Do Americans Want to Tax Capital? New Evidence from Online Surveys

Raymond Fisman, Keith Gladstone, Ilyana Kuziemko, and Suresh Naidu

January 5, 2016

The Political Economy of Wealth Taxation

- Taxation of capital classic subject in economics.
- Classic optimal tax =0 results: Atkinson and Stiglitz (1976), Judd (1985),Chamley (1986).
- Recent literature challenging this: Piketty and Saez (2013),Straub and Werning (2014).
- Diverse empirical literature looking at taxes on estates, real estate, dividends, capital gains.
  - Piketty (2014) suggests small global wealth tax.
  - late 19th century general property (i.e. wealth) tax widespread in U.S. states.Einhorn (2001)
- Little of this literature discusses *political feasibility*.
- Our paper: Use survey experiments learn about what people prefer in wealth/capital taxes.

What we do.

- Randomly show online survey subjects 14 hypothetical income and wealth pairs (i, w) and ask subjects to assess preferred total tax bill for each pair T.
- Allows us to trace out $T(income, wealth)$ flexibly and unobstrusively.
- Also randomize source of wealth across "savings" and "inheritance".
- Findings:
  - $\frac{dT}{dw} > 0$ independently of income.
  - $\frac{dT}{dw} << \frac{dT}{dI}$ suggesting stock-flow comprehension.
  - $T(w_{savings}) < T(w_{inheritance})$ everywhere.
  - Some evidence of progressivity $\frac{d^2T}{dw^2} > 0$.
- Problem: subject aversion to large numbers McCaffery and Baron (2006) lead to mechanical regressivity.
- Extensions: Subject to data constraints, methodology can be used to elicit high-dimensional tax functions $T(.)$. e.g. tags, consumption, hours worked, sources of wealth/income.

Experimental Design

- Recruit and pay subjects via Mechanical Turk.
- Redirect to Qualtrics surveys.

Wording

In each experiment, subjects were asked how much hypothetical individuals should pay in taxes, based on their income and wealth levels. In the initial instructions, subjects were provided the following definitions:

> *Wealth is the total amount of assets an individual owns minus any debt. Examples of assets include money in savings or retirement accounts, stocks, and the value of real estate owned; examples of debt include remaining mortgages, credit card balances, and student loans.*
>
> *Income is the amount of money an individual earns in a year. Examples of income include salary from employment, interest on savings accounts, and stock dividends.*

Wording

- Subjects were randomized into the source of the hypothetical individual's wealth.
- For those who were randomized into the 'savings' treatment, they would answer questions of the following form (underlining appears in the original):

> *Consider a person who, at the end of 2014, had $X in wealth, accumulated mostly by saving his past earnings. His 2014 income was $Y. How much should this person pay in taxes for the year?*

- For those who were randomized into the 'inheritance' treatment, questions took the form below:

> *Consider a person who, at the end of 2014, had $X in wealth, accumulated mostly from inheritance received from a deceased relative. His 2014 income was $Y. How much should this person pay in taxes for the year?*

