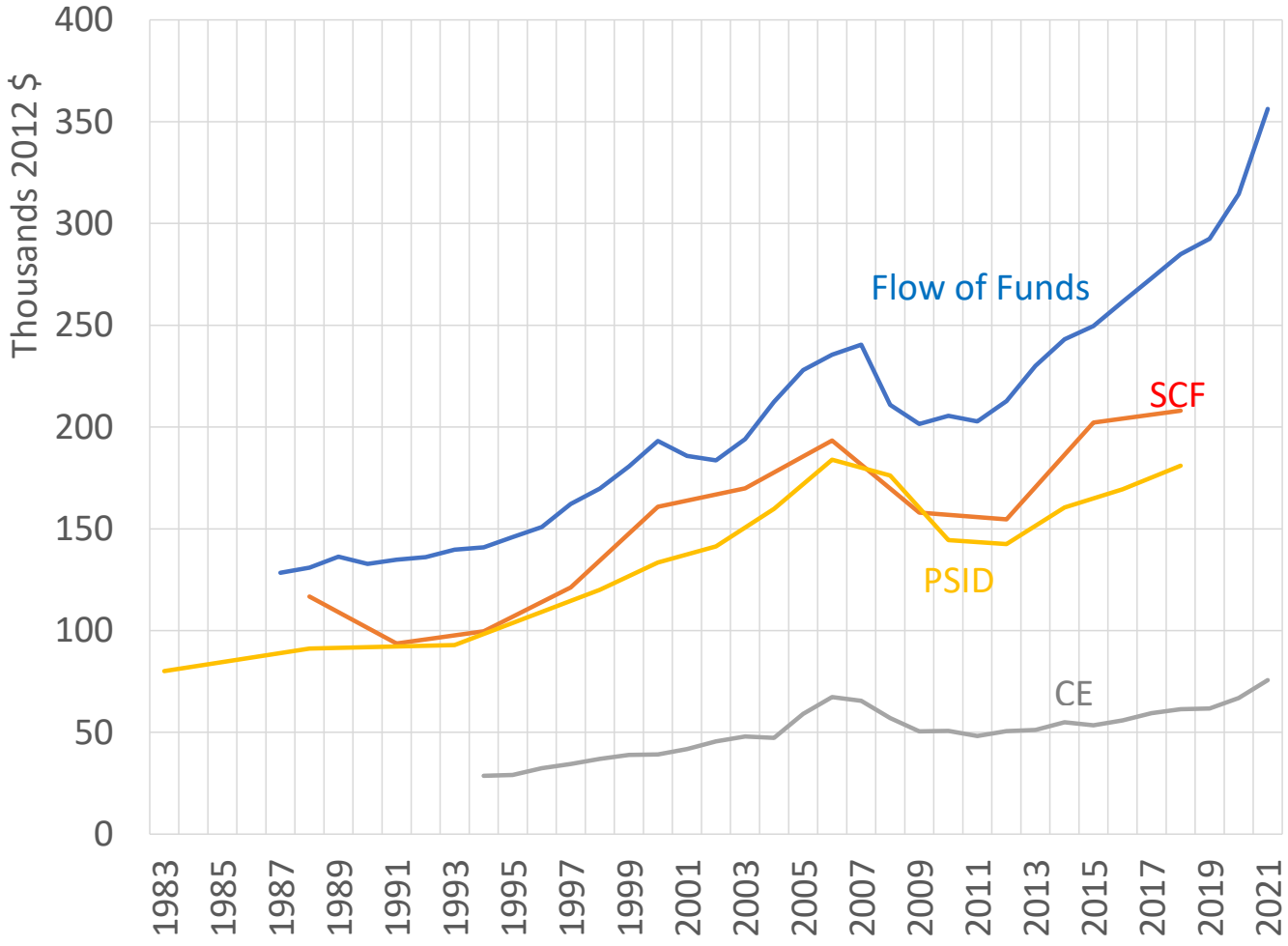
Durables



Non health, non housing

- recent years allow evaluation of PSID v/s CE
- CE better matches NIPA growth in recent years and closer to NIPA than PSID
- both capture cyclical variations (COVID?)

Household net worth pc, sample A

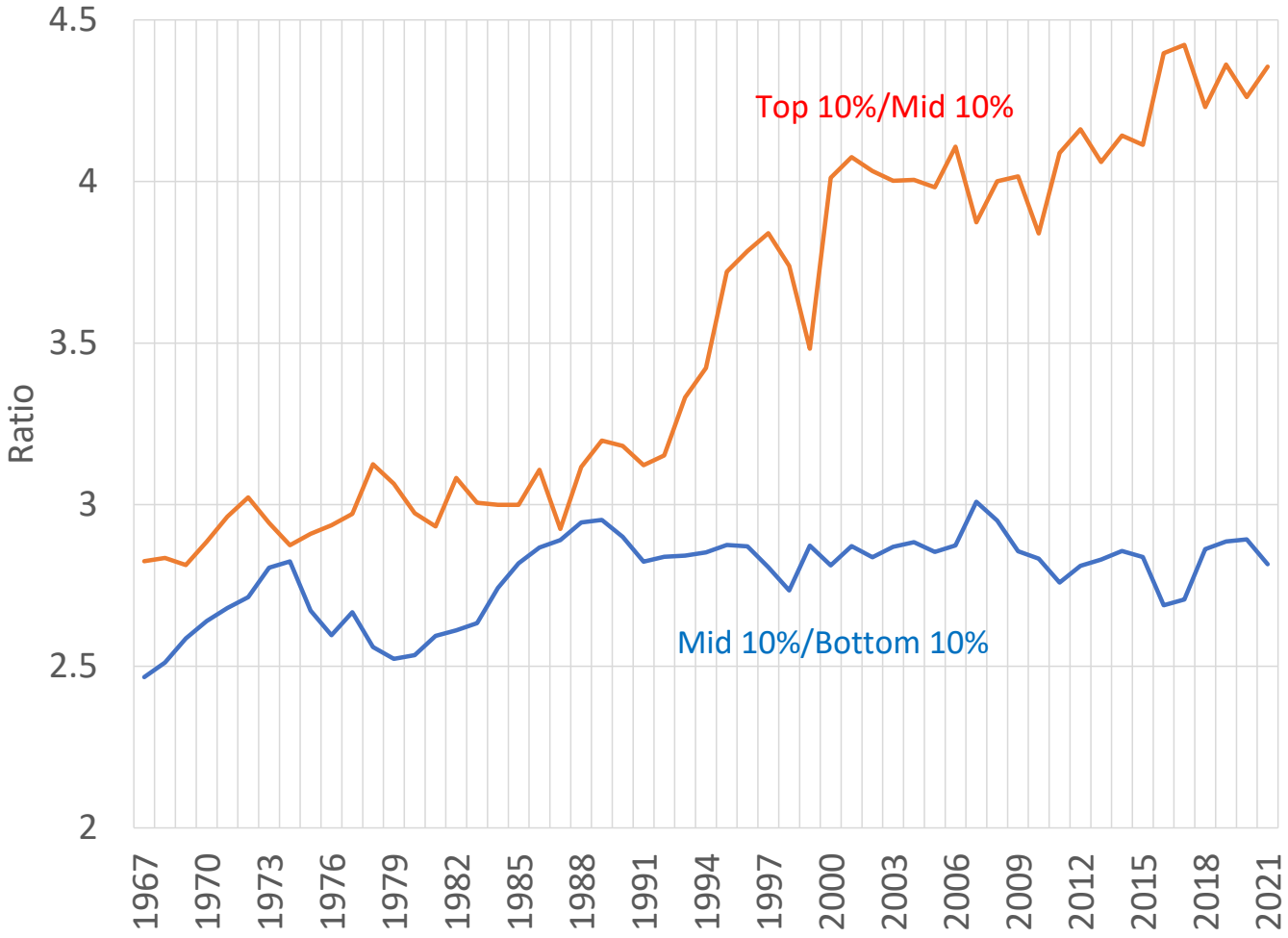


- gap between surveys and FoF
- PSID $\approx$ SCF except during equity booms
- CE wealth very low

