Web Appendix of

How Elastic are Preferences for Redistribution? Evidence from Randomized Survey Experiments

***By* Ilyana Kuziemko, Michael I. Norton, Emmanuel Saez, and Stefanie Stantcheva**

A Detailed Description of the Experiment

A.1 Omnibus Treatment Description

This Section describes in detail the omnibus experiment. The omnibus treatment experiment was carried out in 4 separate rounds from January 2011 to August 2012. The structure of the experiment was as follows:
(1) Background socio-economic questions including age, gender, race, marital status, children, state of residence, education, household income, work status, whether the respondent considers himself conservative or liberal on economic policy, voting choice in 2008 presidential election.
(2) Randomized treatment showing information on inequality, the estate tax, and tax policy shown solely to the treatment group. Those treatments are illustrated through screenshots in appendix Figures 1, 2, 3, and 4.
(3) Set of questions on inequality, taxes and transfers, policy views and 2012 voting plans. Those questions are listed in detail after the screenshots.

Surveys were openly posted on mTurk and their description stated that they would pay $1.50 for approximately 15 minutes of survey time, i.e., a $6 hourly wage. People were free to drop out any time or take up to one hour to answer all questions.

Round 3 was conducted with CT Marketing Group instead of mTurk at a cost of $5 per respondent. The survey software remained exactly the same.

The link to this survey is: `https://hbs.qualtrics.com/SE/?SID=SV_77fSvTy12ZSBihn`

List of all Outcome Questions

Note: Sentences in italic were not seen by the respondents. Bold fonts are just labels for each section. Sentences in normal font are exactly as they appeared in the survey. Text in bracket represents the answer choices given to respondents. Text in curly brackets are explanatory notes for the readers of this paper (not presented to respondents).

Tax rate questions:

1. *Choose the tax rate on the top 1%, next 9%, next 40% and bottom 50% (see screenshot).* [Slider with continuous percentage choices 0%-100% for each of the four income groups]

2. Do you think top income tax rates were higher in the 1950s and 1960s than they are today? [Yes, higher in the 1950s and 1960s/No, lower in the 1950s and 1960s]

3. As you may know, there have been proposals recently to decrease the federal deficit by raising income taxes on millionaires. Do you think income taxes on millionaires should be increased, stay the same or decreased? [Increased/Stay the same/Decreased]

4. The Federal Estate tax (also known as the Death Tax) is a tax imposed on the transfer of wealth from a deceased person to his or her heirs. Do you think the Federal Estate tax should be decreased, left as is or increased? [Decreased/Left as is/Increased]

First stage questions on knowledge and perceptions of inequality:

5. Do you think annual economic growth was faster in the period 1980-2010 than in the period 1933-1980? [Faster in 1980-2011/The same in both periods/Faster in 1933-1980]

6. Do you think inequality is a serious problem in America? [Not a problem at all/A small problem/A problem/A serious problem/A very serious problem]

7. Do you think income inequality in the US has increased or decreased in recent decades? [Decreased/Stayed the same/Increased]

8. Are you satisfied with your current income? [Very satisfied/Somewhat satisfied/Not too satisfied/Not at all satisfied]

9. Do you think that the very high earners in our society deserve their high incomes? [Most of the time/Sometimes/Rarely]

10. Which statement do you agree with most? [A: "One's income and position in society is mostly the result of one's individual effort" / B: "One's income and position in society is to a large extent the outcome of elements outside of one's control (for example, including but not limited to family background, luck, health issues, etc..)"?]

Political Outcomes:

11. Which party do you plan to support in the 2012 presidential elections? [Democratic/Republican/Other/None] {note: the surveys were carried out before the 2012 elections}

12. How much of the time do you think you can trust government in Washington to do what is right? [Just about always/Most of the time/ Only some of the time/ Never]

13. Next, think more broadly about the purpose of government. Where would you rate yourself on a scale of 1 to 5, where 1 means you think the government should do only those things necessary to provide the most basic government functions, and 5 means you think the government should take active steps in every area it can to try and improve the lives of its citizens? [1/2/3/4/5]

14. What do you think the most important goal of the federal income tax should be? [Raise money for infrastructure projects such as roads and bridges/ Raise money for universal social services such as Social Security and Medicare/ Raise money from the wealthiest citizens to support programs that aid low-income citizens, such as Medicaid and Food Stamps)]

