

Estimating taxpayer responses to top tax reforms

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Summary

- New top brackets introduced in Canada, 2013-16
- Administrative tax return data, 2008-16
 - about 400,000 high-income taxpayers per year
- New instrument to deal with endogeneity
 - average of Gruber-Saez simulated tax change in taxpayer's census tract
- IV regression using grouped-data at tract level
- A new DD estimator of elasticity of taxable income, based on census tract-year grouped panel data
- Identifies a policy-relevant local average ETI
- Large responses (EBI = 0.8; ETI = 1.0) to 2016 reforms

Intention-to-treat effect of the 2016 reform

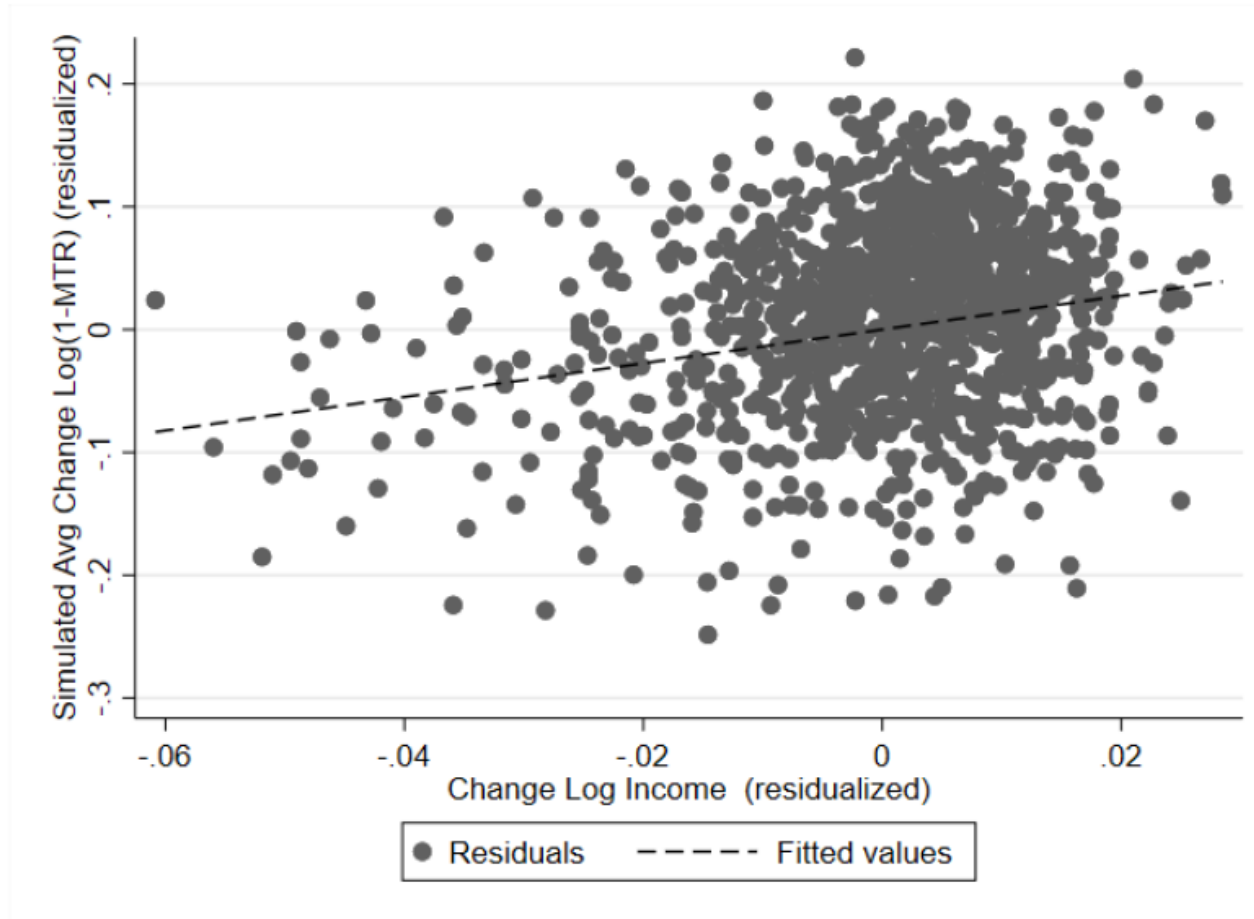


Figure: Tract-level mean log income and take-home rate changes, 2013-16

Comments

- Switch age axes on intent-to-treat graph
- Use multiple instruments and test for overidentification
- Standard errors
- Show whether IV correlated with other covariates
- Weighting

Annual estimates for the tract instrument match pattern of actual reforms



Table: Tract-level estimates of elasticity of taxable income, by year

	Reform year								
	2008	2009	2010	2011	2012	2013	2014	2015	2016
ETI	-0.08 (0.41)	-0.50 (0.34)	0.62 (0.88)	2.33 (1.27)	0.96 (0.87)	0.95* (0.43)	0.79** (0.28)	-0.15 (0.37)	0.79*** (0.24)
First stage:									
F statistic	186.8	275.4	291.2	159.2	274.8	325.6	704.2	367.3	1342.1
partial R2	0.14	0.18	0.17	0.13	0.16	0.21	0.40	0.22	0.46
Observations	2,100	2,200	2,200	2,200	2,200	2,200	2,300	2,300	2,300

Robust standard errors in parentheses.

All specifications include fixed effects in gender, language, family status, and

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$