Inequality dynamics roadmap

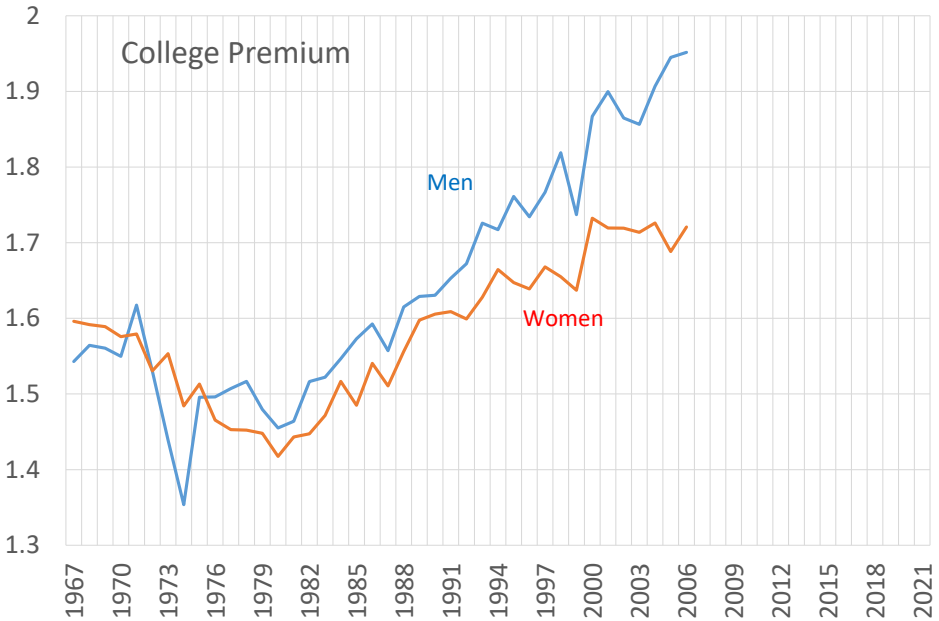
- individual wages $\rightarrow$
- individual earnings $\rightarrow$
- HH earnings/income $\rightarrow$
- HH expenditures and wealth

Wage inequality, sample C, CPS



- not cyclical
- flat at the bottom
- post GR: keeps increasing at the top

Wage premia


College Premium
Men
Women
2
1.9
1.8
1.7
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1967
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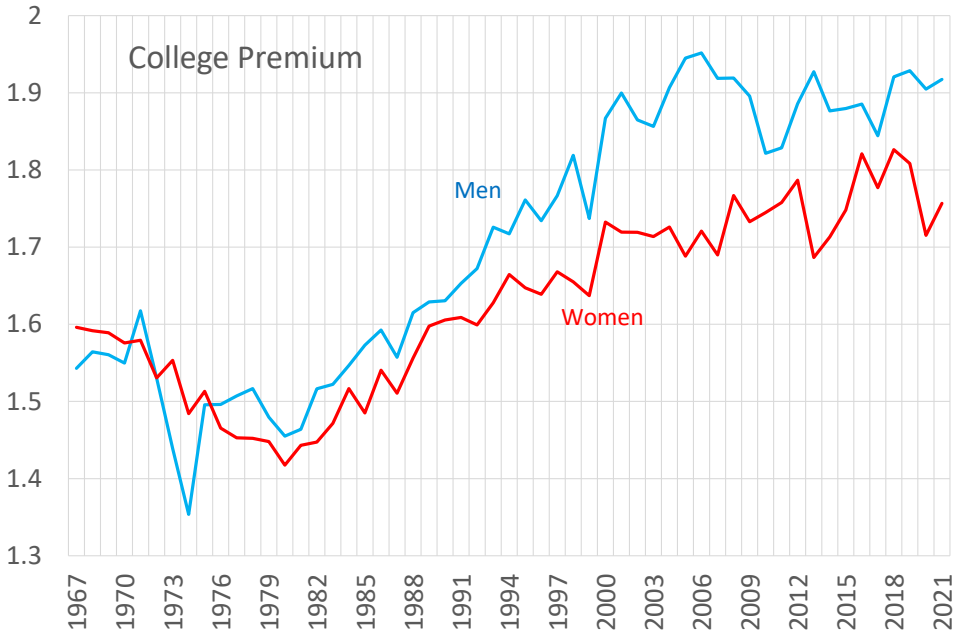
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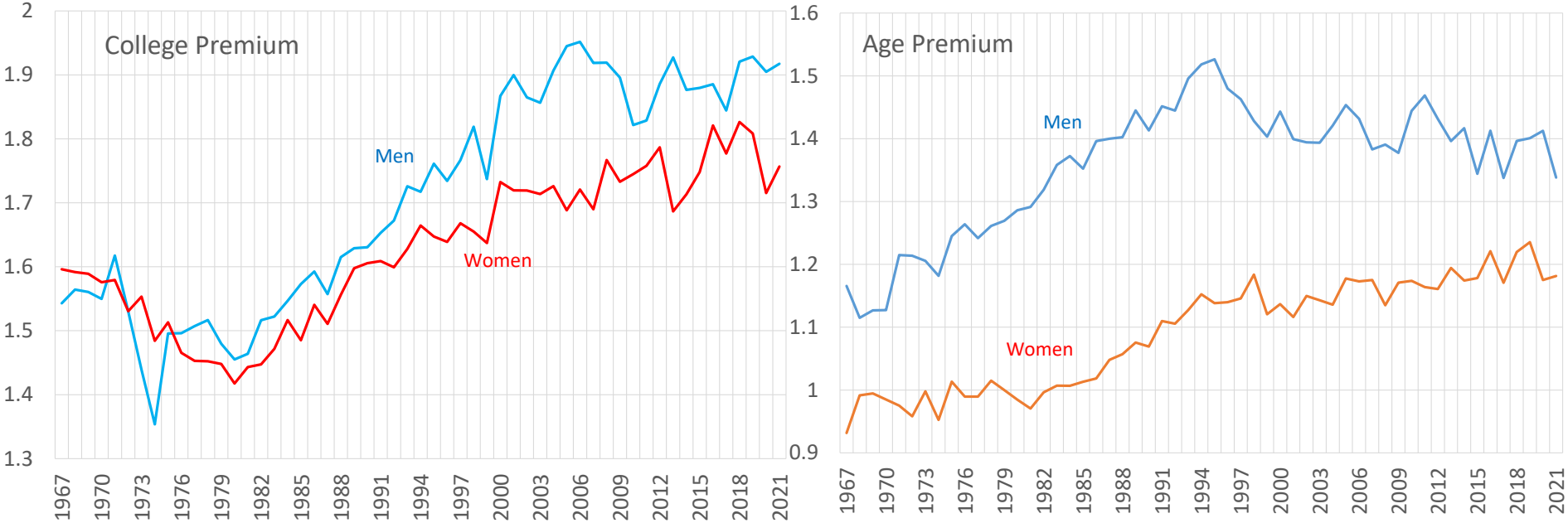
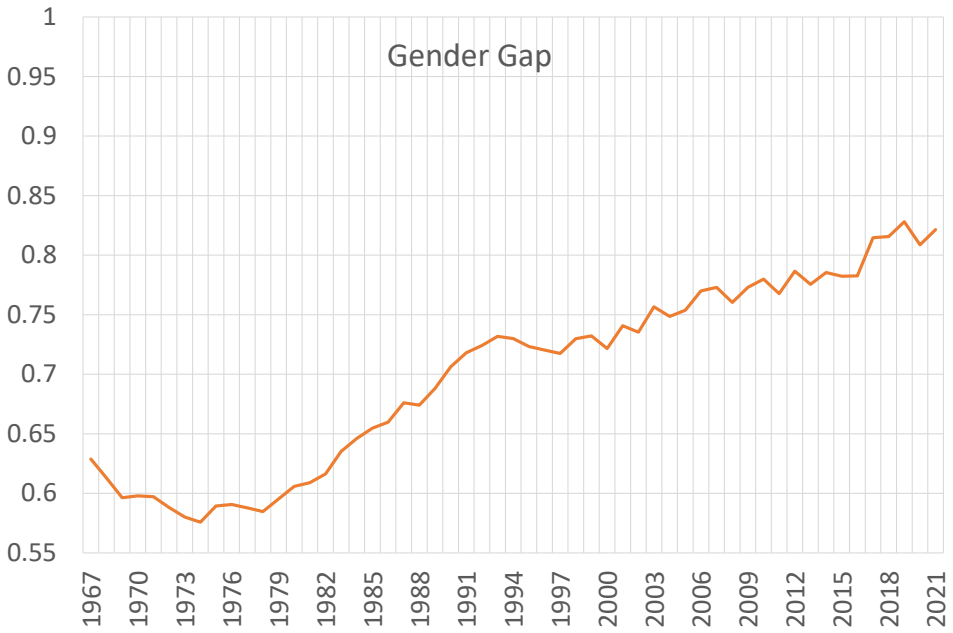
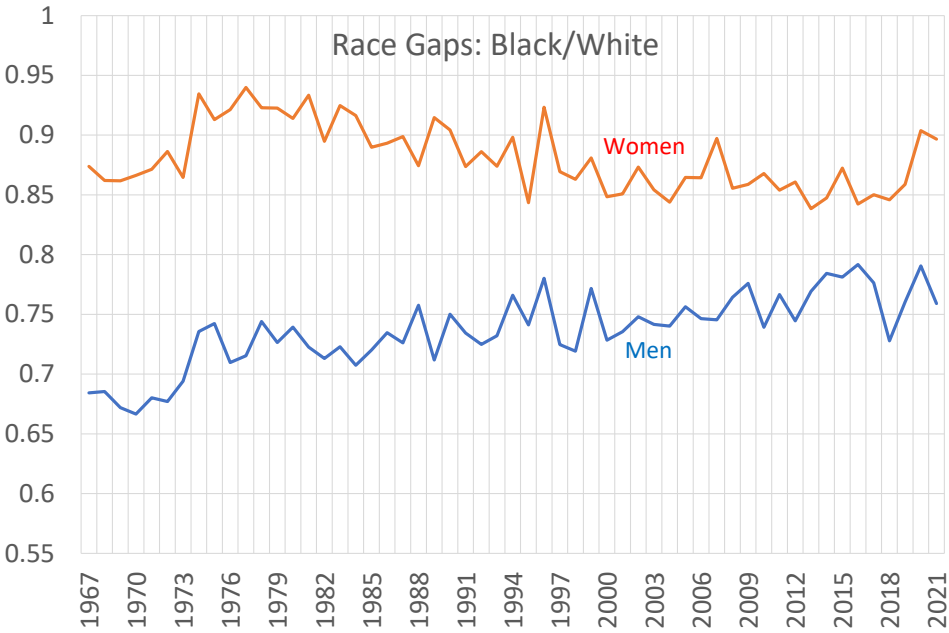


