Online Appendix: Political Identity and Trust

Pablo Hernandez-Lagos   Dylan Minor

New York University, Abu Dhabi   Northwestern University

Abstract

We present the survey instrument for the main treatments and the belief treatments. We also describe the extent to which participants changed their declared partisan inclination in the experimental survey relative to the pre-screen survey. We explore a potential preference channel for identity to affect trust and whether identity treatment effects are moderated by covariates. Finally, we present the results on the effect of revealing previous reciprocation on trust beliefs and trust behavior.

Keywords: *Trust, Beliefs, Political Identity*

1 Survey instrument, main treatments: no identity

* For the following questions, you will be paid in Amazon gift certificates according to how you choose to answer them.

Q1 You will receive a payment according to your decision in the following scenario: You have a total of $5 to divide between yourself and another survey participant in any way you want (in increments of $1).

_____ Decide how many dollars you hold (1)

_____ Decide how many dollars you pass (2)

Q2 You will receive a payment based on your decision in the following scenario: You will be matched to another survey participant. You need to decide between the following two options: 1) You and the other participant each receive $5 2) You let the other participant choose. He/she will decide between one of two options: i) You receive $0 and he/she receives $14 or ii) Each of you receives $10. Please enter your decision:

* I choose option 1) (1)

* I choose option 2) (2)

Q3 You will receive a payment based on your decision in the following scenario: You will be matched to another survey participant. The other participant can choose for each of you to receive $5 or instead he/she can let you decide between one of two options: 1) You and the other participant each receive $10 2) You receive $14 and the other participant receives $0 In case the other participant lets you choose, please enter your decision:

* I choose option 1) (1)

* I choose option 2) (2)

Q4 You will receive an additional $3 if you guess the correct percentage range of participants that choose option 1) for the above question: Between:

* 0 and 9% (1)

* 10 and 19% (2)

* 20 and 29% (3)

* 30 and 39% (4)

* 40 and 49% (5)

* 50 and 59% (6)

* 60 and 69% (7)

* 70 and 79% (8)

* 80 and 89% (9)

* 90 and 100% (10)

Q5 Please answer the following questions:

A bat and a ball cost $1.10 in total. The bat costs $1.00 more than the ball. How much does the ball cost? (1)

If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets? (2)

In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half of the lake? (3)

Q6 What is your political orientation?

* Very Liberal (1)

* Liberal (2)

* Moderate (3)

* Conservative (4)

* Very Conservative (5)

* Don't know (6)

Q7 What is your annual household income?

* less than $10,000 (1)

* $10,001 to $20,000 (2)

* $20,001 to $50,000 (3)

* $50,001 to $75,000 (4)

* $75,001 to $100,000 (5)

* $100,001 to $150,000 (6)

* $150,001 to $250,000 (7)

* $250,001 to $350,000 (8)

* more than $350,000 (9)

Q8 Based on your political views, would you consider yourself to be:

* A Democrat (1)

* A Republican (2)

* An Independent (3)

* Other (4)

* Click continue to finish your survey.You will receive your total final payment in the coming week. Thank you for participating!

2 Survey instrument, main treatments: identity

(The additional information is highlighted only in this Online Appendix in **bold font** for exposition purposes. Such information or any other was not made salient in the questions participants faced.)

* For the following questions, you will be paid in Amazon gift certificates according to how you choose to answer them.

Q1 You will receive a payment according to your decision in the following scenario: You have a total of $5 to divide between yourself and another survey participant in any way you want (in increments of $1).

_____ Decide how many dollars you hold (1)

_____ Decide how many dollars you pass (2)

Q2 You will receive a payment based on your decision in the following scenario: You will be matched to another survey participant **who considered him or herself to be [POLITICAL IDENTITY]**. You need to decide between the following two options: 1) You and the other participant each receive $5 2) You let the other participant choose. He/she will decide between one of two options: i) You receive $0 and he/she receives $14 or ii) Each of you receives $10. Please enter your decision:

* I choose option 1) (1)

* I choose option 2) (2)

Q3 You will receive a payment based on your decision in the following scenario: You will be matched to another survey participant **who considered him or herself to be [POLITICAL IDENTITY]**. The other participant can choose for each of you to receive $5 or instead he/she can let you decide between one of two options: 1) You and the other participant each receive $10 2) You receive $14 and the other participant receives $0 In case the other participant lets you choose, please enter your decision:

