Supplemental Appendix for:

Zero-Sum Thinking and the Roots of U.S. Political Differences

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Appendix A. Finer Details of the Survey

Survey questions about ancestors

For each of six of the respondent's ancestors – mother, father, paternal grandfather, paternal grandmother, maternal grandfather, and maternal grandmother – we ask three sets of questions aimed at collecting information about their year of birth, residential history, and other relevant characteristics like education and occupation. Specifically, we ask the following questions:

Age questions:

- Is <*ancestor*> currently alive?
- *If alive*:
  - What is the age of <*ancestor*>?
  - What is the year of birth of <*ancestor*>?
- *If not alive*:
  - In what year did <*ancestor*> die?
  - What is the year of birth of <*ancestor*>?
  - How old was he/she when he/she died?

Location questions:

- Did <*ancestor*> primarily grow up (age 7-17) in the United States?
- *If ancestor didn't grow up in the U.S.*:
  - In what country did <*ancestor*> primarily grow up?
- *If ancestor grew up in the U.S.*:
  - In which state did <*ancestor*> primarily grow up?
  - In which town did <*ancestor*> primarily grow up? If he/she grew up in multiple places, select the location where he/she spent most of his time.

Other questions:

- Which category best describes <*ancestor's*> highest level of education?
- What was/is the occupation of <*ancestor*> as an adult?
- Which category best describes <*ancestor's*> occupation?

Survey statistics

Table A1: Covariate Balance for Survey and U.S. Population

	(1) Survey sample N = 20,352		(2) U.S. population		(2) – (1)	
	Mean	Std. dev.	Mean	Std. dev.	Diff.	p-value
Male	0.486	0.500	0.488	0.500	0.00	0.609
18–29 years old	0.199	0.399	0.199	0.399	0.00	0.859
30–39 years old	0.182	0.386	0.176	0.380	-0.01	0.045
40–49 years old	0.178	0.382	0.159	0.366	-0.02	0.000
50–59 years old	0.184	0.388	0.163	0.370	-0.02	0.000
60+ years old	0.257	0.437	0.303	0.460	0.05	0.000
$0–$24,999	0.173	0.378	0.163	0.370	-0.01	0.001
$25,000–$54,999	0.246	0.431	0.218	0.413	-0.03	0.000
$55,000–$99,999	0.260	0.439	0.238	0.426	-0.02	0.000
$100,000+	0.320	0.467	0.381	0.486	0.06	0.000
4-year college degree or more	0.478	0.500	0.348	0.476	-0.13	0.000
High school graduate or less	0.207	0.405	0.388	0.487	0.18	0.000
Employed	0.549	0.498	0.613	0.487	0.06	0.000
Unemployed	0.093	0.291	0.021	0.143	-0.07	0.000
Self-employed	0.068	0.252	0.066	0.248	0.00	0.205
Married	0.509	0.500	0.515	0.500	0.01	0.082
White	0.673	0.469	0.621	0.485	-0.05	0.000
Black/African American	0.120	0.324	0.120	0.325	0.00	0.764
Hispanic/Latino	0.107	0.309	0.172	0.377	0.06	0.000
Asian/Asian American	0.061	0.239	0.062	0.242	0.00	0.355

Notes: The table displays summary statistics for the overall U.S. population and the survey respondents. National statistics are from the IPUMS-CPS-ASEC data set for May 2022 (Flood et al., 2022). We present p-values of the differences between the two samples for each covariate. Survey quotas were designed to achieve a nationally representative sample in gender, age, household income, and race and ethnicity.

Table A2: Attrition

Wave	Started survey	Completed
1	3,622	0.82
2	3,738	0.79
3	3,735	0.79
4	3,856	0.74
5	4,471	0.67
6	4,700	0.63
7	3,149	0.95
Overall	27,271	0.76

Notes: The table shows, by wave, the number of people who started the survey and the proportion who completed it.

