# How elastic are Preferences for Redistribution? Evidence from Randomized Survey Experiments

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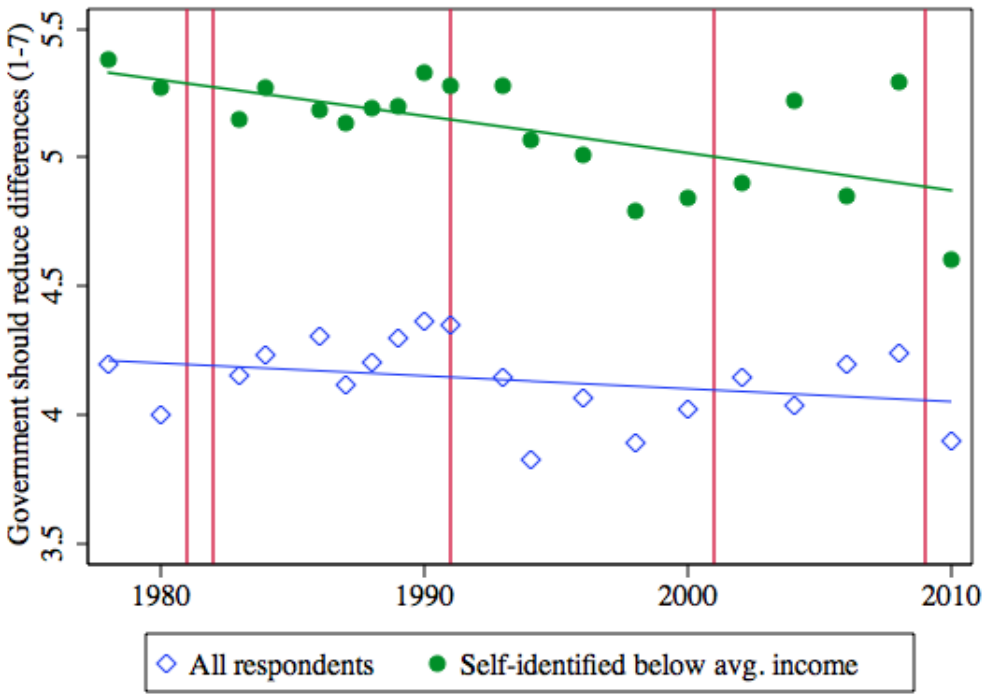
# Motivation: Rise in inequality but not in support for redistribution

- Income inequality in the US has soared: Top 1% had 9% of income in 1970 vs 23.5% in 2007.
- According to median-voter theorem, support for redistribution should increase; but has even slightly decreased.
- Do individuals lack (sufficiently salient) information about level of and increase in inequality? If yes, more and better info will change redistributive preferences.
- Are Americans skeptical about govt's ability to redistribute effectively?
- Tax and entitlement reform are some of most consequential issues in the US: Knowing how voters form redistributive preferences is vital

# The government should reduce income differences (scale from 1–7, GSS)




While not significant, slightly negative trend, more pronounced among below-average incomes

# Summary

1. **Method**
   - Series of online randomized experiments on mTurk to test effects of info provision
   - 5000 respondents randomized into interactive treatments with info on income inequality, historical correlation btw top taxes and econ growth, and estate tax
   - Then asked about views on inequality, govt, and policies

# Summary

2. **Results**

- Views on inequality very elastic to info: treatment closes 40% of gap between liberals' and conservatives' views of whether ineq is serious problem
- Policy preferences less elastic, esp. poverty-reduction policies; but increase in support for higher top tax rates and min wage
- Very large effect on support for increasing the estate tax (200% of gap between liberals and conservatives)
- Effects not ephemeral: persist in a followup one month later (but small take-up)
- "Real" effect: Treated more likely to send petition to State Senator asking for higher estate tax.

# Summary

3. **Interpretation**

- Small response of policies could be due to treatment significantly decreasing respondents' trust in govt
- Find substantial contrast in treatment effects between low income/low education respondents and high income/high education respondents.
  - Low income/low educ respondents less likely to support transfers to the poor after treatment. If dropped, treatment has strong positive effect on poverty-reduction policies
- We test for "financial anxiety" having different effects on lower income respondents using separate experiment about response to positive or negative news about economy
  - Results also consistent with "Last Place Aversion" effects (Kuziemko et. al., 2011): info on income distribution heightens status concerns

# Some related literature on social preferences

- Public fails to connect concern for inequality with public policy preferences, which are "sticky" (Bartels, 2005, Luttmer and Singhal, 2011)

- Determinants of social preferences from political science, sociology, economics and psychology (Alesina and Glaeser, 2004, Alesina and La Ferrara, 2005, Luttmer, 2001, Singhal 2008)

- Effects of framing and priming on policy preferences (Hite and Roberts, 1991, McCaffery and Baron, 2004, 2005, 2006, Savani and Rattan, 2012)

- Randomized info treatments' effects on policy preferences (Sides, 2011, Cruces et al., 2013, Kuklinski et al., 2003)

