Measuring Time Preferences in Large Surveys*

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Abstract

Time preferences may explain public opinion about a wide range of long-term policy problems whose costs and benefits will be realized in the distant future. However, mass publics may discount these costs and benefits because they are later or because they are more uncertain. Standard methods to elicit individual-level time preferences tend to conflate attitudes toward risk and time and are susceptible to social desirability bias. A potential solution relies on a costly lab-experimental method, convex time budgets (CTB). We present and experimentally validate an affordable version of this approach for implementation in mass surveys. We find that the theoretically preferred CTB patience measure predicts attitudes toward a local, delayed investment problem but fails to predict support for more complex, future-oriented policies. These results have implications for studying the mass politics of dynamic policy problems.

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1 Introduction

The extent to which differences in patience account for political conflict over future-oriented policies has important implications for understanding the ability of democracies to address long-term policy challenges such as climate change, excessive public deficits, or the insolvency of pension funds. Impatient societies provide little incentive to election-seeking policymakers to engage in the types of long-term policy investment needed to combat these problems. Since these policies require costly intertemporal trade-offs, social scientists have become increasingly interested in measuring individual time preferences (Sheffer et al., 2018; Falk et al., 2018; Andersen et al., 2008; Frederick, Loewenstein and O'Donoghue, 2002; Laibson, 2007) to assess whether time discounting is an important explanation of political behavior (Kertzer, 2017; Jacobs, 2016).[1] Initially, the concept of time discounting was used in formal models of the dynamics of public goods provision (Baron, 1996) and legislative decisionmaking (Baron and Ferejohn, 1989). Subsequently, time preferences have, for example, been used in empirical studies of mass support for contributions to local public goods (Sheffer et al., 2018), investments in public infrastructure (Jacobs and Matthews, 2015, 2012), and military interventions (Kertzer, 2017).

A significant portion of this previous research has examined the mass politics of important long-term policy problems relying on time preference measures that are subject to two types of criticism. First, the long-term payoffs to policy investment today are not only temporally distant, but also more uncertain. Therefore, scholarship interested in explaining support for future-oriented policy should rely on individual-level measures that are able to disentangle patience from risk acceptance. Yet, the most widespread methods to elicit individual-level measures of time and risk preferences run the risk of conflating these two forces. Second, when asked to self-assess and state their level of patience as well

[1] In fact, the number of articles published in political science, economics, sociology, and psychology that engage with aspects of decisionmaking related to time discounting has increased from 5 in 1990 to over 4,000 in 2018. These numbers are based on a web of science search for "discounting", "time preferences", or " patience". These data are available as part of the replication archive for this study.

as attitudes toward policy, respondents may be affected by social desirability bias. A potential solution to this problem introduces convex time budgets (Andreoni and Sprenger, 2012; Andreoni, Kuhn and Sprenger, 2015) to generate estimates of patience and risk acceptance. This technique rests on a choice exercise in which respondents choose between combinations of sooner and later payments. So far, the convex time budgets (CTB) approach has only been used in lab experiments and is very costly due to the considerable monetary incentives.

We show using an experimental design that changing the costly, original payoff mechanism of the CTB approach by either reducing the payoffs by an order of magnitude or employing hypothetical decisions yields measures of time preferences with nearly identical distributions in a large quota sample of Americans. We then evaluate the validity of the CTB patience measure by exploring the extent to which it predicts future-oriented policy opinions. Using a local delayed investment problem in which respondents select between a constant and a backloaded investment schedule to address water supply issues, we establish that patience correlates in theoretically meaningful ways with individuals' choices in a simplified public policy example. This result further validates the CTB measure. However, when examining support for a wide range of large-scale, future-oriented policies such as climate mitigation, climate technology, human capital investment, and fiscal discipline we find that patience as measured by the CTB approach does not predict individuals' policy views. In contrast, the stated-preference patience measure tends to predict not only support for policies with a significant dynamic component but also a placebo policy that lacks a clear temporal dimension. These results are consistent with the view that the relationship between stated-preference patience measures and future-oriented policy positions may be spurious and a result of social desirability bias.

2 Measuring Time Preferences

The widely used stated preference approach asks respondents to indicate on a Likert scale how willing they are to give up something that is beneficial today in order to benefit more from that in the future (see Appendix A). This survey item and others like it are easy for respondents to understand and require only a single question for which almost all respondents provide an answer. The measure, however, has at least two weaknesses. First, it may conflate risk and time preferences (Andersen et al., 2008; Andreoni and Sprenger, 2012; Andreoni, Kuhn and Sprenger, 2015). Respondents could be reluctant to sacrifice a current benefit for a future gain because they do not value the future or because they are risk averse and view the later gain as more uncertain. Second, respondents' self-assessments may be influenced by social desirability bias. Individuals who indicate to be willing to give up something today for a later benefit may value the future or they may be providing the response they think describes themselves positively. Both weaknesses seem important for studies that seek to understand public opinion about future-oriented policies such as climate action, fiscal discipline, and human capital investment.

A second widely used approach to measuring patience is the staircase method. This choice-based technique asks individuals to choose between a payment today or a payment at some point in the future. Appendix B reports the exact question wording in typical implementations. These choices are used to calculate a discount rate for each respondent based on how large the value of the later payment needed to be for the respondent to forego the payment today for the later payment. This approach seems less prone to social desirability bias as there is no clear answer option that would make the respondent conform with what is perceived as socially desirable. Further, in applications that actually pay respondents for one of their choices, the measurement strategy is substantially incentivized. Yet, individuals could prefer the payment today because they do not value the future larger payment as much as the present smaller payment or because they are averse to the higher risk associated with the later payment. The limitations of

existing approaches to measuring time preferences motivate the Convex Time Budget (CTB) method (Andreoni and Sprenger, 2012; Andreoni, Kuhn and Sprenger, 2015) as an alternative way of eliciting time preferences.

The CTB method starts with considering the allocation of payments x_t and x_{t+k} between two periods t and $t+k$. Preferences over these two payments are assumed to be described by the following utility function:

$$U(x_t, x_{t+k}) = \begin{cases} x_t^\alpha + \beta\delta^k x_{t+k}^\alpha, & \text{if } t = 0. \\ x_t^\alpha + \delta^k x_{t+k}^\alpha, & \text{if } t > 0. \end{cases} \tag{1}$$

The parameter δ measures long-run exponential time discounting, β measures the preference for payments now ($t = 0$) and thus captures present bias, and α measures utility function curvature or the extent of risk aversion. Estimating all three of these parameters for a sample, population, or individual are of potential interest. Our primary objective is to obtain a valid measure of time preference (δ) at the individual level.

The CTB approach asks respondents to choose repeatedly a bundle of payments that will be received at time t and time $t+k$. Each choice includes both extreme cases in which the full payment is at time t or at time $t+k$ as well as four convex combinations of these payoffs (see Appendix Figure A.1 for an example of the choice task). Some choices compare payments now to payments later while other choices compare payments at some $t > 0$ and payments later than that. The differences in those choices allow for the separate identification of general time discounting (δ) from β (present bias) and risk aversion (α). Choices at the extremes are consistent with $\alpha = 1$ and risk-neutrality while interior choices are consistent with $\alpha < 1$ and risk aversion. CTB identifies risk aversion based on the price-sensitivity of the intertemporal choice. The parameters of interest δ, α, and β can be estimated by ordinary least squares or nonlinear least squares.

3 CTB, Costs, and Alternative Payoff Mechanisms

CTB as most commonly implemented costs about $20 per respondent in incentives only. Given that most social science surveys have 1,000 respondents or more, these costs will be prohibitive in most cases. We investigate modifications of the standard payoff mechanism for the CTB approach such that it produces similar estimates at a substantially lower cost.[2]

We implement the CTB method with four different, randomly assigned payoff mechanisms. The *Benchmark CTB* payoff mechanism is an exact replication of the laboratory protocols in Andreoni, Kuhn and Sprenger (2015). Respondents make 24 choices and are told that one of their 24 decisions will be randomly selected to determine their actual payments. *CTB Lottery* asks respondents to make the same 24 choices as in the benchmark case but are told that only twenty percent of the respondents will actually receive a payment. In *CTB Hypothetical Low* individuals make the same 24 choices as in the benchmark but no actual payments are promised. We add a fourth payoff mechanism, *CTB Hypothetical High*, in which the 24 choices range from sooner payments of $0 to $1,900 and later payments from $0 to $2,000 as opposed to $0 to $19 and $0 to $20 in the other payoff mechanisms and no actual payments are promised. Appendix C reports the exact instructions for each of the four payoff mechanisms. Respondents are randomly assigned into one of the payoff mechanisms. The experiment was fielded in June 2018 to an online quota sample of 5,820 adult respondents in the United States (see Appendix D for a detailed description of the sample).

We estimate patience (δ) at the individual level by regressing the natural log of the ratio of the sooner and later combination of payments chosen by the respondent on the number of days to the first payment (t), the number of days that the payment is delayed (k), and the natural log of the price ratio of the later payments to the sooner payments. The estimate of an individual's discount factor δ is then equal to the exponent of the ratio

[2]The study was reviewed by the Institutional Review Boards at Stanford University (eProtocol # 46325) and Washington University in St. Louis (IRB ID #: 201803178). The full survey instrument will be available as part of the replication archive for this study.

of the coefficient on k and the coefficient on the natural log of the price ratio.[3]

Two important issues become evident. First, some respondents always choose one of the corner options in "sooner" and "later" space which makes it impossible to estimate parameters for these individuals. Andreoni, Kuhn and Sprenger (2015) note that this occurred for 6 out of 64 students in their laboratory setting. In our data, it occurred for 16% of respondents. We follow Andreoni, Kuhn and Sprenger (2015) and exclude these observations. Second, given the relatively small number of choices, it is possible for the estimates for any one person to take on extreme and implausible values. In our analyses below, we trim our CTB estimates of individual time preferences by setting all values below the 5th percentile and above the 95th percentile equal to missing.

We compare several statistics of the CTB patience parameters in Table 1 which reports the mean, median, difference-in-means, and the Kolmogorov-Smirnov test of the null hypothesis of the distributions being equal for the time preference parameter δ across the four payoff mechanisms.[4] The mean and median is equal to 1 in all four samples. While there exist some differences in the means at the third decimal place, none of these are substantively significant and only the difference between *CTB Hypothetical High* and the other three payoff mechanisms is statistically significant. The results reported in Appendix Table A.1 show that these conclusions do not depend on the use of survey weights.

