

Appendix for “Aligning Taxes and Spending: Theory and Experimental Evidence,” by Daniel Hemel and Ethan Porter

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Demographic Question Text

Age

“Please describe your age based on the ranges provided below:” [18-24 / 25-34 / 35-44 / 45-54 / 55-64 / 65-74 / 75 or greater]

Hispanic

“Are you of Hispanic, Latino, or Spanish origin?”

[No / Yes / Prefer not to answer]

Race

“What is your race?”

[White / Black or African American / American Indian or Alaska Native / Asian / Native Hawaiian or Pacific Islander / Other]

Gender

“Please describe your gender:”

[Male / female]

State

“What is your state of residence?”

[Drop-down menu of 50 states and the District of Columbia]

Party Identification

“Please describe your political party affiliation:”

[Strong Republican / Not Strong Republican / Leans Republican / Undecided Independent or Other / Leans Democrat / Not Strong Democrat / Strong Democrat]

Household Income

“Please indicate your household income from the ranges below:”

Less than \$5,000 / \$5,000 to \$7,499 / \$7,500 to \$9,999 / \$10,000 to \$12,499 / \$12,500 to \$14,999 / \$15,000 to \$19,999 / \$20,000 to \$24,999 / \$25,000 to \$29,999 / \$30,000 to \$34,999 / \$35,000 to \$39,999 / \$40,000 to \$49,999 / \$50,000 to \$59,999 / \$60,000 to \$74,999 /

\$75,000 to \$84,999 / \$85,000 to \$99,999 / \$100,000 to \$124,999 / \$125,000 to \$149,999 /
\$150,000 to \$174,999 / \$175,000 or more]

Party ID and Treatment Effects

	Dependent variable:					
	(1)	You Pay For (FT)	(3)	(4)	You Break (FT)	(6)
You Pay For/Aligned		10.576*** (1.338)	10.619*** (1.324)			
You Pay For/Misaligned		6.463*** (1.364)	6.585*** (1.370)			
You Break/Aligned					4.654*** (1.675)	4.808*** (1.658)
You Break/Misaligned					2.108 (1.686)	2.259 (1.682)
Party ID				1.619*** 28.367*** (1.735)	1.629*** 26.022*** (2.005)	0.671 19.610** (7.965)
Constant	1.536*** 27.897*** (1.481)	1.562*** 22.187*** (1.632)	0.249 45.245*** (6.768)			
Observations	2,693	2,693	2,693	2,687	2,687	2,687
Other Covariates?	No	No	Yes	No	No	Yes
R ²	0.009	0.031	0.072	0.007	0.010	0.059
Adjusted R ²	0.009	0.030	0.050	0.007	0.009	0.037
Residual Std. Error	29.300 (df = 2691)	28.984 (df = 2689)	28.680 (df = 2632)	35.457 (df = 2685)	35.419 (df = 2683)	34.902 (df = 2626)
F Statistic	25.086*** (df = 1; 2691)	28.866*** (df = 3; 2689)	3.379*** (df = 60; 2632)	18.972*** (df = 1; 2685)	8.923*** (df = 3; 2683)	2.744*** (df = 60; 2626)

