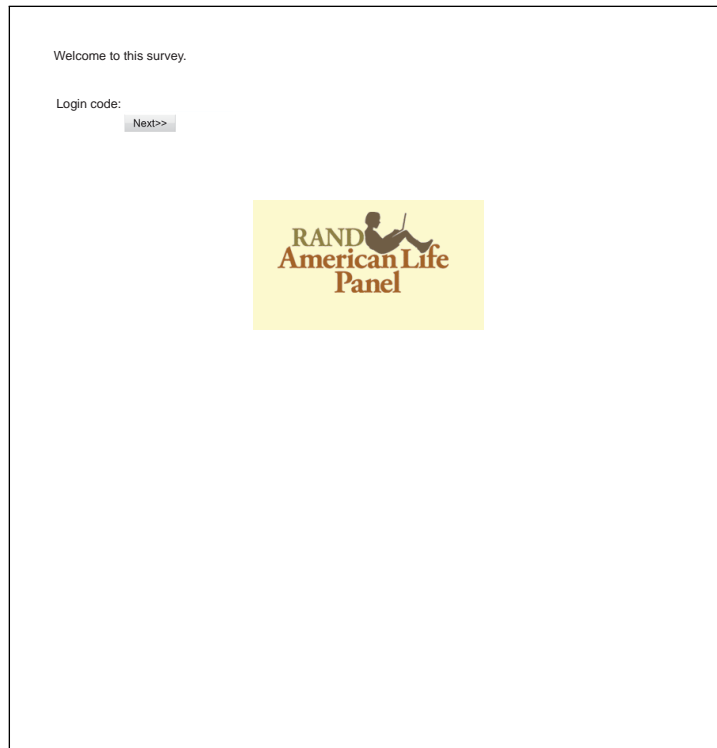


Online Appendix:  
“The Distributional Preferences of Americans”

**A. Experimental Instructions**



Welcome.

Please remember: Participation in the survey is voluntary and you may skip over any questions that you would prefer not to answer. You will not be identified in any reports on this study.

Choose 'Next' to start the questionnaire.

Next>>



This is an experiment in decision-making. Please pay careful attention to the instructions as a considerable amount of money is at stake.

During the experiment we will speak in terms of experimental tokens instead of dollars. Your payoffs will be calculated in terms of tokens and then translated into dollars at the end of the experiment at the following rate:

**2 Tokens = 1 Dollar**

You are free to stop at any time. If you do not complete the experiment now, you may return to complete the experimental session at any time between now and 2013-08-15. If you do not complete the experiment between now and 2013-08-15, you will not receive any payment. Details of how you will make decisions and receive payments will be provided below.

Please click the NEXT button below to proceed to the next screen.

Next>>



In this experiment, you will make 50 decisions that share a common form. We next describe in detail the process that will be repeated in all decision problems and the computer program that you will use to make your decisions.

In each decision, you will be asked to allocate tokens between yourself and another person who will be chosen at random from the group of American Life Panel (ALP) respondents who were not asked to participate in this experiment.

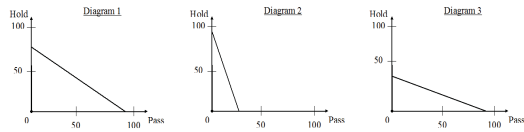
We will refer to the tokens that you allocate to yourself as tokens that you **Hold**, and tokens that you allocate to the other person as tokens that you **Pass** to that individual. The identity of the ALP respondent who receives the tokens you pass depends entirely on chance.

Please click the NEXT button below to proceed to the next screen.

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Each decision will involve choosing a point on a line representing possible token allocations to you (**Hold**) and the other ALP respondent (**Pass**). In each decision, you may choose any combination of tokens to **Hold** and **Pass** – in other words, any combination of tokens to yourself and tokens to the other ALP respondent – that is on the line. Examples of lines that you might face appear in the diagrams below. In each graph, **Hold** corresponds to the vertical axis and **Pass** corresponds to the horizontal axis; the points on the diagonal lines in the graphs represent possible token allocations to **Hold** (tokens you to you) and **Pass** (tokens to the other ALP respondent) that you might choose.



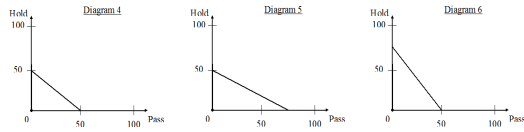
Please click the NEXT button below to proceed to the next screen.

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By picking a point on the diagonal line, you choose how many tokens to hold for yourself and how many to pass to the other person. You may select any allocation to **Hold** and **Pass** on that line.

If, for example, the diagonal line runs from 50 tokens on the **Hold** axis to 50 tokens on the **Pass** axis (see Diagram 4), you could choose to hold all 50 tokens for yourself, or pass all 50 tokens to the other person, or anything in between. However, most of the decision problems will involve flatter or steeper lines: if the line is flatter (see Diagram 5), one less token for yourself means *more than* one additional token is passed to the other person; if the line is steeper (see Diagram 6), one less token held means *less than* one additional token passed to the other person.