Poverty Reduction Policies Outcomes:

15. The minimum wage is currently $7.25 per hour. Do you think it should be decreased, stay the same or increased? [Decreased/Stay the same/Increased]

16. Do you support or oppose the Earned Income Tax Credit (EITC) program? [Support/Indifferent/Oppose]

17. Do you support or oppose the Food Stamps program? [Support/Indifferent/Oppose]

18. In the next month, do you plan to donate any money to an organization that supports those in need? [Yes/No]

19. In the past month, have you donated any money to an organization that supports those in need? [Yes/No]

20. In the next month, do you plan to donate some of your time to an organization that supports those in need? [Yes/No]

21. In the past month, have you donated some of your time to an organization that supports those in need? [Yes/No]

Real Outcome: Petition for Estate Tax

22. Writing to the Senators of your state gives you an opportunity to influence taxation policy. Few citizens email their elected officials, therefore Senators and their staff take such emails from their constituents very seriously. If you would like to write to your Senator, go to the official US Senate list and click on your Senator's contact webpage. Two sample letters are provided below, one asking for higher estate taxes on the rich, one asking not to increase estate taxes on the rich. Feel free to cut-and-paste and edit the text before sending it to your Senator. Most Senators' websites ask for your name and address to avoid spam. We are not able to record what you write on the external (Senator's) website, so your letter and private information are kept fully confidential.

For the purpose of our survey, we would just like to know from you: I sent or will send an email to my Senator asking for higher estate taxes on the rich/ I sent or will send an email to my Senator asking to not increase estate taxes on the rich/ I do not want to email my Senator

Sample letter for higher estate taxes on the rich: Dear Senator, In the coming months as you debate the federal budget, one of the priorities for Congress should be raising estate taxes on the wealthiest Americans so that they pay their fair share to fund government programs and help solve our federal budget deficit problem.

Sample letter for not increasing estate taxes on the rich**:** Dear Senator, In the coming months as you debate the federal budget, one of the priorities for Congress should be keeping estate taxes on the wealthiest Americans low. The government should not punish people who are financially successful or well-off.

[I sent or will send an email to my Senator asking for higher estate taxes on the rich/I sent or will send an email to my Senator asking to not increase estate taxes on the rich/I do not want to email my Senator]

A.2 Estate Tax Experiment Description

The follow up estate tax experiment was conducted in March 2014 on a sample of 1800 respondents. Respondents were randomized into one of two treatment groups, or into the control group. The first treatment group saw the same screen as in the omnibus treatment (only the part regarding the estate tax), as in appendix Figure 4. The second group saw a plain explanation for the estate tax, as in appendix Figure 6.

The link to this experiment is: `https://hbs.qualtrics.com/SE/?SID=SV_0v0ecp2MDPBpInb`

List of all Outcome Questions

Note: Sentences in italic were not seen by the respondents. Bold fonts are just labels for each section. Sentences in normal font are exactly as they appeared in the survey.

1. *Choose the tax rate on the top 1%, next 9%, next 40% and bottom 50% (see screenshot).* [Slider with continuous percentage choices 0%-100% for each of the four income groups]

2. Do you think income inequality in the United States has increased or decreased since 1980? [Decreased/Stayed the same/Increased]

3. Do you think inequality is a serious problem in America? [Not a problem at all/A small problem/A problem/A serious problem/A very serious problem]

4. The Federal Estate Tax is a tax imposed on the transfer of wealth from a deceased person to his or her heirs. What percentage of people who die have to pay the Federal Estate tax? If you don't know, just give your best guess. [Less than 1%/1%/10%/20%/40%/60%/100%]

5. Do you think poverty is a serious problem in America? [Not a problem at all/A small problem/A problem/A serious problem/A very serious problem]

6. Do you think that the very high earners in our society deserve their high incomes? [Most of the time/Sometimes/Rarely]

7. Do you think the federal estate tax should be decreased, left as is or increased? (Recall that the federal estate tax is a tax imposed on the transfer of wealth from a deceased person to his or her heirs.) [Decreased/Left as is/Increased]

8. As you may know, there have been proposals recently to decrease the federal deficit by raising income taxes on millionaires. Do you think income taxes on millionaires should be increased, stay the same or decreased?[Increased/Stay the same/Decreased]

9. Which of the tools below do you consider the best to address inequality in the United States? Please drag and drop the items to the box on the right and rank them in your preferred order. Your preferred method for addressing inequality should be at the top, your least preferred one at the bottom. [Education Policies, Private Charity, Progressive Taxes, Government Transfers (e.g., food stamps, Medicaid,..), Government regulation (e.g., min wage, caps on top compensation,...)]