*p<0.1; **p<0.05; ***p<0.01

Table A1

Table A2

	Dependent variable:					
	You Pay For (Rate)			You Break (Rate)		
	(1)	(2)	(3)	(4)	(5)	(6)
You Pay For/Aligned		5.199*** (1.146)	5.177*** (1.142)			
You Pay For/Misaligned		3.126*** (1.159)	2.792** (1.160)			
You Break/Aligned					2.349* (1.355)	2.327* (1.358)
You Break/Misaligned					1.820 (1.362)	1.680 (1.360)
Party ID	0.771*** (0.286)	0.783*** (0.286)	-0.101 (0.373)	-0.042 (0.317)	-0.039 (0.317)	-0.601 (0.419)
Constant	16.254*** (1.288)	13.463*** (1.414)	36.569*** (5.778)	21.044*** (1.466)	19.620*** (1.671)	25.340*** (6.554)
Observations	2,689	2,689	2,689	2,674	2,674	2,674
Other Covariates?	No	No	Yes	No	No	Yes
R ²	0.003	0.010	0.061	0.00001	0.001	0.035
Adjusted R ²	0.003	0.009	0.039	-0.0004	0.0001	0.013
Residual Std. Error	25.061 (df = 2687)	24.978 (df = 2685)	24.598 (df = 2628)	28.671 (df = 2672)	28.664 (df = 2670)	28.476 (df = 2613)
F Statistic	8.616*** (df = 1; 2687)	9.471*** (df = 3; 2685)	2.835*** (df = 60; 2628)	0.019 (df = 1; 2672)	1.091 (df = 3; 2670)	1.596*** (df = 60; 2613)

