Top 1% Income Shares:
Comparing Estimates Using Tax Data

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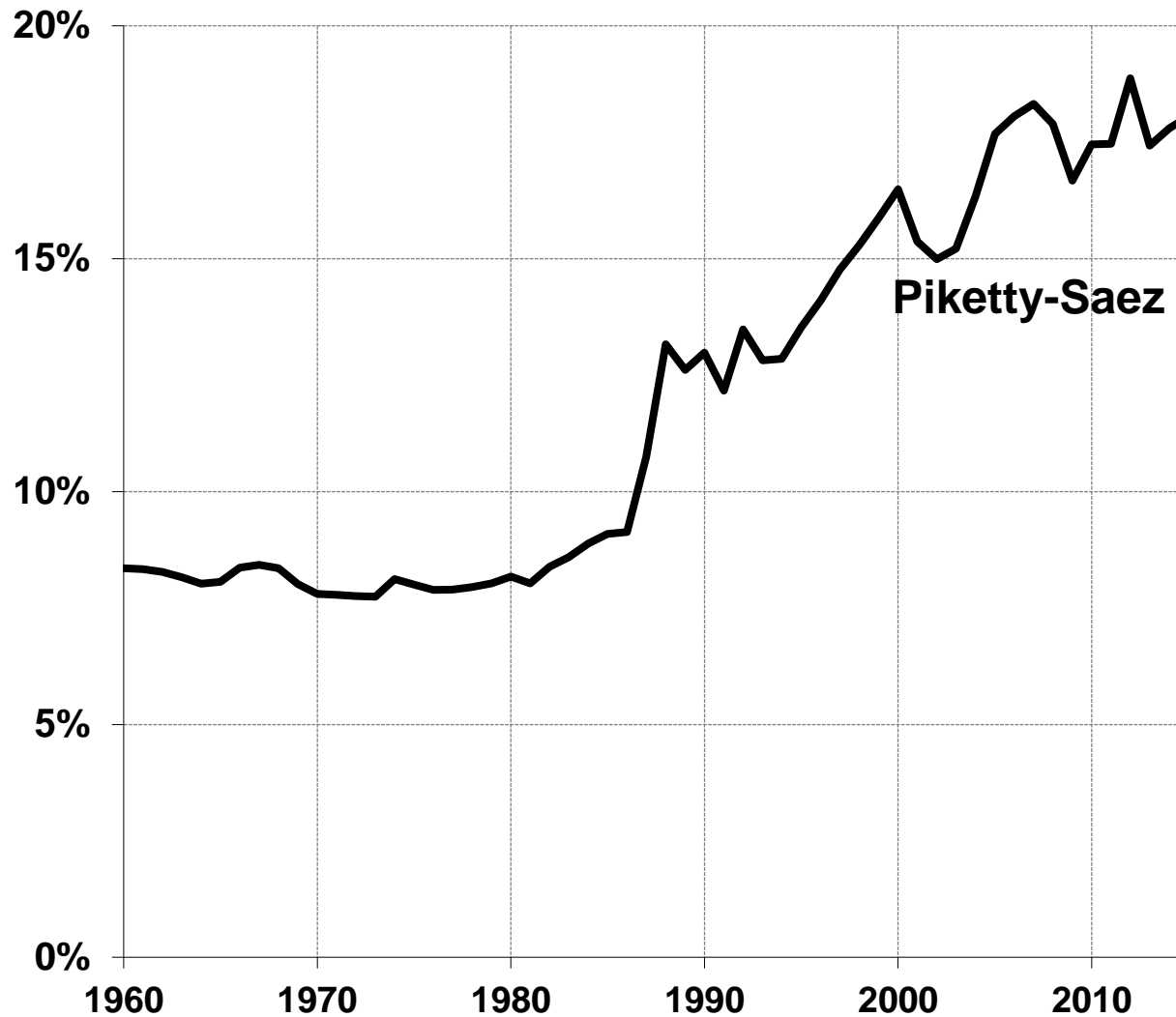
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For presentation at American Economic Association
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Documentation at: davidsplinter.com

Some Research Reports Dramatic Increases in Top 1% Shares since 1960

Piketty-Saez

Measuring incomes over time isn't easy

Tax data issues

Base broadening tax reforms (TRA86)

Over 1/3 of national income <u>not</u> in tax data

Demographic and social changes

Declining marriage rates + more single parent HH

More dependent filers

Economic changes

Government transfers increased

Inflation: distorts real income

Some Technical Issues in Using Tax Data

Income definition

NOLs = losses in <u>prior</u> years

State & Local refunds = adjustment for prior year

Gambling winnings but not losses in AGI

Alimony received/paid

TRA86 adjustments

Post-TRA passive loss limits

Pre-TRA86: C corporations as tax shelter

Post-TRA86: Pass-through business to avoid double tax

Tax excluded payments

Employer-paid payroll taxes

Employer-sponsored health insurance

Prior research on inequality trends varies widely

Bricker, et al. (2016)

Fixler, Johnson, et al. (2014, 2017, 2019)

Burkhauser, et al. (2012)