Table 1 also reports the p-value for the KS test for each combination of the four payoff mechanisms. We find that we cannot reject the null of equality for each combination of *Benchmark CTB*, *CTB Lottery*, and *CTB Hypothetical Low*. However, the KS test does reject the null hypothesis for the *CTB Hypothetical High* payoff mechanism. These results indicate that the CTB method can be adopted with fewer or arguably no respondents actually paid for their choices. Since the *CTB Hypothetical High* payoff mechanism generates patience estimates that differ systematically from the *Benchmark CTB*, we exclude these

[3]Following the replication code for Andreoni, Kuhn and Sprenger (2015), we substitute all payouts equal to 0 with 0.001.

[4]Appendix E compares our individual-level and aggregate-level estimates for *Benchmark CTB* to the laboratory results in Andreoni, Kuhn and Sprenger (2015) and shows them to be comparable.

observations in all subsequent analyses.

Table 1: Comparison of Means and Distributions of CTB Time Preferences for the Randomized Payoff Mechanism Experiment

	Median	Mean	N		CTB Lottery	CTB Hypothetical Low	CTB Hypothetical High
Benchmark CTB	0.998	1.000	1066	Difference	0.000	0.000	-0.001
				p(t)	0.476	0.890	0.009
				p(KS)	0.979	0.345	0.000
CTB Lottery	0.998	0.999	1097	Difference		0.000	-0.001
				p(t)		0.585	0.000
				p(KS)		0.166	0.000
CTB Hypothetical Low	0.998	1.000	1065	Difference			-0.001
				p(t)			0.007
				p(KS)			0.000
CTB Hypothetical High	1.000	1.001	1160	Difference			
				p(t)			
				p(KS)			

Note: The table reports the mean, median, and number of observations (N) of the estimated discount factor (δ, trimmed) by treatment condition along with the difference-in-means. p(t) is the p-value of a *t*-test of the null hypothesis of no difference between the estimated parameters. p(KS) is the p-value of a Kolmogorov-Smirnov test of the null hypothesis of equal distributions.

4 Patience and Public Opinion about Dynamic Policy Problems

4.1 Patience and Delaying Investment

We validate our measure in a simplified investment problem in which we inform respondents that the water pipe system in their region needs upgrades and repairs to secure the supply of fresh water to households. The survey item instructs respondents that engineers have approved two repair plans that will solve the problem but differ in their timing of household payments. One plan has constant payments over five years while the other plan starts with lower payments and ends with higher ones. We designed the payment schedule such that, theoretically, if time preferences were the main factor influencing this choice, only respondents who do not discount the future at all should select the constant payment option while everyone else should prefer the backloaded option

(see Appendix F for the detailed question wording). The expectation is that more patient individuals—those who discount less—should be more likely to choose the constant payment option.

We embedded this item in a survey that we fielded together with YouGov in December 2018 and January 2019. The sample is representative of the U.S. population (4,081 respondents).[5] We constructed the variable *Constant Payment* equal to one if respondents selected "Option 1", i.e., the contant investment plan, in the question above and zero if they selected "Option 2", i.e., the backloaded plan. The survey contained a CTB module using the *Hypothetical Low* approach described above.

We estimate an OLS regression of *Constant Payment* on our measures of patience (including dichotomized versions of both the CTB and stated-preference measure which were both set equal to 1 if above the median and 0 otherwise) and, in some specifications sociodemographic control variables. Table 2 reports these results. Columns 1 and 2 report the estimates for the CTB patience measure with and without control variables. It should be noted that the CTB measurement approach generated higher levels of missingness in this survey than in the original study discussed above. The level of missingness is broadly similar to that we observed for the staircase method in the original study. We obtain a significantly positive coefficient for CTB patience in column 1 which is consistent with the hypothesis that more patient respondents are more likely to choose the constant payment option. Adding sociodemographic controls in column 2 attenuates the coefficient on CTB patience somewhat but the estimate remains positive and statistically significant. Columns 3 and 4 report estimates for the dichotomized version of the CTB patience measure. The estimates are again positive and statistically significant and have the straightforward substantive interpretation that having an above-median value on the CTB patience score is correlated with a 5 to 7 percentage point increase in the probability of choosing the constant payment option.[6]

[5] See Appendix G for a description of the sampling methodology and descriptive statistics for this survey.

[6] An alternative interpretation of the risk aversion parameter (α) is a preference for smoothing consump-

The estimates for the raw and the dichotomous version of the stated-preference measures suggest substantive magnitudes that parallel those for the CTB measure (Columns 5-8). For example, having a stated-preference value above the median is associated with a 5 to 8 percentage point increase in the probability of choosing the constant payment plan. Taken together, the results reported in Table 2 are consistent with the common conjecture that heterogeneity in how much individuals value the future accounts for lower than desirable investment levels for long-term projects.[7]

Table 2: Patience and Support for Long-Term Investment (Waterpipe Problem)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Patience CTB	1.224**	1.042*						
	(0.529)	(0.550)						
Patience CTB: High			0.068***	0.052***				
			(0.017)	(0.018)				
Patience Stated					0.015***	0.012***		
					(0.002)	(0.003)		
Patience Stated: High							0.082***	0.052***
							(0.013)	(0.014)
Sociodemographics		Yes		Yes		Yes		Yes
Observations	2,551	2,284	2,551	2,284	4,081	3,609	4,081	3,609

Note: This table reports linear regression coefficients in which support for the constant investment plan is regressed on patience measures and sociodemographic variables. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

4.2 Patience and Support for Future-Oriented Policy

We now explore whether individuals support cutting greenhouse gas emissions to address climate change, investing in new technologies to remove carbon from the air (carbon harvesting), cutting public spending to improve the sustainability of public debt, and investing in human capital to increase economic growth. We expect more patient respondents to be more supportive of such investments. We also analyze the relationship

tion over time (Aycinena et al., 2018). In the context of the waterpipe problem, this suggests that α should be correlated positively with choosing the constant payment option. In separate regressions, we find mixed evidence for this prediction and excluding this measure has no effect on our main results.

[7]These results remain substantively unchanged when estimated on the weighted data, see Appendix Table A.2.

between patience and support for a short-term, placebo policy which would require all firms to offer paid maternity leave for 90 days. Our expectation is that patience should not predict support for paid maternity leave. This analysis utilizes our original survey data conducted in June 2018 and described above and in Appendix D. Appendix H provides the exact question wording for these survey items. To relax functional form assumptions we convert the 11-point disagree-agree scale into an indicator variable that is 1 if the level of agreement with the policy is greater or equal to 7 and 0 otherwise.

Table 3 reports the results. We find that across a wide range of long-term policy issues, the CTB measure of patience fails to predict policy support. This result also holds when replacing the continuous patience variable with a binary indicator that distinguishes between individuals who are more patient than the median. The single exception is the binary CTB patience when analyzing support for investing in climate technology (column 10) where the coefficient is actually negative, i.e., wrongly signed. In contrast, the stated-preference patience measure predicts agreement across all types of policies including support for paid maternity leave. We believe this latter result to be particularly important as this issue serves as a placebo that lacks the dynamic nature that characterizes the other policy problems. These results remain unchanged when we account for respondents' party identification (see Appendix Table A.3) and when estimating the results on weighted data (see Appendix Tables A.4 and A.5).

Table 3: Time Preference Measures and Support for Public Policy

Outcome:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	Agree: Cut GHG Emissions				Agree: Invest in New Climate Technology				Agree: Invest in Human Capital				Agree: Cut Public Spending				Agree: Paid Maternity Leave			
Patience CTB	-0.104				-0.573				-0.913				-1.507				-0.255			
	(1.063)				(1.059)				(1.048)				(1.068)				(1.043)			
Patience CTB: High		-0.025				-0.020				-0.040**				-0.023				-0.024		
		(0.018)				(0.018)				(0.018)				(0.018)				(0.018)		
Patience Stated			0.015***				0.013***				0.018***				0.011***				0.008***	
			(0.003)				(0.003)				(0.003)				(0.003)				(0.003)	
Patience Stated: High				0.072***				0.064***				0.109***				0.058***				0.035**
				(0.016)				(0.016)				(0.016)				(0.016)				(0.016)
Sociodemographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Risk Acceptance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,828	2,986	4,015	4,015	2,828	2,986	4,015	4,015	2,828	2,986	4,015	4,015	2,828	2,986	4,015	4,015	2,828	2,986	4,015	4,015
R-squared	0.018	0.019	0.020	0.020	0.016	0.016	0.020	0.020	0.009	0.011	0.016	0.020	0.008	0.008	0.014	0.014	0.050	0.050	0.044	0.044

Note: Coefficients from linear probability models with robust standard errors clustered on individuals in parentheses. Sociodemographic covariates: Age: 35-49, Age: 50-64, Age: 65+, Education: High School, Education: Some College, Education: BA or Higher, Income: Lower Middle, Income: Upper Middle, Income: High, Gender: Female, Race: White. *** p<0.01, ** p<0.05, * p<0.1.

The stated-preference results may evidence a divide between more and less patient individuals. However, this correlation could also reflect that respondents think the socially desirable answer is to be willing to wait for benefits in general and to express support for investing in policies that address societal problems. Three pieces of evidence seem to support the latter interpretation. First, the CTB patience measure performs as expected in the waterpipe validation problem. Second, the CTB patience measure only weakly correlates with the stated-preference measure (see Appendix Tables A.6 and A.7). It is also the case that the socio-demgraphic predictors vary between CTB patience and stated patience (see Appendix I and Appendix Figure A.2). Third, CTB patience does neither predict support for long-term policy nor agreement with a placebo policy whereas the stated-preference measure correlates with all of these policy views. The varying predictive power of the theoretically preferred CTB patience measure in contrast to the stated measure suggests that the stated measure is likely capturing an underlying trait that makes respondents prone to social desirability considerations.

5 Discussion

Empirical evaluations of the extent to which public opinion about long-term policy depends on time discounting rely on measures that conflate attitudes toward time and risk and may be prone to social desirability bias. We explore whether more affordable versions of the theoretically appealing CTB method to elicit individual-level time preferences are feasible in mass surveys. We show that alternative payoff mechanisms that rely on either a lottery or a hypothetical version of the original instrument produce estimates of individual time discounting that do not differ systematically from those we obtain when using the costly benchmark incentivization. We then validate the CTB measures in a simplified delayed investment problem where those who are more patient prefer a sequencing of costs that avoids high future payments than those who are impatient. When exam-

ining more complex, future-oriented policy problems, however, we find little evidence that time horizons structure mass preferences over long-term policy decisions such as reducing greenhouse gas emissions, investing in climate technology to prevent dangerous levels of global warming, or avoiding excessive public deficits.