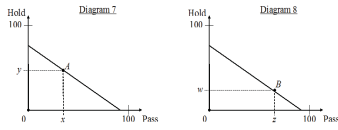


Please click the NEXT button below to proceed to the next screen.

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To further illustrate, in the example below, choice A represents an allocation in which you hold  $y$  tokens and pass  $x$  tokens. Thus, if you choose this allocation, you will hold  $y$  tokens for yourself and you will pass  $x$  tokens to another person. Another possible allocation is B, in which you hold  $w$  tokens and pass  $z$  tokens to the other person.



Please click the NEXT button below to proceed to the next screen.

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Each of the 50 decision problems will start by having the computer select a diagonal line at random. All of the lines that the computer will select will intersect with at least one of the axes at 50 or more tokens, but will not intersect either axis at more than 100 tokens. The lines selected for you in different decision problems are independent of each other and depend solely upon chance.

Please click the NEXT button below to proceed to the next screen.

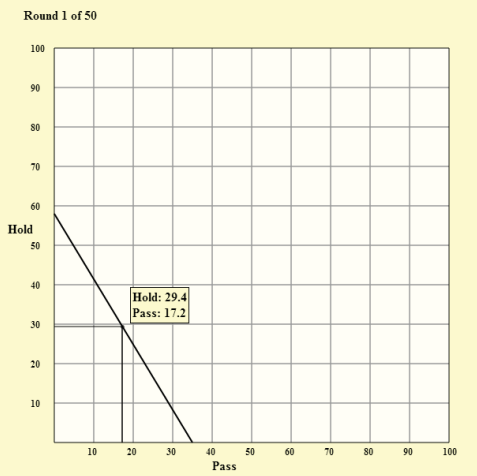
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The computer program dialog window is shown here. In each round, you will choose an allocation by using the mouse to move the pointer on the computer screen to the allocation that you wish to choose (note that the pointer does not need to be precisely on the diagonal line to shift the allocation).

When you are ready to make your decision, left-click to enter your chosen allocation. After that, confirm your decision by clicking on the OK button. Note that you can choose only **Hold** and **Pass** combinations that are on the diagonal line. Once you have clicked the OK button, your decision cannot be revised.



After you submit each choice, you will be asked to make another allocation in a different decision problem involving a different diagonal line representing possible allocations. Again, all decision problems are independent of each other. This process will be repeated until all 50 decision rounds are completed. At the end of the last round, you will be informed that the experiment has ended.

Please click the NEXT button below to proceed to the next screen.

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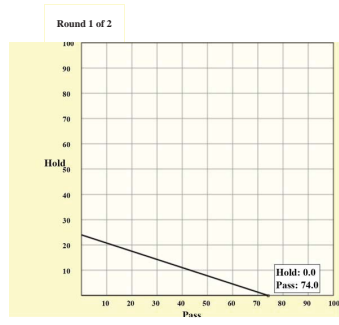
Next, you will have two practice decision rounds. The choices you make in these practice rounds will have no impact on the final payoffs to you or to the other ALP respondent. In each round, you may choose any combination of tokens to **Hold** (tokens to you) and **Pass** (tokens to the other ALP respondent) that are on the line. To choose an allocation, use the mouse to move the cursor on the computer screen to the allocation that you desire.

When you are ready to make your first practice choice, left-click to enter your chosen allocation. To revise your allocation in the first practice round, click the CANCEL button. To confirm your decision, click on the OK button. You will then be automatically moved to the second practice round. After you complete the two practice rounds, click NEXT to proceed to the next screen.

Please click the NEXT button below to enter the first practice round.

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Payoffs will be determined as follows. At the end of the experiment, the computer will randomly select one of the 50 decisions you made to carry out for real payoffs. You will receive the tokens you held in that round (the tokens allocated to **Hold**). Another respondent of the American Life Panel (ALP) will receive the tokens that you passed (the tokens allocated to **Pass**). Note that the recipient of the tokens you pass was not asked to participate in this experiment – he or she is not making any allocation decisions.

At the end of last round, you will be informed of the round selected for payment, and your choice and payment for the round. At the end of the experiment, the tokens will be converted into money. Each token will be worth 0.50 dollars, and payoffs will be rounded up to the nearest cent.

Recall that you are free to stop at any time, and you may return to complete the experimental session at any time between now and 2013-08-15. If you do not complete the experiment between now and 2013-08-15, neither you nor the other ALP respondent that has been selected to receive the tokens you pass will receive any payment.

Please click the NEXT button below to proceed to the next screen.

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To review, in every decision problem in this experiment, you will be asked to allocate tokens to **Hold** and **Pass**. At the end of the experiment, the computer will randomly select one of the 50 decision problems to carry out for payoffs. The round selected depends solely upon chance. You will then receive the number of tokens you allocated to **Hold** in the chosen round. Another person, who will be chosen at random from the group of ALP respondents who were not asked to participate and who will remain anonymous, will receive the number of tokens you allocated to **Pass** in the chosen round. Each token will be worth 50 cents.