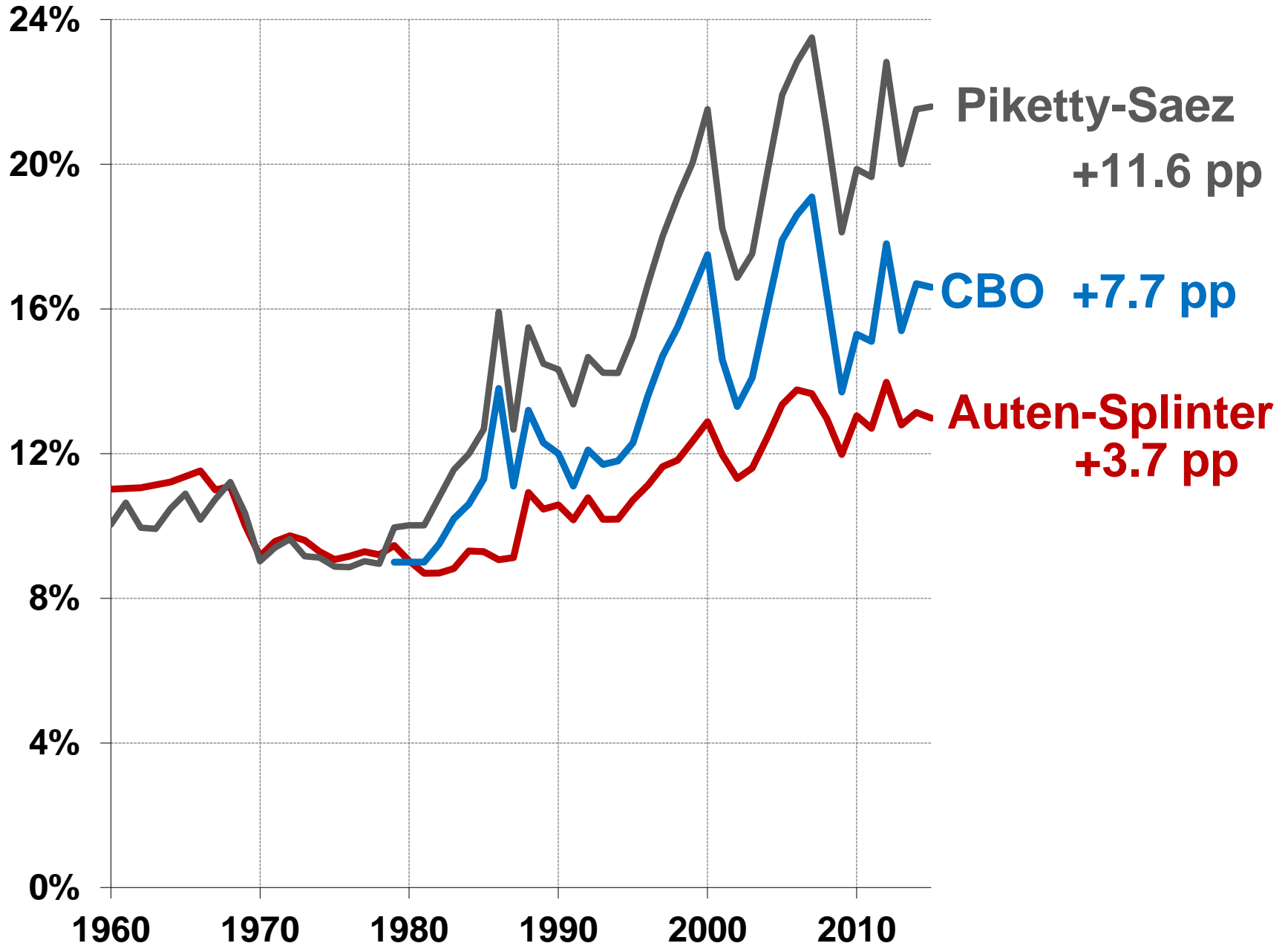## Compare estimates based only on tax data

Piketty-Saez (2003, updated 2018)

CBO (2018)

Auten-Splinter (2018)

Piketty-Saez-Zucman (2018)

Top 1% Pre-tax Income Shares: 1979-2014 changes

Piketty-Saez
+11.6 pp

CBO +7.7 pp

Auten-Splinter
+3.7 pp

Top 1% Income Shares: PS fiscal income to CBO

Piketty-Saez

−2.8 unit/sample

−2.0 Soc. insur.

−1.3 ESI/taxes/ret.

+0.9 Corp. tax

CBO

−5.1 Total in 2014

Top 1% Income Shares: PS fiscal income to Auten-Splinter

Piketty-Saez

−2.2 unit/sample

−2.4 Soc. insur.