- post GR: end of the rise in college premium

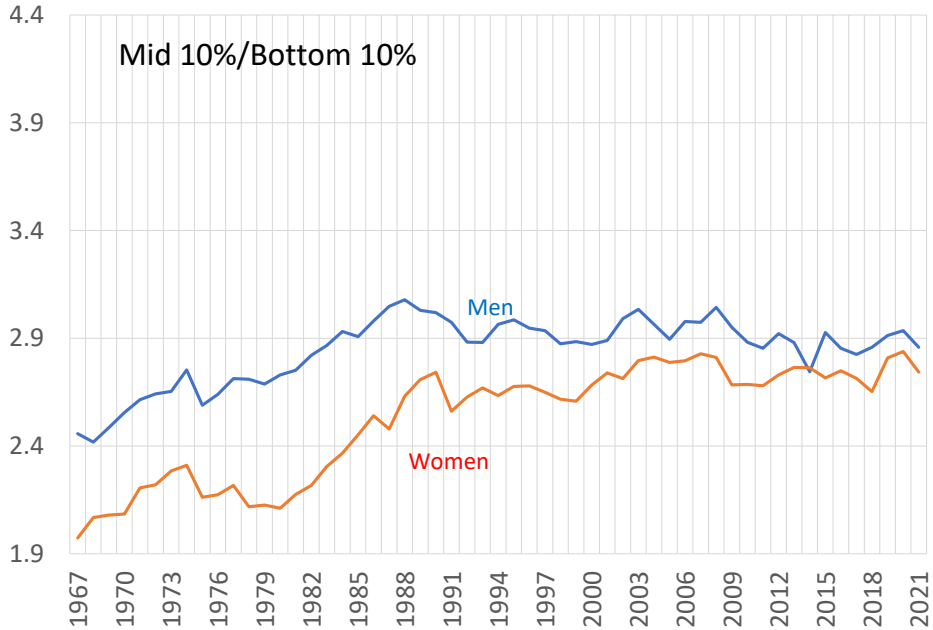
Wage gaps

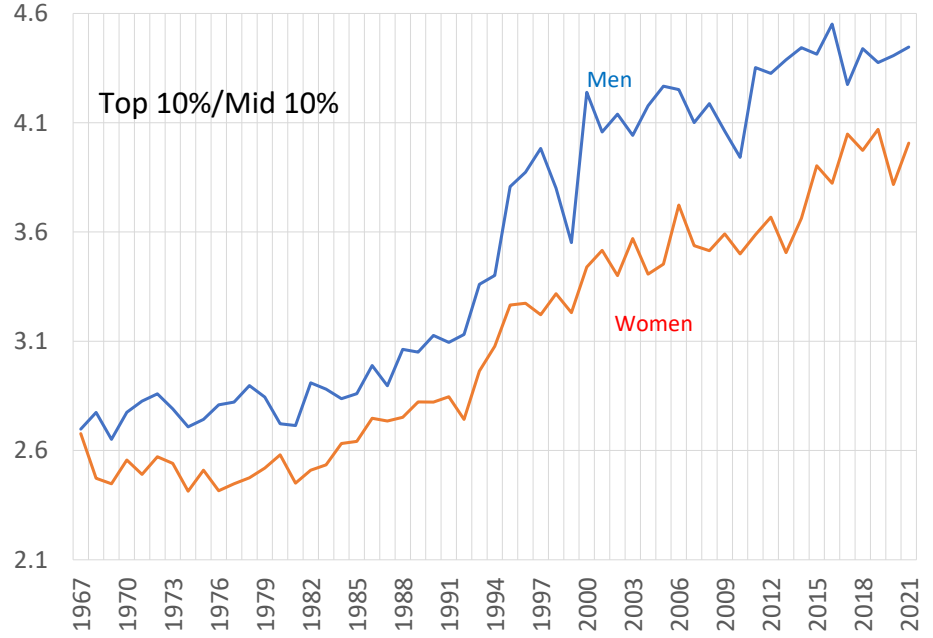


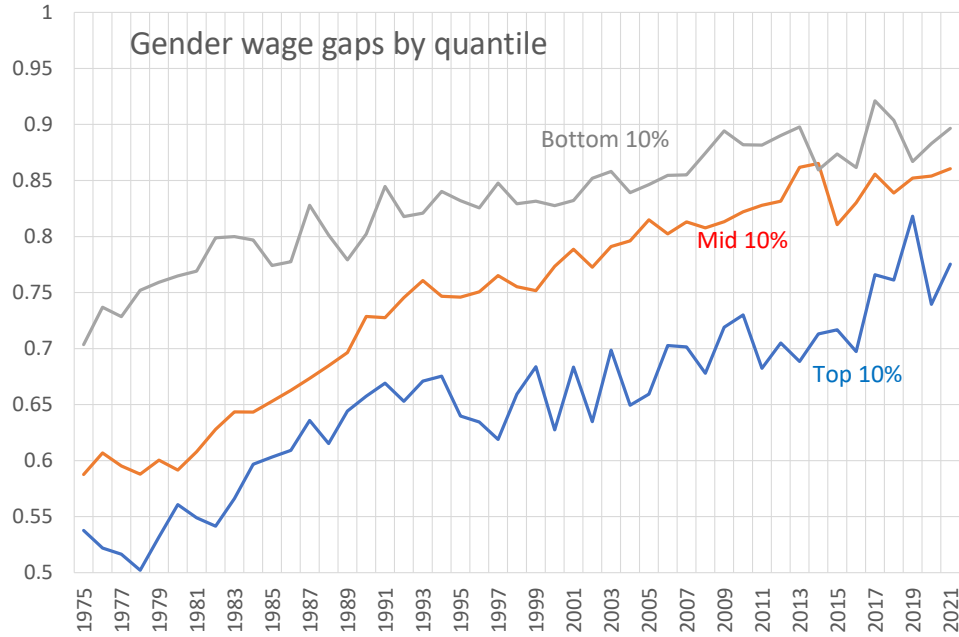


- post GR: further closing (at slower pace) of gender gap
- little change in race gap