# Some related literature on online surveys and experiments

- Growing literature using online survey platforms: Review paper by Berinsky et al. (2013)
- Public goods games (Rand and Nowak, 2011)
- Online labor markets (Horton et al., 2011)
- Pay satisfaction (Card et al., 2012)
- Social preferences (Weinzierl, 2012, Saez and Stantcheva, 2013)

# The survey experiment

- 6 waves using mTurk from Jan 2011 to Aug 2012, with 6000 respondents

- Common core structure with variations:

  1. **Background socio-economic questions**
  2. **Randomized treatment** providing info on inequality and tax policy
  3. **Outcome questions**: views on inequality, taxes and transfers, govt, voting in presidential election

# The information treatments

Goal: Simplified, salient, and interactive information

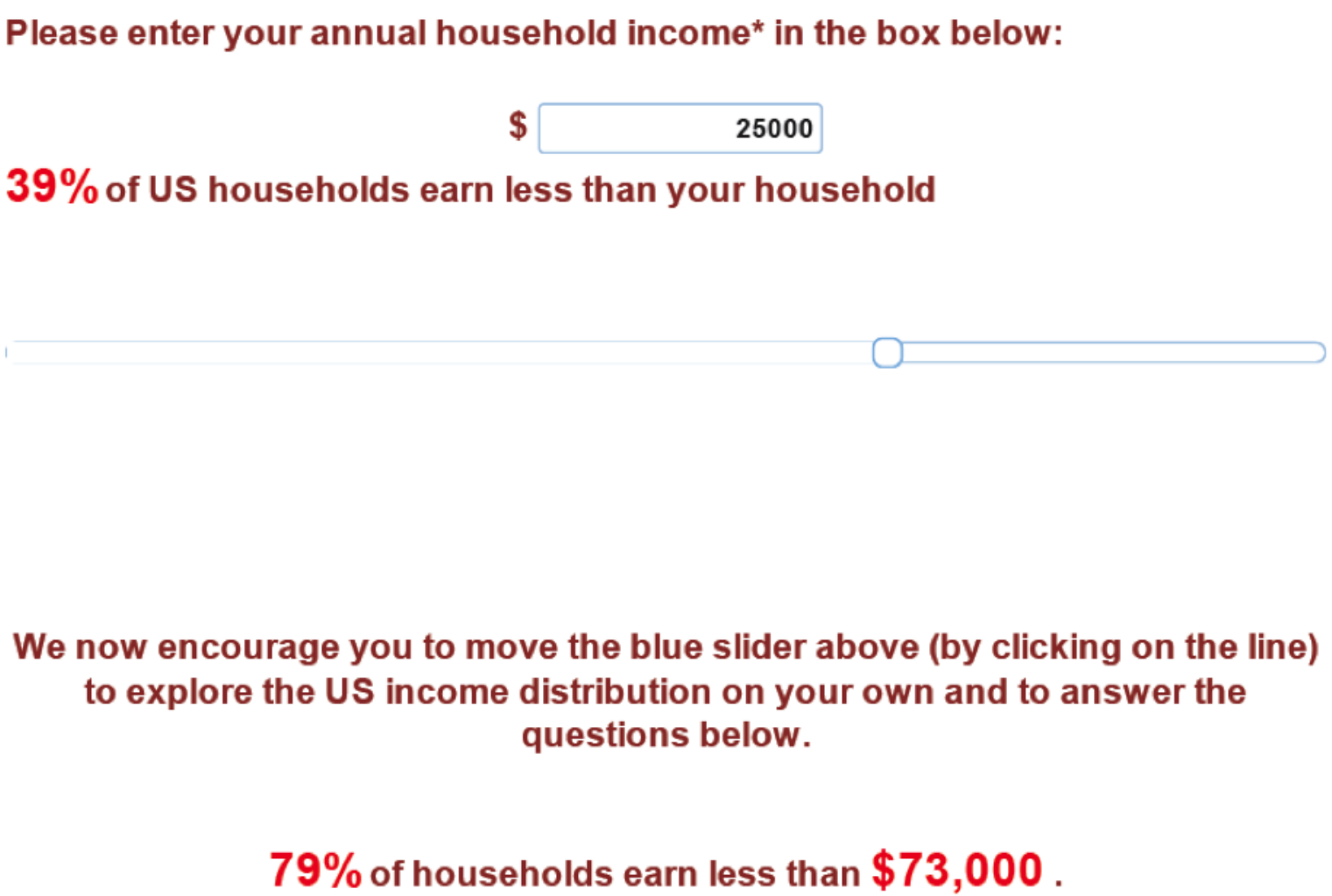
1. Information on inequality and the income distribution:
   - "Where are you in the income distribution?"
   - "Where would you have been if economic growth since 1980 had been evenly shared"

2. Policy information:
   - Series of figures highlighting raw correlation between economic growth and top tax rates, 1913 to 2010
   - Description of the estate tax and the fact that only the top 0.1% of estates are affected by it.