Taken together, we believe that there is a reasonable case for considering the CTB approach for measuring time preferences in large surveys. At the same time, important caveats should be kept in mind and improved upon in future research. While we solve the problem of unaffordable payments to respondents, implementing the CTB method still causes significant costs because it requires a lot of survey time and generates substantial amounts of missingness. Future research could test alternative strategies such as eliminating the estimation of present bias, especially since our results provide little evidence for the idea that individuals are less patient in the short-run than in the distant future. A second line of research could attempt to decrease the number of questions needed to estimate the remaining parameters. Finally, to reduce missingness and further lower survey costs, it may be possible to minimize the number of respondents who do not switch between sooner and later payments by altering the payoff combinations or the length of time between payments.

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Online Appendix for

"Measuring Time Preferences in Large Surveys"

A The Stated Preference Measure

The following question is a typical example of a stated-preference measure of patience:

> "We now ask for your willingness to act in a certain way. Please indicate your answer on a scale from 0 to 10, where 0 means you are "completely unwilling to do so" and a 10 means you are "very willing to do so". You can also use any numbers between 0 and 10 to indicate where you fall on the scale, like 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
>
> How willing are you to give up something that is beneficial for you today in order to benefit more from that in the future?"

B The Staircase Method

An example of the choice-based approach which asks respondent to choose between a sequence of sooner or later payments is the staircase method. A typical implementation looks as follows:

> "Suppose you were given the choice between the following: receiving a payment today or a payment in 12 months. We will now present to you five situations. The payment today is the same in each of these situations. The payment in 12 months is different in every situation. For each of these situations we would like to know which you would choose.
>
> Would you rather receive $100 today or $153.80 in 12 months?"

The choices presented to the respondent vary depending on their answers to each question until the respondent switches from the sooner to the later payment or vice versa. These choices are used to calculate a discount rate for each respondent based on how large the value of the later payment needed to be for the respondent to forego the payment today for the later payment.

C CTB Items: Question Wording and Treatment Conditions

The exact instructions for each of the four randomly assigned payoff mechanisms are:

1. *Benchmark CTB*. "In this example, you are asked to choose your favorite combination of payment today and payment in 5 weeks. As you can see, the sooner payment varies in value from \$19 to \$0 and the later payment varies in value from \$0 to \$20. Note that there is a trade-off between the sooner payment and the later payment across the options. As the sooner payment goes down, the later payment goes up. Among the 24 decisions that you will make in the following, a computer will randomly draw one of the decisions to determine your actual payout. Hence, for the decision that is drawn, your sooner and later payment will be paid out to you at the sooner and later date stated in the question."
2. *CTB Lottery*. "In this example, you are asked to choose your favorite combination of payment today and payment in 5 weeks. As you can see, the sooner payment varies in value from \$19 to \$0 and the later payment varies in value from \$0 to \$20. Note that there is a trade-off between the sooner payment and the later payment across the options. As the sooner payment goes down, the later payment goes up. Among the 24 decisions that you will make in the following, a computer will randomly draw one of the decisions to determine your actual payout. Hence, for the decision that is drawn, your sooner and later payment will be paid out to you at the sooner and later date stated in the question. After completing the survey, you will automatically participate in a lottery together with the other participants in the survey. In this lottery, one-fifth of all participants will be randomly selected to receive the payout determined by the one decision which is drawn."
3. *CTB Hypothetical Low*. "In this example, you are asked to choose your favorite combination of payment today and payment in 5 weeks. As you can see, the sooner payment varies in value from \$19 to \$0 and the later payment varies in value from \$0 to \$20. Note that there is a trade-off between the sooner payment and the later payment across the options. As the sooner payment goes down, the later payment goes up. In this set of questions, we are not providing any actual payout to you. However, we nevertheless ask you to carefully think about each decision that you make in the survey, and to think about how you would respond if money was at stake. Hence, please make your choices between options as if the amounts would in fact be paid out to you at the sooner and later date stated in the questions."
4. *CTB Hypothetical High*. "In this example, you are asked to choose your favorite combination of payment today and payment in 5 weeks. As you can see, the sooner payment varies in value from \$1,900 to \$0 and the later payment varies in value from \$0 to \$2,000. Note that there is a trade-off between the sooner payment and the later payment across the options. As the sooner payment goes down, the later payment goes up. In this set of questions, we are not providing any actual payout to you. However, we nevertheless ask you to carefully think about each decision that you make in the survey, and to think about how you would respond if money was at stake. Hence, please make your choices between options as if the amounts would in fact be paid out to you at the sooner and later date stated in the questions."

D Description of CTB Survey (Survey 1, United States, N=5,820)

The survey was conducted online by Respondi in June 2018 on a quota sample of the adult population in the United States. Quotas were set on age, education, and gender. The final number of observations was 5,820. Table A.8 reports the distribution of sociodemographics in the target population, the raw sample, and the weighted sample. This survey contained the question items needed to generate the CTB patience measure, the stated patience measure, and the staircase patience measure.

E Replication of Aggregate and Individual CTB Estimates

We examine whether our *Benchmark CTB* method recovers estimates similar to those reported in previous CTB studies implemented in laboratory settings. We note that we might expect some differences between the mass and laboratory results due to variation in the characteristics of the subject pool—all adults versus students. For this analysis, we consider aggregate and individual-level estimates of time preferences δ, risk preferences α, and present bias β and focus on those respondents in our study who were exposed to the *Benchmark CTB* payoff mechanism. We compare the estimated parameters to those reported in Andreoni, Kuhn and Sprenger (2015).

To produce aggregate estimates of δ, α, and β, we pool the 28,488 choices made by the 1,184 respondents in the *Benchmark CTB* payoff mechanism. We regress the natural log of the ratio of the sooner and later combination of payments chosen on the number of days to the first payment (t), the number of days that the payment is delayed (k), and the natural log of the price ratio of the later payments to the sooner payments and calculate standard errors clustered on individuals. Our estimate of δ is then equal to the exponent of the ratio of the coefficient on k and the coefficient on the natural log of the price ratio. Our estimate of α is the inverse of the coefficient on the price ratio and the estimate of β is equal to the exponent of the ratio of the coefficient on t and the coefficient on the natural log of the price ratio.[8]

Appendix Table A.9 reports our aggregate and individual-level estimates of δ, α, and β and those in Andreoni, Kuhn and Sprenger (2015). Our aggregate estimate of δ is 0.995 which is extremely close to the value of 0.998 reported in Andreoni, Kuhn and Sprenger (2015). Our individual-level estimate of δ of 0.998 is identical. The results are consistent with the idea that it is possible to successfully replicate CTB estimates for time preferences in a mass survey. The estimates for α and β are also broadly similar to the laboratory estimates though the point estimates are statistically significantly different. Our aggregate estimates provide some evidence of greater risk aversion and more present bias. This could be due to differences in how well subjects understand the task in the mass survey setting versus the laboratory, but they also could be due to the fact that the laboratory subjects were students and not representative of the population. We think the important conclusion that we can make from this comparison is that mass survey estimates are reasonable and in fact nearly identical for time preferences.

[8]Following the replication code for Andreoni, Kuhn and Sprenger (2015), we substitute all payouts equal to 0 with 0.001. Note that the text of Andreoni, Kuhn and Sprenger (2015) indicates that the number for this substitution was 0.01 but the replication code indicates that it was 0.001.

F Waterpipe Problem

The exact wording for the waterpipe problem is:

> Now we would like you to consider the following scenario related to water supply issues in your region.
>
> Suppose that the water pipe system in your region is deteriorating. Upgrades and repairs seem vital to secure the supply of fresh water to households.
>
> Engineers have determined that either of the following repair plans will work, although the required timing of household contributions is different.
>
> Please let us know which of the following two options you prefer [Random Order]:

Option 1					
Year	2020	2021	2022	2023	2024
Monthly household contributions	$50	$50	$50	$50	$50
Option 2					
Year	2020	2021	2022	2023	2024
Monthly household contributions	$20	$20	$20	$95	$95

G Description of Waterpipe Survey (Survey 2, N=4,081)

The survey was conducted online by YouGov on representative samples of the adult population in United States. The survey contained the CTB module and the stated patience question item. The field period was December 18, 2018 to January 3, 2019. The sampling frames are constructed from the full 2016 American Community Survey. YouGov employs matched sampling in which interviews are conducted from participants in YouGov's online panel. The matched cases were weighted to the sampling frame using propensity scores. The matched cases and the frame were combined and a logistic regression was estimated for inclusion in the frame. The propensity score model included gender, age, race/ethnicity, region, and education. The propensity scores were grouped into deciles of the estimated propensity score in the frame and post-stratified according to these deciles. All matched respondents were then assigned weights stratified on 2016 presidential vote, age, sex, race, and education to correct for remaining imbalances. The final number of observations was 4,081. Table A.10 reports the distribution of sociodemographics in the target population, the raw sample, and the weighted sample.

H Policy Views Questions

"Please let us know how strongly you agree or disagree with each of the following statements where 1 means strongly disagree and 11 means strongly agree.

The United States should...

... address climate change by cutting greenhouse gas emission

... address climate change by investing in new technologies to remove carbon from the air and store it

... increase the sustainability of the public debt by cutting public spending

... increase the sustainability of the public debt by investing in human capital to increase economic growth

... increase gender equality by requiring all firms to offer paid instead of unpaid maternity leave for 90 days."

I Who is Patient? The Sociodemographic Predictors of Time Preferences

We start our analysis of the sociodemographic predictors of patience by employing the aggregate-level CTB estimation strategy described in detail in Appendix E. Exploring the distribution of patience in adult populations is not only empirically interesting, but also relevant since previous research has used the sociodemographic characteristics as proxies for time preferences. Jacobs and Matthews (2012), for example, complement their patience measure that relies on a concise version of the staircase method with variables such as age, education, income, and gender to assess whether differences in long-run discounting explain preferences over social security reform.