Gender gaps across the wage distribution



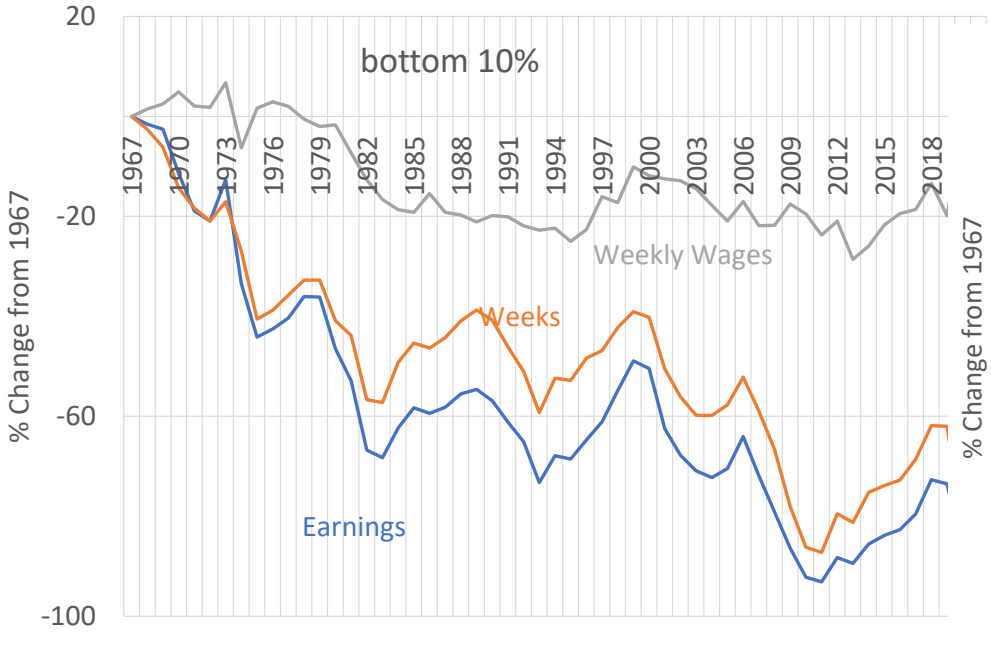


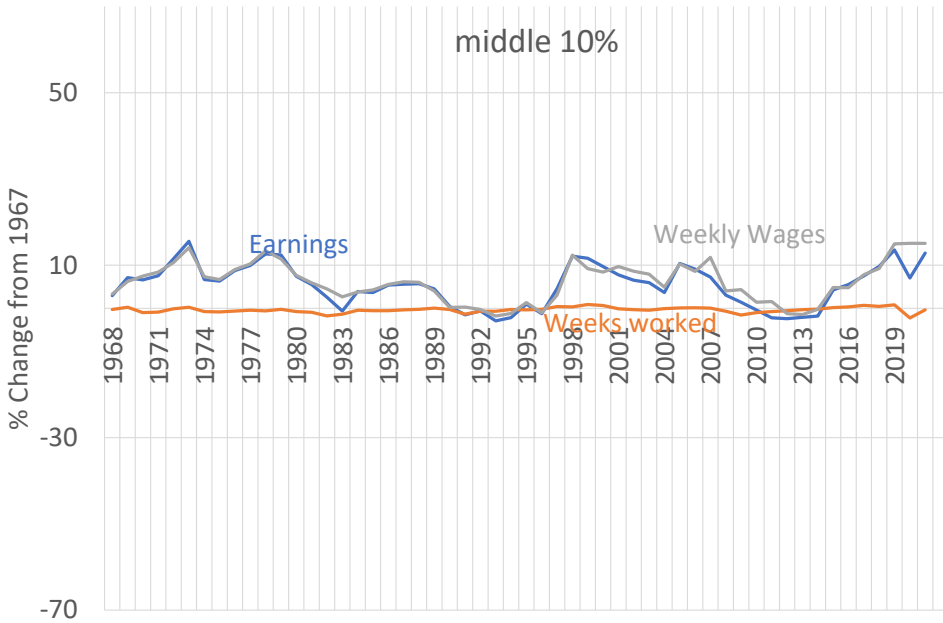


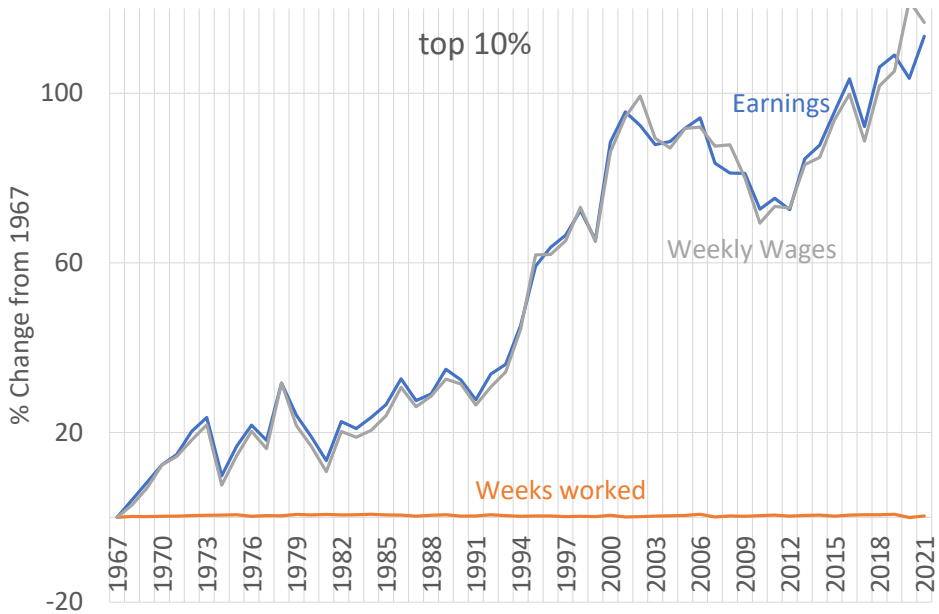
over past 15 years

- increase in inequality at top both for men and women
- largest gender gap at the top