* I choose option 1) (1)

* I choose option 2) (2)

Q4 You will receive an additional $3 if you guess the correct percentage range of [**POLITICAL IDENTITY**] participants that choose option 1) for the above question: Between:

* 0 and 9% (1)

* 10 and 19% (2)

* 20 and 29% (3)

* 30 and 39% (4)

* 40 and 49% (5)

* 50 and 59% (6)

* 60 and 69% (7)

* 70 and 79% (8)

* 80 and 89% (9)

* 90 and 100% (10)

Q5 Please answer the following questions:

A bat and a ball cost $1.10 in total. The bat costs $1.00 more than the ball. How much does the ball cost? (1)

If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets? (2)

In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half of the lake? (3)

Q6 What is your political orientation?

* Very Liberal (1)

* Liberal (2)

* Moderate (3)

* Conservative (4)

* Very Conservative (5)

* Don't know (6)

Q7 What is your annual household income?

* less than $10,000 (1)

* $10,001 to $20,000 (2)

* $20,001 to $50,000 (3)

* $50,001 to $75,000 (4)

* $75,001 to $100,000 (5)

* $100,001 to $150,000 (6)

* $150,001 to $250,000 (7)

* $250,001 to $350,000 (8)

* more than $350,000 (9)

Q8 Based on your political views, would you consider yourself to be:

* A Democrat (1)

* A Republican (2)

* An Independent (3)

* Other (4)

* Click continue to finish your survey.You will receive your total final payment in the coming week. Thank you for participating!

2.1 Survey instrument, beliefs treatment

(The additional information is highlighted only in this Online Appendix in **bold font** for exposition purposes. Such information or any other was not made salient in the questions

participants faced.)

* For the following questions, you will be paid in Amazon gift certificates according to how you choose to answer them.

Q1 You will receive a payment according to your decision in the following scenario: You have a total of $5 to divide between yourself and another survey participant in any way you want (in increments of $1).

_____ Decide how many dollars you hold (1)

_____ Decide how many dollars you pass (2)

Q2 You will receive a payment based on your decision in the following scenario: You will be matched to another survey participant **who considered him or herself to be [POLITICAL IDENTITY]**. You need to decide between the following two options: 1) You and the other participant each receive $5 2) You let the other participant choose. He/she will decide between one of two options: i) You receive $0 and he/she receives $14 or ii) Each of you receives $10. Please enter your decision:

In previous surveys, when the other [POLITICAL IDENTITY] participant was designated to choose, he/she chose alternative ii) "Each of you receives $10" X% of the time. Please enter your decision:

* I choose option 1) (1)

* I choose option 2) (2)

Q3 You will receive a payment based on your decision in the following scenario: You will be matched to another survey participant **who considered him or herself to be [POLITICAL IDENTITY]**. The other participant can choose for each of you to receive $5 or instead he/she can let you decide between one of two options: 1) You and the other participant each receive $10 2) You receive $14 and the other participant receives $0 In case the other participant lets you choose, please enter your decision:

* I choose option 1) (1)

* I choose option 2) (2)

Q4 You will receive an additional $3 if you guess the correct percentage range of [**POLITICAL IDENTITY**] participants that choose option 1) for the above question: Between:

* 0 and 9% (1)

* 10 and 19% (2)

* 20 and 29% (3)

* 30 and 39% (4)

* 40 and 49% (5)

* 50 and 59% (6)

* 60 and 69% (7)

* 70 and 79% (8)

* 80 and 89% (9)

* 90 and 100% (10)

Q5 Please answer the following questions:

A bat and a ball cost $1.10 in total. The bat costs $1.00 more than the ball. How much does the ball cost? (1)

If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets? (2)

In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half of the lake? (3)

Q6 What is your political orientation?

* Very Liberal (1)

* Liberal (2)

* Moderate (3)

* Conservative (4)

* Very Conservative (5)

* Don't know (6)

Q7 What is your annual household income?