If everything is clear, you are ready to start. Please click NEXT to proceed to the actual experiment.

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## B. Additional Analysis: Decomposing Preferences without Assuming a CES Utility Function

In this section, we explore the allocation decisions of our experimental subjects in a simple framework that imposes minimal functional form assumptions on distributional preferences.

### B.1 Fair-mindedness

We begin by constructing a simple, reduced form measure of fair-mindedness: the fraction of tokens kept by *self*,  $\pi_s/(\pi_s + \pi_o)$ , averaged across all 50 decision problems at the subject level. This measure is equal to one for perfectly selfish subjects; fair-minded subjects who put equal weight on *self* and *other* will keep approximately half of the total tokens, on average. We observe considerable heterogeneity across subjects. The individual-level average of  $\pi_s/(\pi_s + \pi_o)$  ranges from 0.03 to 1, though the vast majority of subjects (84.6 percent) kept an average of at least half the tokens. Only 35 subjects (3.49 percent) kept an average of less than 45 percent of tokens. Thus, among subjects that kept less than half of the tokens, most appear to place nearly equal weight on the payoffs to *self* and *other*.<sup>1</sup>

Several key features of our data stand out. First, we observe very low numbers of selfish subjects who kept almost all of the tokens. The average of  $\pi_s/(\pi_s + \pi_o)$  is at least 95 percent for only 81 subjects (8.1 percent). This relatively low number of selfish subjects contrasts with the large body of experiments with the usual collection of undergraduate students. Overall, our subjects kept approximately 65 percent of the tokens. In the studies of standard split-the-pie dictator games reported in Camerer (2003), the typical mean allocations to *other* are about 80 percent. Second, a substantial fraction of subjects kept an average of approximately half the tokens. In fact, these fair-minded subjects far outnumber the selfish types: 370 subjects (36.9 percent) kept an average of 45 to 55 percent of the tokens. Moreover, the distribution of  $\pi_s/(\pi_s + \pi_o)$  is quite smooth between 0.5 and 0.99, suggesting considerable heterogeneity in fair-mindedness among non-selfish subjects.

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<sup>1</sup>This suggests that almost all of our subjects comprehended the tradeoff between *self* and *other* that they were making. Numerous experimental studies suggest that subjects rarely allocate more to *other* than to *self* in standard dictator games. Since our design includes random variation in the price of redistribution and subjects may respond to price variation in different ways, subjects who put equal weight on the payoffs to *self* and *other* may not allocate themselves exactly half of the tokens in our experiment.

Figure 1 explores the extent to which this heterogeneity in fair-mindedness is explained by demographic and socioeconomic characteristics. Each section of the figure represents a partition of the subject pool into mutually exclusive categories — for example, men and women. The figure indicates the average across subjects of the individual-level average of  $\pi_s/(\pi_s + \pi_o)$  within a category; the 95 percent confidence intervals for means, and the 25<sup>th</sup> and 75<sup>th</sup> percentiles of the distribution are labeled for each group. There are substantial differences in the average of  $\pi_s/(\pi_s + \pi_o)$  across groups. Women keep a smaller fraction of the tokens than men. Surprisingly,  $\pi_s/(\pi_s + \pi_o)$  increases with both household income and education level. A number of these differences are statistically significant.

In addition to the clear between-group differences, there is considerable heterogeneity within every category. For all the sub-groups included in the figure, the 25<sup>th</sup> percentile of the distribution is between 0.5 and 0.52. This means that every demographic and socioeconomic category we consider includes non-negligible numbers of fair-minded subjects who treat *self* and *other* more or less symmetrically. The 75<sup>th</sup> percentiles range from 0.62 to 0.83, and we observe relatively selfish subjects who keep an average of at least 95 percent of the tokens in every category. In most cases — for example, when we compare men to women or lower and higher income households — there is much more variation among subjects within a category than there is across category averages. Regression analysis (reported in Section E, Table 2) confirms this: the complete set of dummy variables for demographic and socioeconomic categories explains 4.95 percent of the variation in average  $\pi_s/(\pi_s + \pi_o)$ . Thus, most of the observed heterogeneity in fair-mindedness is not explained by demographic and socioeconomic factors.

## B.2 Equality-Efficiency Tradeoffs

Subjects may also differ in their equality-efficiency tradeoffs, as discussed above. Of the fair-minded subjects, 85 subjects (8.5 percent) always made nearly equal allocations  $\pi_s = \pi_o$  indicating Rawlsian preferences.<sup>2</sup> Only 2 subjects allocated all their tokens to *self* when  $p_s < p_o$  and to *other* when  $p_s > p_o$  indicating utilitarian preferences, while 3 subjects made equal ex-

<sup>2</sup>Since humans implement their decisions with error, we classify subjects as being consistent with a prototypical model of distributional preferences if, on average, their choices deviate from those prescribed by that model by less than 0.02 (i.e. by no more than 2 percent of the tokens or budget). In the Online Appendix, we report the fraction of subjects behaving in a manner consistent with each of the prototypical types for a range of values for the maximum average deviation.

penditures on *self* and *other*  $p_s\pi_s = p_o\pi_o$  indicating Cobb-Douglas preferences. Thus, very few subjects made allocations that fit with fair-minded prototypical distributional preferences.