−2.1 ESI/taxes/ret.
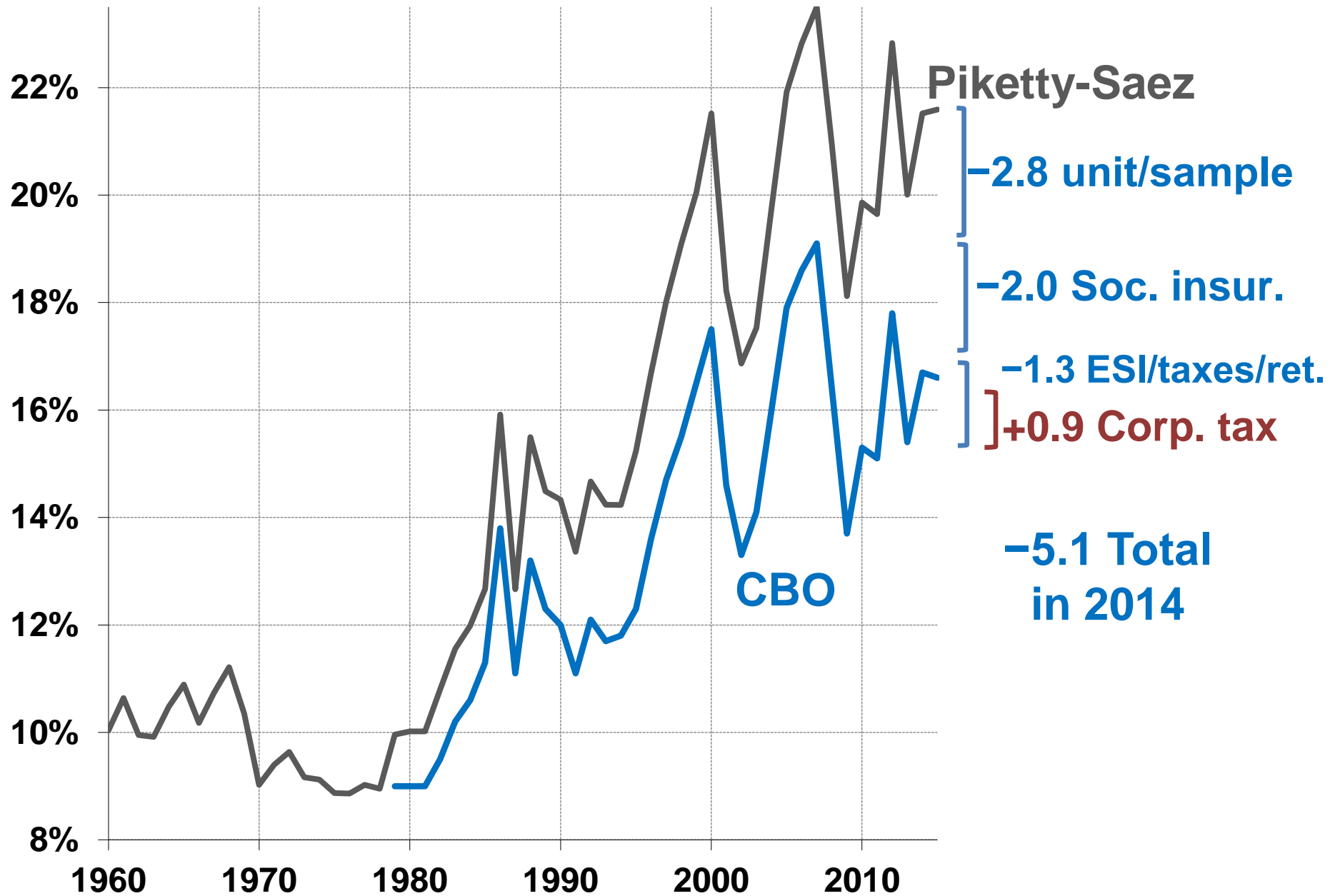
Auten-Splinter

Top 1% Income Shares: PS fiscal income to Auten-Splinter

Piketty-Saez

−2.2 unit/sample

−2.4 Soc. insur.

−2.1 ESI/taxes/ret.