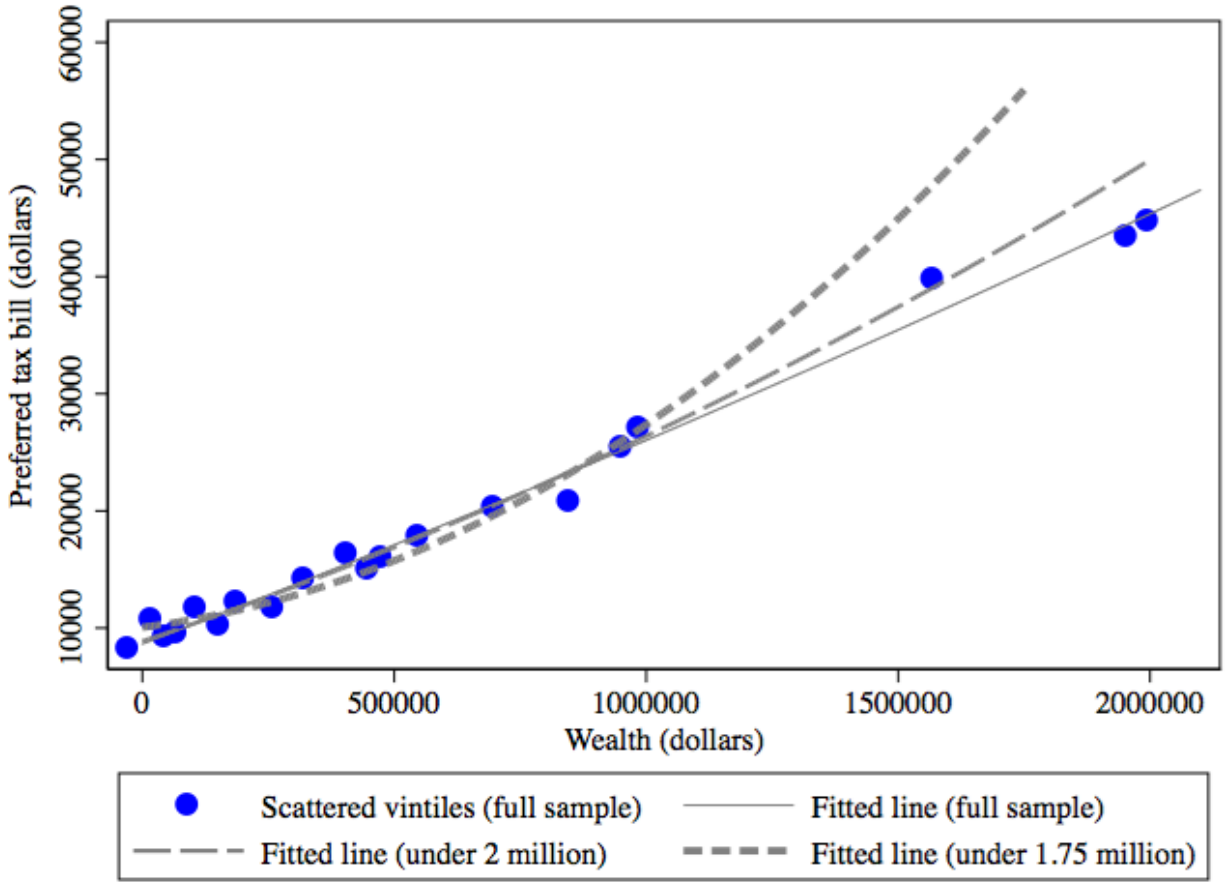
Support

- Baseline: wealth values were drawn at random from $50,000, $100,000, $200,000, $500,000, $1,000,000, and $2,000,000; income values were drawn from $13,000, $27,000, $50,000, $86,000, and $210,000.
- Extended Support: added two new wealth values, $300,000 and $750,000.
- Jittered: drawing a value at random from the same distribution as earlier experiments and randomly adding or subtracting 5 percent rounded to the nearest thousand.
- SCF: sampled from the joint distribution of income and wealth in the Survey of Consumer Finance (SCF).

Following the tax scenarios, subjects were asked whether they believe success is a matter of luck or hard work, and were then asked to provide basic socio-demographic data, such as gender, household income, age, and who they voted for in the 2012 election.