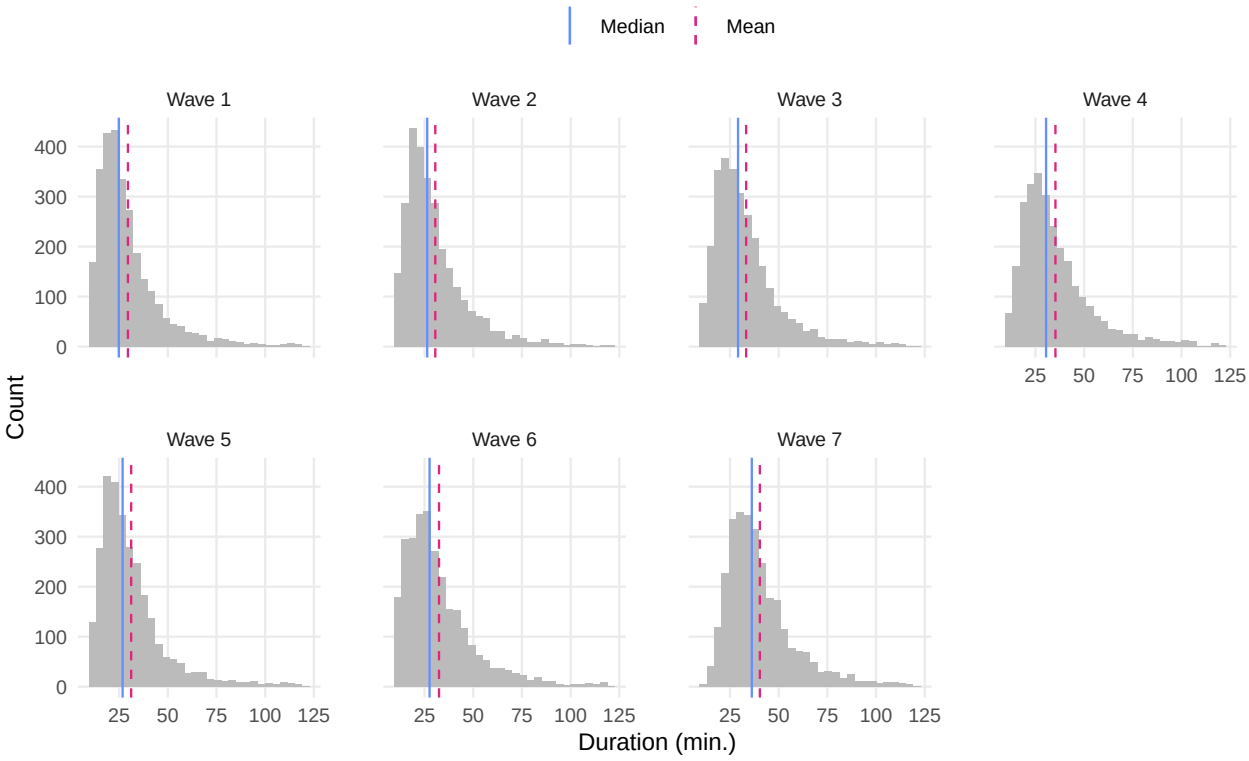


Figure A1: Survey Duration by Wave

Notes: The figures show the distribution of the time (in minutes) spent by respondents to complete the survey in each wave. The median is shown with a blue line and the mean with a dashed pink line. Responses above two hours – which is the 97th percentile of the distribution – are excluded from the figures.