10. Should the federal government increase or decrease spending on aid to the poor? [Significantly increase/Slightly increase/Keep at current level/Slightly decrease/Significantly decrease]

11. The federal minimum wage is currently $7.25 per hour. Do you think it should be decreased, stay the same or increased? [Significantly increased/Slightly increased/Stay the same/Slightly decreased/Significantly decreased]

12. Should the federal government increase or decrease its spending on public housing for low income families? [Significantly increase /Slightly increase/Keep at current level/Slightly decrease/Significantly decrease]

13. Should the federal government increase or decrease its spending on food stamps? (Food stamps provide financial assistance for food purchasing to families and individuals with low or no income.) [Significantly increase/Slightly increase/Keep at current level/Slightly decrease/Significantly decrease]

14. *Petition for Estate Tax*: same as in A.1

15. Which party do you plan to support in the 2014 congressional elections? [Democratic/Republican/Other/None]

16. How much of the time do you think you can trust government in Washington to do what is right? [Just about always/Most of the time/Only some of the time/Hardly ever]

17. Next, think more broadly about the purpose of government. Where would you rate yourself on a scale of 1 to 5, where 1 means you think the government should do only those things necessary to provide the most basic government functions, and 5 means you think the government should take active steps in every area it can to try and improve the lives of its citizens? [1/2/3/4/5]

18. Do you think that people in the government waste a lot of money we pay in taxes, waste some of it, or don't waste very much of it?" [Waste a lot of money we pay in taxes/Waste some of the money we pay in taxes/Don't waste much of the money we pay in taxes]

19. How do you feel about the following statement: "Currently, the federal government is very effective in limiting fraud, waste and abuse in the programs it administers"? [Strongly agree/Agree/Disagree/Strongly disagree]

20. How do you feel about the following statement: "Politicians in Washington work to enrich themselves and their largest campaign contributors, instead of working for the benefit of the majority of citizens"? [Strongly agree/Agree/Disagree/Strongly disagree]

A.3 Emotional Poverty Experiment

The emotional poverty treatment was conducted in March 2014 on a sample of 1200 respondents. Respondents were first as usual asked for their demographic information. Depending on their answers to the questions about their marital status and whether they have children living with them, they were redirected to a specific, customized branch. They were then randomized into treatment and control group. The treatment group saw information about poverty that was adapted to their family situation, without knowing that the information was actually customized. Each respondent estimated the basic expenses that a family of the configuration of his own family (living where the respondent lives) would have to incur for rent, utilities, transportation to work, food, and, depending on the family situation, expenses for children. Appendix Figure 9 shows the screenshot where respondents were asked to estimate the minimal budget of a family similar to theirs. Between this page and the next, the program computed the total expenses estimated. If those were above the actual poverty threshold for the family, the next page told respondents that given their estimates, the family would fall short by such and such amount. If the total was below the poverty threshold, the next page told respondents that given their estimates, the family would only be left with such and such amount for all other expenses.

The link to the survey is `https://hbs.qualtrics.com/SE/?SID=SV_1B8MczKSMIvWaqx`

The outcome questions were the same as in section A.2, except that the question about how many people pay the estate tax was not asked. Instead the following three questions were added:

1. What percentage of Americans live in poverty? If you don't know, just give your best guess. (Poverty is officially defined as having monthly resources below $970 for a single person, $1310 for a two person family, $1650 for a three person family, etc...) [Less than 5% / 9% / 16% / 24%].

2. What percentage of children under age 18 live in poverty in the US, approximately? If you don't know, just give your best guess. [10% / 20% / 30% / 40%].

3. How many workers in the US earn the minimum wage? If you don't know, just give your best guess. [2 million / 6 million / 10 million].