* less than $10,000 (1)

* $10,001 to $20,000 (2)

* $20,001 to $50,000 (3)

* $50,001 to $75,000 (4)

* $75,001 to $100,000 (5)

* $100,001 to $150,000 (6)

* $150,001 to $250,000 (7)

* $250,001 to $350,000 (8)

* more than $350,000 (9)

Q8 Based on your political views, would you consider yourself to be:

* A Democrat (1)

* A Republican (2)

* An Independent (3)

* Other (4)

* Click continue to finish your survey.You will receive your total final payment in the coming week. Thank you for participating!

3   Switchers

This section explores the behavior of those who declared different partisanship in the E-lab pre-screen survey compared to the experimental survey. This analysis is important because the E-lab pre-screen survey was not part of any experiment. Everybody answered the same set of questions in the same order and no payoffs were derived from doing so. In our experimental survey, on the other hand, we asked for partisanship after participants decided whether to trust and reciprocate conditional on their partner's partisan identity. Table 1 shows the numbers of those who switched. In general, the majority stuck to their pre-screen partisanship: 89% of Democrats (221 out of 247) and 76% of Republicans (182 out of 238).

Depending on the identity of the matching partner, individuals may feign partisanship affiliation following reprobate behavior. Table 2 shows the number of individuals who switched partisanship per treatment. Overall, participants who switch to the opposite party tend to do it when they are not matched with someone with the same partisan identity, although the difference is only significant for (pre-screened) Democrats. Precisely, none of the 100 Democrats switched to Republican, and only 4 did to either Independent or Other (those

Table 1: **Differences in partisanship between Elab pre-screen survey and experimental survey.**

	Experimental survey				
Pre-screen survey	Democrat	Republican	Indep.	Other	Total
Republican	**39**	**182**	**16**	**1**	**238**
	16.39	76.47	6.72	0.42	100
Democrat	**221**	**14**	**9**	**3**	**247**
	89.47	5.67	3.64	1.21	100

who switch account for 4% in this treatment, chi-squared p-value = 0.029) when matched with a Democrat. From the 99 Republicans matched with a Republican, 16 switched to Democrat and 6 to Independent or Other (those who switched account for 22% in this treatment, chi-squared p-value = 0.785).

Table 2: **Differences in partisanship per treatment between Elab pre-screen survey and experimental survey.**

	Democrats (Pre-screen survey)				Republicans (Pre-screen survey)			
Treatment	Dem.	Rep.	Ind./Other	Total	Dem.	Rep.	Ind./Other	Total
matched anyone	85	10	5	100	17	72	6	95
% of total	85	10	5	100	17.9	75.8	6.3	100
matched Democrat	96	0	4	100	6	33	5	44
% of total	96	0	4	100	13.6	75	11.4	100
matched Republican	40	4	3	47	16	77	6	99
% of total	85.1	8.5	6.4	100	16.2	77.8	6.1	100
Total	221	14	12	247	39	182	17	238

One important concern that arises is whether declaring different partisan identity is in part caused by their previous behavior and the partisan identity of the partner. For example, Republicans may want to deliver a statement that even Democrats trust Republicans. Our data is consistent with this: 16 of the 39 Republicans who switched to Democrats after the experiment were matched with Republicans. 81% of them (13 out of 16) trusted a

Republican Player B, which is significantly larger than the 53% of the 77 who did not switch to Democrat (41 out of 77, chi-squared p-value = 0.039).[1] Another reason for the switch may be to feign partisanship when the participant did not trust. Consistent with this, we observe Republicans who switched to Democrat and were matched with an anonymous Player B (17 out of 95) trusted the anonymous partner significantly less often than those who did not switch (72 out of 95): 35% compared to 61%, chi-squared p-value = 0.054.[2] This seemingly strategic behavior is not particular to Republicans. Democrats may also feign partisan identity to make Republicans "look bad." Democrats who were matched with a Republican, for example, who switched to Republican (4 out of 47) never trusted a Republican Player B, while those who did not switch (40 out of 47, the remaining 3 switched to either Independent or Other) did so 42% of the time. Although this difference is marginally significant at conventional levels (chi-squared p-value = 0.096), we cannot completely rule out that a few individuals may be trying to feign partisan identity to undermine the other party's image in the eyes of the experimenter.