Table A3: Predictors of Attrition

	Completed survey (1)
Constant	0.6790*** (0.0387)
Age 30-39	-0.0150** (0.0072)
Age 40-49	-0.0311*** (0.0074)
Age 50-59	-0.0434*** (0.0074)
Age 60+	-0.0275*** (0.0071)
Missing age	0.2887* (0.1617)
Male	0.0217*** (0.0044)
Other gender	-0.0085 (0.0323)
American Indian/Alaska Native	0.0326 (0.0236)
Asian/Asian American	0.0731*** (0.0106)
White	0.0459*** (0.0077)
Hispanic/Latino	0.0288*** (0.0096)
Native Hawaiian/Pacific Islander	-0.0028 (0.0409)
Other race	0.0051 (0.0156)
Missing race	-0.0420*** (0.0087)
$25,000–$54,999	0.0382*** (0.0072)
$55,000–$99,999	0.0459*** (0.0073)
$100,000+	0.0644*** (0.0075)
Missing income	-0.1962 (0.1584)
Some high school	0.0152 (0.0406)
High school degree/GED	0.0768** (0.0377)
Some college	0.0946** (0.0377)
2-year college degree	0.1144*** (0.0380)
4-year college degree	0.1290*** (0.0377)
Master's degree, M.B.A.	0.1366*** (0.0379)
Ph.D., J.D., M.D.	0.1409*** (0.0389)
Reached education question but did not answer	0.0693* (0.0380)
Did not reach education question	0.0776** (0.0377)
Moderate Republican	0.0178** (0.0086)
Independent	-0.0004 (0.0079)
Moderate Democrat	0.0105 (0.0084)
Strong Democrat	0.0353*** (0.0081)
Other party	-0.0513*** (0.0158)
Reached party question but did not answer	-0.0994 (0.1320)
Did not reach party question	-0.7305*** (0.0103)
Wave 2	-0.0147* (0.0076)
Wave 3	-0.0213*** (0.0079)
Wave 4	-0.0376*** (0.0083)
Wave 5	-0.0947*** (0.0082)
Wave 6	-0.1192*** (0.0083)
Wave 7	0.0919*** (0.0070)
Observations	27,271
R^2	0.336
Dependent variable mean	0.758
Dependent variable std. dev.	0.428

Notes: The table reports OLS estimates where the unit of observation is an individual. The dependent variable is an indicator equal to one if the respondent completed the survey. The sample includes only respondents who consented to participate and were not screened out due to demographic quotas. The omitted categories are female for gender, Black for race, $0–$15K for household income, no high school for education, strong Republican for party affiliation, and wave 1 for survey wave. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A4: Covariate Balance for Attrition

	(1) Did not finish survey N = 6,919		(2) Finished survey N = 20,352		(2) – (1)	
	Mean	Std. dev.	Mean	Std. dev.	Diff.	p-value
Male	0.436	0.496	0.486	0.500	0.05	0.000
18–29 years old	0.241	0.428	0.199	0.399	-0.04	0.000
30–39 years old	0.168	0.374	0.182	0.386	0.01	0.015
40–49 years old	0.165	0.371	0.178	0.382	0.01	0.021
50–59 years old	0.192	0.394	0.184	0.388	-0.01	0.191
60+ years old	0.233	0.423	0.257	0.437	0.02	0.000
$0–$24,999	0.279	0.448	0.173	0.378	-0.11	0.000
$25,000–$54,999	0.249	0.433	0.246	0.431	0.00	0.639
$55,000–$99,999	0.239	0.426	0.260	0.439	0.02	0.001
$100,000+	0.234	0.423	0.320	0.467	0.09	0.000
4-year college degree or more	0.357	0.479	0.478	0.500	0.12	0.000
High school graduate or less	0.311	0.463	0.207	0.405	-0.10	0.000
Employed	0.504	0.500	0.549	0.498	0.04	0.000
Unemployed	0.127	0.333	0.093	0.291	-0.03	0.000
Self-employed	0.066	0.248	0.068	0.252	0.00	0.600
Married	0.421	0.494	0.509	0.500	0.09	0.000
White	0.586	0.493	0.673	0.469	0.09	0.000
Black/African American	0.176	0.381	0.120	0.324	-0.06	0.000
Hispanic/Latino	0.143	0.350	0.107	0.309	-0.04	0.000
Asian/Asian American	0.042	0.201	0.061	0.239	0.02	0.000
Democrat	0.426	0.495	0.438	0.496	0.01	0.135
Republican	0.273	0.445	0.289	0.453	0.02	0.028
Independent	0.301	0.459	0.273	0.446	-0.03	0.000
Voted for Clinton in 2016	0.279	0.448	0.518	0.500	0.24	0.000
Voted for Trump in 2016	0.275	0.447	0.474	0.499	0.20	0.000
Voted for Biden in 2020	0.342	0.474	0.616	0.486	0.27	0.000
Voted for Trump in 2020	0.234	0.423	0.383	0.486	0.15	0.000

Notes: The table displays summary statistics for those who started but did not finish and those who finished the survey. The sample includes only respondents who consented to participate and were not screened out due to demographic quotas. We present *p*-values of the differences between the two subsamples for each covariate.