For this estimation we use the choices made by all respondents while excluding the observations from the *Hypothetical High* payoff mechanism and estimate patience separately for each sociodemographic and political group. Appendix Figure A.3 reports the distribution of patience by group. The top left panel indicates that individuals 65 years old or greater are less patient than younger respondents. There is little evidence of significant differences across the other age groups. The top right panel indicates that patience tends to be correlated with higher educational attainment with the exception of respondents with less than a high school degree. This group is relatively small as reflected in the wide confidence interval for this estimate. We also find that respondents with some college education are more patient than high school graduates and that college graduates are in turn more patient than those with some college. The results indicate only very minor differences across income groups. Moreover, women tend to be more patient than men.

We also assess whether there exist systematic differences in patience by partisan identification and/or political ideology. We find that respondents who self-identify as Republicans are less patient than either Democrats or Independents. The bottom right panel distinguishes individuals according to their political ideology into left, middle, and right based on their self-placement on a standard eleven point left-right ideological scale and estimates the CTB patience measure separately for each group.[9] There are again significant differences but they follow a somewhat different pattern. The estimates indicate that respondents with left ideological orientations are more patient than those in the middle and those with right orientations. There are no significant differences between those in the middle and those on the right. These patterns remain unchanged when estimating the CTB patience parameter on the weighted data (see Appendix Figure A.4).

These aggregate estimates are informative of the marginal distribution of patience across these social groups. However, differences or a lack thereof for a given social group may not persist once we control for other individual characteristics. To investigate these partial correlations, we regress our individual-level CTB patience estimates of time preferences on indicator variables for age, education, income and gender categories while also controlling for respondent race. For comparison, we also report results using the staircase and stated-preference measures of patience.

Appendix Table A.11 reports coefficients from quantile (median) regressions of the three different individual-level measures of time preferences on the sociodemographic characteristics of individuals.[10] Our dependent variable is *Patience* and is coded from each of the time preference measures so that it is increasing in the extent that a respondent values the future.

Consider first the estimates for the CTB patience measure in column 1. These indicate that the differences in patience that we observed for education, income, and gender using the aggregate-level CTB method remain intact when using individual-level estimates and a multiple regression framework. We do not, however, still observe differences by age. The estimates for the staircase method are similar in direction and significance for education and income. Interestingly, according to this measure women are less patient than men, controlling for the other demographic characteristics. There exists also some evidence that older respondents—especially both those over 50 and over 65— are more patient than the 18-35 age

[9] The exact question wording was "In politics people sometimes talk of "left" and "right". Where would you place yourself on this scale, where 0 means the left and 10 means the right?"

[10] We report quantile regression results because they are more robust to outliers and even after trimming the individual-level CTB estimates, there is the possibility of influential outliers. However, we report the OLS estimates in Appendix Table A.12 and there are few differences.

group. The estimates for the stated-preference measure follow a similar pattern as in the CTB results for education and income. These estimates, however, suggest that, controlling for the other characteristics, older respondents are less patient and these results do not suggest any significant gender differences. Given our theoretical concerns with the staircase and stated-preference approaches, we emphasize the two sets of CTB results that suggest greater patience among women, the higher educated, and to some extent higher income individuals. We should also note that the differences in the sociodemographic predictors of the staircase and stated-preference approaches offer additional evidence for the conjecture that these measures are not measuring the same underlying characteristic of individuals that is captured by the CTB method.

When assessing the political correlates of CTB patience (column 2 and 3 in Appendix Table A.11), we find only small differences that are not statistically significant. For the staircase and the stated-preference measure we find diverging patterns with independents significantly more patient than Democrats according to the staircase measure (column 6) while there exists no significant difference when examining the stated patience measure (column 9). Instead, Republicans appear to be significantly more patient than Democrats when we explore the stated-preference measure. These results remain robust to employing an OLS specification, a linear probability model, and re-estimation using survey weights (see Appendix Tables A.13 and A.14).

We also examine whether the sociodemographic cleavages that characterize patience vary within political groups. Appendix Table A.15 reports these estimates. The results reveal that among Republicans patience reflects mostly an educational divide whereas among Democrats it is the more wealthy who tend to be more patient. These patterns remain unchanged when we analyzing a binary version of patience that we dichotomize at the median and when employing survey weights (see Appendix Tables A.16 and A.17).

J Appendix Tables

Table A.1: The Causal Effect of Payoff Mechanism on CTB Patience

Model	(1) Linear	(2) Linear	(3) Linear	(4) Linear	(5) Quantile	(6) Quantile
Weights	No	Yes	No	Yes	No	No
Benchmark CTB -	Reference group	Reference group	Reference group	Reference group	Reference group	Reference group
CTB Lottery	-0.000	-0.000	-0.000	-0.000	-0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)
CTB Hypothetical Low	-0.000	-0.000	-0.000	-0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)
CTB Hypothetical High	0.001***	0.001***	0.001**	0.001**	0.002***	0.002***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)
Age: 35-49			0.000	0.001		0.000
			(0.000)	(0.000)		(0.001)
Age: 50-64			0.000	0.000		0.000
			(0.000)	(0.000)		(0.001)
Age: 65+			0.000	0.000		0.001
			(0.000)	(0.000)		(0.001)
Education: High School			0.001	0.001		0.002**
			(0.001)	(0.001)		(0.001)
Education: Some College			0.001***	0.001**		0.002***
			(0.001)	(0.001)		(0.001)
Education: BA or higher			0.002***	0.002***		0.003***
			(0.001)	(0.001)		(0.001)
Income: Lower Middle			0.001***	0.001**		0.001*
			(0.000)	(0.000)		(0.001)
Income: Upper Middle			0.001**	0.001**		0.001
			(0.000)	(0.000)		(0.001)
Income: High			0.002***	0.001***		0.002***
			(0.000)	(0.000)		(0.001)
Female			0.001***	0.001***		0.002***
			(0.000)	(0.000)		(0.000)
White			0.001**	0.001***		0.001***
			(0.000)	(0.000)		(0.001)
Constant	1.000***	1.000***	0.996***	0.996***	0.999***	0.993***
	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.001)
Observations	4,388	4,388	4,059	4,059	4,388	4,059

Note: This table reports coefficients from linear and quantile (median) regressions of CTB patience on randomly assigned payoff mechanism. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.2: Patience and Support for Long-Term Investment (Waterpipe Problem, Weighted Data)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Patience CTB (trimmed)	1.183**	0.840						
	(0.585)	(0.596)						
Patience CTB (trimmed): High			0.072***	0.051**				
			(0.019)	(0.020)				
Patience Stated					0.016***	0.012***		
					(0.003)	(0.003)		
Patience Stated: High							0.090***	0.055***
							(0.015)	(0.015)
Sociodemographics		Yes		Yes		Yes		Yes
Observations	2,551	2,284	2,551	2,284	4,081	3,609	4,081	3,609

Note: This table reports linear regression coefficients in which support for the constant investment plan is regressed on patience measures and sociodemographic variables using the weighted data. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.3: Time Preference Measures and Support for Public Policy (Including Party Identification)

Outcome:	(1) Agree: Cut GHG Emissions	(2)	(3)	(4)	(5) Agree: Invest in New Climate Technology	(6)	(7)	(8)	(9) Agree: Invest in Human Capital	(10)	(11)	(12)	(13) Agree: Cut Public Spending	(14)	(15)	(16)	(17) Agree: Paid Maternity Leave	(18)	(19)	(20)
Patience CTB	-0.610				-0.732				-0.767				-1.707				-0.260			
	(1.053)				(1.037)				(1.075)				(1.097)				(1.024)			
Patience CTB: High		-0.028				-0.017				-0.034*				-0.024				-0.020		
		(0.018)				(0.018)				(0.019)				(0.018)				(0.018)		
Patience Stated			0.020***				0.016***				0.020***				0.010***				0.010***	
			(0.003)				(0.003)				(0.003)				(0.003)				(0.003)	
Patience Stated: High				0.096***				0.078***				0.115***				0.045***				0.045***
				(0.016)				(0.016)				(0.016)				(0.016)				(0.016)
Party Identification	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sociodemographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Risk Acceptance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,651	2,798	3,755	3,755	2,651	2,798	3,755	3,755	2,651	2,798	3,755	3,755	2,651	2,798	3,755	3,755	2,651	2,798	3,755	3,755
R-squared	0.082	0.084	0.085	0.085	0.078	0.075	0.077	0.077	0.013	0.014	0.021	0.025	0.031	0.029	0.031	0.031	0.097	0.095	0.085	0.085

Note: This table reports coefficients from linear probability models with robust standard errors clustered on individuals in parentheses. Party Identification: Republican, Independent, Democrat (reference group). Sociodemographic covariates: Age: 35-49, Age: 50-64, Age: 65+, Education: High School, Education: Some College, Education: BA or Higher, Income: Lower Middle, Income: Upper Middle, Income: High, Gender: Female, Race: White. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.4: Time Preference Measures and Support for Public Policy (Weighted Data)

Outcome	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	Agree: Cut GHG Emissions				Agree: Invest in New Climate Technology				Agree: Invest in Human Capital				Agree: Cut Public Spending				Agree: Paid Maternity Leave			
Patience CTB	-0.238				-0.417				-0.844				-1.329				-0.410			
	(1.078)				(1.067)				(1.059)				(1.077)				(1.056)			
Patience CTB: High		-0.026				-0.018				-0.037**				-0.018				-0.025		
		(0.018)				(0.018)				(0.018)				(0.018)				(0.018)		
Patience Stated			0.015***				0.012***				0.018***				0.011***				0.008***	
			(0.003)				(0.003)				(0.003)				(0.003)				(0.003)	
Patience Stated: High				0.074***				0.063***				0.106***				0.055***				0.036**
				(0.016)				(0.016)				(0.016)				(0.016)				(0.016)
Sociodemographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Risk Acceptance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,828	2,986	4,015	4,015	2,828	2,986	4,015	4,015	2,828	2,986	4,015	4,015	2,828	2,986	4,015	4,015	2,828	2,986	4,015	4,015
R-squared	0.019	0.019	0.021	0.020	0.017	0.016	0.020	0.020	0.011	0.012	0.017	0.021	0.009	0.008	0.014	0.014	0.050	0.050	0.043	0.043

Note: This table reports coefficients from linear probability models with robust standard errors clustered on individuals in parentheses using weighted data. Sociodemographic covariates: Age: 35-49, Age: 50-64, Age: 65+, Education: High School, Education: Some College, Education: BA or Higher, Income: Lower Middle, Income: Upper Middle, Income: High, Gender: Female, Race: White. *** p<0.01, ** p<0.05, * p<0.1.

