
Comment: Tax Evasion at the Top of the Income Distribution: Theory and Evidence

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Terminology for this paper

Evasion

Underreported income (not taxes) of timely filed individual tax returns

NRP = National Research Program

comprehensive stratified random audits that examine most items on tax returns and oversample returns with high incomes or low-visibility business income

Detected Evasion

underreporting found by NRP auditor, net of overreporting

Undetected Evasion

estimated underreporting NOT detected by auditor

estimated for tax gap with detection-controlled estimation (DCE)

Overview

Review Guyton, Langetieg, Reck, Risch, and Zucman (2021, GLRRZ) to encourage improvements in next draft

GLRRZ makes important contributions

Calls attention to evasion not generally in NRP audits

- Unreported offshore income (auditors found 7% of FATCA cases)
- Entity-level passthrough (PT) business evasion
- New estimates of amount & distribution of evasion

BUT current GLRRZ could be improved

- Alternative to simple DCE multipliers
- NRP-based allocation for PT evasion, total PT evasion
- Uncertainty: provide range rather than single benchmark

Offshore Evasion

- **GLRRZ assume 95% of offshore wealth undeclared**
But “a growing fraction of offshore wealth is duly declared, namely 20% in 2014, up from 10% in 2008.”
(Zucman, 2015)

Suggest lower to 90% in earlier years, 80% later years

- **Not all offshore wealth owned by individuals:**
Non-profits have >\$200B offshore wealth and
may use similar investments as households
How is non-household wealth identified?

GLRRZ allocate 99% of additional passthrough evasion to top 1%

Income Group	GLRRZ Table A6		Excluding Offshore Evasion			
	Sophisticat. after exam (\$)	Bench. after DCE (\$)	Total passthru evasion afr exam (\$)	Additional passthru evasion after DCE (\$)	Total passthru evasion afr exam (%)	Additional passthru evasion after DCE (%)
P0–90	8	1	7	0	6%	0%
P90–95	6	1	5	0	4%	0%
P95–99	25	5	21	1	17%	1%
Top 1%	141	103	87	49	73%	99%
Total	180	110	119	50	100%	100%

GLRRZ allocate 99% of additional passthrough evasion to top 1%

Allocating by reported income

Inconsistent with NRP data

NRP has data

GLRRZ remove 57% of PT evasion in NRP and reallocate by reported income

Possible Alternatives

Gradient approach to scale up detected evasion
Matching approach to identify similar returns

Additional Passthrough Evasion

GLRRZ assume total PT (no sole props) evasion rate of **20%** but recent data suggests lower evasion rate

- GLRRZ based on 2008-10 corp. tax evasion of **19%**
- But this was revised down to **15%** (IRS, 2019)
- Most recent is **14%** (IRS, 2019)

Other information

- S corp. 2003/04 audit study: 12-14% (consistent w/NIPA)
- 1982 partnership study: 26%
- Weighting S corp/partn by reported income: **18%**
- PLUS more information reporting since 1982 (Sch. K-1)

Using alternative assumption of total PT evasion rate of **15%**

- Top 1% share increase falls from 0.6 pp to 0.2 pp
- GLRRZ results highly sensitive to this assumption

DCE Multipliers

**Simple DCE multipliers for estimating total 2001 evasion
Used in GLRRZ and Johns and Slemrod (2010)**

Non-business returns with reported TPI < \$100K

Low-visibility income: 4.158

High-visibility income: 2.009

Business returns (Sch C or F) or with reported TPI > \$100K

Low-visibility income: 3.358

High-visibility income: 2.340

DCE Multipliers

Simple DCE multipliers only to estimate aggregate evasion and inappropriate for distributions

Issues with simple DCE multipliers were well-known

- **Johns and Slemrod (2010, pg. 400)**

“The use of the DCE multipliers will **understate** estimates of undetected income for some taxpayers...Conversely, it may **overstate** estimates of undetected income for other taxpayers.”