Table A5: Covariate Balance for Respondents Missing Ancestors' Information

	Parents' location	Grandparents' location	Father's income	Grandfather's income
Proportion missing	0.008	0.074	0.143	0.338
Male	0.09 (0.026)	0.06 (0.000)	-0.06 (0.000)	-0.11 (0.000)
18–29 years old	0.26 (0.000)	0.08 (0.000)	0.06 (0.000)	0.02 (0.000)
30–39 years old	0.05 (0.103)	0.02 (0.028)	-0.02 (0.001)	-0.05 (0.000)
40–49 years old	-0.03 (0.307)	-0.01 (0.358)	-0.03 (0.000)	-0.03 (0.000)
50–59 years old	-0.08 (0.001)	-0.03 (0.004)	-0.01 (0.050)	0.00 (0.420)
60+ years old	-0.20 (0.000)	-0.06 (0.000)	0.01 (0.296)	0.06 (0.000)
$0–$24,999	0.26 (0.000)	0.13 (0.000)	0.18 (0.000)	0.09 (0.000)
$25,000–$54,999	-0.08 (0.007)	0.01 (0.310)	0.05 (0.000)	0.05 (0.000)
$55,000–$99,999	-0.09 (0.002)	-0.04 (0.000)	-0.06 (0.000)	-0.03 (0.000)
$100,000+	-0.09 (0.006)	-0.10 (0.000)	-0.17 (0.000)	-0.11 (0.000)
4-year college degree or more	-0.10 (0.009)	-0.15 (0.000)	-0.21 (0.000)	-0.14 (0.000)
High school graduate or less	0.18 (0.000)	0.14 (0.000)	0.16 (0.000)	0.08 (0.000)
Employed	-0.09 (0.022)	-0.03 (0.012)	-0.16 (0.000)	-0.16 (0.000)
Unemployed	0.08 (0.006)	0.04 (0.000)	0.06 (0.000)	0.04 (0.000)
Self-employed	0.03 (0.182)	0.00 (0.909)	0.00 (0.518)	0.01 (0.145)
Married	-0.22 (0.000)	-0.09 (0.000)	-0.17 (0.000)	-0.11 (0.000)
White	-0.28 (0.000)	-0.08 (0.000)	-0.11 (0.000)	-0.02 (0.016)
Black/African American	0.07 (0.029)	0.07 (0.000)	0.09 (0.000)	0.02 (0.000)
Hispanic/Latino	0.09 (0.003)	0.01 (0.097)	0.01 (0.082)	-0.01 (0.082)
Asian/Asian American	0.02 (0.349)	-0.02 (0.004)	-0.01 (0.003)	-0.01 (0.108)
Democrat	-0.06 (0.155)	0.00 (0.904)	0.00 (0.935)	-0.01 (0.295)
Republican	-0.13 (0.000)	-0.08 (0.000)	-0.07 (0.000)	-0.05 (0.000)
Independent	0.18 (0.000)	0.08 (0.000)	0.07 (0.000)	0.05 (0.000)

Notes: The table shows the difference in means between respondents for whom the characteristic in the column header is missing and those for whom it is non-missing. p-values are in parentheses. Missing parents' location refers to respondents for whom location for *both* parents is missing, and missing grandparents' location refers to respondents for whom location for *all four* grandparents is missing.