−0.4 Under/imp rent

−1.8 CGs→Ret earn

] +0.2 Corp. tax

Auten-Splinter

−8.7 Total in 2014
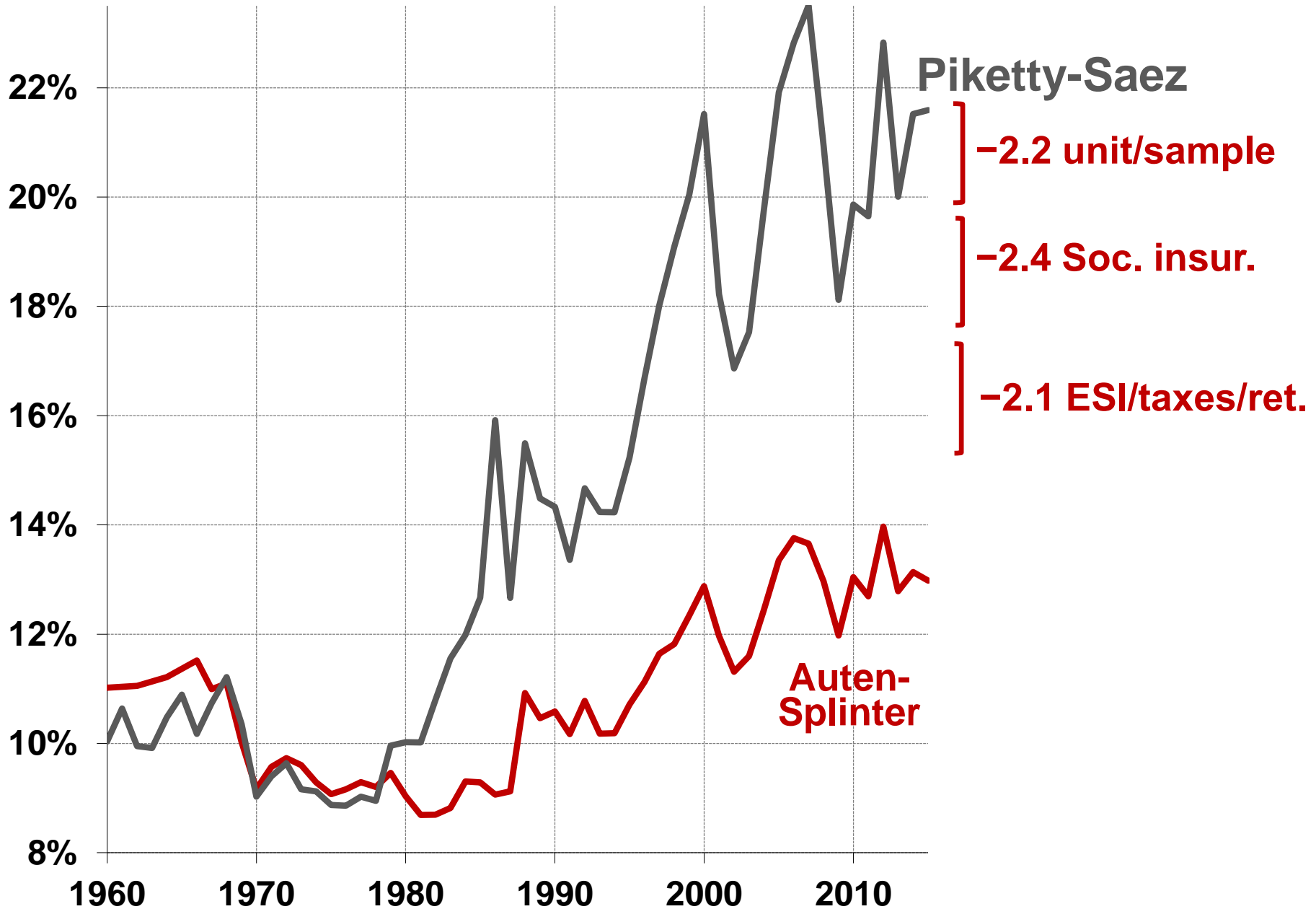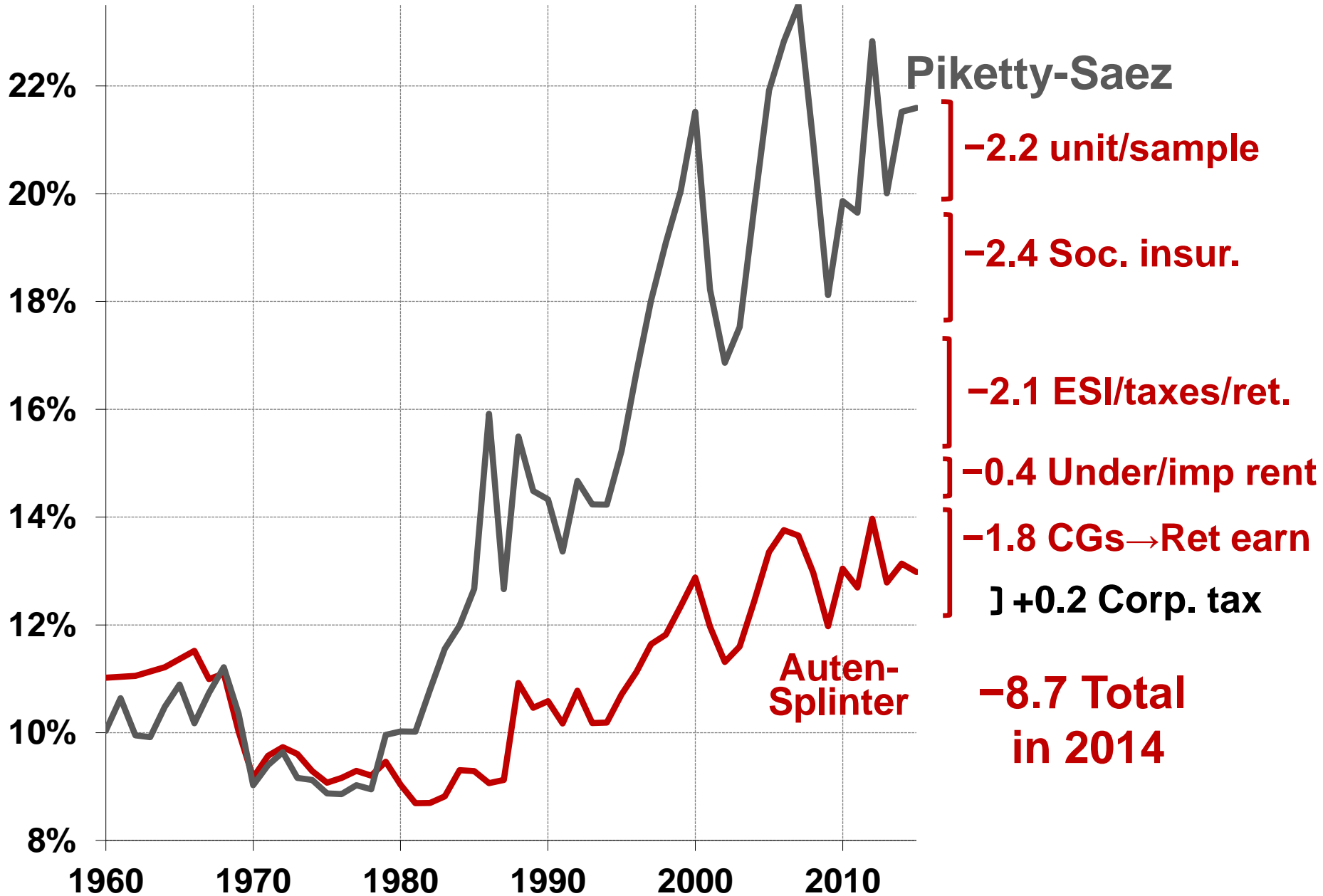
AS differences from CBO in 2014
Top 1% Shares

Effect of:	AS/CBO
Tax unit/HH size-adjustment	0.7
+ social insurance benefits	–0.3
+ employer-sponsored insur.	–0.4
+ corporate income taxes	–0.7
+ payroll & other taxes	–0.5
+ private retirement income	0.1
+ income corrections	–0.1
+ under-reported income	–0.3
+ imputed rent	–0.1
– cap. gains + corp ret. earnings	–1.8
Total differences	–3.5

Top 1% Income Shares: PS fiscal income to PSZ national inc.