4   Interactions

Table 3 here complements Table 4 in the paper in that it shows the results from empirical models that include interactions between the same identity dummy and age, gender and altruism, as well as the ones reported in the paper (cognitive reflection, college-education and income). We are interested in whether each individual attribute moderates the treatment effect of political identity found in the data. In particular, we look at whether the coefficient on the interaction term in each specification is different from zero. For Democrat Players A, Table 3 shows that college-education is the only characteristic in which the effect of identity differs across levels, see column (2). The coefficient of the identity indicator is positive and significant, but the sum of this coefficient and the interaction coefficient is not significantly different from zero (see column (2), bottom row F's p-value = 0.21). Our interpretation of this result is that individuals with no college education are biased towards in-groups:

---

[1]Note that there were 6 Republicans who switched to either Independent or Other and were matched with a Republican. With these, we account for the 99 individuals who were matched with Republicans in the experimental survey (16+77+6=99).

[2]The remaining 6 (17+72+6=95) switched from declaring being Republican in the E-lab pre-screen survey to declaring that they were either Independent or Other in the experimental survey.

They believe that fellow Democrat Players B are more trustworthy than Republican Players B. Thus, individuals who have at least college education show no bias in favor of fellow Democrat Players B. The average (across levels within each covariate) treatment effect, however, remains positive. One way to see this is by noting that either the coefficient of the identity indicator or the sum of such coefficient and the coefficient of the interaction are positive at conventional levels of significance (see columns from (1) to (6)).

Table 3: **Effect of political identity on trust beliefs.**

Dependent variable:						Beliefs						
Player A (Sender):			Democrat						Republican			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Is	0.12	0.30	0.20	0.18	0.04	0.17	-0.03	0.03	0.06	-0.04	0.02	0.05
	(0.06)	(0.07)	(0.07)	(0.05)	(0.07)	(0.07)	(0.06)	(0.08)	(0.08)	(0.06)	(0.06)	(0.06)
CRT34	-0.03						0.06					
	(0.07)						(0.07)					
Is_x_CRT34	0.06						0.05					
	(0.08)						(0.08)					
College		0.10						0.03 				
		(0.07)										
Is_x_College		-0.24										
		(0.09)										
more75k			-0.08						-0.01			
			(0.07)						(0.08)			
Is_x_Income			-0.08						-0.09			
			(0.08)						(0.09)			
Age				0.01						-0.09		
				(0.07)						(0.07)		
Is_x_Age				-0.07						0.07		
				(0.09)						(0.08)		
Female_					-0.17						0.02	
					(0.07)						(0.07)	
Is_x_Female					0.17						-0.05	
					(0.09)						(0.08)	
giving (Altruism)						-0.01						-0.00
						(0.03)						(0.03)
Is_x_Altruism						-0.01						-0.04
						(0.04)						(0.04)
_cons	0.54	0.45	0.57	0.51	0.64	0.53	0.59	0.66	0.63	0.68	0.62	0.63
	(0.05)	(0.06)	(0.06)	(0.04)	(0.06)	(0.05)	(0.05)	(0.07)	(0.07)	(0.05)	(0.05)	(0.05)
N	147	147	147	147	147	147	143	143	143	143	143	143
R-sq	0.088	0.150	0.163	0.093	0.119	0.092	0.049	0.030	0.031	0.016	0.004	0.022
Ho: $\gamma+\gamma_X=0$ pval	0.00	0.21	0.02	0.10	0.00	0.00	0.64	0.65	0.51	0.68	0.64	0.84

The table shows a linear model in which the dependent variable is Player A's trust beliefs. The treatment variable consists of an indicator variable indicating whether Player B (receiver) is from the same partisan identity, I_s. We include a measure of individual characteristic and an interaction between the same-identity indicator and the characteristic in each specification (column). Columns (1)-(6) (resp., (7)-(12)) show the results for Democrat (resp., Republican) Player A. The bottom row shows the p-value of a F-statistic that tests whether the treatment effect for high-level types is different from zero. Standard errors in parentheses.

For Republican Players A, no individual characteristic seems to moderate (or exacerbate)

the null effect of political identity on beliefs, as the non-significant coefficients of the interactions in each column from (7) to (12) in Table 3 show. Consequently, no subgroup presents a significant treatment effect at conventional levels either.