Measures of men earnings: sample B



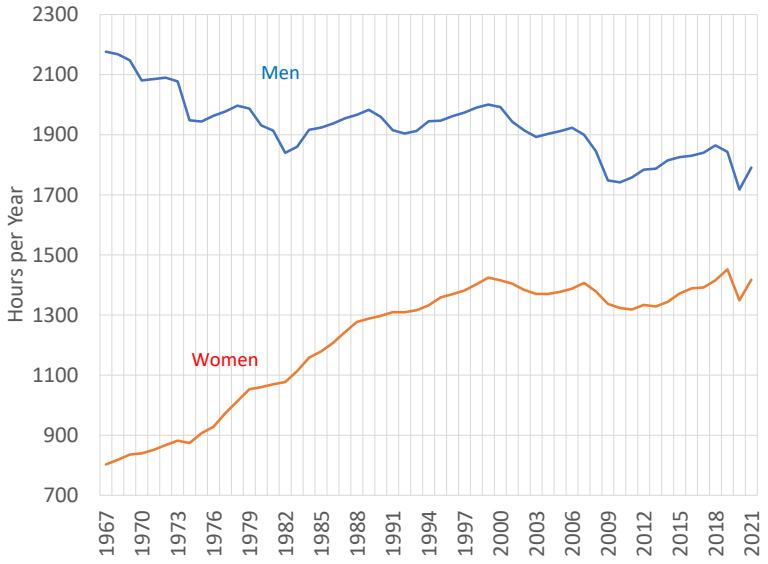




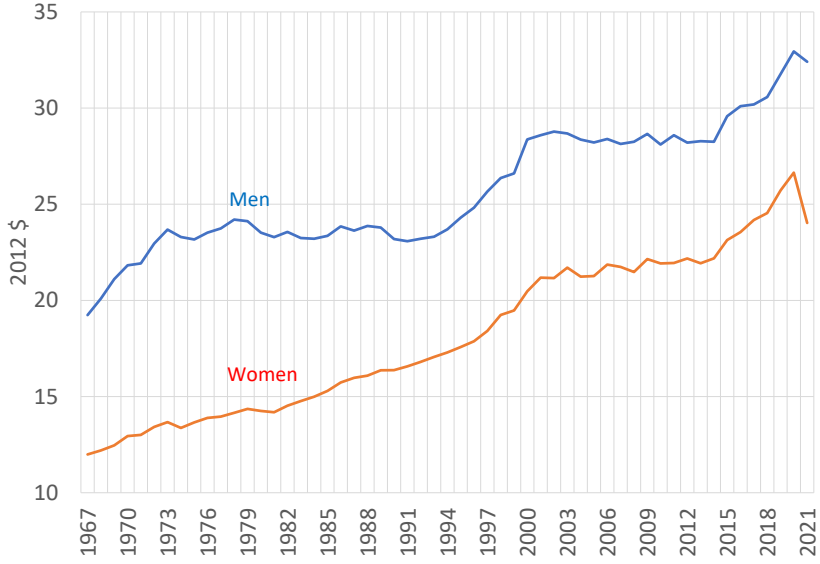
- men earnings inequality increase both at the top and bottom
- top: only secular driven by wages
- bottom: cyclical and secular, driven by hours

Earnings Gender Gaps

Hours (sample B)



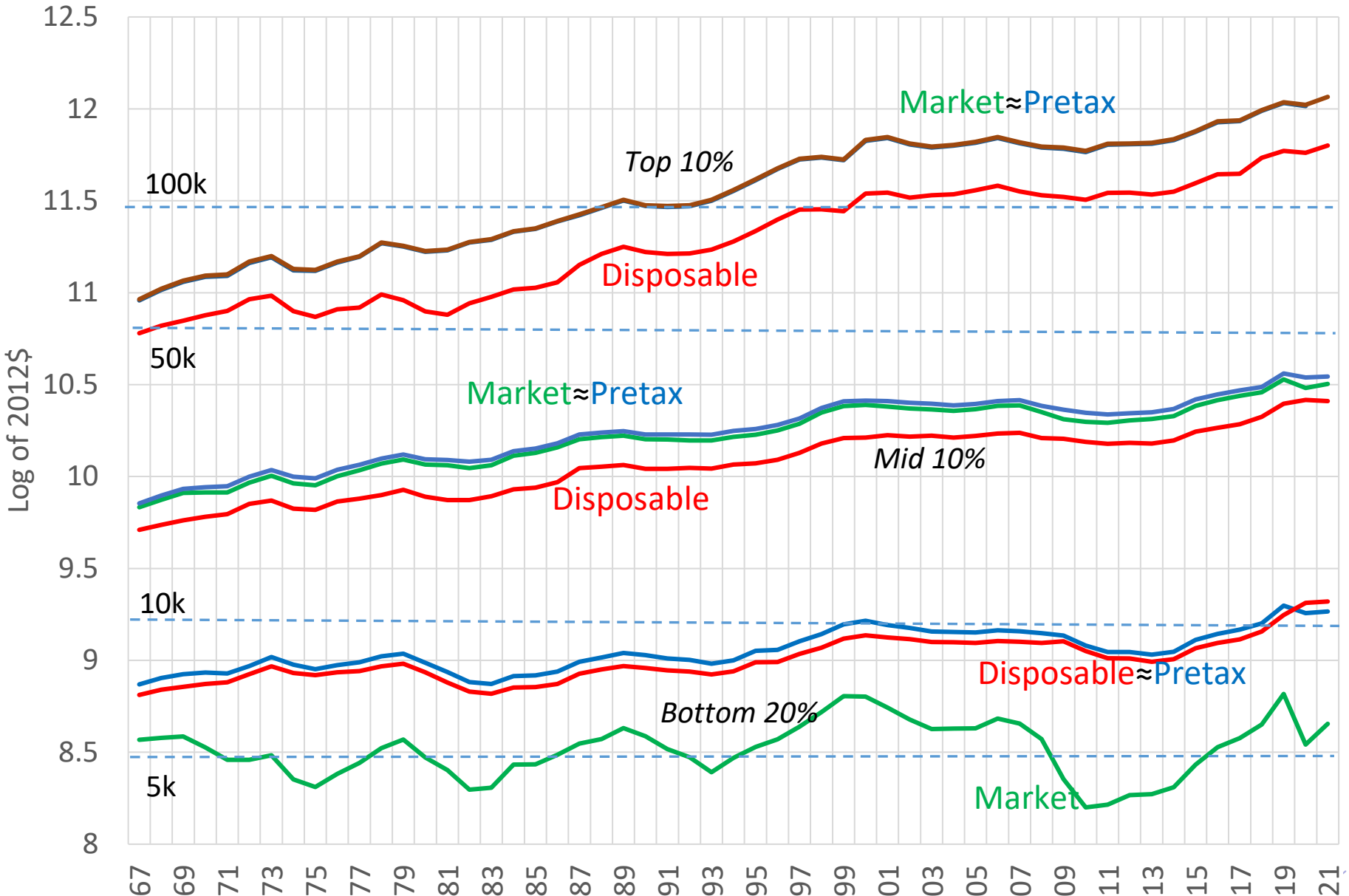
Wages (sample C)



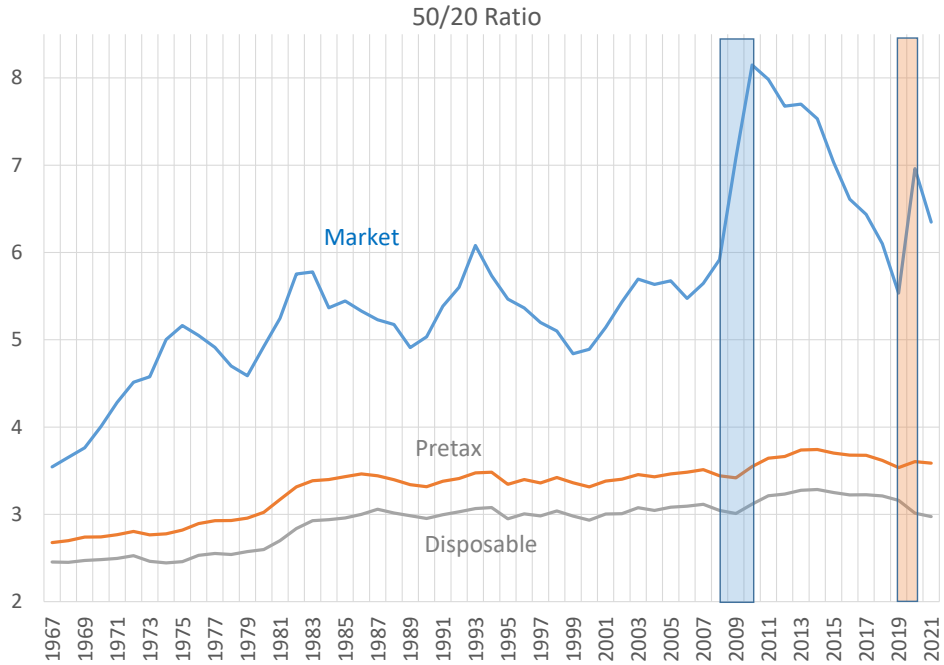
- 1967-1997: women faster wage and hours growth: great earnings equalization
- 1997-2020: hours equalization over, wage equalization slower
- Gender gap in hours AND wages around 25%