Piketty-Saez

−1.6 unit/sample

−1.6 Soc. insur.

−1.1 ESI

−0.2 Imp. rent

−1.5 CGs→Ret

+2.0 Underreported

+1.5 Retire other taxes

+0.5 Corp. tax

PSZ   −1.6 Total in 2014
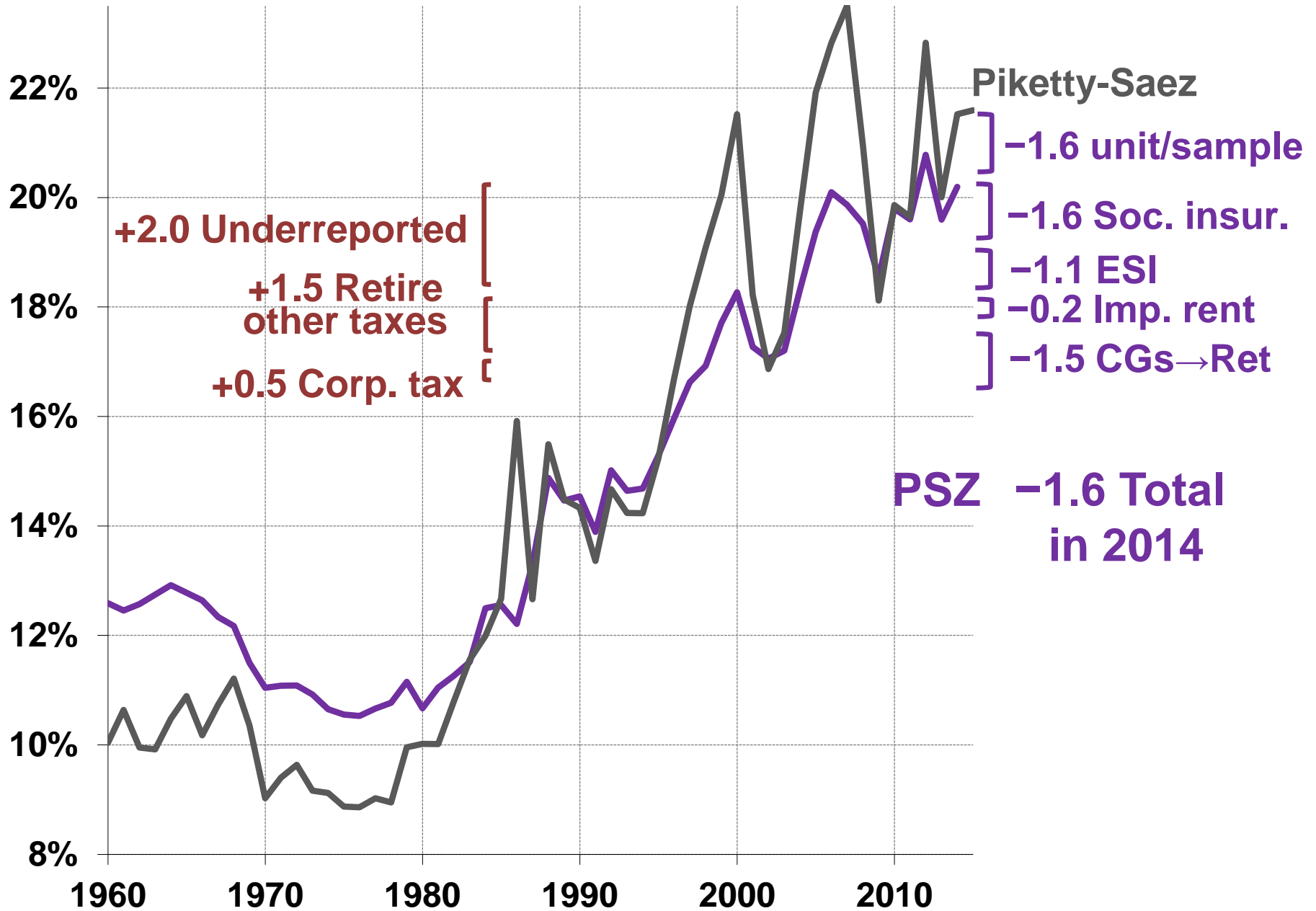
AS differences from PSZ (2018) on 2014 Top 1% share

Effect of:	AS/PSZ
No size-adjusting for ranking	–0.6
+ Soc. insurance: No Medicare	–0.7
+ employer-sponsored insurance	0.1
+ corporate income taxes	–0.4
+ payroll & other taxes, etc.	–1.8
+ private retirement income	–0.8
+ income corrections	–0.4
+ under-reported income	–2.3
+ imputed rent	0.1
– cap. gains/+ retained earn	–0.3
Total differences	–7.0