To explore the equality-efficiency tradeoffs of the remaining subjects, we regress the budget share spent on tokens kept ( $p_s\pi_s$ ) on the log-price of redistribution ( $p = p_s/p_o$ ) at the individual level. We classify a subject as efficiency-oriented if the OLS slope coefficient is greater than or equal to 0 because increasing  $p_s\pi_s$  when  $p$  increases indicates distributional preferences weighted towards efficiency (increasing total payoffs), whereas decreasing  $p_s\pi_s$  when  $p$  increases indicates distributional preferences weighted towards equality (reducing differences in payoffs).

In Figure 2, we explore the variation in the fraction of efficiency-oriented subjects across demographic and socioeconomic categories. Each section of the figure represents a partition of the subject pool into mutually exclusive categories, and we indicate the proportions and the 95 percent confidence intervals. We again observe considerable variation within and across subgroups. Specifically, less educated subjects (those with less than a high school diploma), minorities, younger subjects, the unemployed, and the never married are more efficiency-focused than other groups; older Americans, retirees, non-Hispanic whites, and Protestants focus less on efficiency and more on equality. As in the case of fair-mindedness, most of the observed heterogeneity in equality-efficiency tradeoffs is also not explained by demographic and socioeconomic factors.



## C. Additional Analysis: Individual Rationality

In this section, we discuss our revealed preference tests of individual rationality in detail. The most basic question to ask about choice data is whether it is consistent with individual utility maximization. If participants choose allocations subject to standard budget constraints (as in our experiment), classical revealed preference theory provides a direct test. Afriat's (1967) theorem shows that choices in a finite collection of budget sets are consistent with maximizing a well-behaved (piecewise linear, continuous, increasing, and concave) utility function  $u_s(\pi_s, \pi_o)$  if and only if they satisfy the Generalized Axiom of Revealed Preference (GARP). Hence, to assess whether our data are consistent with utility-maximizing behavior, we only need to check whether our data satisfy GARP, which requires that if  $\pi = (\pi_s, \pi_o)$  is indirectly revealed preferred to  $\pi'$ , then  $\pi'$  is not directly revealed strictly preferred ( $\mathbf{p}' \cdot \pi \geq \mathbf{p}' \cdot \pi'$ ) to  $\pi$ .

Although testing conformity with GARP is conceptually straightforward, there is an obvious difficulty: GARP provides an exact test of utility maximization – either the data satisfy GARP or they do not. To account for the possibility of errors, we assess how nearly individual choice behavior complies with GARP by using Afriat's (1972) Critical Cost Efficiency Index (CCEI), which measures the fraction by which each budget constraint must be shifted in order to remove all violations of GARP. By definition, the CCEI is bounded between zero and one. The closer it is to one, the smaller the perturbation of the budget constraints required to remove all violations and thus the closer the data are to satisfying GARP and hence to perfect consistency with utility maximization. The difference between the CCEI and one can be interpreted as an upper bound on the fraction of income that a subject is wasting by making inconsistent choices.

There is no natural threshold for the CCEI for determining whether subjects are close enough to satisfying GARP that they can be considered utility maximizers. To generate a benchmark against which to compare our CCEI scores, we follow Bronars (1987), which builds on Becker (1962), and compare the behavior of our actual subjects to the behavior of simulated subjects who randomize uniformly on each budget line. Such tests are frequently applied to experimental data. The power of Bronars's (1987) test is defined to be the probability that a randomizing subject violates GARP. Choi, Fisman, Gale, and Kariv (2007) show there is a very high probability that even random behavior will pass the GARP test if the number of individual decisions is sufficiently low, underscoring the need to collect choices in a wide range of budget sets in order to provide a stringent test of utility maximization.

In a simulation of 25,000 subjects who randomize uniformly on each budget line when confronted with our sequence of 50 decision problems, all the simulated subjects had GARP violations, so the Bronars criterion attains its maximum value.

The Bronars (1987) test rules out the possibility that consistency is the accidental result of random behavior, but it is not sufficiently powerful to detect whether utility maximization is the correct model. To this end, Fisman, Kariv, and Markovits (2007) generate a sample of hypothetical subjects who implement a CES utility function with an idiosyncratic preference shock that has a logistic distribution

$$\Pr(\pi^*) = \frac{e^{\gamma \cdot u(\pi^*)}}{\int_{\mathbf{p} \cdot \pi = 1} e^{\gamma \cdot u(\pi)}$$

where the precision parameter  $\gamma$  reflects sensitivity to differences in utility – the choice becomes purely random as  $\gamma$  goes to zero (Bronars’ test), whereas the probability of the allocation yielding the highest utility approaches one as  $\gamma$  goes to infinity. The results provide a clear benchmark of the extent to which subjects do worse than choosing consistently and the extent to which they do better than choosing randomly, and demonstrate that if utility maximization is not in fact the correct model, then our experiment is sufficiently powerful to detect it. We refer the interested reader to Fisman, Kariv, and Markovits (2007) Appendix III for more detail.<sup>3</sup>

The CCEI scores in the ALP sample averaged 0.862 over all subjects, which we interpret as confirmation that most subjects’ choices are approximately consistent. In comparison, the mean CCEI score of a sample of 25,000 random subjects ( $\gamma = 0$ ) who made 50 choices from randomly generated budget sets in the same way as our human subjects is only 0.60. 74.2 percent of actual subjects have CCEI scores above 0.80, while 10.2 percent of random subjects have scores that high. If we choose the 0.85 efficiency level as our critical value, 64.1 percent of our subjects have CCEI scores above this threshold, while 3.4 percent of the random subjects have CCEI scores above 0.85.