Table A.5: Time Preference Measures and Support for Public Policy (Including Party Identification, Weighted Data)

Outomce:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	Agree: Cut GHG Emissions				Agree: Invest in New Climate Technology				Agree: Invest in Human Capital				Agree: Cut Public Spending				Agree: Paid Maternity Leave			
Patience CTB	-0.629				-0.524				-0.615				-1.540				-0.281			
	(1.064)				(1.040)				(1.086)				(1.107)				(1.036)			
Patience CTB: High		-0.028				-0.015				-0.030				-0.019				-0.019		
		(0.018)				(0.018)				(0.019)				(0.019)				(0.018)		
Patience Stated			0.020***				0.015***				0.019***				0.009***				0.010***	
			(0.003)				(0.003)				(0.003)				(0.003)				(0.003)	
Patience Stated: High				0.098***				0.077***				0.113***				0.041**				0.046***
				(0.016)				(0.016)				(0.016)				(0.016)				(0.016)
Party Identification	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sociodemographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Risk Acceptance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,651	2,798	3,755	3,755	2,651	2,798	3,755	3,755	2,651	2,798	3,755	3,755	2,651	2,798	3,755	3,755	2,651	2,798	3,755	3,755
R-squared	0.085	0.087	0.087	0.087	0.081	0.078	0.079	0.079	0.015	0.015	0.022	0.025	0.032	0.030	0.032	0.032	0.097	0.094	0.085	0.085

Note: This table reports coefficients from linear probability models with robust standard errors clustered on individuals in parentheses estimated using weighted data. Party Identification: Republican, Independent, Democrat (reference group). Sociodemographic covariates: Age: 35-49, Age: 50-64, Age: 65+, Education: High School, Education: Some College, Education: BA or Higher, Income: Lower Middle, Income: Upper Middle, Income: High, Gender: Female, Race: White. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.6: Pairwise Correlations between Time Preference Measures

Patience Measure	CTB	Staircase	Stated
CTB Trimmed	1.000		
Staircase	0.248	1.000	
	(0.000)		
Stated	0.089	0.133	1.000
	(0.000)	(0.000)	

Note: This table reports pairwise correlation coefficients with p-values in parentheses.

Table A.7: Pairwise Correlations between Time Preference Measures (Weighted)

Patience Measure	CTB	Staircase	Stated
CTB Trimmed	1.000		
Staircase	0.247	1.000	
	(0.000)		
Stated	0.086	0.132	1.000
	(0.000)	(0.000)	

Note: This table reports pairwise correlation coefficients with p-values in parentheses.

Table A.8: CTB Survey: Distribution of Socio-Demographics in the Target Population, the Raw Sample, and the Weighted Sample (N=5,820)

	Population	Raw Sample	Weighted Sample
Age: 18-34	30	34	30
Age: 35-49	25	24	25
Age: 50-64	25	23	25
Age: 65+	20	19	20
Education: Less than High School	12	12	12
Education: High School Degree	28	25	28
Education: Associate's Degree or Some College	31	36	31
Education: BA or higher	29	27	29
Gender: Male	48	47	49
Gender: Female	51	53	51

Table A.9: Comparison of Mass Survey and Laboratory CTB Estimates

	Aggregate-Level		Individual-Level (Medians)	
	(1) Mass Survey	(2) Lab Results (Andreoni et al. 2015)	(3) Mass Survey	(4) Lab Results (Andreoni et al. 2015)
Patience (δ)	0.995***	0.998	0.998	0.998
	(0.000)			
Risk Aversion (α)	0.903***	0.947***	0.949	0.937
	(0.004)	(0.003)		
Present Bias (β)	0.983***	1.01***	1.070	1.084
	(0.011)	(0.022)		
Respondents	1,184	58	1,184	58
Observations	28,416	1,392	1,184	58

Note: Models 1 and 2 report aggregate-level estimates based on the intertemporal Euler equation in Andreoni, Kuhn and Sprenger (2015, p. 457) computed from OLS coefficients with robust standard errors clustered on individuals in parentheses. Patience (δ) for the Andreoni et al. (2015) lab results is computed from their reported annualized discount rate (Table 2, Model 4). Models 3 and 4 report the medians of the individual-level estimates based on OLS regressions. Andreoni et al. (2015) results based on their Table A.1. *** p<0.01, ** p<0.05, * p<0.1.

Table A.10: Waterpipe Survey: Distribution of Socio-Demographics in the Target Population, the Raw Sample, and the Weighted Sample (Total N=4,081)

	Population	Raw Sample	Weighted Sample
Age: 18-34	30	27	30
Age: 35-49	25	23	25
Age: 50-64	25	30	25
Age: 65+	20	22	20
Education: Less than High School	12	7	12
Education: High School Degree	28	29	28
Education: Associate's Degree or Some College	31	32	31
Education: BA or higher	29	32	29
Gender: Male	48	47	49
Gender: Female	51	53	51

Table A.11: Sociodemographic Predictors of Time Preference Measures

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	CTB			Staircase			Stated		
Age: 35-49	0.001	0.001	0.000	5.200***	4.992***	5.506***	-0.333**	-0.500***	-0.500***
	(0.001)	(0.001)	(0.001)	(1.631)	(1.633)	(1.715)	(0.164)	(0.104)	(0.186)
Age: 50-64	0.000	0.001	0.000	8.025***	7.908***	7.800***	-0.667***	-0.500***	-0.500***
	(0.001)	(0.001)	(0.001)	(1.412)	(1.446)	(1.510)	(0.167)	(0.121)	(0.189)
Age: 65+	0.000	0.000	0.001	10.125***	10.875***	10.825***	-0.667***	-0.500***	-0.500**
	(0.001)	(0.001)	(0.001)	(1.489)	(1.504)	(1.590)	(0.180)	(0.135)	(0.201)
Education: High School	0.001*	0.001	0.001*	3.450**	2.992*	4.206***	-0.333*	0.000	-0.000
	(0.001)	(0.001)	(0.001)	(1.659)	(1.654)	(1.617)	(0.180)	(0.182)	(0.205)
Education: Some College	0.002***	0.002***	0.002***	10.075***	9.467***	10.350***	0.000	0.500**	0.500**
	(0.001)	(0.001)	(0.001)	(1.796)	(1.772)	(1.784)	(0.181)	(0.195)	(0.234)
Education: BA or higher	0.004***	0.003***	0.004***	17.250***	16.550***	17.425***	0.667***	1.000***	1.000***
	(0.001)	(0.001)	(0.001)	(1.652)	(1.660)	(1.664)	(0.226)	(0.226)	(0.287)
Income: Lower Middle	0.001	0.001	0.001*	0.000	0.517	0.000	0.000	-0.000	0.000
	(0.001)	(0.001)	(0.001)	(1.630)	(1.653)	(1.635)	(0.151)	(0.114)	(0.152)
Income: Upper Middle	0.000	0.000	0.000	0.825	1.433	0.881	0.667***	0.500***	0.500**
	(0.001)	(0.001)	(0.001)	(1.621)	(1.642)	(1.678)	(0.175)	(0.117)	(0.209)
Income: High	0.001*	0.001*	0.001**	2.875*	3.483**	3.119*	0.667***	0.500***	0.500**
	(0.001)	(0.001)	(0.001)	(1.617)	(1.638)	(1.638)	(0.176)	(0.108)	(0.206)
Female	0.002***	0.001***	0.002***	-2.000**	-2.000**	-1.994*	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(1.007)	(1.020)	(1.061)	(0.109)	(0.077)	(0.114)
White	0.001***	0.001***	0.001**	1.275	1.183	1.113	-0.333**	-0.500***	-0.500***
	(0.001)	(0.000)	(0.001)	(1.338)	(1.396)	(1.393)	(0.152)	(0.112)	(0.175)
Ideology: Right		-0.000			1.025			0.000	
		(0.001)			(1.505)			(0.128)	
Ideology: Middle		0.001			1.025			-0.500***	
		(0.001)			(1.167)			(0.096)	
Republican			-0.000			2.237			0.500***
			(0.001)			(1.371)			(0.143)
Independent			0.001			2.237*			-0.000
			(0.001)			(1.309)			(0.141)
Constant	0.994***	0.994***	0.993***	115.125***	114.400***	113.044***	6.333***	6.500***	6.000***
	(0.001)	(0.001)	(0.001)	(1.757)	(1.946)	(1.882)	(0.177)	(0.204)	(0.229)
Observations	2,975	2,975	2,788	2,968	2,968	2,787	4,015	4,015	3,755

Note: This table reports coefficients from quantile (median) regressions of individual-level measures of time preferences on sociodemographic and political characteristics. Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.12: Sociodemographic Predictors of Time Preference Measures (OLS Estimates)

	(1)	(2)	(3)
	CTB	Staircase	Stated
Age: 35-49	0.001*	2.075**	-0.212*
	(0.000)	(0.865)	(0.112)
Age: 50-64	0.001	4.785***	-0.192*
	(0.000)	(0.838)	(0.114)
Age: 65+	0.000	6.166***	-0.389***
	(0.001)	(0.902)	(0.122)
Education: High School	0.001	4.268***	0.075
	(0.001)	(1.157)	(0.165)
Education: Some College	0.002**	7.253***	0.262
	(0.001)	(1.125)	(0.161)
Education: BA or higher	0.002***	11.336***	0.450***
	(0.001)	(1.218)	(0.172)
Income: Lower Middle	0.001	0.700	0.192*
	(0.000)	(0.857)	(0.110)
Income: Upper Middle	0.000	1.628*	0.492***
	(0.001)	(0.922)	(0.121)
Income: High	0.001	3.751***	0.573***
	(0.001)	(0.950)	(0.125)
Female	0.001***	-1.082*	0.014
	(0.000)	(0.604)	(0.082)
White	0.001**	1.480*	-0.259**
	(0.000)	(0.830)	(0.112)
Constant	0.996***	117.949***	5.889***
	(0.001)	(1.181)	(0.169)
Observations	2,975	2,968	4,015