AS/PSZ Difference: Under-reported business income

AS allocate to reported income groups based on audit data

PSZ allocate by <u>positive</u> reported business income

But: Business losses important

& under-rep. rates highest at bottom of distribution

AS/PSZ Difference: Under-reported business income

AS allocate to reported income groups based on audit data
PSZ allocate by <u>positive</u> reported business income
But: **Business losses important**
& under-rep. rates highest at bottom of distribution

Reported AGI group	Reported bus. income ($B)	AS % of underrep. income	PSZ % of pos. bus. income
$ <0	-10	17%	0%
0-40	9	27%	5%
40-80	34	28%	19%
80-95	32	13%	17%
95-99	40	8%	22%
Top 1%	77	7%	42%
Total	183	100%	100%

1988 TCMP audit data (sole prop, part., S-corps)

PSZ "simplified" approach

Ignores changes in household structure: ~2 pp (of 6 pp gap)
   tax units a big step backwards from PSZ

Ignores corrections to income definition and sample: ~1 pp

Ignores audit data: ~2 pp

<u>Filer</u> under-reporting little effect on top 1% since TRA86
   BUT small decrease from <u>non-filer</u> under-reporting

We use 1985, 1988, and 2001 audits to capture
   changes in under-reporting rates since TRA86

PSZ "simplified" approach

Ignores changing compositions towards more equal income
  Soc. insur. benefits: 1% → 5% of national income since 1960
  Empl. health insur.: 3% → 6% "
  "Simplified" PSZ allocates by increasingly unequal labor income

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Ignores changing compositions towards more equal income
>   **Soc. insur. benefits: 1% → 5% of national income since 1960**
>   **Empl. health insur.: 3% → 6% "**
>   **"Simplified" PSZ allocates by increasingly unequal labor income**

Ignores that some capital income now more equal
>   **"Simplified" method combines labor+pension to allocate pension**
>   **allocates ~15% to top 1%**
>   **_BUT_ taxable pension ~3% to top 1%**

>   **Retirement C-corp. ownership share: 4%→50% since 1960**

>   **Tax-exempt interest more equal: 80%→40% top 1% since 1960**

PSZ "simplified" approach

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    "Simplified" method combines labor+pension to allocate pension

        allocates ~15% to top 1%

      BUT **taxable pension ~3% to top 1%**

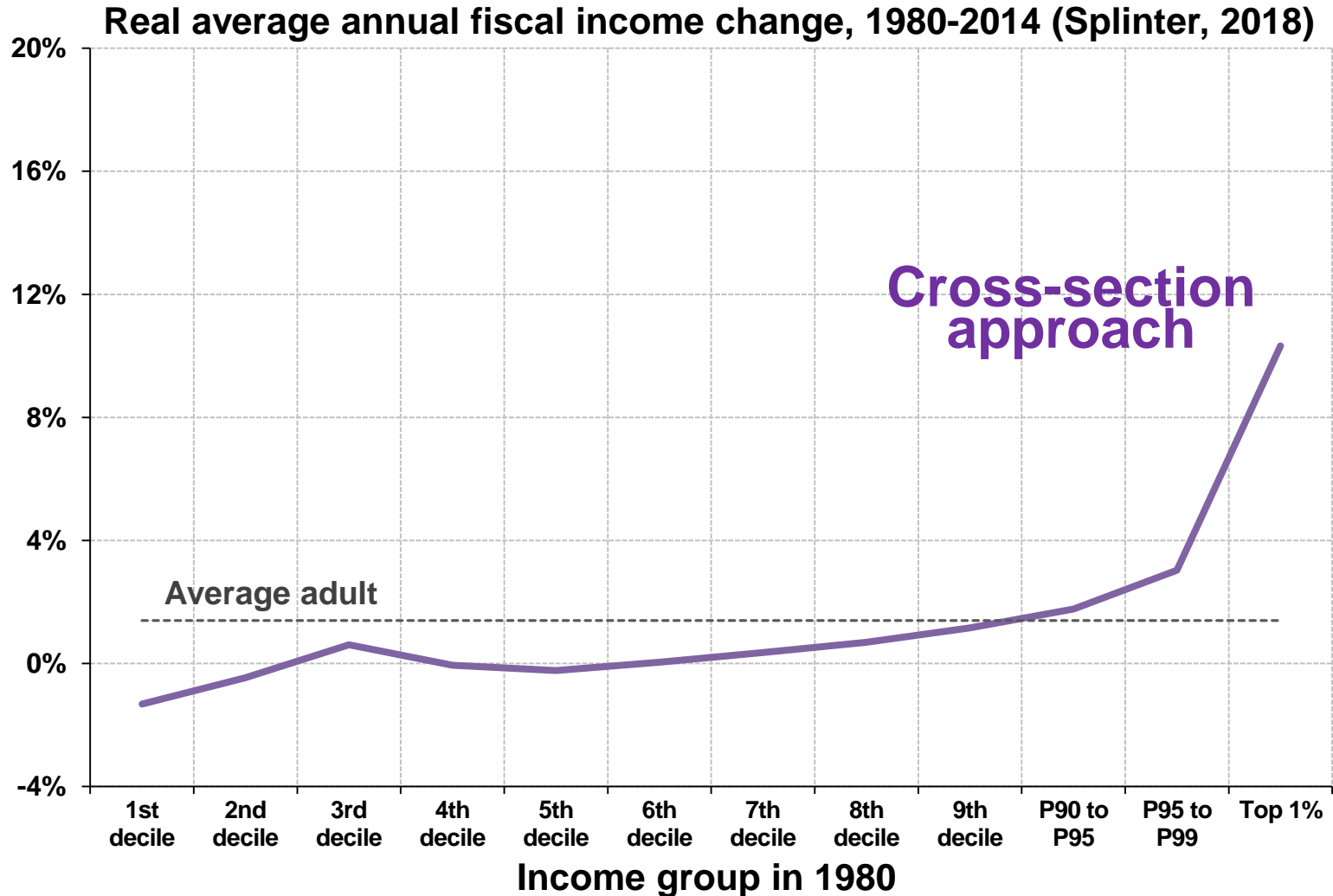   **Retirement C-corp. ownership share: 4%→50% since 1960**