There is, however, marked heterogeneity in the CCEI scores within and across the demographic and economic groups (see regression results in Section E, Table 3). Subjects that completed college display greater levels of

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<sup>3</sup>Varian (1982, 1983) modified Afriat’s (1967) results and describes efficient and general techniques for testing the extent to which choices satisfy GARP. We refer the interested reader to Choi, Fisman, Gale, and Kariv (2007) for more details on testing for consistency with GARP and other measures that have been proposed for measuring GARP violations. In practice, all these measures yield similar conclusions.

consistency than subjects with less education. The magnitudes imply that, on average, subjects without college degrees waste 2.6 percentage points more of their earnings by making inconsistent choices relative to college graduates. We also find that men are more consistent than women, and that the choices of white and Hispanic subjects are more consistent with utility maximization than those of African Americans in our sample. Though all three differences are statistically significant, they are small in magnitude; the average CCEI is above 0.8 for all the demographic and socioeconomic categories we consider.

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## E. Additional Tables and Figures

Table 1: Classifying Subjects as Prototypical Preference Types

	BANDWIDTH (PERCENT OF TOKENS/BUDGET)						
	0.05	0.01	0.02	0.03	0.04	0.05	0.10
Self-interested (allocate all tokens to <i>self</i> )	3.9	4.5	5.7	6.4	7.2	8.1	12.7
Fair-minded (allocate half of tokens to <i>self</i> )	9.3	14.1	21.4	27.0	31.8	36.9	53.3
Utilitarians	0.1	0.1	0.2	0.3	0.3	0.3	0.3
Rawlsians	4.6	6.6	8.5	10.5	12.0	12.4	18.6
Subjects with Cobb-Douglas utility functions	0.1	0.3	0.3	0.3	0.4	0.5	2.8

The numbers indicate the percentage of subjects in each cell. We generate an index of the extent to which choices are consistent with Rawlsianism by calculating the average magnitude of the gap between the fraction of tokens allocated to *self*,  $\pi_s/(\pi_s + \pi_o)$ , and one half, and then subtracting this from 1. To calculate an index of proximity to utilitarianism, we define the fraction of tokens allocated to the less expensive account as  $\pi_s/(\pi_s + \pi_o)$  in rounds where  $p_s \leq p_o$ , and as  $\pi_o/(\pi_s + \pi_o)$  in rounds where  $p_s > p_o$ . The average fraction of tokens that a subject allocates to the less expensive account indicates the extent to which her choices are consistent with utilitarianism. To calculate a measure of the extent to which choices are consistent with the maximization of a Cobb-Douglas utility function, we follow the same procedures as described above for the Rawlsian case, but we replace the fraction of tokens allocated to *self* with the budget share spent on tokens for *self*. We report the proportion of subjects that behave in a manner consistent with one of the three ideals for a range of bandwidths, defined as their average deviation from the ideal expressed in terms of a fraction of the tokens or budget.

Table 2: OLS Regressions of Estimated  $\pi_s/(\pi_s + \pi_o)$  on Subject Characteristics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Female	-0.034*** (0.011)	.	.	.	.	.	.	.	-0.027** (0.012)	-0.033*** (0.012)
Youngest quartile (age 37 or less)	.	0.0007 (0.013)	.	.	.	.	.	.	0.006 (0.014)	0.006 (0.014)
Oldest quartile (over 60)	.	0.023* (0.014)	.	.	.	.	.	.	0.017 (0.015)	0.015 (0.016)
Did not complete high school	.	.	-0.04** (0.016)	.	.	.	.	.	-0.037** (0.016)	-0.031* (0.017)
Completed college	.	.	0.04*** (0.014)	.	.	.	.	.	0.025* (0.013)	0.022 (0.014)
African American	.	.	.	-0.058*** (0.015)	.	.	.	.	-0.046*** (0.016)	-0.05*** (0.017)
Hispanic/Latino	.	.	.	-0.043*** (0.012)	.	.	.	.	-0.023 (0.014)	-0.02 (0.017)
Lowest income quartile	.	.	.	.	-0.018 (0.012)	.	.	.	0.015 (0.014)	0.015 (0.014)
Highest income quartile	.	.	.	.	0.021 (0.014)	.	.	.	0.0005 (0.016)	-0.0003 (0.016)
Employed	.	.	.	.	.	0.014 (0.015)	.	.	0.006 (0.014)	0.006 (0.014)
Unemployed	.	.	.	.	.	-0.036* (0.019)	.	.	-0.025 (0.019)	-0.03 (0.019)
Married	.	.	.	.	.	.	0.024 (0.015)	.	0.0006 (0.016)	0.00006 (0.016)
Widowed, separated, or divorced	.	.	.	.	.	.	-0.003 (0.017)	.	-0.021 (0.018)	-0.01 (0.018)
Catholic	.	.	.	.	.	.	.	-0.021 (0.015)	-0.026 (0.016)	-0.033** (0.016)
Protestant	.	.	.	.	.	.	.	0.017 (0.015)	-0.002 (0.016)	-0.006 (0.016)
No religious preference	.	.	.	.	.	.	.	-0.022 (0.015)	-0.027* (0.015)	-0.026* (0.015)
Constant	0.663*** (0.009)	0.638*** (0.007)	0.627*** (0.009)	0.657*** (0.007)	0.644*** (0.008)	0.636*** (0.013)	0.629*** (0.013)	0.649*** (0.01)	0.669*** (0.025)	0.675*** (0.026)
State of Residence FEs	No	No	No	No	No	No	No	No	No	Yes
Observations	1002	1002	1002	1002	1002	1002	1002	1002	1002	1002
$R^2$	0.01	0.003	0.019	0.019	0.008	0.009	0.006	0.009	0.048	0.098