Note: This table reports coefficients from linear regressions of individual-level measures of time preferences on the sociodemographic characteristics of individuals. Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.13: Sociodemographic Predictors of Time Preference Measures (Weighted Data)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	CTB			Staircase			Stated		
Age: 35-49	0.001**	0.001**	0.001*	2.172**	2.153**	2.322***	-0.223**	-0.220*	-0.230*
	(0.000)	(0.000)	(0.001)	(0.868)	(0.868)	(0.900)	(0.113)	(0.113)	(0.118)
Age: 50-64	0.001*	0.001*	0.001	4.953***	4.909***	4.843***	-0.199*	-0.211*	-0.234*
	(0.000)	(0.000)	(0.001)	(0.838)	(0.841)	(0.867)	(0.115)	(0.115)	(0.119)
Age: 65+	0.001	0.001	0.000	6.235***	6.192***	6.574***	-0.397***	-0.415***	-0.401***
	(0.001)	(0.001)	(0.001)	(0.906)	(0.909)	(0.933)	(0.124)	(0.124)	(0.128)
Education: High School	0.001	0.001	0.001	4.113***	4.099***	4.398***	0.071	0.070	0.180
	(0.001)	(0.001)	(0.001)	(1.173)	(1.177)	(1.237)	(0.166)	(0.167)	(0.175)
Education: Some College	0.001**	0.001**	0.001*	7.022***	7.007***	7.208***	0.260	0.252	0.341**
	(0.001)	(0.001)	(0.001)	(1.141)	(1.143)	(1.206)	(0.163)	(0.163)	(0.172)
Education: BA or higher	0.002***	0.002***	0.002***	11.166***	11.179***	11.483***	0.459***	0.442**	0.546***
	(0.001)	(0.001)	(0.001)	(1.234)	(1.233)	(1.300)	(0.174)	(0.175)	(0.183)
Income: Lower Middle	0.001	0.001	0.001	0.847	0.850	0.533	0.181	0.184*	0.117
	(0.000)	(0.000)	(0.001)	(0.866)	(0.866)	(0.901)	(0.111)	(0.111)	(0.117)
Income: Upper Middle	0.001	0.001	0.001	1.933**	1.924**	1.347	0.479***	0.461***	0.452***
	(0.001)	(0.001)	(0.001)	(0.922)	(0.922)	(0.954)	(0.122)	(0.122)	(0.127)
Income: High	0.001	0.001	0.001	3.902***	3.900***	3.455***	0.567***	0.557***	0.544***
	(0.001)	(0.001)	(0.001)	(0.956)	(0.955)	(0.990)	(0.126)	(0.126)	(0.131)
Female	0.001***	0.001**	0.001***	-1.289**	-1.277**	-1.293**	-0.001	0.020	-0.008
	(0.000)	(0.000)	(0.000)	(0.608)	(0.609)	(0.625)	(0.082)	(0.082)	(0.085)
White	0.001**	0.001**	0.001**	1.408*	1.388*	1.366	-0.268**	-0.282**	-0.325***
	(0.000)	(0.000)	(0.000)	(0.832)	(0.833)	(0.866)	(0.113)	(0.113)	(0.120)
Ideology: Right		-0.000			0.502			0.200	
		(0.001)			(0.902)			(0.129)	
Ideology: Middle		0.000			0.198			-0.124	
		(0.000)			(0.736)			(0.100)	
Republican			-0.000			0.965			0.184*
			(0.000)			(0.773)			(0.107)
Independent			0.000			1.753**			0.053
			(0.000)			(0.767)			(0.104)
Constant	0.996***	0.996***	0.997***	118.056***	117.883***	117.165***	5.917***	5.965***	5.830***
	(0.001)	(0.001)	(0.001)	(1.193)	(1.263)	(1.317)	(0.171)	(0.184)	(0.190)
Observations	2,975	2,975	2,788	2,968	2,968	2,787	4,015	4,015	3,755

Note: This table reports coefficients from linear regressions of individual-level measures of time preferences on sociodemographic and political characteristics using weighted data. Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.14: Sociodemographic Predictors of Binary Time Preference Measures (Weighted Data)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	CTB: High			Staircase: High			Stated: High		
Age: 35-49	0.049**	0.046**	0.042*	0.071***	0.070***	0.074***	-0.062***	-0.060***	-0.061***
	(0.021)	(0.021)	(0.022)	(0.021)	(0.021)	(0.022)	(0.022)	(0.022)	(0.023)
Age: 50-64	0.030	0.027	0.027	0.096***	0.095***	0.096***	-0.083***	-0.085***	-0.087***
	(0.022)	(0.022)	(0.023)	(0.022)	(0.022)	(0.023)	(0.022)	(0.022)	(0.023)
Age: 65+	0.033	0.031	0.039	0.122***	0.121***	0.130***	-0.102***	-0.106***	-0.102***
	(0.023)	(0.023)	(0.024)	(0.022)	(0.023)	(0.023)	(0.024)	(0.024)	(0.024)
Education: High School	0.089***	0.087***	0.084***	0.034	0.033	0.045	-0.020	-0.019	-0.010
	(0.030)	(0.030)	(0.032)	(0.031)	(0.031)	(0.032)	(0.031)	(0.031)	(0.032)
Education: Some College	0.091***	0.091***	0.091***	0.071**	0.071**	0.084***	0.047	0.045	0.054*
	(0.030)	(0.029)	(0.031)	(0.030)	(0.030)	(0.031)	(0.030)	(0.030)	(0.032)
Education: BA or higher	0.097***	0.102***	0.094***	0.136***	0.137***	0.148***	0.085***	0.079**	0.091***
	(0.032)	(0.032)	(0.033)	(0.032)	(0.032)	(0.033)	(0.032)	(0.032)	(0.034)
Income: Lower Middle	0.038*	0.037*	0.042*	-0.040*	-0.040*	-0.047**	0.035	0.036*	0.029
	(0.022)	(0.022)	(0.023)	(0.021)	(0.021)	(0.022)	(0.022)	(0.022)	(0.023)
Income: Upper Middle	0.029	0.030	0.041*	-0.008	-0.008	-0.020	0.104***	0.099***	0.098***
	(0.023)	(0.023)	(0.024)	(0.023)	(0.023)	(0.024)	(0.024)	(0.024)	(0.025)
Income: High	0.059**	0.059**	0.065***	0.028	0.028	0.020	0.093***	0.091***	0.089***
	(0.024)	(0.024)	(0.025)	(0.023)	(0.023)	(0.024)	(0.024)	(0.024)	(0.025)
Female	0.052***	0.049***	0.056***	-0.031**	-0.032**	-0.032**	0.002	0.008	0.001
	(0.016)	(0.016)	(0.016)	(0.015)	(0.015)	(0.016)	(0.016)	(0.016)	(0.017)
White	0.045**	0.046**	0.040*	-0.003	-0.003	0.006	-0.042**	-0.045**	-0.049**
	(0.021)	(0.021)	(0.022)	(0.020)	(0.020)	(0.022)	(0.021)	(0.021)	(0.022)
Ideology: Right		0.025			0.012			0.037	
		(0.024)			(0.023)			(0.024)	
Ideology: Middle		0.057***			0.017			-0.054***	
		(0.019)			(0.019)			(0.019)	
Republican			0.022			0.005			0.045**
			(0.020)			(0.020)			(0.021)
Independent			0.049**			0.027			0.005
			(0.020)			(0.019)			(0.020)
Constant	0.414***	0.379***	0.387***	0.529***	0.518***	0.502***	0.562***	0.588***	0.549***
	(0.032)	(0.034)	(0.035)	(0.032)	(0.034)	(0.035)	(0.032)	(0.034)	(0.035)
Observations	2,975	2,975	2,788	2,968	2,968	2,787	4,015	4,015	3,755

Note: This table reports coefficients from linear regressions of individual-level measures of time preferences dichotomized at the median on sociodemographic and political characteristics using weighted data. Robust standard errors are reported in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.15: Political Groups and the Sociodemographic Predictors of Patience (Quantile Regressions)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Partisanship				Ideology			
	Republican	Independent	Democrat	Interactions	Right	Middle	Left	Interactions
Age: 35-49	-0.001	0.002	0.000	0.000	-0.001	0.001	-0.001	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Age: 50-64	-0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)
Age: 65+	-0.000	0.002	0.001	0.001	-0.001	0.001*	-0.000	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)
Education: High School	0.002*	0.002	0.001	0.001	0.003**	-0.000	0.003*	0.003**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Education: Some College	0.002*	0.002**	0.002	0.002	0.003**	0.001	0.002**	0.002**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Education: BA or higher	0.005***	0.004***	0.002	0.002	0.004**	0.003**	0.004***	0.004***
	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Income: Lower Middle	0.002*	-0.000	0.000	0.001	0.001	0.000	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Income: Upper Middle	0.000	-0.000	0.002	0.002	-0.001	-0.000	0.003**	0.003*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Income: High	0.002	0.000	0.003***	0.003**	-0.000	0.002**	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Female	0.001	0.002***	0.002**	0.001***	0.002	0.002***	0.002**	0.002***
	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)
White	0.001	0.001*	0.001	0.001	0.003***	0.001	0.001	0.002***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Republican				-0.001				
				(0.001)				
Ideology: Right								-0.000
								(0.001)
Republican X Age: 35-49				-0.001				
				(0.001)				
Republican X Age: 50-64				-0.001				
				(0.002)				
Republican X Age: 65+				-0.001				
				(0.002)				
Republican X High School				0.002				
				(0.002)				
Republican X Some College				0.001				
				(0.001)				
Republican X BA or higher				0.004**				
				(0.002)				
Republican X Income: Lower M				0.001				
				(0.001)				
Republican X Income: Upper M				-0.002				
				(0.002)				
Republican X Income: High				-0.002				
				(0.002)				
Ideology: Right X Age: 35-49								0.001
								(0.001)
Ideology: Right X Age: 50-64								0.001
								(0.002)
Ideology: Right X Age: 65+								-0.001
								(0.002)
Ideology: Right X High School								-0.000
								(0.002)
Ideology: Right X Some College								0.001
								(0.001)
Ideology: Right X BA or higher								-0.000
								(0.002)
Ideology: Right X Income: Lower M								0.000
								(0.002)
Ideology: Right X Income: Upper M								-0.003*
								(0.002)
Ideology: Right X Income: High								-0.001
								(0.002)
Constant	0.993***	0.994***	0.994***	0.994***	0.993***	0.995***	0.993***	0.993***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Observations	927	974	887	1,814	598	1,614	763	1,361