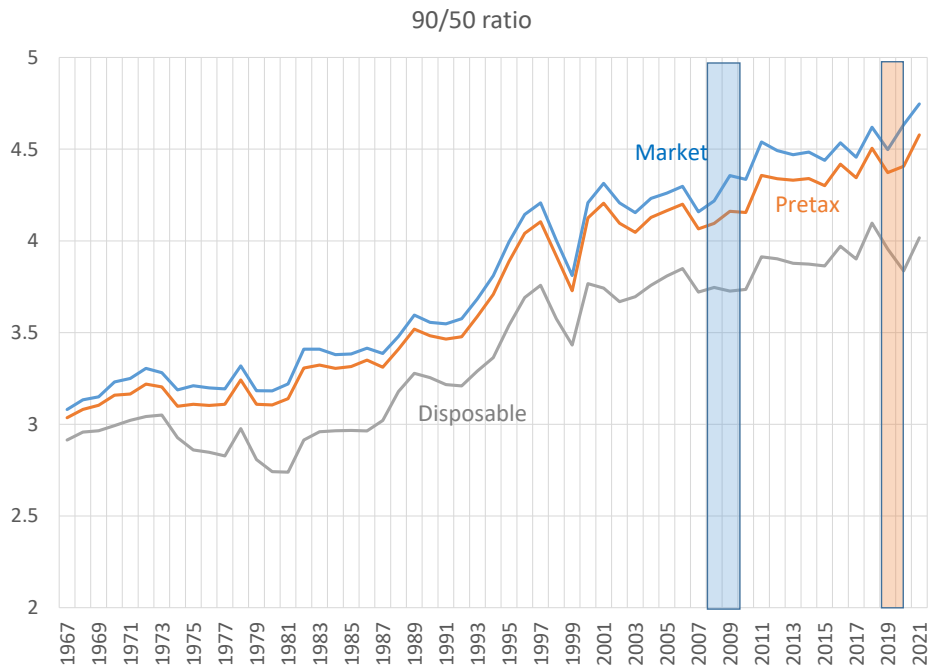
From individuals to households

Measures of household income: Sample B, CPS, by mkt



Household inequality: Sample B





- Great Recession drove an increase in inequality, which has reversed at the bottom, not at the top
- COVID recession unprecedented redistribution

Main takeaways

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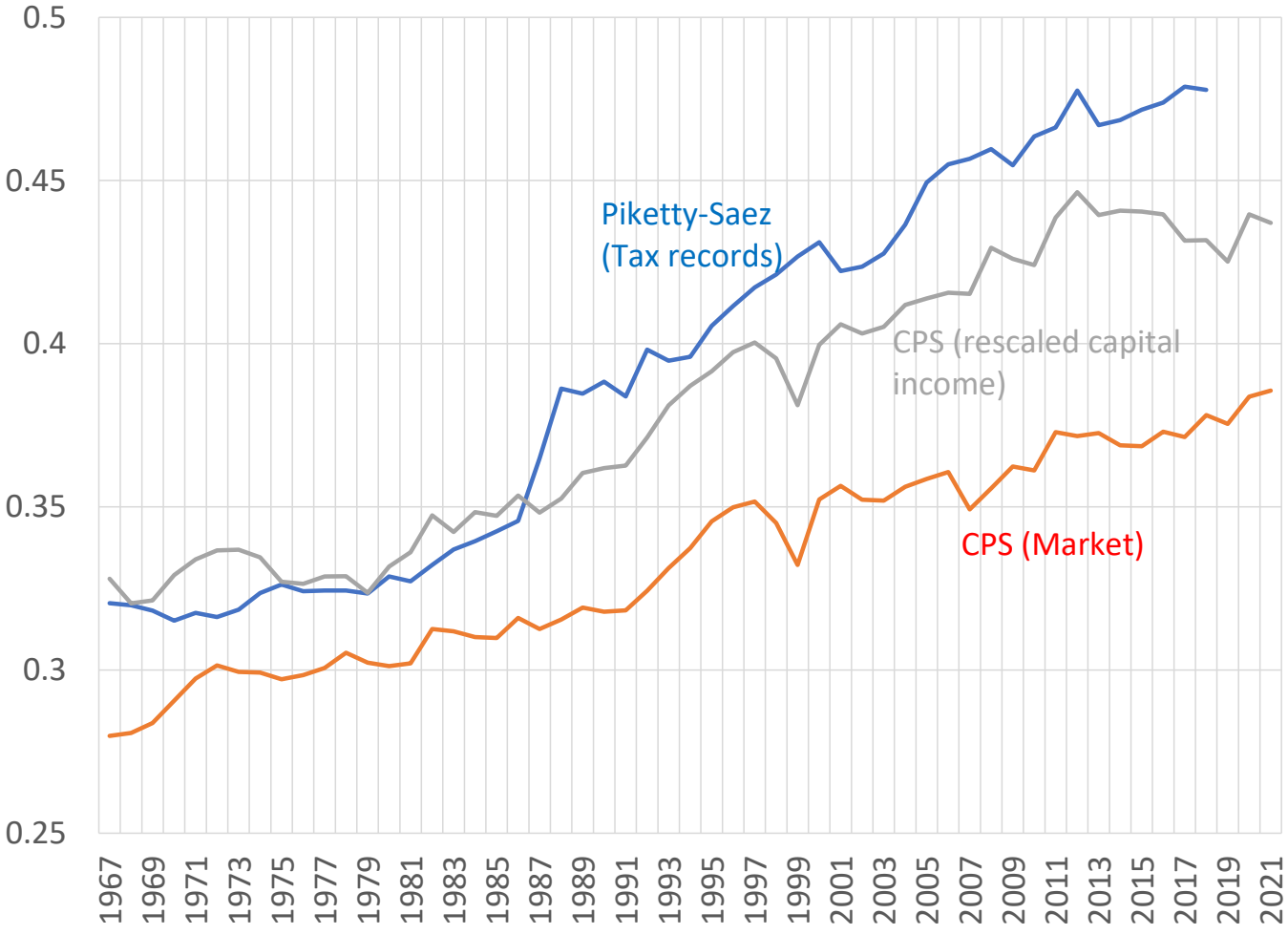
- Tax and transfers greatly affect trend and cycle of bottom 20%, and reduce income at the top
- Over past 15 years disposable income of the top keeps diverging
- COVID historically large redistribution