5 A preference channel for identity

The estimates of the constant coefficient (μ_I) in Table 5 in the paper also provide information about the (net) benefit for Player A if Player B defects, $M(I)$, for different treatments. A higher $M(I)$ suggests a stronger preference for trusting a Player B of identity I in case Player B defects. In this sense, M is a measure of a preference for giving conditional on identity match. Although not part of the main hypotheses in this paper, it is instructive to check for differences in the constant across regressions (1) and (2) and across regressions (3) and (4). Also using the aforementioned seemingly unrelated regression model, we fail to reject the hypothesis of equality of the constant for Democrats (one-sided standard normal test p-value is 0.16) and marginally reject equality for Republicans (one-sided standard normal test p-value is 0.1). This suggests that a preference for giving (to in-groups) may not be playing an important role. When repeating the same procedure but now over the sample of strongly Democrats and strongly Republicans, the qualitative results remain the same. Another test would be to compare the frequency of trust when beliefs are pessimistic. If there is a baseline level of trust favoring in-group partners, then this effect should be present even when $p = 0$. From equation (2) in the paper, $p = 0$ implies that trust is determined by its baseline trust $M(I)$. Unfortunately, there are very few extremely pessimistic individuals (only four participants in the D-D and D-R conditions and one in the R-D and R-R conditions stated beliefs between 0-9%). We therefore compare the frequency counts Democrat Players A trust Democrat Players B and the frequency counts they trust Republican Players B, when Players A beliefs are relatively pessimistic: 1) 0-19%, 2) 0-29%, and 3) 0-39%. In each of these three cases we compute the Pearson's chi-squared statistic for the hypothesis that Player A's trust and Player B's identity are independent of each other. We fail to reject independence in each of these three cases and the p-values are: 1) 0.49, 2) 0.24, and 3) 0.61. We repeat the exercise for Republican Players A. The corresponding p-values are: 1) 0.51, 2) 0.33, and 3) 0.07. That is, we reject independence of Player A's baseline trust and Player B's identity at 10% level only when beliefs are in the 0-39% range. The significance

goes away when we restrict the sample to strongly Republican Players A (from 28 to 15 participants, p-value = 0.14). All the other results presented in this paragraph are robust to restricting the sample to strongly Democrat and strongly Republican Players A. In sum, our data lend little support to a preference channel affecting trust. These results, however, should be considered with caution as our experimental design is not meant to identify a preference channel of political identity on trust behavior.

6 Revealing previous reciprocation: effect on beliefs by demographic groups

Table 4 shows the results of a simple regression model of beliefs on a dummy variable that takes the value of 1 for the belief treatment and 0 for the corresponding treatment in which beliefs are not revealed, a variable measuring an individual attribute (cognitive reflection, at least college, annual income over 75k, age, female, amount given in the dictator game) and an interaction between the belief-treatment indicator and each characteristic. The point of the exercise is to assess whether each individual characteristic moderates (i.e., the treatment effect differs across groups) the effect of revealing positive information by inspecting the coefficient of the interaction term, and to asses the differential treatment effects, if any, for low and high levels of the covariate, by looking at the belief-treatment coefficient and the belief-treatment plus the interaction coefficient, respectively.

Columns (1)-(6) show the results for Democrat Players A matched to Democrat Players B and columns (7)-(12) for Democrat Players A matched to Republican Players B. When Player B is Democrat, we observe that college education, income and age moderate the effect of information on Players A's trust beliefs. The coefficient of the interaction term is positive and significant at conventional levels (see columns 2, 3 and 4 in Table 4). Thus, individuals featuring higher levels on these variables, as well as female participants, also show more optimistic beliefs when presented with positive information about the trustworthiness of Player B. Individuals featuring lower levels on these variables do not show more negative beliefs after revealing information, except those who have less than college education. When Player B is Republican, income and being female moderate the mild treatment effect of information on beliefs (see the coefficient on the interaction in columns 9 and 11). Thus, high