   Simplified info (e.g., abstract from deadweight loss of taxes) might provide upper bound on how much opinions can be moved.

# Treatment example: Where are you in the distribution?

See the full interactive Treatment here:
`https://hbs.qualtrics.com/SE/?SID=SV_77fSvTy12ZSBihn`



# Treatment example: Counterfactual income distributions

**Income Inequality has increased dramatically in the United States since 1980.**
Incomes of poorer and middle-income families have grown very little while top incomes have grown a lot.

**How would YOU be doing if inequality had not increased?**

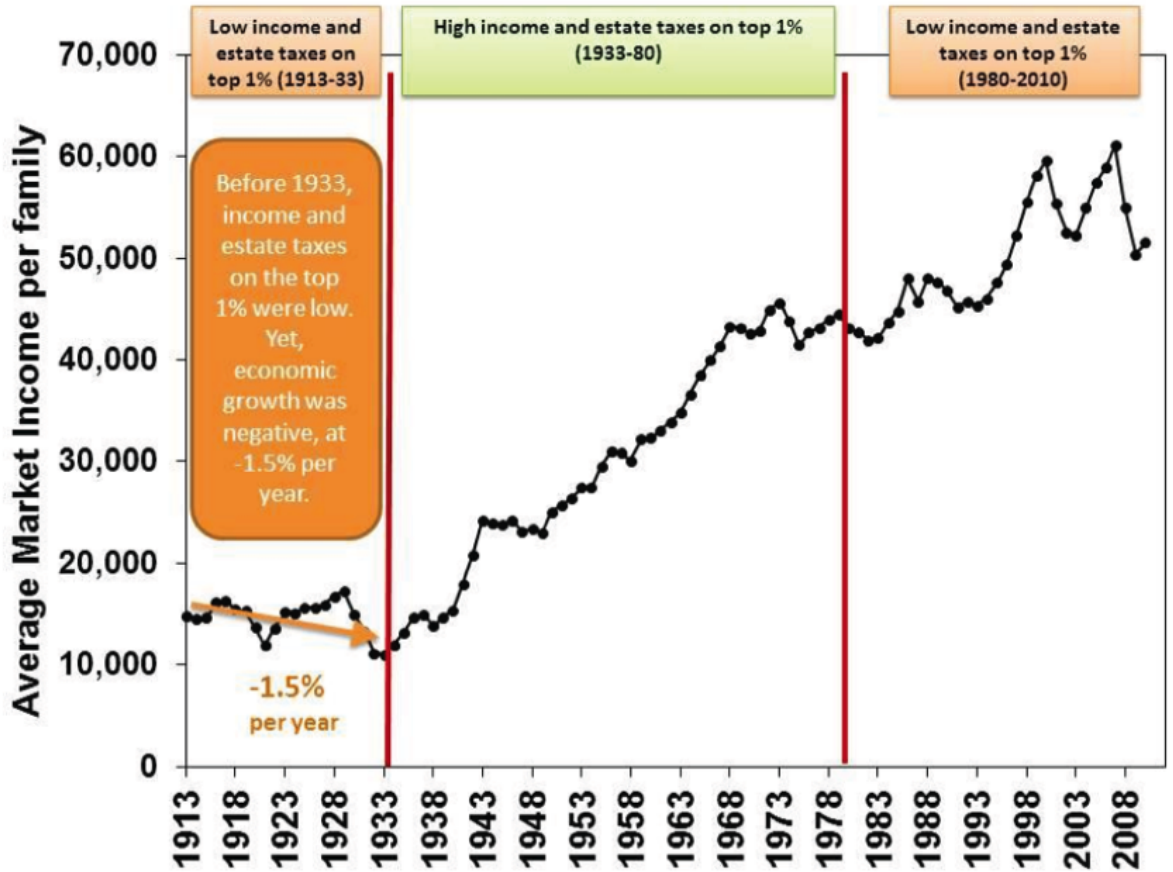
The slider below shows how much each group would make if incomes had grown by the same percentage since 1980 for all groups: the poor, the middle class, and the rich. Use the slider to answer the questions below.

A household making **$25,800** today would instead be making
**$35,200** if inequality had not changed since 1980.
In other words, if growth had been evenly shared, this household would have earned
**37% more**.

# Treatment example: Taxes and growth

**Increasing the federal income tax rate and the estate tax rate on very high incomes can raise tax revenue without hurting economic growth.**

**The following slides describe both income and estate taxes on high incomes and economic growth over three historical periods: (1) Before the New Deal of 1933, (2) Between 1933 and 1980, (3) Since 1980.**
**Economic growth is measured as the growth in the average family market income.**



# Treatment example: Information about the Estate Tax

Besides the income tax, the government can also level the playing field with **the federal estate tax.**

The **Federal Estate Tax** (also known as the **Death Tax**) applies when a deceased person leaves **more than $5 million** in wealth to his or her heirs. Wealth left to a spouse or charitable organizations is exempt from estate tax.