*p<0.1; **p<0.05; ***p<0.01

Treatment and Party ID Interaction Figures

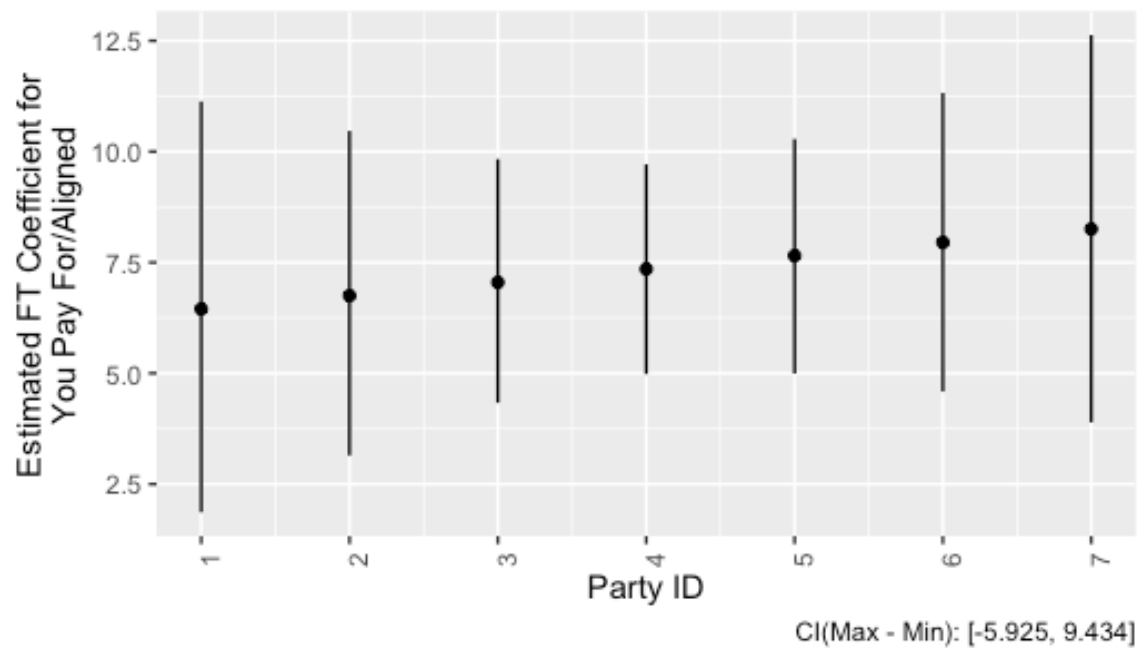


Figure A1

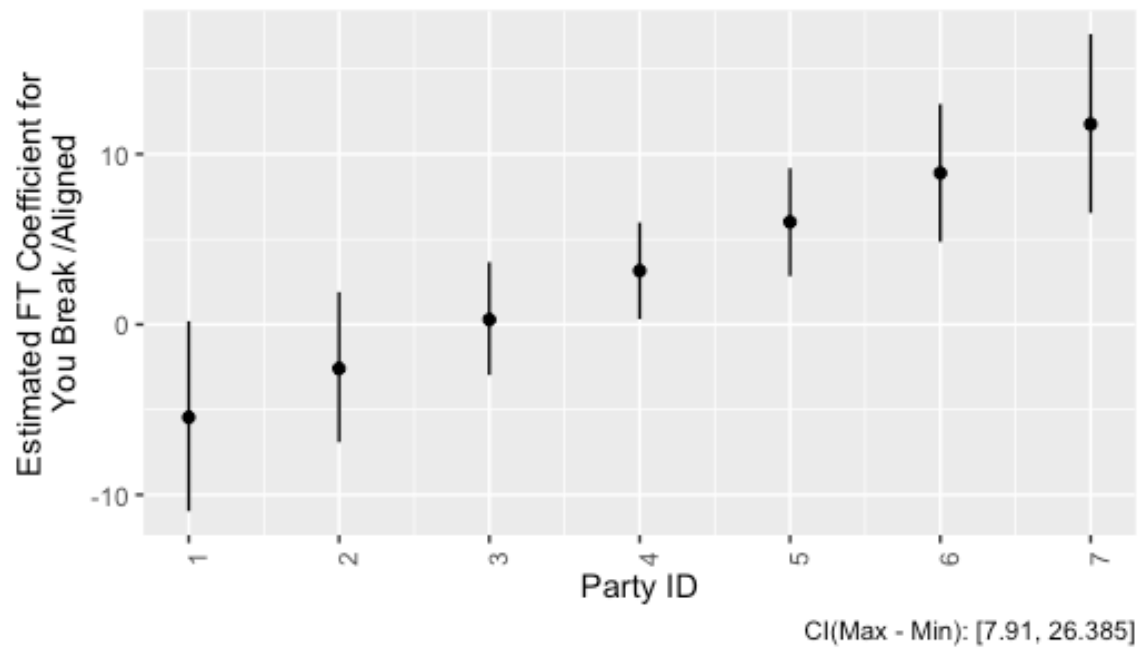


Figure A2

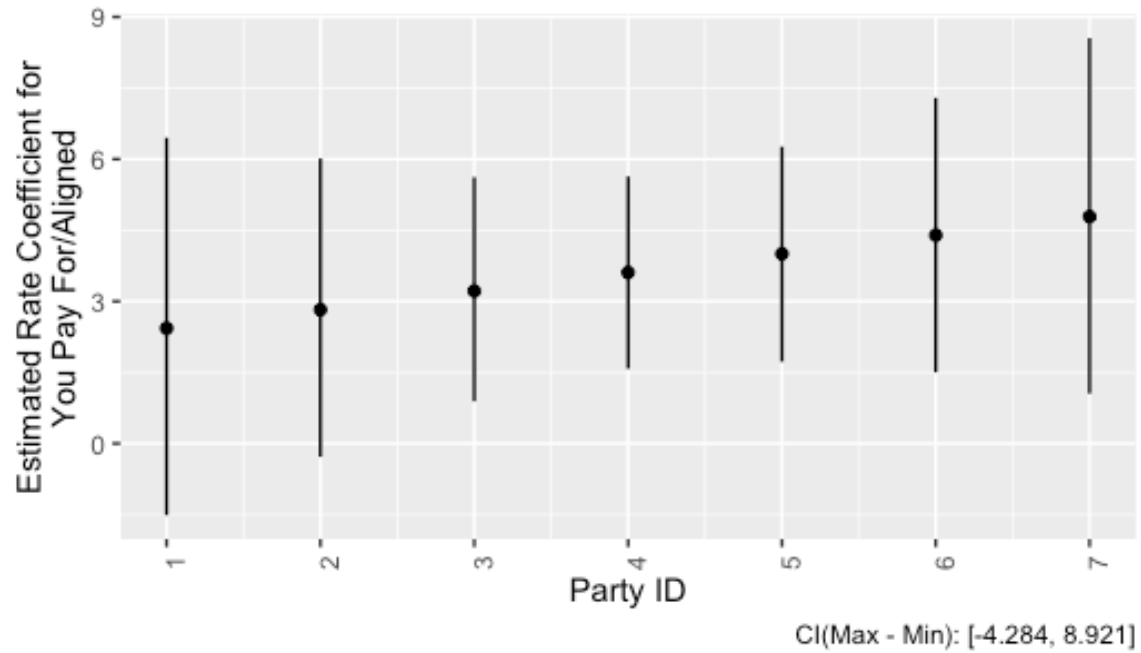


Figure A3

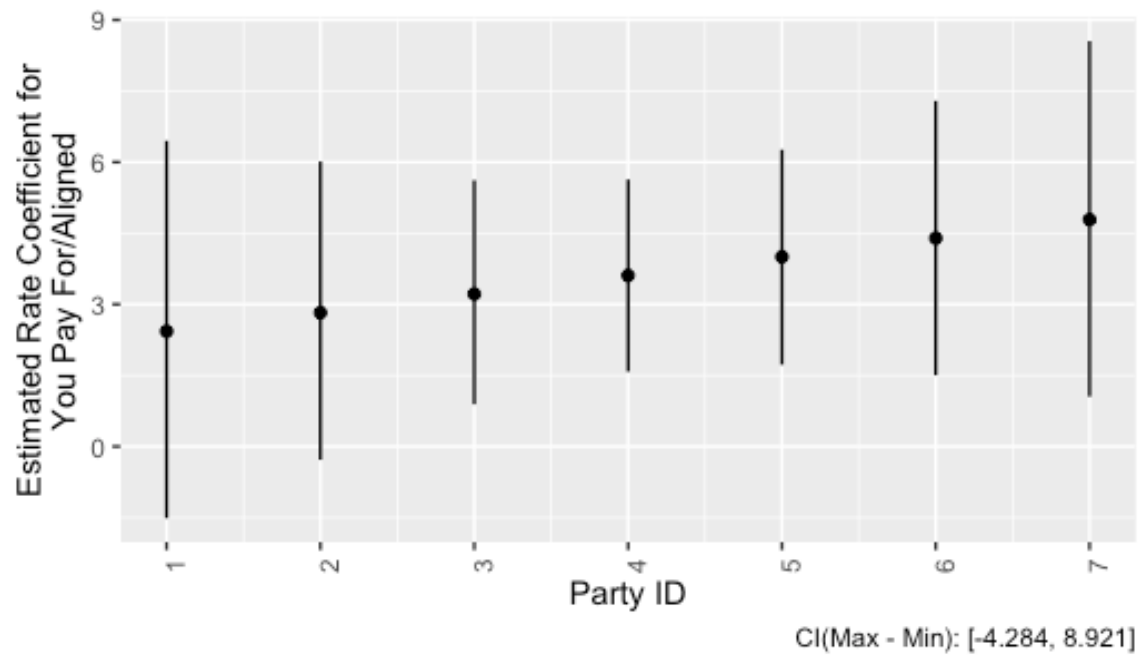


Figure A4

Figures A1-A4 display interactions between the aligned condition and Party ID. Party ID is measured on a 1-7 scale, with 7 representing self-reported “Strong Democrats” and 1 representing self-reported “Strong Republicans.”

Interaction Models (Party ID and Treatment)

	<i>Dependent variable:</i>			
	You Pay For (FT)		You Break (FT)	
	(1)	(2)	(3)	(4)
You Pay For/Aligned	6.227** (3.110)			
You Pay For/Misaligned		0.317 (3.211)		
You Break/Aligned			-8.226** (3.533)	
You Break/Misaligned				7.265** (3.598)
Party ID	1.479*** (0.397)	1.455*** (0.391)	0.640 (0.459)	2.224*** (0.455)
You Pay For Aligned:Party ID	0.279 (0.680)			
You Pay For Misaligned:Party ID		0.233 (0.703)		
You Break Aligned:Party ID			2.844*** (0.777)	
You Break Misaligned:Party ID				-1.807** (0.787)
Constant	25.729*** (1.806)	27.804*** (1.779)	31.237*** (2.098)	25.952*** (2.069)
Observations	2,693	2,693	2,687	2,687
R ²	0.023	0.010	0.014	0.009
Adjusted R ²	0.022	0.009	0.013	0.008
Residual Std. Error	29.104 (df = 2689)	29.304 (df = 2689)	35.342 (df = 2683)	35.435 (df = 2683)
F Statistic	21.238*** (df = 3; 2689)	8.789*** (df = 3; 2689)	12.899*** (df = 3; 2683)	8.101*** (df = 3; 2683)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table A3