Appendix B. Data Construction and Description

Variable	Description	Source
Zero-sum index	First principal component of agreement with the following statements: "If an ethnic group becomes richer, this comes at the expense of other groups"; "In international trade, if one country makes more money, then the other makes less"; "If one income class becomes wealthier, it is at the expense of others"; "If non-U.S. citizens do better economically, this is at the expense of citizens". Variable is normalized to be between 0 and 1.	Survey
Adjusted zero-sum index (income omitted)	First principal component of agreement with the following statements: "If an ethnic group becomes richer, this comes at the expense of other groups"; "In international trade, if one country makes more money, then the other makes less"; "If non-U.S. citizens do better economically, this is at the expense of citizens". Variable is normalized to be between 0 and 1.	Survey
Adjusted zero-sum index (ethnic omitted)	First principal component of agreement with the following statements: "In international trade, if one country makes more money, then the other makes less"; "If one income class becomes wealthier, it is at the expense of others"; "If non-U.S. citizens do better economically, this is at the expense of citizens". Variable is normalized to be between 0 and 1.	Survey
Adjusted zero-sum index (citizen omitted)	First principal component of agreement with the following statements: "If an ethnic group becomes richer, this comes at the expense of other groups"; "In international trade, if one country makes more money, then the other makes less"; "If one income class becomes wealthier, it is at the expense of others". Variable is normalized to be between 0 and 1.	Survey
Pro-redistribution index	First principal component of agreement with the following statements: "Government should equalize outcomes"; "Government should equalize opportunity"; "Support for universal healthcare"; "Government should spend on income support for poor"; "Rich pay too little tax minus poor pay too little tax"; "Disagree with allowing wealth accumulation". Variable is normalized to be between 0 and 1.	Survey
Race attitudes index	First principal component of agreement with the following statements: "Slavery makes it hard for Blacks to escape poverty"; "Racism is a problem in the U.S." Variable is normalized to be between 0 and 1.	Survey
Gender attitudes index	First principal component of agreement with the following statements: "Women in the U.S. experience discrimination"; "Women should be given hiring preference". Variable is normalized to be between 0 and 1.	Survey
Anti-immigration index	First principal component of agreement with the following statements: "Being born in the U.S. is important for being American"; "Disagree with increasing immigration". Variable is normalized to be between 0 and 1.	Survey
Luck more important than effort	First principal component of agreement with the following statements: "In the US everybody can be economically successful"; "Hard work and effort have paid off"; "Disagree with success in life is outside one's control". Variable is normalized to be between 0 and 1.	Survey
Perceived mobility	First principal component of questions about the respondent's perception of the probability that in the U.S. a poor child can move to the 1st, 2nd, 3rd, 4th, and 5th quintile of the income distribution. Variable is normalized to be between 0 and 1.	Survey

Variable	Description	Source
Universalist morals	First principal component of two questions that capture how the respondent would split $100 between a member of their organizations and a random person in the U.S., and how they would split $100 between a random person anywhere in the world and a random person in the U.S. Variable is normalized to be between 0 and 1.	Survey (waves 5-7)
Tradition is important	Captures agreement on a 10-point scale with the statement that "It is important to follow the traditions and customs that are passed down by one's community or family over time" relative to the opposite statement. Variable is normalized to be between 0 and 1.	Survey (waves 5-7)
Generalized trust	Captures agreement with the statement "Would you say that most people can be trusted?" Variable is normalized to be between 0 and 1.	Survey (waves 5-7)
Abortions should be legal	Measures sentiment towards abortion with the question "Should abortions be legal?". Respondents could choose: (1) Legal under any circumstances; (2) Legal only under certain circumstances; (3) Illegal in all circumstances. Variable is oriented so it is increasing in preference for abortion being legal and normalized to be between 0 and 1.	Survey (waves 5-7)
Gov. should invest in infrastructure	Captures agreement on a 5-point scale with the statement "Government should invest in infrastructure." Variable is normalized to be between 0 and 1.	Survey
Gov. should spend more on defense and national security	Captures agreement on a 5-point scale with the statement "Government should spend more on defense and national security." Variable is normalized to be between 0 and 1.	Survey
Laws covering the sale of firearms should be made more strict	Captures agreement on a 3-point scale with the statement "Laws covering the sale of firearms should be made more strict." Variable is normalized to be between 0 and 1.	Survey
Zero-sum thinking (WVS)	Captures agreement on a 10-point scale with the statement "People can only get rich at the expense of others" as opposed to "Wealth can grow so that there's enough for everyone."	WVS (var. E041, waves 2, 3, 5, 6) and survey (waves 5-7)
Political beliefs (WVS)	Captures agreement on a 10-point scale with the statement "In political matters, people talk of the left and the right. How would you place your views on this scale, generally speaking?"	WVS (var. E033)
Incomes should be more equal (WVS)	Captures agreement on a 10-point scale with the statement "Income should be more equal" as opposed to "There should be greater incentives for individual effort." Variable is normalized to be between 0 and 1.	WVS (var. E035, waves 2-7)
Government should take more responsibility to provide for everyone (WVS)	Captures agreement on a 10-point scale with the statement "Government should take more responsibility to ensure that everyone is provided for" as opposed to "People should take more responsibility to provide for themselves." Variable is normalized to be between 0 and 1.	WVS (var. E037, waves 2-7)
Government should prohibit immigrants (WVS)	Measures anti-immigrant sentiment with the question: "How about people from other countries coming here to work. Which one of the following do you think the government should do." Respondents could choose: (1) Let anyone come who wants to; (2) Let people come as long as there are jobs available; (3) Place strict limits on the number of foreigners who can come here; (4) Prohibit people coming here from other countries. Variable is oriented so it is increasing in preference for immigration restrictions, and is normalized to be between 0 and 1.	WVS (var. E143, waves 3-5)