Note: This table reports coefficients from quantile (median) regressions of individual-level measures of time preferences on the sociodemographic characteristics of individuals. Model 4 compares Democrats and Republicans and Model 8 compares Ideology: Left and Ideology: Right. Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.16: Political Groups and the Sociodemographic Predictors of Patience (Weighted Data)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Partisanship				Ideology			
	Republican	Independent	Democrat	Interactions	Right	Middle	Left	Interactions
Age: 35-49	0.001	0.001	0.000	0.001	0.002	0.001*	-0.000	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Age: 50-64	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Age: 65+	0.000	0.001	0.001	0.001	0.000	0.001*	-0.000	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Education: High School	0.002	0.002*	-0.002	-0.002	0.003	-0.001	0.003*	0.003*
	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)
Education: Some College	0.002	0.002**	-0.001	-0.001	0.002	0.001	0.003**	0.003**
	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)
Education: BA or higher	0.004**	0.003***	-0.001	-0.001	0.003*	0.001	0.003**	0.003**
	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)
Income: Lower Middle	0.000	-0.000	0.002**	0.002**	0.001	0.000	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Income: Upper Middle	-0.000	0.000	0.002**	0.002**	0.001	-0.000	0.002*	0.002*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Income: High	-0.001	0.000	0.003***	0.003***	-0.001	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Female	-0.000	0.002***	0.001*	0.001	0.000	0.001**	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)	(0.001)
White	0.001	0.002**	0.000	0.001	0.002	0.001	0.001*	0.002**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Republican				-0.002				
				(0.002)				
Ideology: Right								-0.000
								(0.002)
Republican X Age: 35-49				0.001				
				(0.001)				
Republican X Age: 50-64				-0.000				
				(0.001)				
Republican X Age: 65+				-0.001				
				(0.001)				
Republican X High School				0.004**				
				(0.002)				
Republican X Some College				0.003				
				(0.002)				
Republican X BA or higher				0.005**				
				(0.002)				
Republican X Income: Lower M				-0.002				
				(0.001)				
Republican X Income: Upper M				-0.003**				
				(0.001)				
Republican X Income: High				-0.004**				
				(0.001)				
Ideology: Right X Age: 35-49								0.002
								(0.002)
Ideology: Right X Age: 50-64								0.001
								(0.001)
Ideology: Right X Age: 65+								0.000
								(0.001)
Ideology: Right X High School								0.000
								(0.002)
Ideology: Right X Some College								-0.001
								(0.002)
Ideology: Right X BA or higher								0.000
								(0.002)
Ideology: Right X Income: Lower M								-0.000
								(0.002)
Ideology: Right X Income: Upper M								-0.001
								(0.002)
Ideology: Right X Income: High								-0.002
								(0.002)
Constant	0.996***	0.995***	0.998***	0.998***	0.995***	0.998***	0.995***	0.995***
	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)
Observations	927	974	887	1,814	598	1,614	763	1,361

Note: This table reports coefficients from linear regressions of individual-level measures of time preferences on the sociodemographic characteristics of individuals. Model 4 compares Democrats and Republicans and Model 8 compares Ideology: Left and Ideology: Right. Standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

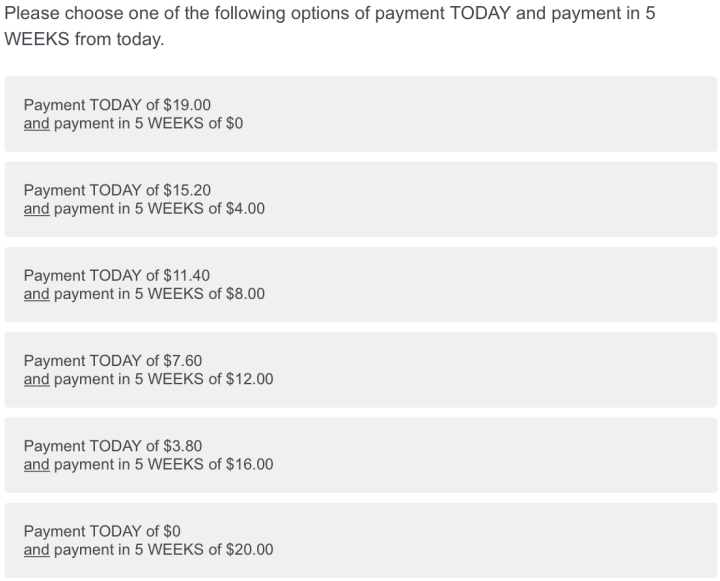
Table A.17: Political Groups and the Sociodemographic Predictors of Patience (Binary, Weighted Data)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Partisanship				Ideology			
	Republican	Independent	Democrat	Interactions	Right	Middle	Left	Interactions
Age: 35-49	0.004	0.095***	0.010	0.011	0.054	0.071***	-0.027	-0.026
	(0.040)	(0.035)	(0.041)	(0.040)	(0.052)	(0.027)	(0.044)	(0.044)
Age: 50-64	0.013	0.023	0.033	0.031	0.058	0.033	-0.022	-0.021
	(0.039)	(0.039)	(0.041)	(0.041)	(0.050)	(0.029)	(0.047)	(0.047)
Age: 65+	-0.021	0.072*	0.072*	0.064	-0.031	0.087***	-0.026	-0.025
	(0.041)	(0.042)	(0.042)	(0.042)	(0.052)	(0.031)	(0.049)	(0.049)
Education: High School	0.143**	0.092*	0.010	0.003	0.280***	-0.001	0.199***	0.200***
	(0.059)	(0.048)	(0.062)	(0.063)	(0.079)	(0.038)	(0.063)	(0.063)
Education: Some College	0.126**	0.107**	0.029	0.023	0.215***	0.018	0.217***	0.217***
	(0.058)	(0.046)	(0.060)	(0.060)	(0.077)	(0.037)	(0.059)	(0.059)
Education: BA or higher	0.168***	0.101**	-0.008	-0.017	0.267***	0.024	0.206***	0.207***
	(0.061)	(0.051)	(0.064)	(0.064)	(0.082)	(0.041)	(0.064)	(0.064)
Income: Lower Middle	0.069*	0.003	0.075*	0.074*	0.066	0.035	0.004	0.003
	(0.040)	(0.036)	(0.042)	(0.042)	(0.050)	(0.028)	(0.046)	(0.046)
Income: Upper Middle	-0.013	0.048	0.115***	0.111**	-0.036	0.028	0.077	0.078
	(0.043)	(0.040)	(0.044)	(0.044)	(0.052)	(0.031)	(0.049)	(0.049)
Income: High	0.030	0.038	0.153***	0.147***	0.009	0.080**	0.048	0.048
	(0.043)	(0.040)	(0.047)	(0.047)	(0.053)	(0.031)	(0.051)	(0.051)
Female	0.002	0.091***	0.080***	0.040*	0.055	0.052**	0.048	0.051**
	(0.028)	(0.027)	(0.030)	(0.020)	(0.035)	(0.021)	(0.032)	(0.024)
White	0.092*	0.048	0.004	0.033	0.057	0.028	0.071*	0.066**
	(0.051)	(0.036)	(0.034)	(0.028)	(0.054)	(0.027)	(0.041)	(0.033)
Republican				-0.035				
				(0.080)				
Ideology: Right								-0.031
								(0.088)
Republican X Age: 35-49				-0.006				
				(0.057)				
Republican X Age: 50-64				-0.009				
				(0.056)				
Republican X Age: 65+				-0.072				
				(0.058)				
Republican X High School				0.148*				
				(0.086)				
Republican X Some College				0.113				
				(0.083)				
Republican X BA or higher				0.196**				
				(0.088)				
Republican X Income: Lower M				-0.008				
				(0.058)				
Republican X Income: Upper M				-0.125**				
				(0.061)				
Republican X Income: High				-0.116*				
				(0.064)				
Ideology: Right X Age: 35-49								0.08
								-0.067
Ideology: Right X Age: 50-64								0.078
								-0.067
Ideology: Right X Age: 65+								-0.008
								-0.07
Ideology: Right X High School								0.078
								-0.1
Ideology: Right X Some College								-0.004
								-0.097
Ideology: Right X BA or higher								0.058
								-0.103
Ideology: Right X Income: Lower M								0.063
								-0.068
Ideology: Right X Income: Upper M								-0.114
								-0.071
Ideology: Right X Income: High								-0.039
								-0.073
Constant	0.381***	0.400***	0.424***	0.438***	0.271***	0.497***	0.299***	0.300***
	(0.065)	(0.050)	(0.063)	(0.061)	(0.083)	(0.041)	(0.057)	(0.055)
Observations	1,286	1,324	1,145	2,431	820	2,252	943	1,763

Note: This table reports coefficients from linear regressions of individual-level measures of time preferences (dichotomized at the median) on the sociodemographic characteristics of individuals. Model 4 compares Democrats and Republicans and Model 8 compares Ideology: Left and Ideology: Right. Standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