	<i>Dependent variable:</i>			
	You Pay For (Rate)		You Break (Rate)	
	(1)	(2)	(3)	(4)
You Pay For Aligned	2.099 (2.699)			
You Pay For Misaligned		0.772 (2.832)		
You Break Aligned			-7.305** (2.875)	
You Break Misaligned				6.433** (2.914)
Party ID	0.663* (0.353)	0.784** (0.340)	-0.764** (0.372)	0.423 (0.370)
You Pay For Aligned:Party ID	0.375 (0.601)			
You Pay For Misaligned:Party ID		-0.046 (0.627)		
You Break Aligned:Party ID			2.101*** (0.633)	
You Break Misaligned:Party ID				-1.392** (0.638)
Constant	15.513*** (1.591)	16.008*** (1.524)	23.580*** (1.699)	18.904*** (1.679)
Observations	2,689	2,689	2,674	2,674
R ²	0.008	0.003	0.005	0.002
Adjusted R ²	0.007	0.002	0.004	0.001
Residual Std. Error	25.009 (df = 2685)	25.069 (df = 2685)	28.615 (df = 2670)	28.655 (df = 2670)
F Statistic	7.244*** (df = 3; 2685)	2.979** (df = 3; 2685)	4.180*** (df = 3; 2670)	1.684 (df = 3; 2670)
<i>Note:</i>			*p<0.1; **p<0.05; ***p<0.01	

Table A4

Further Regression Tables

	<i>Dependent variable:</i>			
	Gas (FT) (1)	Gas (Rate) (2)	Jet (FT) (3)	Jet (Rate) (4)
Gas/Highways	14.311*** (1.797)	5.604*** (1.279)		
Gas/Airports	1.548 (1.593)	0.977 (1.242)		
Jets/Airports			6.975*** (1.879)	5.029*** (1.834)
Jets/Highways			11.911*** (1.942)	5.530*** (1.839)
Constant	19.837*** (1.141)	10.532*** (0.783)	37.590*** (1.320)	22.974*** (1.210)
Observations	1,367	1,366	1,326	1,323
R ²	0.057	0.015	0.029	0.008
Adjusted R ²	0.056	0.014	0.027	0.007
Residual Std. Error	26.026 (df = 1364)	19.714 (df = 1363)	28.626 (df = 1323)	27.800 (df = 1320)
F Statistic	41.398*** (df = 2; 1364)	10.484*** (df = 2; 1363)	19.698*** (df = 2; 1323)	5.433*** (df = 2; 1320)

Note: *p<0.1; **p<0.05; ***p<0.01

Table A5

	<i>Dependent variable:</i>			
	Bags (FT) (1)	Bags (Rate) (2)	Alcohol (FT) (3)	Alcohol (Rate) (4)
Bags/Litter	0.984 (2.195)	0.706 (1.588)		
Bags/Drunk-Driving	4.287* (2.323)	2.800* (1.681)		
Alcohol/Drunk-Driving			8.397*** (2.447)	4.233** (2.134)
Alcohol/Litter			-0.553 (2.398)	0.320 (2.094)
Constant	26.742*** (1.586)	13.900*** (1.141)	39.283*** (1.763)	25.330*** (1.518)
Observations	1,360	1,356	1,327	1,318
R ²	0.003	0.002	0.013	0.004
Adjusted R ²	0.001	0.001	0.012	0.002
Residual Std. Error	34.027 (df = 1357)	24.637 (df = 1353)	35.618 (df = 1324)	31.143 (df = 1315)
F Statistic	1.930 (df = 2; 1357)	1.543 (df = 2; 1353)	8.851*** (df = 2; 1324)	2.510* (df = 2; 1315)