**Only 1 person out of 1000 is wealthy enough to face the estate tax.**

Average Americans do not have anything close to $5 million in wealth, so the estate tax does not affect them and they can pass on their property to their children tax-free.

**Eliminating** the estate tax would allow the very richest families to pass down all of their wealth to their children tax-free. Hence, children of rich people would also start off very rich themselves.

**Increasing** the estate tax is a way to level the playing field between the children of wealthy parents and children of middle-class parents.

Table 1: Summary statistics: Unweighted mTurk, CBS News and weighted mTurk samples

| | (1) mTurk (unwgted) | (2) CBS | (3) mTurk (wgted) |
|---|---|---|---|
| Male | 0.430 | 0.476 | 0.476 |
| Age | 35.03 | 48.99 | 42.82 |
| White | 0.784 | 0.739 | 0.739 |
| Black | 0.0725 | 0.116 | 0.102 |
| Hispanic | 0.0420 | 0.0983 | 0.0550 |
| Asian | 0.0729 | 0.0209 | 0.0707 |
| Married | 0.387 | 0.594 | 0.457 |
| Has college degree | 0.448 | 0.318 | 0.318 |
| Unemployed | 0.127 | 0.104 | 0.129 |
| Not in labor force | 0.140 | 0.309 | 0.213 |
| Voted for Obama in 2008 | 0.670 | 0.555 | 0.555 |
| Pol. views, 1 (Cons) to 3 (Lib) | 2.176 | 1.586 | 1.998 |
| Observations | 4527 | 808 | 4527 |

Notes: Summary stats of survey respondents in mTurk experiment (col (1)), national representative averages from CBS news surveys (col (2)). Col (3): re-weighted summary statistics of our mTurk sample to match CBS sample for 32 cells based on: gender (2) $\times$ age brackets (2) $\times$ white versus non-white (2) $\times$ college degree indicator (2) $\times$ Supported Obama in 2008 (2).

# Controlling for Selective Attrition

- Attrition is 22% overall
  - But only 15% for those remaining long enough to be assigned to Treatment (T) or Control (C)
- Differential attrition: 20% in T vs. 9% in C
- Conditional on finishing survey, treatment is randomly assigned, even wrt political preferences (check)
  - Treatment increases attrition but does not induce selective attrition along (observable) characteristics
- Still, add controls to regressions
- Robustness checks to show results not driven by selective attrition based on unobservables

Table 2: Ability of covariates to predict treatment status, conditional on finishing the survey

| Variable | Coefficient | P-value |
|---|---|---|
| Voted for Obama in 2008 | 0.009 | 0.564 |
| Age | -0.000 | 0.552 |
| Liberal policy view | 0.002 | 0.767 |
| Household income | 0.003 | 0.207 |
| Married | -0.014 | 0.357 |
| Education | -0.004 | 0.443 |
| Male | 0.006 | 0.666 |
| Black | -0.041 | 0.156 |
| Hispanic | 0.083 | 0.026 |
| Native | -0.023 | 0.469 |
| Employed full time | -0.008 | 0.616 |
| Unemployed | 0.014 | 0.516 |
| Not in labor force | 0.011 | 0.623 |
| Student | -0.017 | 0.403 |

Notes: For each row, the coefficient and $p$-value are from regressions of the form $Assigned\ to\ treatment_{ir} = \alpha + \beta Covariate_i + \delta_r + \epsilon_{ir}$, where $Covariate$ is listed to the left in the row and $\delta_r$ are survey wave fixed effects. Those tests are used to detect selective attrition (as treatment respondents are approximately ten percentage points less likely to complete the survey than are control respondents).

# Results - Views on inequality

- Note: Results scaled by the pre-treatment gap in responses between self-proclaimed liberals and conservatives ("L-C gap")
- Very strong first stage effects
- 40 % increase in share who agree inequality is a "very serious" problem; 40% of L-C gap
- Increase in share who perceive inequality to have increased: 54% of L-C gap
- Decrease in share who believe high earners are deserving of their income: small (17% of L-C gap)

Table 3: Effect of treatment on opinions about inequality

| | Ineq. v. serious | | Ineq. increased | | Rich deserving | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Treated | 0.113*** | 0.115*** | 0.118*** | 0.118*** | -0.0479*** | -0.0491*** |
| | [0.0140] | [0.0131] | [0.0117] | [0.0115] | [0.0109] | [0.0103] |
| Cont gp. mean | 0.280 | 0.280 | 0.746 | 0.746 | 0.180 | 0.180 |
| Scaled Effect | 0.378 | 0.384 | 0.539 | 0.539 | 0.164 | 0.168 |
| Covariates? | No | Yes | No | Yes | No | Yes |
| Obs. | 4477 | 4477 | 4478 | 4478 | 4464 | 4464 |