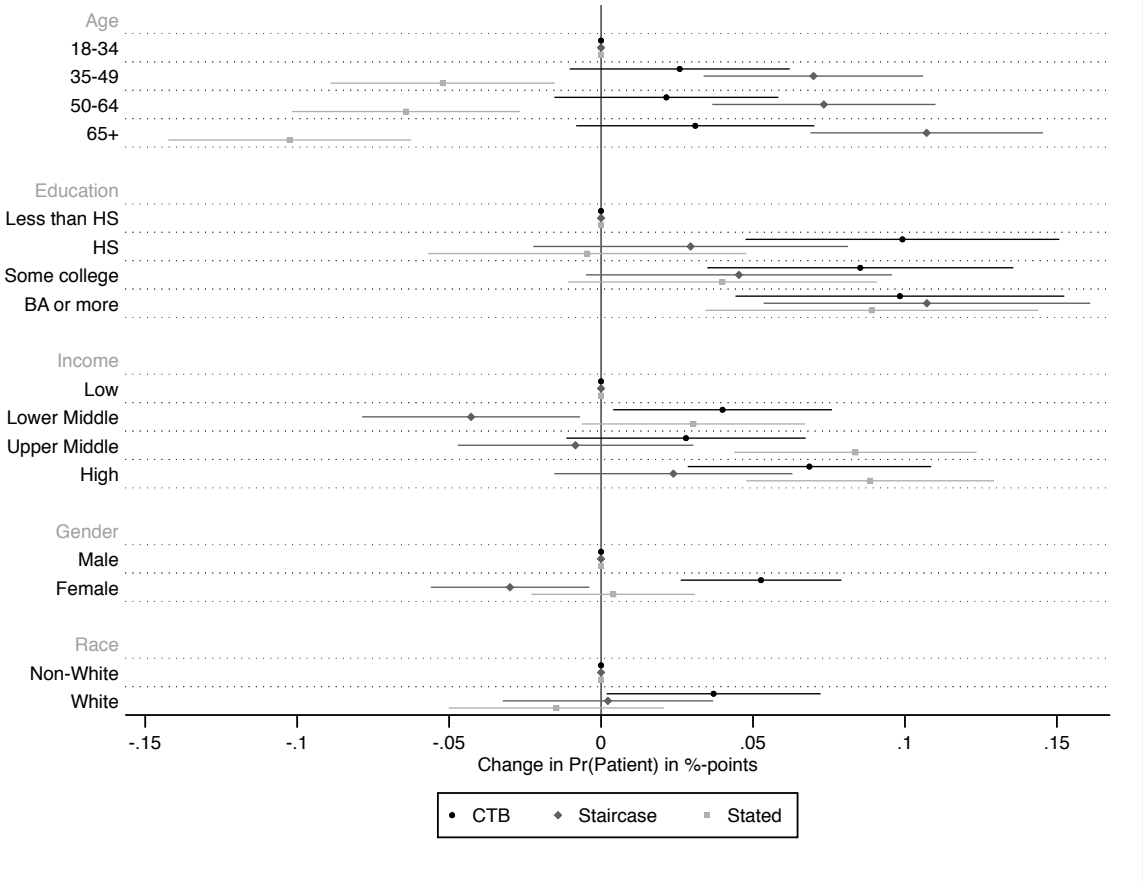
K Appendix Figures

Figure A.1: CTB Example Screenshot



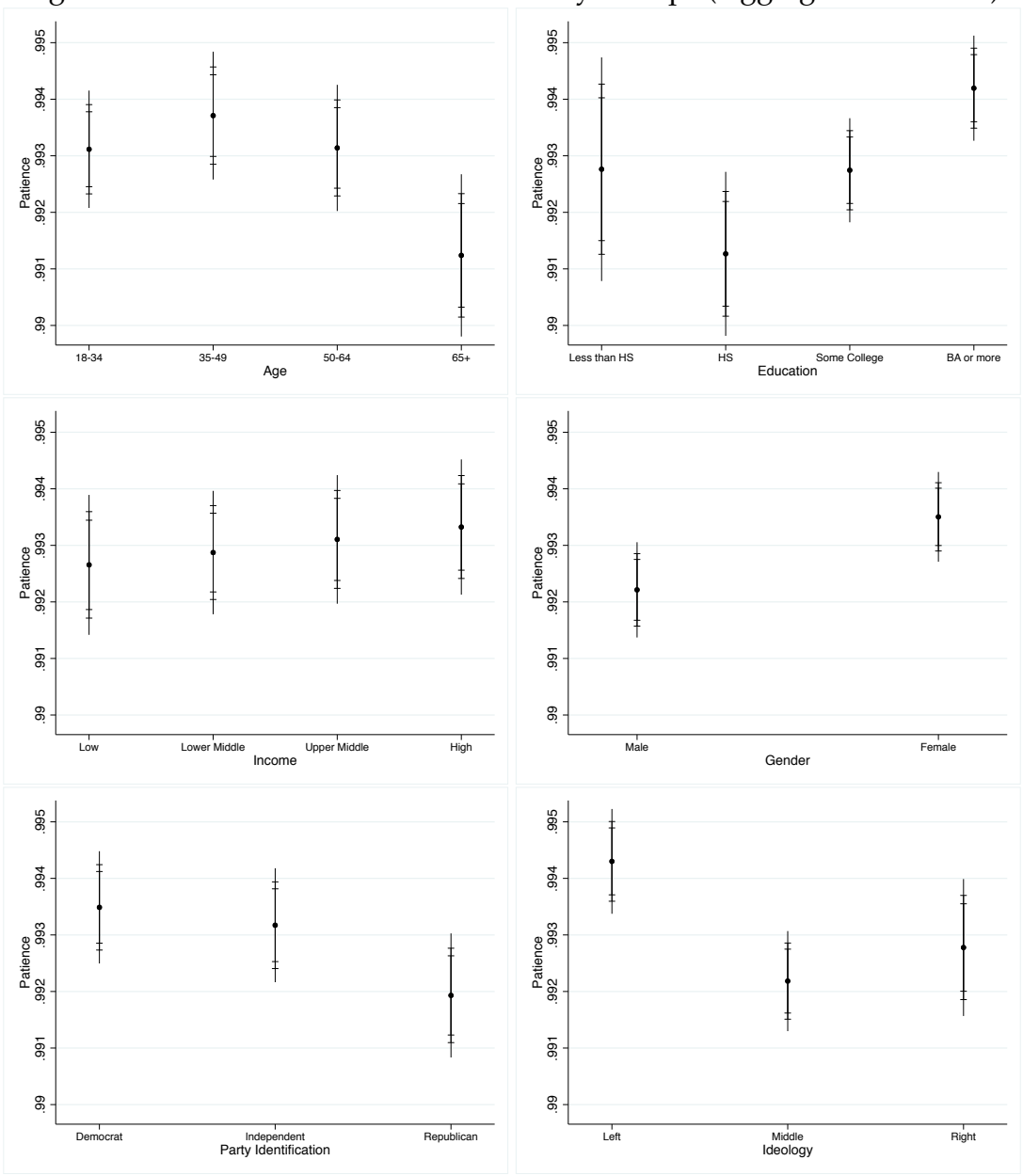
Note: This figure shows a screenshot of a CTB choice task.

Figure A.2: The Socio-Demographic Predictors of Patience by Elicitation Method



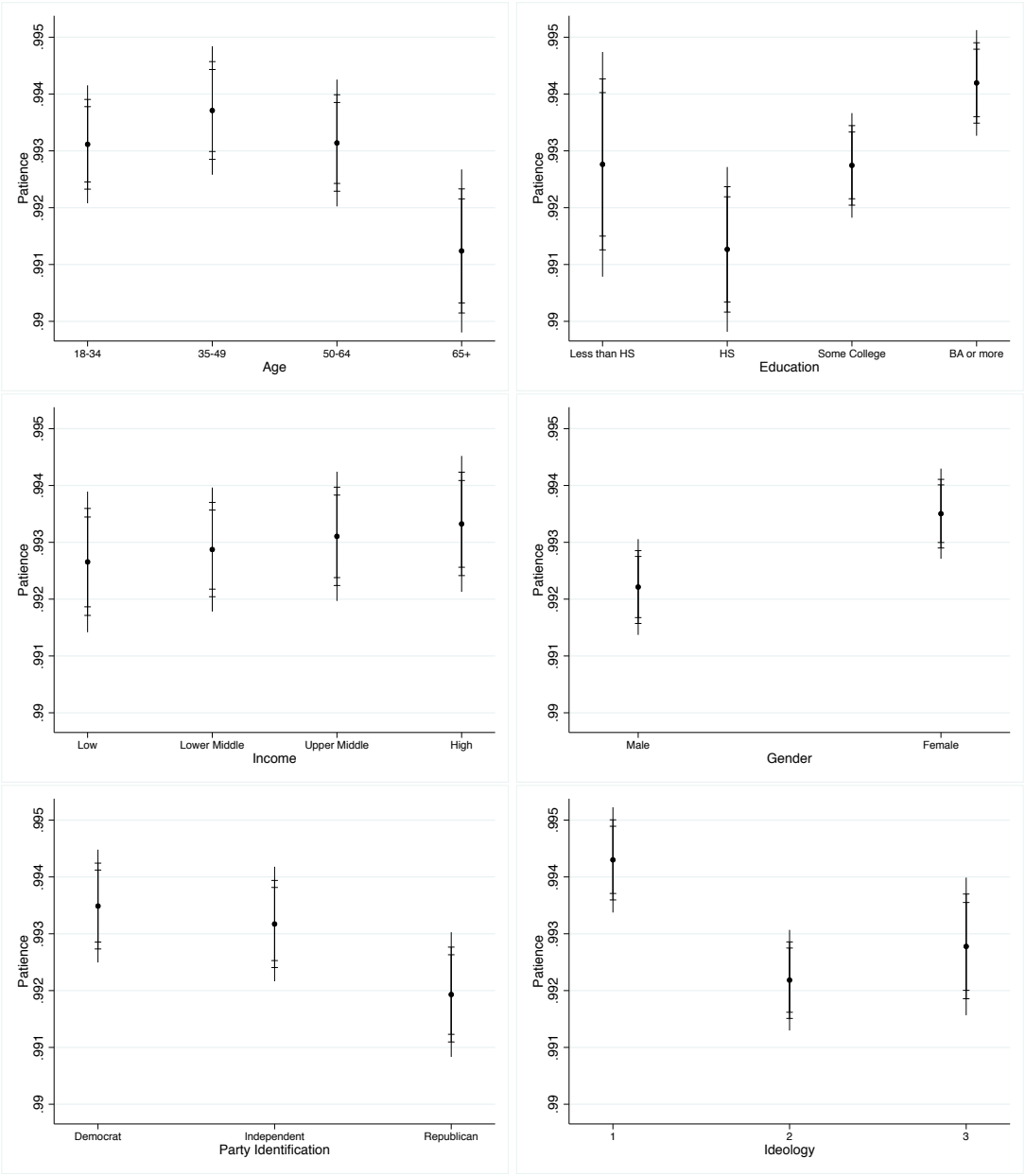
Note: This figure shows coefficients from linear regressions of a binary patience indicator (split at the median) on sociodemographic variables. Error bars indicate 95% robust confidence intervals. Point estimates without confidence intervals denote reference categories. Model 2 includes interactions between benefits and timing indicators. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. N(CTB)=2,975, N(Staircase)=4,015, N(Stated)=4,015.

Figure A.3: The Distribution of Patience by Groups (Aggregate Estimates)



Note: This plot reports aggregate-level patience (CTB) by group with 90%, 95%, and 99% confidence intervals.

Figure A.4: The Distribution of Patience by Groups (Aggregate Estimates with Weights)



Note: This plot reports aggregate-level patience (CTB) by group with 90%, 95%, and 99% confidence intervals. Patience parameters have been estimated on the weighted data.