Table 4: **Effect of beliefs treatment on trust beliefs: Democrat Players A.**

	Democrat Player A (Sender)											
	Democrat Player B (Receiver)						Republican Player B (Receiver)					
Dependent var:						Beliefs						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
BT	0.12	-0.34	-0.04	0.01	0.03	0.04	0.07	0.14	-0.01	0.08	-0.05	0.03
	(0.06)	(0.12)	(0.07)	(0.05)	(0.06)	(0.05)	(0.08)	(0.07)	(0.06)	(0.05)	(0.07)	(0.07)
CRT34	0.03						-0.03					
	(0.04)						(0.07)					
BT_x_CRT34	-0.09						0.02					
	(0.08)						(0.10)					
College		-0.14						0.10				
		(0.04)						(0.07)				
BT_x_College		0.49						-0.06				
		(0.12)						(0.11)				
more75k			-0.16						-0.08			
			(0.04)						(0.07)			
BT_x_Income			0.17						0.32			
			(0.08)						(0.11)			
Age				-0.06						0.01		
				(0.04)						(0.07)		
BT_x_Age				0.18						0.07		
				(0.08)						(0.15)		
Female					-0.01						-0.17	
					(0.04)						(0.07)	
BT_x_Female					0.08						0.21	
					(0.08)						(0.10)	
giving						-0.02						-0.01
						(0.02)						(0.03)
BT_x_Altruism						0.02						0.06
						(0.04)						(0.04)
_cons	0.66	0.75	0.77	0.69	0.67	0.70	0.54	0.45	0.57	0.51	0.64	0.53
	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)	(0.05)	(0.06)	(0.05)	(0.04)	(0.06)	(0.05)
N	146	146	146	146	146	146	95	95	95	95	95	95
R-sq	0.032	0.149	0.121	0.056	0.033	0.034	0.036	0.057	0.123	0.038	0.100	0.062
Ho:BT+BT*X=0, pval	0.48	0.00	0.00	0.00	0.04	0.11	0.11	0.33	0.00	0.28	0.02	0.05

The table shows a linear model in which the dependent variable is the belief a given Player A holds about Players B's trustworthiness. The treatment variable is an indicator equal to 1 if the observation belongs to the beliefs treatment and 0 if it belongs to the corresponding treatment in which beliefs were not revealed. We include covariates and their interaction with the beliefs-treatment dummy in each specification (column). Columns (1)-(6) show the results for Democrat Player A matched to a Democrat Player B, columns (7)-(12) the results for Democrat Player A matched to a Republican Player B. Standard errors in parentheses.

income participants and female participants present a positive treatment effect of information on beliefs (see bottom row in columns 9 and 11). Participants who report less than college education participants also respond more to information, as suggested by the estimates in column 8. All in all, individual characteristics, specially income, seem to matter in how people respond to information.

Table 5: **Effect of beliefs treatment on trust beliefs: Republican Players A.**

	Republican Player A (Sender)											
	Democrat Player B (Receiver)						Republican Player B (Receiver)					
Dependent var:						Beliefs						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
BT	-0.01 (0.07)	-0.11 (0.08)	-0.07 (0.08)	-0.13 (0.07)	-0.03 (0.08)	-0.04 (0.07)	0.03 (0.07)	-0.10 (0.05)	-0.12 (0.05)	-0.07 (0.04)	-0.03 (0.06)	-0.11 (0.05)
CRT34	0.06 (0.07)						0.11 (0.04)					
BT_x_CRT34	-0.05 (0.10)						-0.13 (0.08)					
College		-0.04 (0.08)						-0.10 (0.05)				
BT_x_College		0.14 (0.11)						0.06 (0.08)				
more75k			-0.01 (0.08)						-0.10 (0.05)			
BT_x_Income			0.05 (0.10)						0.11 (0.08)			
Age				-0.09 (0.07)						-0.03 (0.04)		
BT_x_Age				0.20 (0.10)						0.26 (0.16)		
Female					0.02 (0.07)						-0.03 (0.04)	
BT_x_Female					-0.03 (0.10)						-0.01 (0.07)	
giving						-0.00 (0.03)						-0.04 (0.02)
BT_x_Altruism						-0.00 (0.04)						0.08 (0.05)
_cons	0.59 (0.05)	0.66 (0.07)	0.63 (0.07)	0.68 (0.05)	0.62 (0.06)	0.63 (0.06)	0.57 (0.03)	0.69 (0.04)	0.70 (0.04)	0.64 (0.03)	0.64 (0.03)	0.67 (0.03)
N	91	91	91	91	91	91	149	149	149	149	149	149
R-sq	0.018	0.034	0.013	0.051	0.010	0.009	0.057	0.042	0.043	0.027	0.016	0.040
Ho:BT+BT*X, pval	0.32	0.68	0.75	0.37	0.41	0.39	0.02	0.49	0.94	0.21	0.39	0.53

The table shows a linear model in which the dependent variable is the belief a given Player A holds about Players B's trustworthiness. The treatment variable is an indicator equal to 1 if the observation belongs to the beliefs treatment and 0 if it belongs to the corresponding treatment in which beliefs were not revealed. We include covariates and their interaction with the beliefs-treatment dummy in each specification (column). Columns (1)-(6) show the results for Republican Player A matched to a Democrat Player B, columns (7)-(12) the results for Republican Player A matched to a Republican Player B. Standard errors in parentheses.