Assessing the impact of missing income in CPS

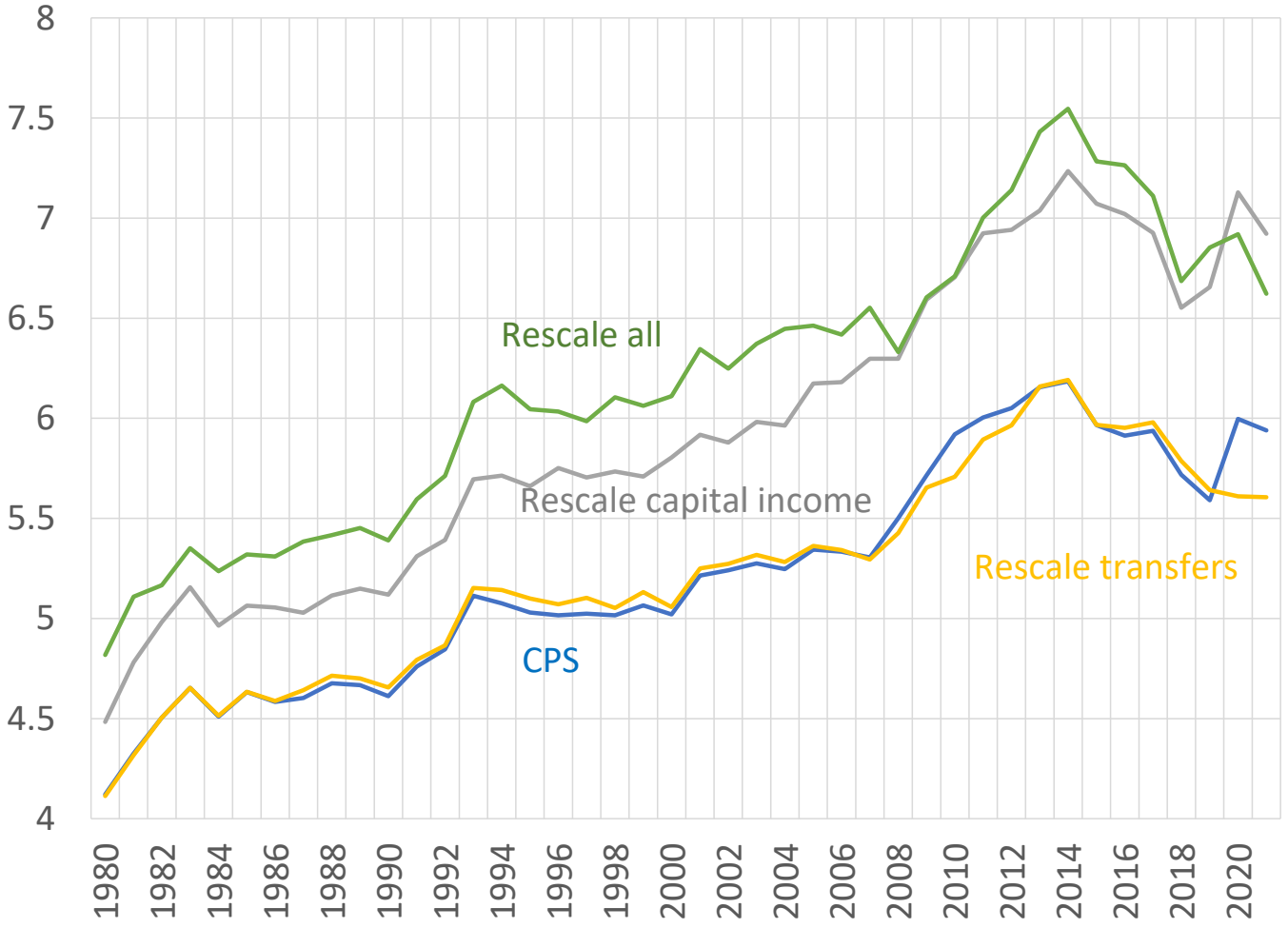
- CPS might miss substantial fraction of capital and business income and, during COVID, transfers
- assess inequality impact by rescaling CPS figures by the avge NIPA/CPS ratio in income category
- rescaling is not uniform across households because many households report 0

Check: Share of top 10%



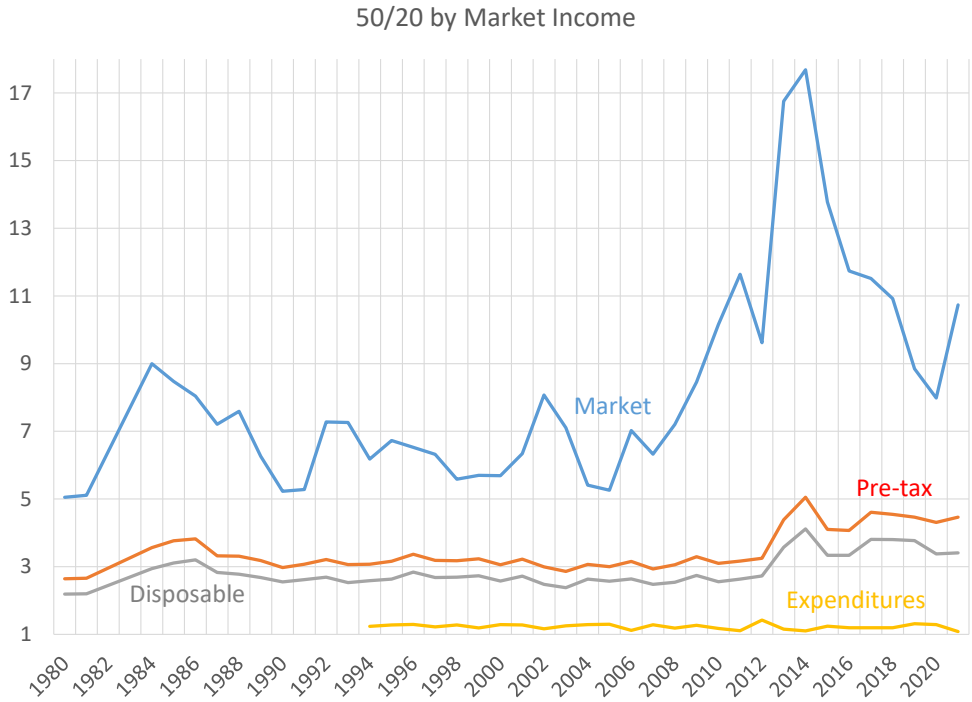
- Rescaling capital income has significant impact on both level and trend of inequality at the top

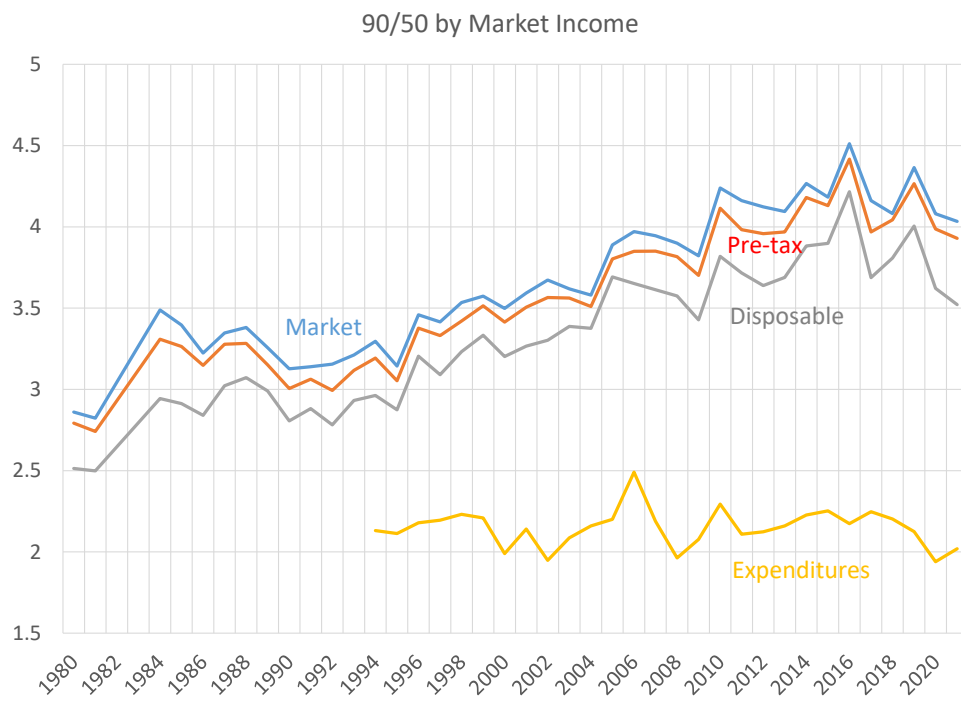
Impact of rescaling on inequality (90/20)



- missing capital inc underestimates ineq. level & growth
- missing transfers overestimates ineq. in covid
- overall ineq. trend over past 15 years not much affected