A.4 Policy Experiment

The policy experiment was conducted in March 2014 on a sample of 1300 respondents. Respondents were randomized into a control group or a treatment group. The treatment group was again redirected to a customized branch, depending on their answers to the questions about their marital status and whether they had children living with them. In the treatment screens, they were asked about and shown information about a family whose configuration was similar to theirs. First, respondents were asked to estimate the minimum expenses necessary for a family earning the minimum wage, for rent, utilities, transportation to work, food, and, if applicable, children expenses. That screen is shown in appendix Figure 10. Between this page and the next, the program computed the total expenses implied and informed the respondents either of the shortfall that the family living on a single minimum wage would have to face, or the surplus that would be left over, if they had to incur the expenses as estimated by the respondent. That second screen also showed information about the food stamps program, informing respondents that: "The Food Stamps program helps many low income families, such as those earning only one minimum wage. It provides $150/month per person to help with food expenses."

The link to the experiment is `https://hbs.qualtrics.com/SE/?SID=SV_1B8MczKSMIvWaqx`.

The outcome questions were exactly the same as in section A.3.

A.5 Trust Experiment

The trust treatment was conducted in March 2014 on a sample of 1000 respondents. The treatment showed people information about how the United States is ranked in terms of corruption among a list of countries of similar income and development levels (the United States is ranked in the worst group of countries given income and development levels), as shown in appendix Figure 8.

The link to this survey is in: `https://hbs.qualtrics.com/SE/?SID=SV_bgEuJfl1Y3UreKh`

Respondents in the treatment group were asked questions designed to elicit negative reactions regarding the government. The full list of questions were:

1. What is your view of the "Wall Street bailout", the legislation signed into law by President Bush in 2008 whereby the federal government lent $700 billion to banks and other financial institutions that faced bankruptcy? [Strongly support this legislation/Support this legislation/Oppose this legislation/Strongly oppose this legislation]

2. Because of a recent Supreme Court decision, for the first time in decades there are now no limits on the amount of money that corporations and other special interests can give to political campaigns for President or Congress. Do you agree with the following statement: "Corporations and other specials interests have far too much influence on politicians in Washington"? [Strongly agree/Agree/Disagree/Strongly disagree]

3. How do you feel about the following statement: "Currently, the federal government is very effective in limiting fraud, waste and abuse in the programs it administers"? [Strongly agree/Agree/Disagree/Strongly disagree]

4. How much confidence do you have in the federal government's administering of economic and military aid to foreign countries (which totals over $50 billion annually)? [A great deal of confidence/Some confidence/Little confidence/No confidence]

5. How do you feel about the following statement: "Politicians in Washington work to enrich themselves and their largest campaign contributors, instead of working for the benefit of the majority of citizens"? [Strongly agree/Agree/Disagree/Strongly disagree]

The outcome questions were the same as in section A.2, except that we did not ask any of the knowledge questions about poverty rates, child poverty rates, minimum wage earners, or how many people pay the estate tax.

A.6 List of all constructed variables

Below we provide a full definition of all variables used in the tables. In brackets, we provide the coding of the variable.

- "Ineq vs." (or "Ineq. v. serious") is a binary variable equal to 1 if the respondent replies that "inequality is a very serious problem." [0/1]
- "Ineq. inc." (or "Ineq. increased") is a binary variable equal to 1 if the respondent replies that inequality has increased since 1980. [0/1]
- "Deserving" (or "Rich deserving") is a binary variable equal to 1 if the respondent believes that the rich are deserving of their income "most of the time." [0/1]
- "Top tax" (or "Top tax rate") is the chosen average tax rate on the richest one percent. [0 to 100]
- "Mill. tax" (or "Increase Mill. Tax") is an indicator variable for whether the respondent wants to increase the income tax on millionaires. [0/1]
- "Estate tax" (or "Increase Estate Tax") is an indicator variable for whether the respondent wants to increase the estate tax. [0/1]
- "Petition" is an indicator variable for whether the respondent wants to send a petition to her State Senator to increase the estate tax. [0/1]
- "Min. wage" in the omnibus treatment indicates support for increasing the minimum wage. [0/1]
- "Min wage" in the follow up surveys indicates the strength of the support for increasing the minimum wage [0/1/2/3/4, increasing in support].
- "Aid" indicates support for expanding aid to the poor. [0/1/2/3/4, increasing in support].
- "Housing" indicates support for expanding funding for public housing. [0/1/2/3/4, increasing in support].