Table 5 shows the analogous results, but now for the sample of Republican Players A. Revealing information does not have a significant effect on trust beliefs, not even for

the sub-populations of interest when Player B is Democrat. And although there are no moderating effects when Player B is Republican, less-than-college, income below 75k and selfish participants in general become less optimistic after revealing positive information about the trustworthiness of fellow Republicans. These perhaps counter intuitive results may be due to motivated reasoning as we describe in the "Revealing previous reciprocation: effect on trust" section below.

Another interesting covariate to consider is whether individuals are strongly identified with their party. For example, when we focus only on Conservative or Very Conservative Republicans (strongly Republicans), average beliefs go down from 65% in the main treatment to 58% in the beliefs treatment in the R-R case (one-sided t-test p-value = 0.04) and they go down from 62% to 55% in the D-R case, although not significantly so (one-sided t-test p-value = 0.11). In contrast, Liberal or Very Liberal (strongly) Democrats seem to respond positively to the new information regardless of whether Player B has the same political identity. That is, in D-D treatments average beliefs go from 67% in the main treatment to 70% in the belief treatment (one-sided t-test p-value = 0.29); and in D-R treatments average beliefs go from 50% in the main treatment to 60% in the belief treatment (one-sided t-test p-value = 0.03). We find also a similar effect when looking at trust behavior in the next subsection.

7 Revealing previous reciprocation: effect on trust

We have seen beliefs positively change only for Democrats. Does this increase trust behavior? Table 6 summarizes the results. Focusing first on Democrat Players A, revealing reciprocation rates induces higher trust in Democrat Players B, from 63% (63 out of 100) to 76% (35 out of 46), although the difference is not statistically significant at conventional levels (chi-squared test p-value = 0.12). Revealing actual reciprocation rates does not affect trust when Player B is Republican. Trust rates go from 40% (19 out of 47) to 35% (17 out of 48, chi-squared p-value = 0.62).

For Republican Players A who face Democrat Players B the trust rates decrease across treatments, but they are not statistically different (66%, 29 out of 100 in the main treatment; and 51%, 24 out of 47, in the beliefs treatment, chi-squared test p-value = 0.15). For Republican Players A facing Republican Players B, the trust rate decreases by a significant

amount: 58% (57 out of 99) in the main treatment to 16% (8 out of 50) in the beliefs treatment (chi-squared test p-value < 0.01).

Table 6: **Trust across treatments.**

a.

Democrat's partner identity is	Democrat	Republican
Fraction of Trust (main treatment)	0.63	0.40
# of Players A who Trust/Total	63/100	19/47
Fraction of Trust (beliefs treatment)	0.76	0.35
# of Players A who Trust/Total	35/46	17/48
Difference	0.13	-0.05

b.

Republican's partner identity is	Democrat	Republican
Fraction of Trust (main treatment)	0.66	0.58
# of Players A who Trust/Total	29/44	57/99
Fraction of Trust (beliefs treatment)	0.51	0.16
# of Players A who Trust/Total	24/47	8/50
Difference	-0.15	-0.42

The table shows trust for Democrat (panel a) and Republican (panel b) Players A in the main and belief treatments.

One worth noting aspect of our data that can help explain the rather odd result in Table 6 is the difference in proportion of Conservative or Very Conservative (we label these participants "strongly") Republicans across treatments. In the R-R main treatment, 44 out of 99 (44%) declare to be strongly Republican and 37 out of 99 (37%) to be moderate Republicans. In the R-R belief treatment in contrast, 47 out of 50 (94%) declare to be strongly Republican and no one to be moderate Republican (the remaining 3 participants declare to be: 1 Very Liberal, 1 Liberal and 1 Don't Know). We do not observe such difference in terms of political orientation across the other treatments (i.e. across D-D main treatment and D-D belief treatment, across D-R main treatment and D-R belief treatment,

and across R-D main treatment and R-D belief treatment).