Notes: "Ineq. v. serious" is a dummy equal to one if respondent says inequality is a "very serious" problem. "Ineq. increased" is a dummy equal to one if respondent says inequality has increased in the US. "Rich deserving" is a dummy for whether respondent think the high earners in our society deserve their pay. All regressions have wave fixed effects. Covariates here and in all subsequent tables include all vars in the randomization table (Table 2), plus state-of-residence. "Scaled effect" in all tables is the coefficient on treated scaled by the difference in mean between liberals and conservatives for each corresponding dependent variable. The row "Cont pg. mean" reports the mean of the outcome variable in the control group. $^{*}p < 0.1,^{**} p < 0.05,^{***} p < 0.01$

# Results - Views on Top Income Tax Rates

- Effects on top tax rates and support for increasing a tax on millionaires are significant but small
- Preferred top tax rate increases by 1.1 percentage points (11% of L-C gap)
- Support for increase in millionaire tax increases by 5 percentage points (12% of L-C gap)

# Results - Views on the Estate Tax

- Very large effects on support for increasing the estate tax: 40 percentage points (205% of L-C gap)
  - Consistent with Sides (2011)
- Is it because estate tax is less salient?
  - Gallup 2010: estate tax is top priority for lame-duck session of Congress (above unemployment benefit extension or Bush income tax cuts)
- Is it because of widespread misinformation, even if salient issue?
  - Slemrod (2006): 49% of respondents believe most families have to pay it.
- Correcting misinformation works well here, as no racial or other stereotypes (unlike for welfare, see Kuklinski et al. (2003) experiment)

Table 4: Effect of treatment on opinions about taxes

| | Top tax rate | | Millionaire tax | | Estate tax | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Treated | 1.131** | 1.096** | 0.0477*** | 0.0485*** | 0.360*** | 0.357*** |
| | [0.485] | [0.472] | [0.0125] | [0.0113] | [0.0145] | [0.0140] |
| Cont gp. mean | 28.96 | 28.96 | 0.742 | 0.742 | 0.171 | 0.171 |
| Scaled Effect | 0.118 | 0.114 | 0.109 | 0.111 | 2.063 | 2.043 |
| Covariates? | No | Yes | No | Yes | No | Yes |
| Obs. | 4521 | 4521 | 4521 | 4521 | 3673 | 3673 |

Notes: "Top rate" is continuous (respondents' preferred average tax rate on the richest one percent) and other outcome variables are binary ("millionaire tax" and "estate tax" coded as one if respondents wants taxes on millionaires and the estate tax to increase, respectively).

# Results - Views on public policy: Poverty Reduction Policies

- Effect on poverty reduction policies limited, but distinction between direct transfer and indirect transfer policies
- Direct transfer policies tested (EITC and Food Stamps): no effect
- Indirect transfer policy (Min wage): support increases to close 13% of L-C gap
- One possible explanation is "Last Place Aversion" - more details below

Table 5: Effect of treatment on opinions about other policies

| | Min. wage | | EITC | | Food stamps | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Treated | 0.0439*** | 0.0461*** | 0.0206 | 0.0229* | 0.0138 | 0.0156 |
| | [0.0137] | [0.0128] | [0.0144] | [0.0138] | [0.0138] | [0.0129] |
| Cont gp. mean | 0.679 | 0.679 | 0.577 | 0.577 | 0.681 | 0.681 |
| Scaled Effect | 0.128 | 0.134 | 0.0743 | 0.0826 | 0.0342 | 0.0386 |
| Covariates? | No | Yes | No | Yes | No | Yes |
| Obs. | 4464 | 4464 | 4464 | 4464 | 4464 | 4464 |

All outcomes are binary and indicate respondents wish those policies are increased.

# Results - Views of government

- **Large decrease in share of respondents agreeing that govt can be trusted** "always" or "most of the time" as opposed to "only some of the time" or "never" (Gallup questions)
  - Magnitude of effect is 150 % of L-C gap
- Treatment moves respondents toward wanting a more active govt "in every area (...) to try and improve the lives of its citizens"
- Makes respondents prioritize redistributive role of income tax as opposed to its role raising money for infrastructure or universal transfer programs like Medicare or Social Security
  - Seems paradoxical? - see robustness check for attrition below

Table 6: Effect on views of government

| | Trust gov. | | Active gov. | | Redistr. taxes | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Treated | -0.0247** | -0.0255** | 0.113*** | 0.117*** | 0.0378*** | 0.0385*** |
| | [0.0102] | [0.0101] | [0.0353] | [0.0305] | [0.0122] | [0.0119] |
| Cont gp. mean | 0.153 | 0.153 | 3.054 | 3.054 | 0.194 | 0.194 |
| Scaled Effect | 1.018 | 1.050 | 0.0925 | 0.0961 | 0.271 | 0.276 |
| Covariates? | No | Yes | No | Yes | No | Yes |
| Obs. | 4519 | 4519 | 4478 | 4478 | 4474 | 4474 |

Notes: "Trust gov" is binary indicator for trusting government at least some of the time, "Active gov" is a one-to-five variable for how active you think the government should be, and "Redist. taxes" is a binary variable for whether you believe the primary goal of the federal income tax is redistribution.