- **DeBacker et al. (2020, pg. 1106)**

“Because the published multipliers are **applied to all auditors regardless of skill level**, the biggest amounts of undetected misreporting will be attributed to the audits with the largest amounts of detected misreporting. **This runs counter to the intended application of the adjustments** and can exaggerate the true variation in misreporting.”

- **Bloomquist, Emblom, Johns, and Langetieg (2012, pg. 71)**

The simple DCE multiplier “approach was still primarily an **aggregate approach**...some returns were allocated more undetected income than they should have been while other returns were allocated less.”

GLRRZ should differentiate micro-DCE from simple DCE multipliers

“DCE methodology...is modeled by positing that, conditional on evasion occurring, only a fraction is detected depending on the characteristics of the return examined (presence of self-employment income, schedules filed, etc.) and of the examiner (experience, age, etc.). Feinstein (1991) estimates such a model by maximum likelihood and finds that about a third of tax evasion goes detected (i.e., if all examiners were as perceptive as the examiners who uncover the most evasion, three times more evasion would be detected). To adjust for unreported income that examiners were unable to detect, **the IRS applies DCE to the returns subject to audit. Separate multipliers were applied for low-visibility and high-visibility income and for taxpayers with reported total positive income above and below \$100,000.** The same approach is followed by Johns and Slemrod (2010) to study the distribution of noncompliance in 2001.” (pg. 9)

GLLRZ could clarify that DCE multipliers differ from the auditor-specific method and that the revised tax gap approach is a micro-based approach

“Total positive income is the sum of all positive amounts of the various components of income reported on an individual tax return, and thus excludes losses. Johns and Slemrod (2010) provide more details on DCE methodology as used in the 2001 wave of the NRP. **DCE methods have been slightly revised in more recent tax gap studies (IRS, 2019), although the basic approach remains the same.**” (pg. 9)

DCE multipliers imply more evasion than currently in national income

National income evasion is based on tax gap micro-DCE approach since 2006 (Bloomquist et al., 2012)

- **National accounts total filer evasion ~\$770 B**

Nat. accounts: \$561 B proprietor evasion and wage evasion of \$75 B averaging 2006–2013 (\$2012). Auten and Splinter (2019): avg. annual gaps of \$44 B farms, \$43 B rents, and \$80 B S corporations, assume dividends/int. evasion \$50 B, and non-filer evasion is 10%

- **GLRRZ comparable evasion of \$1,070 B**

GLRRZ NRP evasion of \$1,304 B, drop \$70B cap gains & \$160B losses

- **GLRRZ exceeds national account evasion by \$300 B**

National income be higher, but suggests DCE multipliers exceed micro-DCE

Effects of DCE Multipliers

GLRRZ effects on top 1% inc. share

Detected Evasion: -0.5 pp

DCE Multipliers: **+1.1 pp**

Addit. PT Evasion: +0.6 pp

Offshore Evasion: +0.3 pp

All “Benchmark”: **+1.5 pp** (DCE mult. explain >1/2 effect)

Undetected evasion multipliers by ratio class: Alternative gradients

more undetected evasion to returns
with relatively less detected evasion

Ratio Class (corrected/reported)	1-1.1	1.1-1.2	1.2-1.5	1.5-2	2-4	4-8	8+
DCE Multipliers (approx. GLRRZ)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Example gradient	8.0	6.8	5.7	4.5	3.3	2.2	1.0
Flat gradient	4.0	3.5	3.0	2.5	2.0	1.5	1.0
Steep gradient	12.0	10.2	8.3	6.5	4.7	2.8	1.0

Returns and evasion ratios by ratio class, 2010–11 (Auten & Langetieg, 2020)