All Data Pooled

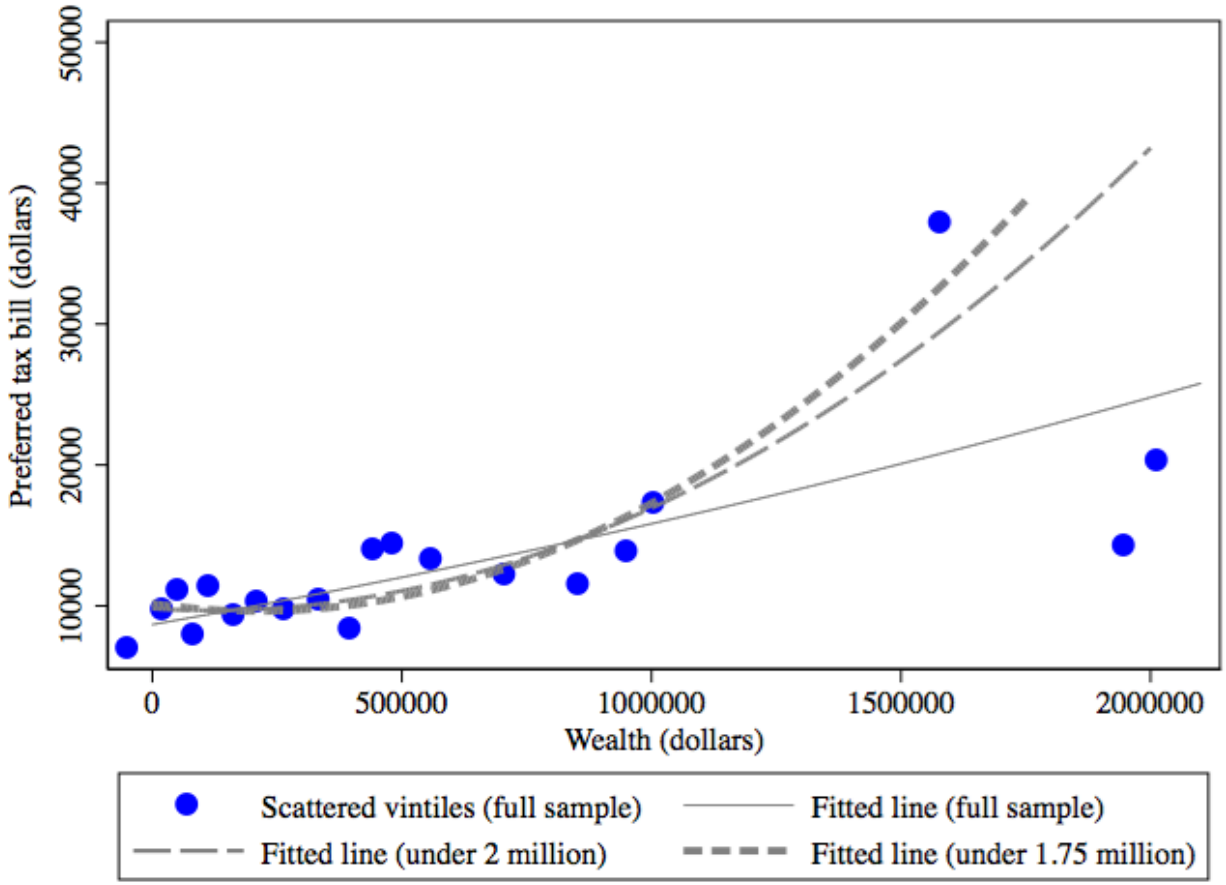
Figure: Tax bill as a function of wealth



Notes: The figure shows residualized vintiles of the tax and wealth data. The tax choices have been adjusted for income decile fixed effects and survey date fixed effects. Note that as the scatter points are collapsed to vintiles, subjects were confronted with *more* than the twenty wealth choices plotted in the figure.