# Results - Political Involvement

- Want to (modestly) address a major critique of survey analysis, that it's difficult to connect respondents' attitudes to "real world" behaviors

- Asked respondents if would like to send a petition to their Senator asking to either raise or lower top tax rates (respectively, the estate tax).
  - Provide link with Senators' emails (can check if they clicked) and sample messages both for an against raising taxes

- Findings: large effect on petition asking for higher estate tax (no effect for income tax petition)
  - "Action" consistent with changed attitudes
  - But attenuation from attitudes to actions: petition effect is 40% of L-C gap, but support for increasing estate tax was 205% of L-C gap

Table 7: Effect on political involvement

| | Petition, inc. tax | | Petition, est. tax | | Democrat 2012 | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Treated | 0.0321 | 0.0370 | 0.0666*** | 0.0648*** | 0.0231 | 0.0206* |
| | [0.0232] | [0.0230] | [0.0159] | [0.0156] | [0.0149] | [0.0113] |
| Cont gp. mean | 0.235 | 0.235 | 0.234 | 0.234 | 0.520 | 0.520 |
| Scaled Effect | 0.196 | 0.226 | 0.405 | 0.394 | 0.0369 | 0.0329 |
| Cont gp. st dev | 0.424 | 0.424 | 0.424 | 0.424 | 0.500 | 0.500 |
| Covariates? | No | Yes | No | Yes | No | Yes |
| Obs. | 1390 | 1390 | 3060 | 3060 | 4477 | 4477 |

Notes: "Petition, inc. tax" is a dummy equal to 1 if respondent wants to send a petition to his State Senator asking to increase the income tax. "Petition, est. tax" is a dummy equal to 1 if respondent wants to send a petition to his State Senator asking to increase the estate tax. "Democrat 2012" is a dummy equal to 1 if respondent expresses intention to vote for the Democrat party in 2012.

# Results - Political Involvement (continued)

- At best marginal effect on voting intention, increase in support of Obama
- Consistent with overall mild policy effects
- Might be net effect of increase in wish to redistribute combined with decrease in trust of government (Democrats being the party in power)

# Robustness Checks

- External validity and reweighting:
  - Disproportionate number of ethnic Asians, younger people, and women on mTurk
  - Reweight to match CBS sample in terms of 32 cells (age, gender, white, college, support for Obama in 2008)
  - Results not affected - differential attrition limited

- Bounding effects of differential attrition:
  - Create lower and upper bounds, imputing largest vs smallest possible value of outcome for attriters (extreme assumption)
  - Estate tax result remains, top tax rate and trust in govt weakened
  - Impute average liberal vs average conservative view to all attriters: all results robust (less stringent bounds, but still generous because outcomes vary by political views but attrition does not)

# Robustness Checks - continued

- Low vs High Differential Attrition Waves:
  - We used various methods to reduce attrition across waves: see details below
  - Check whether results are stable across low and high differential attrition waves
  - Robust results, but main messages even more highlighted in low attrition waves (which are most reliable)
  - Strong effects on views about inequality, more modest effects on policy, except for estate tax. Potentially driven by a large decrease in trust in government and no push for more active or redistributive govt.

- Robustness across waves:
  - Verify that no single wave driving results

Table 8: Views on inequality and taxes for high- and low-attrition waves

| | Ineq. v. serious | | Ineq. increased | | Rich deserving | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Treated | 0.114*** | 0.117*** | 0.0968*** | 0.138*** | -0.0188 | -0.0672*** |
| | [0.0193] | [0.0219] | [0.0168] | [0.0176] | [0.0155] | [0.0169] |
| Cont gp. mean | 0.269 | 0.289 | 0.775 | 0.780 | 0.168 | 0.180 |
| Scaled Effect | 0.355 | 0.387 | 0.517 | 0.615 | 0.0651 | 0.209 |
| Differential attrition? | Low | High | Low | High | Low | High |
| Obs. | 2034 | 1635 | 2034 | 1636 | 2028 | 1631 |

| | Top tax rate | | Millionaire tax | | Estate tax | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Treated | 0.828 | 2.003*** | 0.0333** | 0.0555*** | 0.421*** | 0.365*** |
| | [0.697] | [0.716] | [0.0166] | [0.0187] | [0.0247] | [0.0212] |
| Cont gp. mean | 30.00 | 28.88 | 0.766 | 0.754 | 0.179 | 0.178 |
| Scaled Effect | 0.0792 | 0.203 | 0.0823 | 0.108 | 1.761 | 2.396 |
| Differential attrition? | Low | High | Low | High | Low | High |
| Obs. | 2051 | 1650 | 2034 | 1636 | 1250 | 1626 |