Panel A: Percent of Returns by Ratio Class

rank	-0.5	0.5	1	1-1.1	1.1-1.2	1.2-1.5	1.5-2	2-4	4-8	8+
<-\$50K	4.1	37.0	34.1	3.1	3.5	11.4	1.9	4.2	0.6	---
< \$0	7.0	20.1	29.1	2.8	2.3	5.5	6.3	10.5	9.3	7.2
\$0-20	---	5.1	66.4	8.6	3.3	5.6	3.4	3.7	1.8	1.9
20-40	---	4.7	70.5	10.6	3.3	5.1	3.0	2.2	0.5	---
40-60	---	4.2	72.5	11.8	3.4	4.5	2.0	1.3	0.2	---
60-80	---	3.6	71.0	17.2	3.4	3.5	0.9	0.5	0.0	---
80-90	---	3.8	74.4	16.4	2.5	2.2	0.6	0.2	0.0	---
90-95	---	3.4	75.2	15.5	3.3	2.1	0.4	0.1	0.0	---
95-99	---	4.6	72.8	18.2	2.7	1.3	0.3	0.1	---	---
99-99.5	---	4.8	74.7	17.7	1.7	0.5	0.4	0.1	---	---
Top 0.5%	---	3.8	77.7	15.4	2.0	0.8	0.2	0.1	---	---
All	0.1	4.5	70.6	13.0	3.2	4.1	2.0	1.6	0.5	0.4

Panel B: Average Ratio of Corrected to Reported Income by Ratio Class

rank	-0.5	0.5	1	1-1.1	1.1-1.2	1.2-1.5	1.5-2	2-4	4-8	8+
<-\$50K	-1.2	-0.8	1.0	1.1	1.2	1.4	1.7	2.9	4.6	---
< \$0	-1.7	-0.6	1.0	1.0	1.1	1.4	1.9	2.9	6.2	24.1
\$0-20	---	0.6	1.0	1.0	1.1	1.3	1.7	2.7	5.6	17.4
20-40	---	0.5	1.0	1.0	1.1	1.3	1.7	2.8	5.3	---
40-60	---	0.8	1.0	1.0	1.1	1.3	1.7	2.5	4.9	---
60-80	---	0.9	1.0	1.0	1.1	1.3	1.7	2.6	5.2	---
80-90	---	0.9	1.0	1.0	1.1	1.3	1.7	2.5	5.2	---
90-95	---	1.0	1.0	1.0	1.2	1.3	1.6	2.6	4.8	---
95-99	---	1.0	1.0	1.0	1.1	1.3	1.7	2.7	4.2	---
99-99.5	---	0.9	1.0	1.0	1.1	1.4	1.7	2.0	---	---
Top 0.5%	---	1.0	1.0	1.0	1.1	1.3	1.7	3.1	---	---
All	0.103	0.7	1.0	1.0	1.1	1.3	1.7	2.7	5.6	17.834

Example of adding detected evasion and applying DCE multipliers

Detected lowers top share
DCE increases top share

ID	Reported		Reported + Detected		Reported + Detected + DCE	
	Income	Share	Income	Share	Income	Share
a	\$12	40%	\$13	36%	\$16	30%
b	\$10	33%	\$11	31%	\$14	26%
c	\$8	27%	\$12	33%	\$24	44%
Total	\$30	100%	\$36	100%	\$54	100%

Income shares for different allocations of undetected evasion, 2010 tax returns

	Income Shares (%)			Top 1% chg. from reported (pp)
	P0-50	P50-99	Top 1%	
<i>Replicate GLRRZ Table 3 changes from reported income</i>				
Reported income	10.0	70.3	19.8	---
After exam, no DCE	10.8	69.8	19.5	-0.3
After exam, w/DCE	11.2	68.4	20.4	0.7
<i>Distributionally consistent alternatives to DCE</i>				
Gradient	11.1	70.1	18.9	-0.9
Gradient, level	11.2	69.8	19.0	-0.8
<i>Sensitivity Checks</i>				
Flat gradient, level	11.2	69.8	19.0	-0.8
Steep gradient, level	11.2	69.8	19.0	-0.8