- “Food stamps” in the omnibus indicates support for expanding the food stamps program. [0/1]
- “Food stamps” in the followup surveys indicates the strength of the support for expanding the food stamps program [0/1/2/3/4, increasing in support].
- “EITC” indicators support for expanding funding for the EITC. [0/1]
- “Trust” or (“Trust govt”) is an indicator variable for whether the respondent believes the government can be trusted. [0/1]
- “Scope” (or “Govt scope”) is a categorical variable indicating how active the government should be in redistributing income. [1/2/3/4/5, 5 being the broadest scope of government].
- “Dem 2012” indicates that the respondent plans to vote for the Democrat (Obama) in the 2012 Presidential election. [0/1]
- “Dem 2014” indicates that the respondent plans to vote for the Democrat in the 2014 Congressional election. [0/1]
- “Taxes redistr.” indicates that the respondent thinks that the role of income taxes is to redistribute income (as opposed to just financing infrastructure). [0/1]
- “Growth” indicates that the respondent’s reply to the question of whether growth was higher in 1933-1980 than in 1980-200 was correct. [0/1]
- “Tax 1950” indicates that the resppndent’s reply to the question whether top income taxes were higher in the 1950s than today was correct. [0/1]
- “Satisfied” indicates whether the respondent is satisfied with his current income. [0/1]
- “Money charity” is a dummy variable for whether the respondent plans to give money to charity in the next month. [0/1]
- “Money given” indicates whether he has already given money in the past month. [0/1]
- “Time charity” is a dummy variable for whether the respondent plans to give time to charity in the next month. [0/1]
- “Time given” indicates whether he has already given time in the past month. [0/1]
- “Income mostly result of effort” is a binary variable indicating that the respondent believes that one’s income is mostly the result of one’s own effort. [0/1]
- “Tax on next 9%”, ”Tax on next 40 %” and ”Tax on Bottom 50%” are the respondent’s chosen tax rates for, respectively, people in the 90th to 99th percentile, in the 50th to 90th percentile and in the Bottom half of the income distribution. [0 to 100]
- “Diff tax top 1 and Bottom 50” is the tax differential between the preferred tax on the top 1% and that on the Bottom 50%.

- "Charities" refers to the ranking (from 1 to 5, with 1 being the highest ranking) that respondents attribute to private charities as a means to redistribute income. [1/2/3/4/5]
- "Educ. pol" refers to the ranking (from 1 to 5, with 1 being the highest ranking) that respondents attribute to education policies as a means to redistribute income. [1/2/3/4/5]
- "No waste" takes values from 1 to 3, with 1 representing that the government is wasting a lot of tax revenue and 3 indicating that the government is not wasting much tax revenue at all. [1/2/3]

B Methodological issues related to online survey experiments

In this section, we share what we have learned through our experience with these mTurk survey experiments to highlight both the advantages and disadvantages of using online surveys for research as well as provide advice for future researchers.

The most obvious advantage is the ease and speed of gathering relatively large samples. At a per-survey price of $1.50 it typically took at most five or six days to gather a sample of 1,000 U.S. residents, and samples of 300-400 could usually be gathered within 24 hours. An important piece of advice for future researchers studying American domestic policy questions is to ask mTurk to limit the sample to U.S. residents (Amazon documents this information for tax purposes). In pilot surveys we conducted before becoming aware of this problem, over forty percent of our respondents turned out to have non-U.S. IP addresses (likely an ever greater share were foreign residents since respondents can connect through remote servers and appear to be in the US). Launching surveys at night (during the workday in Asia) exacerbates this problem.

B.1 How representative is the mTurk sample?

As noted earlier, respondents to our surveys are not representative of the U.S. population. However, this lack of representativeness does not appear substantially worse than in other surveys. For example, the mTurk sample is about 13 years younger and 13 percentage points more likely to have a college degree than the representative sample of U.S. adults in our national CBS sample (see Table 1). But that same CBS poll we use as a basis for comparison is itself weighted. The raw CBS sample is about nine years older than the weighted sample and, like our mTurk sample, about 13 percentage points more likely to have a college degree. It under-represents Hispanics to the same extent as our sample and is even worse than our sample in terms of the under-representation of men. As such, while the mTurk sample is not representative, neither are other standard polls (though some of the biases, such as age, are in opposite directions from standard polls).

As noted in the text, the American Life Panel is more representative than the mTurk sample. However, this sample is much smaller and roughly 30 times more expensive than mTurk.