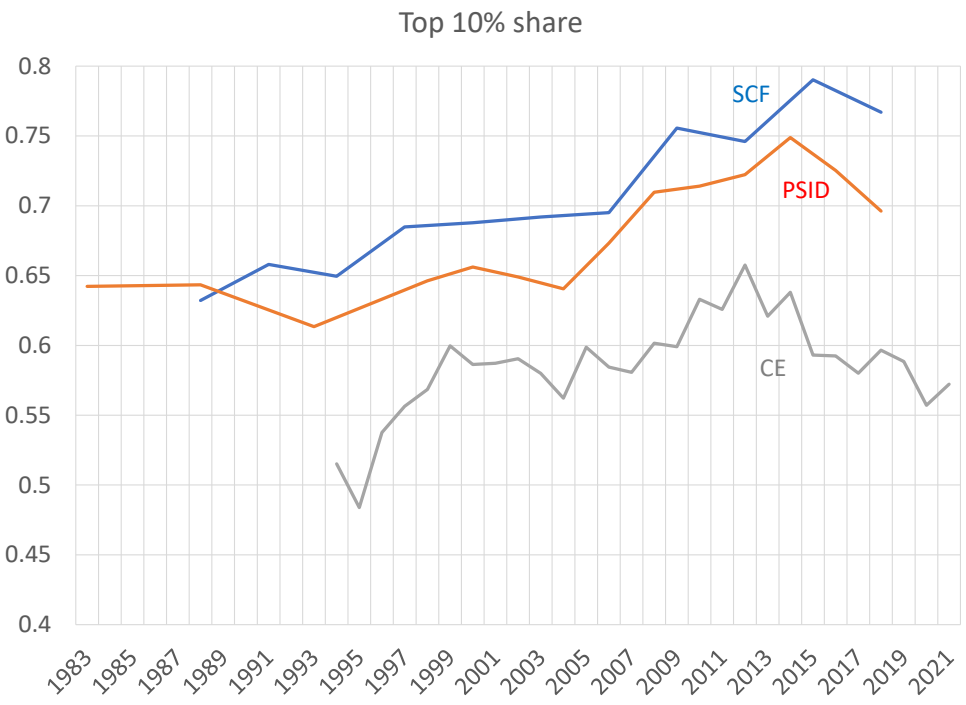
Household Expenditure Inequality: Sample B, CE

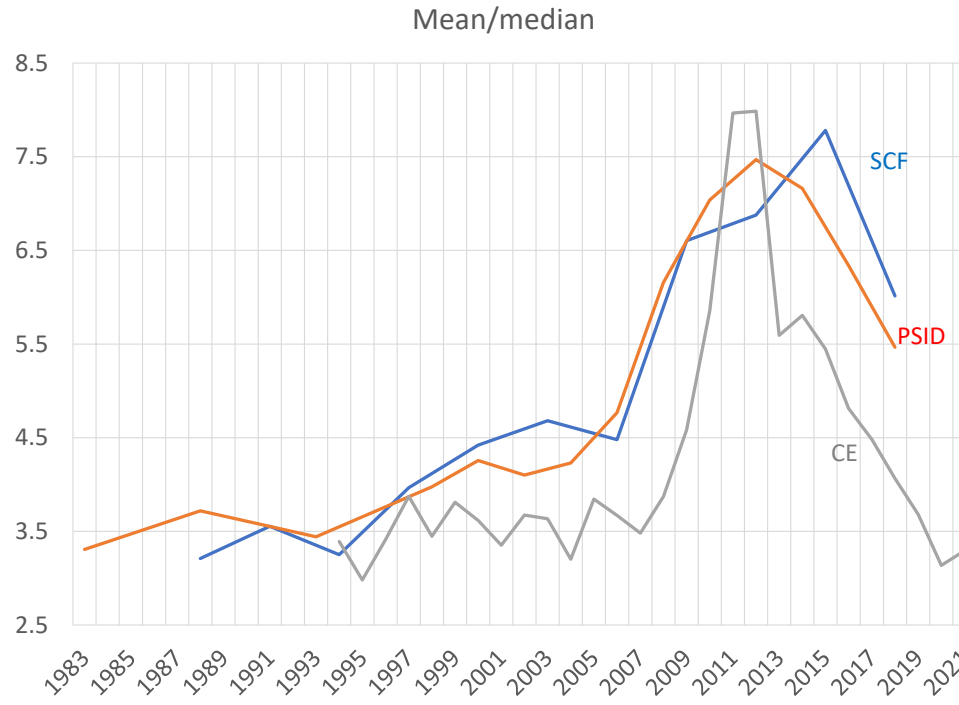




- Dynamics of income inequality in CE very similar to CPS
- Still no increase in expenditure inequality
- Same results using PSID expenditures

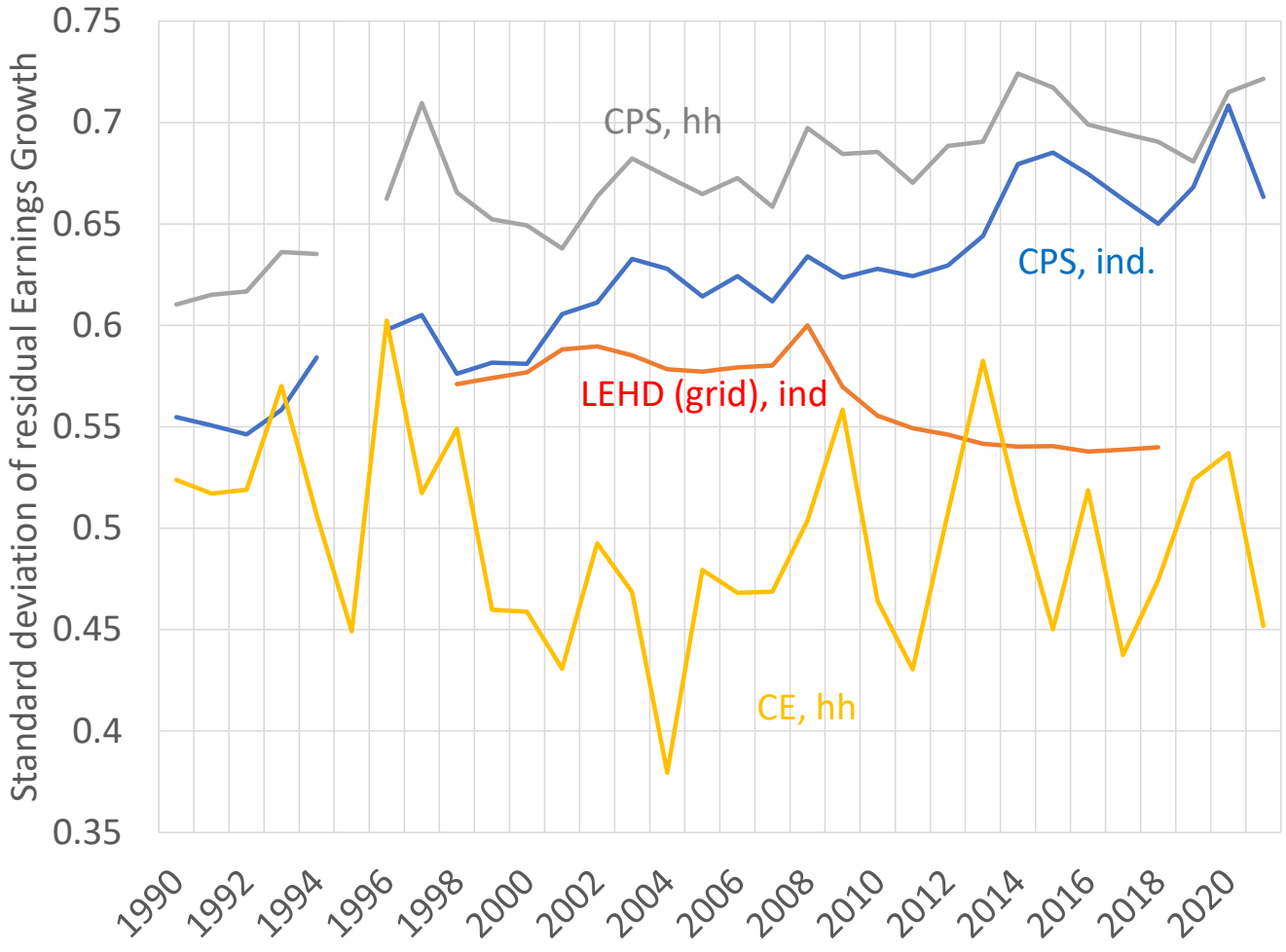
Wealth Inequality: Sample B





- Dynamics of wealth inequality driven by house and stock prices (Kuhn et al. 2020)
- In recent years (still missing COVID data in SCF and PSID) wealth inequality declining (raising home prices?)

Earnings Volatility



Lessons from U.S. Survey data over the past 15 years

- The rate of increase in income inequality has moderated, however inequality at the top still increasing
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- COVID: historically different, first recession when disposable income inequality declined
- Consumption expenditure inequality still flat throughout
- Wealth inequality increase around great recession, declines after