Robust standard errors in parentheses. All regressions include controls for respondents who are missing data on race (2), household income (5), and religion (8).

Table 3: OLS Regressions of Completion and Comprehension Outcomes

<i>Dependent variable: Specification:</i>	COMPLETED		CCEI SCORE	
	OLS (1)	PROBIT (2)	OLS (3)	TOBIT (4)
Female	-0.028 (0.021)	-0.155 (0.097)	-0.019** (0.009)	-0.024** (0.01)
Youngest quartile (age 37 or less)	-0.004 (0.025)	-0.005 (0.124)	0.011 (0.011)	0.009 (0.012)
Oldest quartile (over 60)	-0.063** (0.03)	-0.274** (0.125)	-0.008 (0.012)	-0.012 (0.013)
Did not complete high school	0.008 (0.041)	0.034 (0.165)	0.003 (0.015)	-0.003 (0.015)
Completed college	0.079*** (0.024)	0.379*** (0.125)	0.025** (0.011)	0.033*** (0.012)
African American	-0.083** (0.04)	-0.351** (0.152)	-0.032** (0.016)	-0.037** (0.017)
Hispanic/Latino	-0.031 (0.031)	-0.138 (0.131)	-0.003 (0.012)	-0.003 (0.013)
Lowest income quartile	0.014 (0.029)	0.05 (0.122)	0.002 (0.012)	0.003 (0.013)
Highest income quartile	-0.037 (0.028)	-0.167 (0.134)	0.007 (0.013)	0.007 (0.015)
Employed	0.019 (0.027)	0.083 (0.119)	-0.005 (0.012)	-0.004 (0.013)
Unemployed	-0.001 (0.041)	-0.009 (0.17)	-0.003 (0.017)	-0.003 (0.018)
Married	-0.015 (0.031)	-0.074 (0.148)	0.021 (0.014)	0.022 (0.015)
Widowed, separated, or divorced	-0.05 (0.037)	-0.207 (0.162)	0.018 (0.016)	0.022 (0.017)
Protestant	0.027 (0.028)	0.126 (0.136)	0.01 (0.013)	0.008 (0.014)
Catholic	-0.04 (0.031)	-0.182 (0.132)	-0.002 (0.013)	-0.007 (0.014)
No religious preference	0.003 (0.028)	-0.008 (0.132)	-0.004 (0.013)	-0.004 (0.014)
Constant	0.899*** (0.047)	1.306*** (0.218)	0.852*** (0.021)	0.864*** (0.023)
Observations	1170	1168	1002	1002
$R^2$	0.03	.	0.033	.