Taxing Wealth From Savings

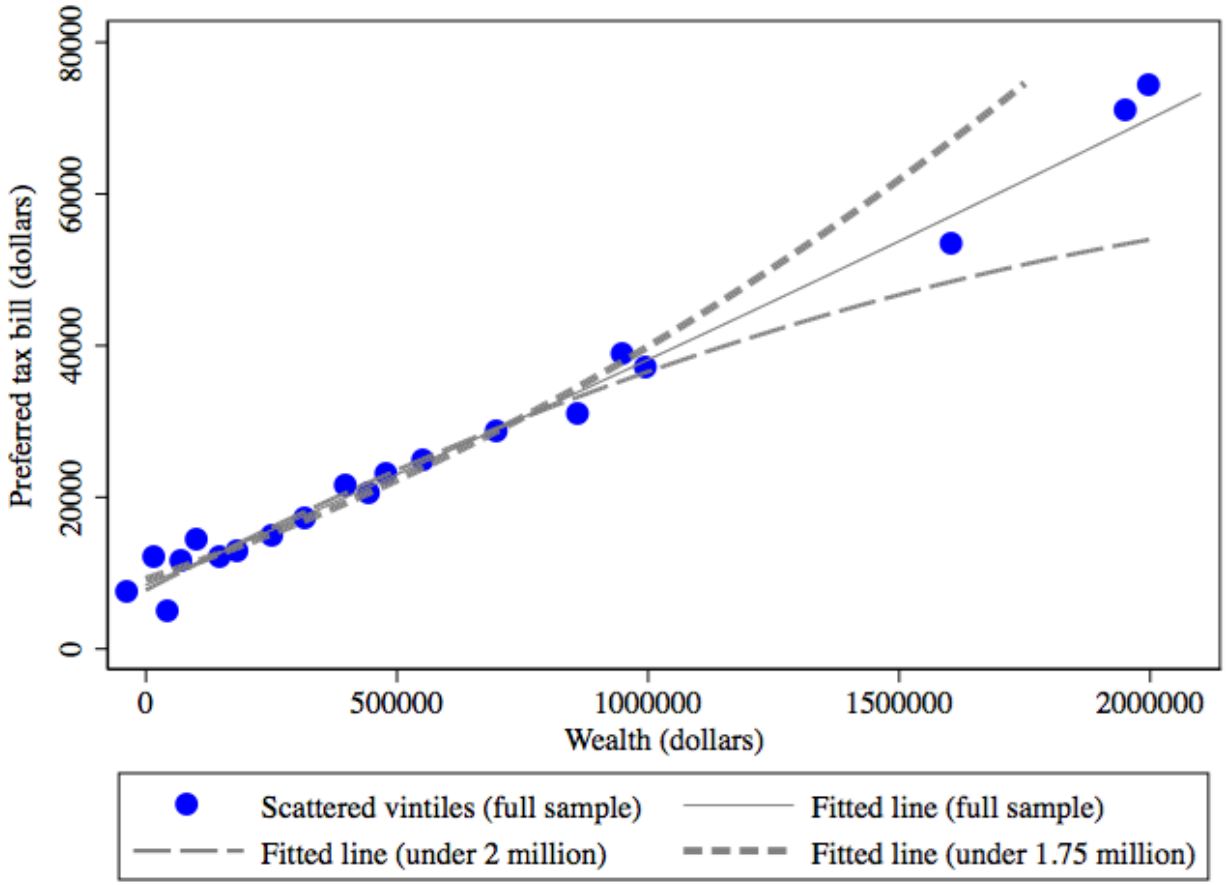
Figure: Tax bill as a function of wealth (wealth from savings)



Notes: The figure shows residualized vintiles of the tax and wealth data. The tax choices have been adjusted for income decile fixed effects and survey date fixed effects. Note that as the scatter points are collapsed to vintiles, subjects were confronted with *more* than the twenty wealth choices plotted in the figure.

Taxing Wealth From Inheritance

Figure: Tax bill as a function of wealth (wealth from inheritance)



Notes: The figure shows residualized vintiles of the tax and wealth data. The tax choices have been adjusted for income decile fixed effects and survey date fixed effects. Note that as the scatter points are collapsed to vintiles, subjects were confronted with *more* than the twenty wealth choices plotted in the figure.

Sensible Results on Income Taxation

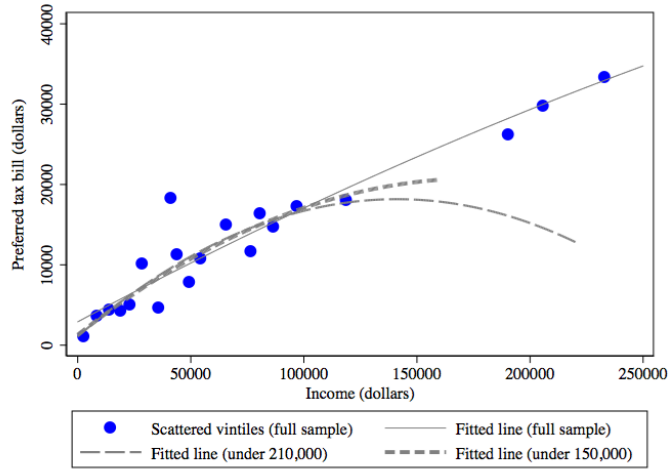


Figure: Tax bill as a function of income (wealth from savings)

