Top 1% Income Shares: Comparing Estimates Using Tax Data

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The views and opinions expressed are those of the authors and do not necessarily represent official positions or policy of the U.S. Treasury Department. This work embodies work undertaken for the staff of the Joint Committee on Taxation, but as members of both parties and both houses of Congress comprise the Joint Committee on Taxation, this work should not be construed to represent the position of any member of the Committee.
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 not 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 prior 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)
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

-2.8 unit/sample
-2.0 Soc. insur.
-1.3 ESI/taxes/ret.
+0.9 Corp. tax
-5.1 Total in 2014
Top 1% Income Shares: PS fiscal income to Auten-Splinter

-2.2 unit/sample
-2.4 Soc. insur.
-2.1 ESI/taxes/ret.
Top 1% Income Shares: PS fiscal income to Auten-Splinter

-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

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

<table>
<thead>
<tr>
<th>Effect of:</th>
<th>AS/CBO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax unit/HH size-adjustment</td>
<td>0.7</td>
</tr>
<tr>
<td>+ social insurance benefits</td>
<td>−0.3</td>
</tr>
<tr>
<td>+ employer-sponsored insur.</td>
<td>−0.4</td>
</tr>
<tr>
<td>+ corporate income taxes</td>
<td>−0.7</td>
</tr>
<tr>
<td>+ payroll &amp; other taxes</td>
<td>−0.5</td>
</tr>
<tr>
<td>+ private retirement income</td>
<td>0.1</td>
</tr>
<tr>
<td>+ income corrections</td>
<td>−0.1</td>
</tr>
<tr>
<td>+ under-reported income</td>
<td>−0.3</td>
</tr>
<tr>
<td>+ imputed rent</td>
<td>−0.1</td>
</tr>
<tr>
<td>− cap. gains + corp ret. earnings</td>
<td>−1.8</td>
</tr>
<tr>
<td>Total differences</td>
<td>−3.5</td>
</tr>
</tbody>
</table>
Top 1% Income Shares: PS fiscal income to PSZ national inc.

-1.5 CGs → Ret
+2.0 Underreported
+1.5 Retire
+0.5 Corp. tax

Piketty-Saez
-1.6 unit/sample
-1.6 Soc. insur.
-1.1 ESI
-0.2 Imp. rent
-1.5 CGs → Ret

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

<table>
<thead>
<tr>
<th>Effect of:</th>
<th>AS/PSZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>No size-adjusting for ranking</td>
<td>-0.6</td>
</tr>
<tr>
<td>+ Soc. insurance: No Medicare</td>
<td>-0.7</td>
</tr>
<tr>
<td>+ employer-sponsored insurance</td>
<td>0.1</td>
</tr>
<tr>
<td>+ corporate income taxes</td>
<td>-0.4</td>
</tr>
<tr>
<td>+ payroll &amp; other taxes, etc.</td>
<td>-1.8</td>
</tr>
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<td>– cap. gains/+ retained earn</td>
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<td>Total differences</td>
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</table>
AS/PSZ Difference: Under-reported business income

AS allocate to reported income groups based on audit data
PSZ allocate by positive 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 positive reported business income

*But*: Business losses important & under-rep. rates highest at bottom of distribution

<table>
<thead>
<tr>
<th>Reported AGI group</th>
<th>Reported bus. income ($B)</th>
<th>AS % of underrep. income</th>
<th>PSZ % of pos. bus. income</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ &lt;0</td>
<td>-10</td>
<td>17%</td>
<td>0%</td>
</tr>
<tr>
<td>0-40</td>
<td>9</td>
<td>27%</td>
<td>5%</td>
</tr>
<tr>
<td>40-80</td>
<td>34</td>
<td>28%</td>
<td>19%</td>
</tr>
<tr>
<td>80-95</td>
<td>32</td>
<td>13%</td>
<td>17%</td>
</tr>
<tr>
<td>95-99</td>
<td>40</td>
<td>8%</td>
<td>22%</td>
</tr>
<tr>
<td>Top 1%</td>
<td>77</td>
<td>7%</td>
<td>42%</td>
</tr>
<tr>
<td>Total</td>
<td>183</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

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

  Filer under-reporting little effect on top 1% since TRA86
  **BUT** small decrease from non-filer 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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“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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- BUT taxable pension ~3% to top 1%

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**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)

Cross-section approach

Average adult

Income group in 1980
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)

Panel approach

Cross-section approach

Average adult
Allocations of transfers and taxes can also differ

Pre-tax national income

After-tax/transfer national income

Auten-Splinter

PSZ
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