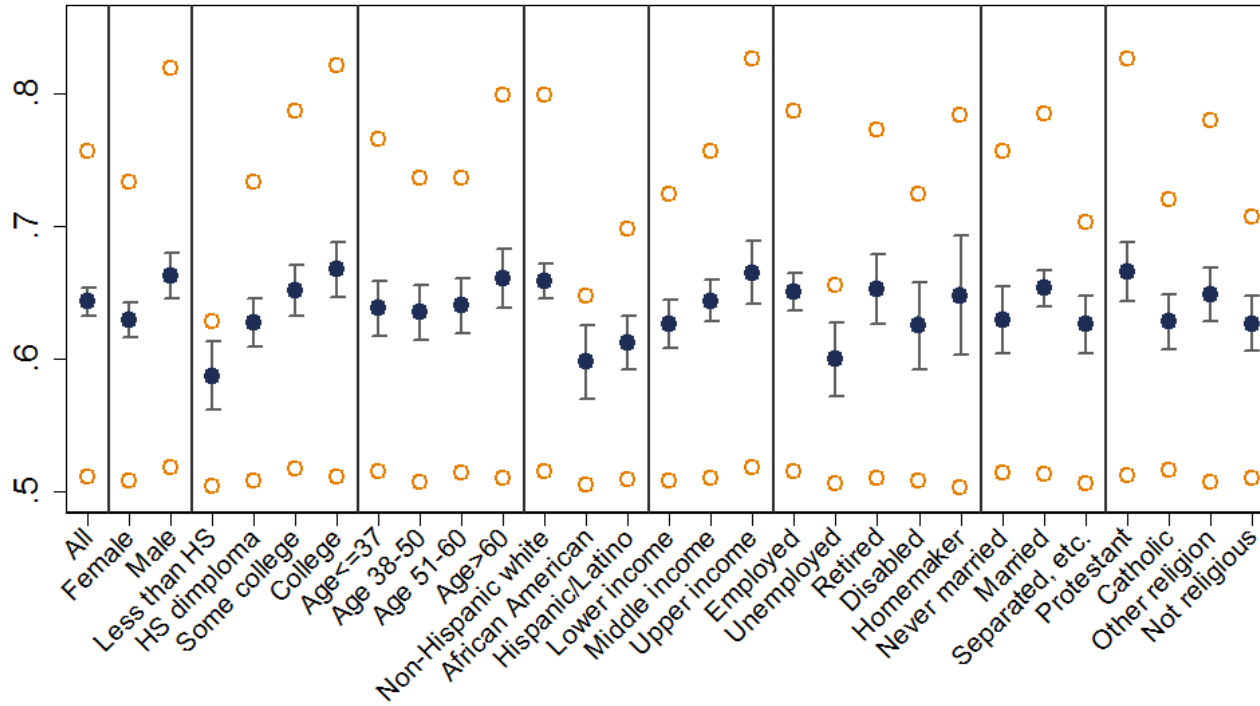
Robust standard errors in parentheses. COMPLETED equals one if a subject completed all 50 incentivized decision problems. The CCEI score indicates how close a respondent's choice are to consistency with the Generalized Axiom of Revealed Preference (GARP). All regressions include controls for respondents who are missing data on race (2), household income (5), or religious affiliation (8). All demographic data is missing for two ALP respondents who logged in but dropped out prior to the practice rounds.

Table 4: OLS Regressions of Political Outcomes with and without  $\rho_{high}$

<i>Dependent variable:</i>	VOTED FOR OBAMA				IDENTIFIES AS A DEMOCRAT			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\rho_{high}$ (i.e. $\hat{\rho}_n \geq 0$ )	.	-0.045	.	-0.068**	.	-0.075*	.	-0.104**
		(0.033)		(0.034)		(0.04)		(0.042)
Female	0.073**	0.069**	0.061*	0.054	0.058	0.052	0.042	0.034
	(0.035)	(0.035)	(0.035)	(0.035)	(0.042)	(0.042)	(0.043)	(0.043)
Youngest quartile (age 37 or less)	-0.05	-0.046	-0.024	-0.018	-0.038	-0.031	-0.037	-0.029
	(0.043)	(0.043)	(0.045)	(0.045)	(0.053)	(0.053)	(0.056)	(0.056)
Oldest quartile (over 60)	-0.0002	-0.004	-0.009	-0.017	0.009	0.002	-0.0003	-0.013
	(0.045)	(0.045)	(0.045)	(0.045)	(0.055)	(0.055)	(0.054)	(0.054)
Did not complete high school	0.055	0.06	0.06	0.066	0.1	0.111	0.118	0.133*
	(0.055)	(0.055)	(0.052)	(0.052)	(0.071)	(0.072)	(0.072)	(0.073)
Completed college	0.12***	0.122***	0.121***	0.124***	0.08*	0.082*	0.06	0.064
	(0.041)	(0.041)	(0.042)	(0.042)	(0.047)	(0.047)	(0.05)	(0.049)
African American	0.377***	0.385***	0.317***	0.327***	0.363***	0.378***	0.32***	0.337***
	(0.038)	(0.038)	(0.042)	(0.042)	(0.053)	(0.052)	(0.058)	(0.057)
Hispanic/Latino	0.305***	0.305***	0.292***	0.295***	0.269***	0.271***	0.291***	0.294***
	(0.046)	(0.046)	(0.052)	(0.052)	(0.059)	(0.059)	(0.069)	(0.07)
Lowest income quartile	0.084**	0.087**	0.098**	0.102**	-0.016	-0.014	0.003	0.006
	(0.042)	(0.042)	(0.041)	(0.041)	(0.052)	(0.052)	(0.056)	(0.055)
Highest income quartile	-0.073	-0.072	-0.092*	-0.091*	-0.09	-0.087	-0.091	-0.09
	(0.047)	(0.047)	(0.048)	(0.048)	(0.055)	(0.055)	(0.058)	(0.057)
Employed	0.066	0.066	0.044	0.043	0.014	0.013	-0.003	-0.007
	(0.042)	(0.042)	(0.042)	(0.042)	(0.052)	(0.052)	(0.052)	(0.052)
Unemployed	0.111*	0.109*	0.092	0.088	0.03	0.031	0.019	0.016
	(0.057)	(0.057)	(0.058)	(0.058)	(0.074)	(0.075)	(0.075)	(0.075)
Married	0.002	0.0003	0.017	0.016	0.026	0.023	0.027	0.023
	(0.049)	(0.05)	(0.049)	(0.049)	(0.06)	(0.06)	(0.064)	(0.063)
Widowed, separated, or divorced	0.005	0.004	0.03	0.03	0.097	0.097	0.106	0.104
	(0.054)	(0.054)	(0.054)	(0.054)	(0.068)	(0.068)	(0.072)	(0.072)
Catholic	-0.059	-0.056	-0.059	-0.056	-0.031	-0.03	-0.036	-0.036
	(0.05)	(0.05)	(0.052)	(0.052)	(0.064)	(0.063)	(0.065)	(0.065)
Protestant	-0.196***	-0.197***	-0.17***	-0.169***	-0.186***	-0.184***	-0.132**	-0.127**
	(0.047)	(0.047)	(0.048)	(0.048)	(0.056)	(0.056)	(0.058)	(0.058)
No religious preference	0.066	0.066	0.062	0.061	0.105*	0.105*	0.092	0.092
	(0.048)	(0.048)	(0.047)	(0.047)	(0.059)	(0.06)	(0.06)	(0.059)
State of Residence FEs	No	No	Yes	Yes	No	No	Yes	Yes
Observations	766	766	766	766	528	528	528	528