The difference in political orientation across R-R samples may give rise to an interesting interaction between strong party affiliation and information. When we look at the trust frequencies by political orientation, most strongly Republicans do trust (26 out of 44, 59%) in the main treatment, but they seldom trust (7 out of 47, 15%) in the belief treatment. Conditional on being a strongly Republican, this difference is significant across treatments (chi-squared p-value < 0.01). A similar pattern can be observed from the comparison of R-D treatments. Most strongly Republicans trust (23 out of 31, 74%) in the main treatment, but less than half do so (12 out of 32, 38%) in the belief treatment. Although not as strong as across the R-R treatments, this difference is also significant (chi-square p-value < 0.01) conditional on being strongly Republican.

This behavior by extreme partisans could reflect motivated reasoning. It may be the case, for example, that initially optimistic individuals are positively surprised by the high reciprocation rates, while pessimists are baffled by it. According to the literature on motivated skepticism, such pessimists may react in opposition to what the new information would prescribe (e.g., Taber and Lodge, 2006). A model of trust behavior driven by deviations in beliefs with respect to a reference-point goes beyond the scope of the paper.[3] Nevertheless, we can use our data to check whether trust behavior is consistent with motivated reasoning by looking at moderating effects of prior trust beliefs. In other words, optimistic individuals should trust more and pessimistic less after revealing high trustworthiness in previous experiments. This exercise, however, should be only considered as illustrative, as trust beliefs also depend on the information revealed.

Table 7 shows that for both Democrat and Republican Players A, extremely pessimistic individuals do trust significantly less Republican Players B (see coefficient on the belief treatment variable in columns (2) and (4), BT in the Table). For these individuals the magnitude of the difference between new (positive) information and priors is the largest. We interpret the negative and significant coefficient as consistent with motivated reasoning for pessimistic individuals, regardless of their political identity. Another interesting result is that positive beliefs seem to be associated with higher trust only for Democrat Players A matched to Republican Players B (the coefficient of the interaction BT x p (beliefs) in column (2)).

---

[3]Models like this in the literature include guilt-aversion as in Charness in Dufwenberg, 2006; or false consensus effects as in Butler et al. 2015, but only in the receiver (Player B) decision.

We interpret this as suggesting that optimistic beliefs are associated with a higher frequency of trust, after positive information about actual trustworthiness was revealed. In sum, it seems that motivated reasoning explains the odd result in Table 6 that Players A trust less Republican Players B.

Table 7: **Effect of beliefs treatment on trust behavior.**

	Dem. Player A		Rep. Player A	
	Dem. Player B	Rep. Player B	Dem. Player B	Rep. Player B
Dependent variable:		Trust		
	(1)	(2)	(3)	(4)
BT	0.21	-0.85	-0.56	-0.68
	(0.29)	(0.30)	(0.29)	(0.28)
p (beliefs)	0.85	0.30	0.08	0.49
	(0.21)	(0.24)	(0.34)	(0.19)
BT_x_p	-0.18	1.29	0.72	0.49
	(0.38)	(0.49)	(0.45)	(0.45)
_cons	0.06	0.25	0.61	0.27
	(0.15)	(0.14)	(0.23)	(0.13)
N	146	95	91	149
R-sq	0.141	0.147	0.106	0.223

The table shows a linear model in which the dependent variable is trust behavior (of Player A). The treatment variable is an indicator equal to 1 if the observation belongs to the beliefs treatment and 0 if it belongs to the corresponding treatment in which beliefs were not revealed. p represents reported beliefs. The belief treatment indicator interacts with the belief Player A reported in the beliefs treatment. Columns (1)-(2) show the results for Democrat Players A and columns (3)-(4) the results for Republican Player A. Standard errors in parentheses.

References

[1] Butler, Jeffrey V., Paola Giuliano, and Luigi Guiso (2015) "Trust, Values and False Consensus," *International Economic Review*, August, 56 (3), 889-915.

[2] Charness, Gary, and Dufwenberg, Martin (2006). Promises and partnership. *Economet-rica*, 74(6), 1579-1601.

[3] Taber, Charles S., and Milton Lodge (2006). Motivated skepticism in the evaluation of political beliefs. *American Journal of Political Science*, 50(3), 755-769.