Table 9: Opinions on poverty reduction policies and govt for high- and low-attrition waves

| | Min. wage | | EITC | | Food stamps | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Treated | 0.0468** | 0.0408* | 0.00939 | 0.0260 | 0.0183 | 0.0197 |
| | [0.0192] | [0.0210] | [0.0205] | [0.0230] | [0.0189] | [0.0210] |
| Cont gp. mean | 0.676 | 0.706 | 0.580 | 0.589 | 0.690 | 0.702 |
| Scaled Effect | 0.131 | 0.129 | 0.0373 | 0.0808 | 0.0447 | 0.0451 |
| Differential attrition? | Low | High | Low | High | Low | High |
| Obs. | 2028 | 1631 | 2028 | 1631 | 2028 | 1631 |

| | Trust gov. | | Active gov. | | Redistr. taxes | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Treated | -0.0511*** | 0.000987 | 0.0476 | 0.248*** | 0.0169 | 0.0762*** |
| | [0.0155] | [0.0169] | [0.0442] | [0.0494] | [0.0175] | [0.0194] |
| Cont gp. mean | 0.166 | 0.133 | 3.064 | 2.997 | 0.191 | 0.167 |
| Scaled Effect | 2.191 | 0.0311 | 0.0361 | 0.195 | 0.117 | 0.496 |
| Differential attrition? | Low | High | Low | High | Low | High |
| Obs. | 2033 | 1635 | 2034 | 1636 | 2032 | 1635 |

# Are treatment effects ephemeral?

- In wave 4, attempt to recontact respondents 1 month after survey: 20 % take-up, not related to political preferences or treatment status in 1st survey

- Most results persist, but loss in precision from very small sample size

- Better practices need to be adopted to ensure larger take up in follow-up surveys

  - Keep span between waves short since high turnover
  - Email reminders through scripts on platform
  - Difficult to contact and incentivize workers: thousands of available surveys, why bother searching for any particular one?
  - Compare: Follow-up was 70% with survey company

Table 10: Results from Follow-up Survey on Selected Variables

| | Top Tax | | Increase Estate Tax | | Ineq v. Serious | |
|---|---|---|---|---|---|---|
| | (1) First | (2) Follow-up | (3) First | (4) Follow-up | (5) First | (6) Follow-up |
| Treated | 3.894 | 5.247** | 0.226*** | 0.198*** | 0.0425 | 0.0355 |
| | [2.492] | [2.535] | [0.0667] | [0.0654] | [0.0615] | [0.0586] |
| Cont gp. mean | 32.61 | 29.99 | 0.181 | 0.184 | 0.288 | 0.230 |
| Obs. | 167 | 167 | 168 | 168 | 169 | 169 |

Notes: The top tax rate is continuous. "Rich deserving" and "Increase Estate Tax" are binary, while "Govt Purpose" is a categorical variable taking five values with one being the most limited and five the most comprehensive purpose for the government (the variable is rescaled by subtracting the sample mean). For each dependent variable, Col "First" is the result from the first survey, while Col "Follow-up" is the result from the follow-up survey. We use a more limited set of control given the small sample size. Controls for each regression include race, marital status, age, gender and political orientation.

# What aspects of the treatment move preferences?

- Treatment is combination of variety of information - effect might be an upper bound on how much policy preferences can be moved

- In wave 6 break down treatment into 3 treatment groups by information on:

  1. Only level and growth of inequality, and that estate tax only paid by owners of very large estates
  2. Empirical correlation between high top tax rates and robust econ growth
  3. Both growth and inequality

- Result: More information produces stronger effects, but almost all effect is driven by information on the level and growth of inequality

# Differential treatment effects by socio-economic status

- Why lack of effect on poverty-reduction policies, mostly direct transfer policies (EITC and Food Stamps)?

- Examine differential treatment effects by socio-economic status:
  - "Poor" = below \$20,000 (21% of above-22 years old in sample), matches US distribution
  - "Low educ" = no 2-year College degree (40% of sample above-22 years old)

- Results
  - With interactions $treat \times poor$ (resp., $treat \times loweduc$) added, main effect of treatment is significantly positive on poverty-reduction policies
  - Poor (resp., low educ) respondents have significantly different reactions to the treatment - eliminating them leads to positive treatment effect

Table 11: Do the poor and less-educated respond differently?

| | By income | | | By Education | | |
|---|---|---|---|---|---|---|
| | (1) F. Stamps | (2) EITC | (3) Min wage | (4) F. Stamps | (5) EITC | (6) Min wage |
| Treated | 0.0304* | 0.0438*** | 0.0571*** | 0.0481*** | 0.0487** | 0.0652*** |
| | [0.0158] | [0.0170] | [0.0157] | [0.0179] | [0.0192] | [0.0178] |
| Poor | 0.0627** | -0.0181 | -0.0266 | | | |
| | [0.0296] | [0.0318] | [0.0294] | | | |
| Treat*Poor | -0.0293 | -0.0666* | -0.000615 | | | |
| | [0.0345] | [0.0370] | [0.0342] | | | |
| No degree | | | | 0.0885*** | 0.0382 | 0.0115 |
| | | | | [0.0309] | [0.0332] | [0.0307] |
| Treat*No degree | | | | -0.0607** | -0.0491 | -0.0215 |
| | | | | [0.0289] | [0.0311] | [0.0287] |
| Cont gp. mean | 0.681 | 0.577 | 0.679 | 0.681 | 0.577 | 0.679 |
| Obs. | 3721 | 3721 | 3721 | 3721 | 3721 | 3721 |

Notes: "By education" columns distinguish respondents without 2-year College degree from those with. "By Income" distinguishes respondents with less than $20,000 income.