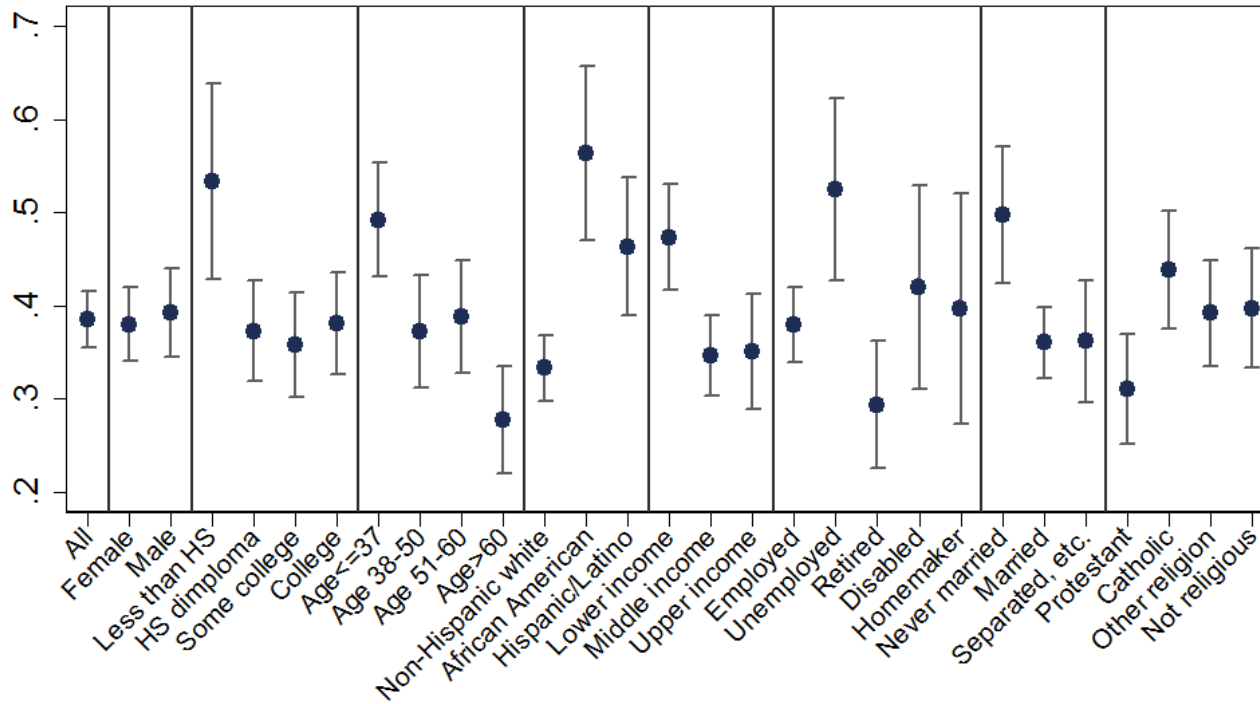
Robust standard errors in parentheses. All regressions include controls for respondents who are missing data on race (2), household income (5), and religion (8).



Figure 1: Average Fraction of Tokens Allocated to *Self* ( $\pi_s/(\pi_s + \pi_o)$ ) by Sub-Group

Dots indicate mean values. Circles indicate 25<sup>th</sup> and 75<sup>th</sup> percentiles. Bars indicate 95 percent confidence intervals for means.

Figure 2: Proportion of Efficiency-Focused Subjects, by Sub-Group



Dots indicate mean values. Bars indicate 95 percent confidence intervals.