    Tax-exempt interest more equal: 80%→40% top 1% since 1960

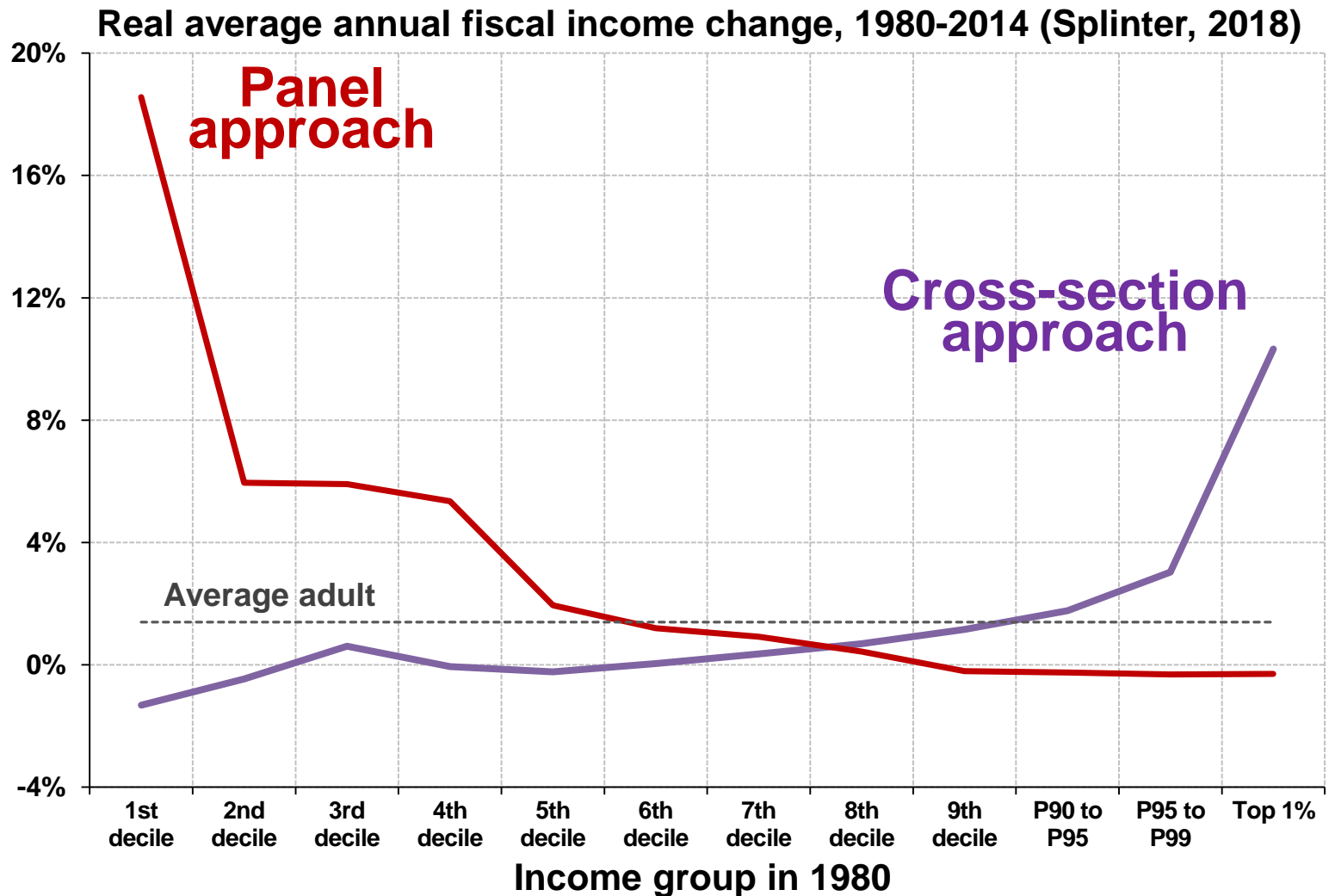**Wealth inequality**

    BUT **high-wealth/low-reported income**

Distribution of Economic Growth

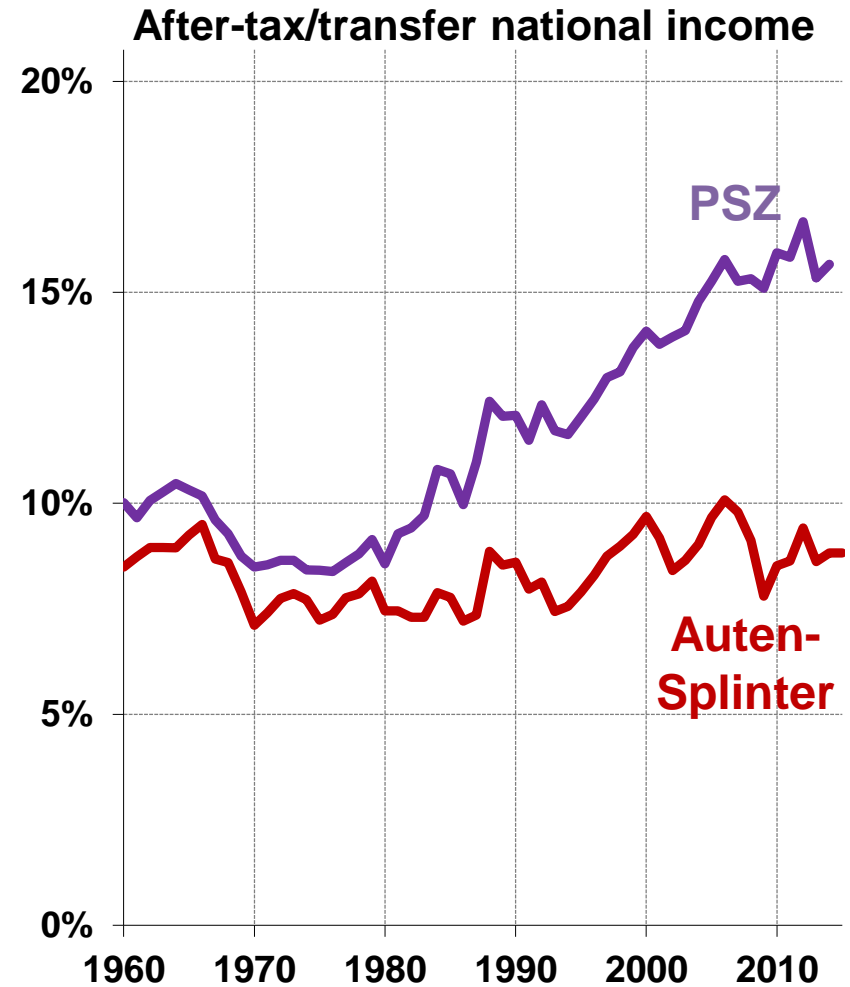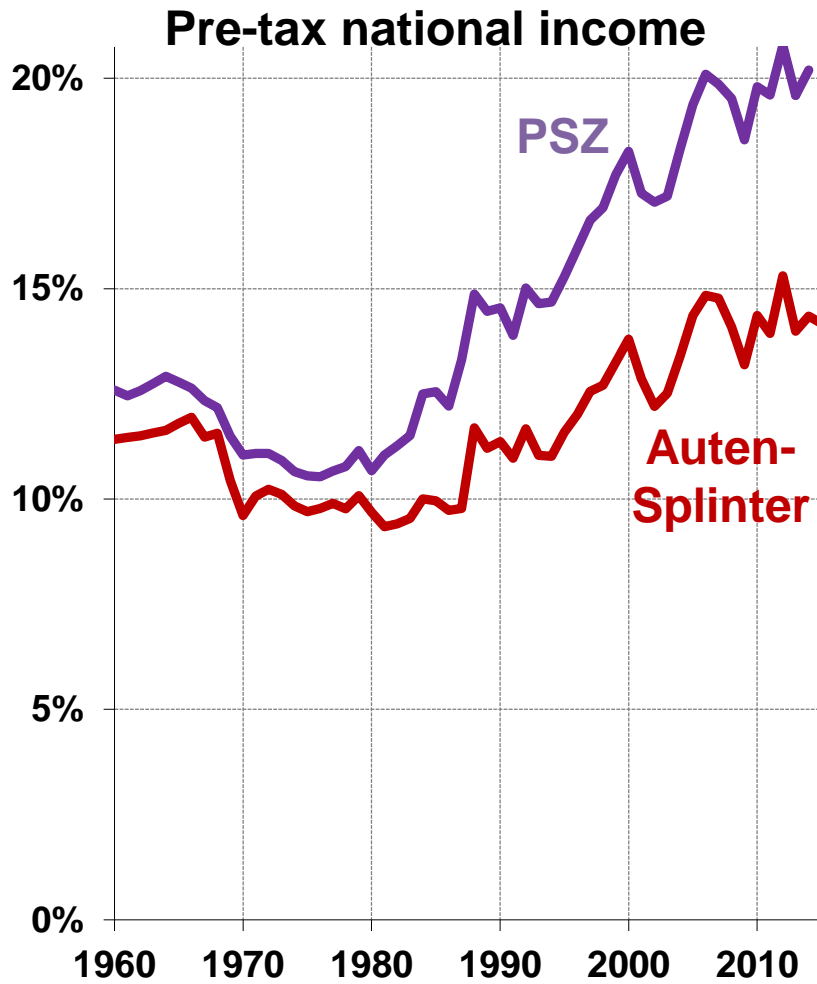## Comparing cross-sectional changes suggests all growth to top 10%

Real average annual fiscal income change, 1980-2014 (Splinter, 2018)

Distribution of Economic Growth

Cross-sections cannot measure income growth rates---it's different people

Real average annual fiscal income change, 1980-2014 (Splinter, 2018)

Allocations of transfers and taxes can also differ

Pre-tax national income

PSZ

Auten-Splinter

After-tax/transfer national income

PSZ

Auten-Splinter

Conclusions

- **It's not easy to measure inequality over time**

- **Broader income measures generally show less inequality and less upward trend since 1980**

- **Tax data better for very top incomes BUT subject to various issues**

- **Much income not in tax data so must be imputed**

- **Results are sensitive imputation assumptions**