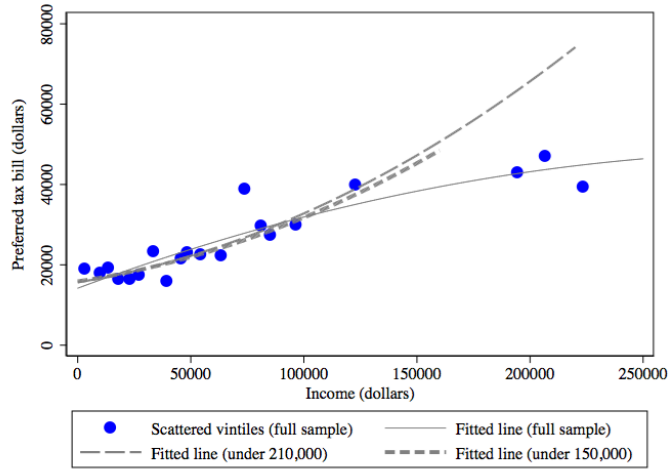


Figure: Tax bill as a function of income (wealth from inheritance)

Mccaffery and Baron (2006)

Figure: Tax levels and rates diverge at high numbers

Table 2
Mean Fair Taxes (in Percentages) as a Function of Income

Response	$25,000	$50,000	$100,000	$200,000
Dollars	9.3	11.7	15.2	16.8
%	9.2	13.0	18.8	24.6

Mechanical bias towards regressivity.

Regressions

- Control for round fixed effects +
- Question order fixed effects +
- respondent fixed effects +
- Drop if completed survey in $<$ 4 minutes.
- Restrict sample to smaller numbers: wealth $>$ 2mil & income $>$ 210K.

Convexity

- Add quadratics (insignificant in whole sample, sig pos when sample restricted as above).
- Add income X wealth (insignificant).
  - Significant convexity (quadratic and spline) in restricted sample, driven by Obama supports (regressivity among Romney supports).
  - Wealth taxes very similar when estimated on sample with $<$ 50K income.

Convexity

	Dep't variable: Total tax bill (dollars)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Wealth	-0.00535	-0.00882	-0.00336	-0.00853	-0.0108*	-0.0161*	0.0119*
	[0.00940]	[0.00615]	[0.00533]	[0.00625]	[0.00655]	[0.00878]	[0.00621]
Max(Wealth–300000, 0)	0.0148	0.0222***	0.0143**	0.0216***	0.0253***	0.0335***	-0.00958
	[0.0104]	[0.00725]	[0.00658]	[0.00737]	[0.00773]	[0.0103]	[0.00741]
Dept. var. mean	13096.5	12082.8	11601.5	11814.1	12811.0	12621.9	10376.4
Ex. if wealth above...?	N/A	2m	1.75m	2m	2m	2m	2m
Ex. if too fast?	No	No	No	Yes	No	No	No
Ex. if T=0?	No	No	No	No	Yes	No	No
Favored 2012 candidate	N/A	N/A	N/A	N/A	N/A	Obama	Romney
R-squared	0.260	0.382	0.444	0.348	0.383	0.327	0.635
R-squared (adj)	0.124	0.253	0.325	0.212	0.247	0.185	0.549
Observations	3809	3413	3344	3227	3219	2246	653

Limitations/Extensions

- Clearly would like to better handle "large number" problem.
- Can use this methodology to trace out preferences over complex tax schedules.
  - Add consumption "spent y dollars this year".
  - Add hours worked "worked h hours this year".
  - Finance vs Real Estate/Housing.
- Within inherited wealth: does inherited wealth that was itself inherited command a higher tax than inherited wealth that was saved by parents.
- Possible to use this method to calibrate optimal tax schedule? e.g. recover "meritocratic weights".

References

Atkinson, A. B. and Stiglitz, J. E. (1976). The design of tax structure: direct versus indirect taxation. *Journal of public Economics*, **6** (1), 55–75.

Chamley, C. (1986). Optimal taxation of capital income in general equilibrium with infinite lives. *Econometrica: Journal of the Econometric Society*, pp. 607–622.

Einhorn, R. L. (2001). Species of property: The american property-tax uniformity clauses reconsidered. *The Journal of Economic History*, **61** (04), 974–1008.

Judd, K. L. (1985). Redistributive taxation in a simple perfect foresight model. *Journal of public Economics*, **28** (1), 59–83.

McCaffery, E. and Baron, J. (2006). Thinking about tax. *Psychology, Public Policy, and Law*, **12** (1), 106.

Piketty, T. (2014). *Capital in the Twenty-first Century*. Harvard University Press.

— and Saez, E. (2013). A theory of optimal inheritance taxation. *Econometrica*, **81** (5), 1851–1886.

Straub, L. and Werning, I. (2014). *Positive Long Run Capital*