Effects of simple multipliers on re-ranking cells sum to 100% of income

Detected Evasion
little re-ranking to top

Reported Income	Top 1%	0.0	0.0	0.3	18.9
	P90-99	0.0	0.9	25.7	0.1
	P10-90	0.1	53.9	1.0	0.1
	Bot. 10%	-1.7	0.2	0.1	0.4
	Total	-1.6	55.0	27.1	19.5
	Bot. 10%	P10-90	P90-99	Top 1%	
	True Income				

Simple DCE mult.
lots of re-ranking to top

Reported Income	Top 1%	0.0	0.0	1.6	15.9
	P90-99	0.0	3.1	21.2	0.5
	P10-90	0.1	49.5	4.0	1.8
	Bot. 10%	-0.8	0.4	0.4	2.3
	Total	-0.7	53.1	27.2	20.5
	Bot. 10%	P10-90	P90-99	Top 1%	
	True Income				

Notes: Tables show re-ranking effects of 2010 income shares.

Effects of gradient multipliers on re-ranking cells sum to 100% of income

Detected Evasion little re-ranking to top

Reported Income	Top 1%	0.0	0.0	0.3	18.9
	P90-99	0.0	0.9	25.7	0.1
	P10-90	0.1	53.9	1.0	0.1
	Bot. 10%	-1.7	0.2	0.1	0.4
Total	-1.6	55.0	27.1	19.5	
	Bot. 10%	P10-90	P90-99	Top 1%	
	True Income				

Gradient+Level Mult. little re-ranking to top

Reported Income	Top 1%	0.0	0.0	0.8	17.6
	P90-99	0.0	2.9	22.2	0.8
	P10-90	0.1	51.6	4.1	0.1
	Bot. 10%	-1.3	0.4	0.2	0.6
Total	-1.2	54.9	27.2	19.0	
	Bot. 10%	P10-90	P90-99	Top 1%	
	True Income				

Notes: Tables show re-ranking effects of 2010 income shares.

Multipliers

total underreporting vs. line-by-line underreporting

Line switching errors

\$ moved from one line to another, should be canceled out

Total evasion: robust to line switching as canceled out

Line-by-line: not robust: only underreported multiplied

Need to control for overall skill of each auditor

Total evasion: closer to overall skill distribution

Line-by-line: each line has different skill distribution

Several additional issues

Line Switching

Errors due income on the wrong line are counted as both underreporting and overreporting rather than canceled out in GLRRZ

Only underreporting is multiplied by simple DCE estimators

Keep entity-level passthrough evasion

3.8% of returns with PT income were audited at entity level

Likely simple or suspicious returns & represents 57% of NRP PT evasion

GLRRZ ignore this detected evasion. Should retain detected evasion and use matching procedure or operational audit data to allocate remaining

Non-filers

For distributional analysis, need to account for evasion by non-filers

Implications for Policy

DCE multipliers & PT allocation may result in too much evasion allocated to the top of the distribution

GLRRZ (pg. 4): “We estimate that 36% of federal income taxes unpaid are owed by the top 1%...”

Gradient multipliers and other adjustments suggest

<20% federal inc. tax unpaid is owed by top 1%

~40% of federal inc. taxes paid by top 1% (42% in 2018)

True top 1% can be lower in reported distribution

- **IRS must audit before know true income**
- **Finding large share of top 1% evasion may require higher audit rates throughout reported income distribution**
- **Improved audit selection could help (Rossotti, Sarin, Summers)**

Conclusions

Important contributions of GLRRZ

- NRP misses offshore evasion and may miss some PT evasion
- New quantitative estimates of this evasion

But current paper could be improved

- Issues with simple DCE multipliers
- Amount/distribution of entity-level passthrough evasion

Suggested improvements

- Use auditor controls like micro-based DCE
- Use NRP detected entity-level PT evasion for estimates
- Improve other allocations and support with evidence

Effects of these changes on Top 1%

- Income share change: +1.5 pp to ~no change
- Underreporting rate: 21% to 10–12%

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