Note: *p<0.1; **p<0.05; ***p<0.01

Table A6

Balance Tables

	<i>You Pay For (Misaligned)</i>	<i>You Pay For (Aligned)</i>	<i>You Pay For (No Use)</i>
Race (White)	655	661	694
Chi-squared .43			
Sex (Female)	462	459	486
Chi-squared .34			
Party ID (Democrat)	334	323	330
Chi-squared .35			
Income (Mean)	10	10.3	10.31
Chi-squared .77			
Age (Mean)	3.4	3.35	3.38
Chi-squared: .04**			

*p<0.1; **p<0.05; ***p<0.01

Table A7

	<i>You Break (Misaligned)</i>	<i>You Break (Aligned)</i>	<i>You Break (No Use)</i>
Race (White)	666	700	639
Chi-squared .56			
Sex (Female)	434	507	467
Chi-squared .013***			
Party ID (Democrat)	335	339	310
Chi-squared .44			
Income (Mean)	10.1	10.3	10.15
Chi-squared .72			
Age (Mean)	3.4	3.35	3.41
Chi-squared .66			

*p<0.1; **p<0.05; ***p<0.01

Table A8

Chi-squared tests are reported for the sex, race and party ID variables. The sex, race and party ID rows report counts for each treatment group. The household income and age rows report mean responses. Household income was recorded on a 1-18 scale. Responses scored as “10,” the mean response for both conditions, refer to a response of \$35,000 to \$39,999. Age was recorded on a 1-7 scale. Responses scored as “3,” the mean response for both conditions, refer to a response of between 35 and 44 years old.

Misaligned Conditions Omitted

	<i>Dependent variable:</i>			
	You Pay For (FT)		You Break (FT)	
	(1)	(2)	(3)	(4)
You Pay For/Aligned	3.974*** (1.412)	4.011*** (1.345)		
You Pay For/No Use	-6.510*** (1.370)	-6.785*** (1.268)		
You Break/Aligned			2.446 (1.670)	2.743* (1.633)
You Break/No Use			-2.141 (1.684)	-1.869 (1.677)
Constant	35.223*** (1.015)	49.488*** (5.350)	34.965*** (1.181)	13.429** (6.422)
Observations	2,693	2,693	2,687	2,687
Covariates?	No	Yes	No	Yes
R ²	0.022	0.156	0.003	0.085
Adjusted R ²	0.021	0.137	0.002	0.065
Residual Std. Error	29.121 (df = 2690)	27.340 (df = 2633)	35.539 (df = 2684)	34.403 (df = 2627)
F Statistic	29.769*** (df = 2; 2690)	8.245*** (df = 59; 2633)	3.734** (df = 2; 2684)	4.155*** (df = 59; 2627)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table A9

	<i>Dependent variable:</i>			
	You Pay For (Rate)		You Break (Rate)	
	(1)	(2)	(3)	(4)
You Pay For/Aligned	2.004 (1.242)	2.460** (1.187)		
You Pay For/No Use	-3.151*** (1.160)	-2.878*** (1.109)		
You Break/Aligned			0.531 (1.356)	0.948 (1.341)
You Break/No Use			-1.819 (1.362)	-1.402 (1.344)
Constant	19.883*** (0.886)	36.997*** (4.530)	21.275*** (0.964)	20.661*** (5.350)
Observations	2,689	2,689	2,674	2,674
Covariates?	No	Yes	No	Yes
R ²	0.007	0.129	0.001	0.074
Adjusted R ²	0.006	0.109	0.0005	0.053
Residual Std. Error	25.015 (df = 2686)	23.682 (df = 2629)	28.659 (df = 2671)	27.894 (df = 2614)
F Statistic	9.705*** (df = 2; 2686)	6.602*** (df = 59; 2629)	1.629 (df = 2; 2671)	3.542*** (df = 59; 2614)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table A10