# Does "financial anxiety" shape redistributive preferences?

- Individuals more confident about their socio-econ status react as expected a priori, becoming more supporting of transfer programs

- Strinkingly, poor/low educ respondents show same treatment effects on "Ineq is very serious", top tax or estate tax rates, but do not become more supportive of transfer programs

- Test for "financial anxiety" using additional experiment survey: randomize respondents into reading good vs bad news about economy.
  - Negative info about economy diminishes respondents' views of both absolute and relative future position in income distribution

# Does "financial anxiety" shape redistributive preferences?

- Findings:
  - Respondents assigned to negative-info treatment believe income distribution more unfair and support more redistribution
  - But lower-income respondents react in opposite direction after being shown negative information

- Possible (non-exhaustive) explanations for heightened financial anxiety of lower socio-economic status respondents:
  - "Last-place aversion" (Kuziemko et al., 2011): status concerns make low-income individuals wary of policies supporting groups below them and focus on income distribution in treatment can heighten these concerns
  - Social-desirability survey bias makes respondents' wary to be perceived as self-interested if support policies to help their own socio-econ strata

# Table 12: Effect of negative information about the economy on support for redistribution

| | Distribution unfair | | | Gov. reduce inc. diffs | | | Fix deficit by taxing rich | | |
|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Neg. treat x | -0.150*** | -0.169*** | -0.216*** | -0.428 | -0.518** | -0.789** | -0.167*** | -0.176*** | -0.242*** |
| Below-med. inc. | [0.0565] | [0.0530] | [0.0672] | [0.264] | [0.241] | [0.314] | [0.0546] | [0.0503] | [0.0622] |
| Negative-info. | 0.119*** | 0.111*** | 0.113** | 0.349* | 0.348* | 0.345 | 0.111*** | 0.0993*** | 0.123*** |
| treatment | [0.0426] | [0.0398] | [0.0498] | [0.200] | [0.182] | [0.233] | [0.0412] | [0.0379] | [0.0461] |
| Mean, dept. var. | 0.773 | 0.771 | 0.753 | 4.734 | 4.715 | 4.672 | 0.796 | 0.794 | 0.790 |
| Controls? | No | Yes | Yes | No | Yes | Yes | No | Yes | Yes |
| Ages | All | All | Over 25 | All | All | Over 25 | All | All | Over 25 |
| Observ. | 899 | 886 | 583 | 902 | 889 | 585 | 902 | 889 | 585 |

Notes: "Distribution unfair" refers to the question "Do you feel that the distribution of money and wealth in the United States is fair, or do you think money and wealth should be more evenly distributed among a larger percentage of people?" "Gov. reduce inc. diffs" is a one-to-seven scale question on whether the government should aim at reducing differences in income between rich and poor. "Fix deficit by taxing rich" refers to the question "The deficit should be mainly addressed with higher taxes on the wealthy or it should be mainly addressed by cutting social services such as Medicare, Medicaid, Unemployment Insurance and Food Stamps."

# Methodological issues for online survey experiments

- Is mTurk representative?
  - No and neither are other standard polls. Some biases actually in opposite direction, like age (younger)
  - Can be re-weighted easily and results robust

- Is attrition very large?
  - Not that high compared to wave with specialized panel (CT Marketing Group) or Gallup 15-min Daily Poll (9% attrition even without "treatment")
  - Our differential attrition seems to be due to length of treatment (not selection) and results robust to checks
  - Encouraging since our info was on sensitive side

# Methods tested to reduce differential attrition

1. Attrition inducement device:
   - Induce respondents unlikely to finish to drop out *before* being assigned to treatment
   - Make them read lengthy academic paragraph on "Teaching the scientific method" and write a paragraph about it

2. Mock treatment for control group:
   - Provide information unrelated to inequality, which takes up time, has same structure and length as real treatment, and is more likely to appeal to liberals
   - We used climate change information

3. Payment variation: not much effect

# Conclusion

- Is lack of info the reason for missing link between rising inequality and support for redistributive policies?
- Providing info on inequality and taxes shown to:
  - Have very large views on knowledge of and attitudes about inequality
  - Smaller effects on policies, esp. poverty-reduction policies
- Possible explanations for disconnect:
  - Treatment also decreases trust in govt
  - "Last-place aversion"among low income/low educ respondents
- Very large and persistent effects on estate tax, possibly due to widespread misinformation, hence high value of info
- "Real effects": Treated more likely to send petition to Senator asking for higher estate tax