Variable	Description	Source
Don't want immigrant neighbors (WVS)	Respondents were given a list of groups and asked "Could you please mention any that you would not like to have as neighbors?"; this variable is 1 if the respondent mentioned "Immigrants/foreign workers" and 0 otherwise.	WVS (var. A124_06, waves 1-7)
Luck more important than effort (WVS)	Captures agreement, on a 10-point scale, with the statement "Everything in life is determined by fate" as opposed to "People shape their fate themselves." Variable is normalized to be between 0 and 1.	WVS (var. F198, wave 5)
Perceived mobility (WVS)	Measures perceived economic mobility with the question: "In your opinion, do most poor people in this country have a chance of escaping from poverty, or is there very little of chance escaping?" Respondents could choose "They have a chance" or "They have very little chance." Variable is normalized to be between 0 and 1.	WVS (var. F198, wave 3)
Universalist morals (WVS)	Difference between ingroup and outgroup trust. Ingroup trust is the average of how much the respondent trusts their family (var. D001, wave 2), neighborhood (var. G007_18, wave 2), and people they know personally (var. G007_33_B, waves 5-7). Outgroup trust is the average of how much the respondent trusts people they meet for the first time (var. G007_34_B, waves 5-7), people of another religion (G007_35_B, waves 5-7), and people of another nationality (var. G007_36_B, waves 5-7). All the component trust variables are normalized to be between 0 and 1. If one component of the average is missing for a particular observation, it is not included in the average.	WVS
Tradition is important (WVS)	Measures the importance of tradition by asking respondents whether a person with the following description is "very much like you, like you, somewhat like you, not like you, or not at all like you": "Tradition is important to this person; to follow the customs handed down by one's religion or family." Variable is normalized to be between 0 and 1.	WVS (var. A198, waves 5-6)
Generalized trust (WVS)	Measures trust with the question "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?" Respondents could choose "Most people can be trusted" or "Need to be very careful." Variable is normalized to be between 0 and 1.	WVS (var. A165)
Per-capita GDP growth	Per-capita GDP growth during the first 20 years of an individual's life in the country where they lived at the time of the survey.	World Bank
Percentage change in bottom 50% income	Percentage change in the pre-tax income growth of the bottom 50% income of the U.S. population for the first 20 years of an individual's life, averaged over five-year bins.	World Inequality Database
Parents to respondent mobility	Difference between the current relative income of the respondent in adulthood and the relative income of the respondent's parents in adulthood (when the respondent was growing up). Relative income takes five values – (1) Far below average; (2) A little below average; (3) Average; (4) A little above average; (5) Far above average – and is defined relative to other families in the country at the time. An answer of "I don't know" is coded as missing.	Survey
Grandparents to respondent mobility	Difference between the current relative income of the respondent in adulthood and the relative income of the respondent's paternal grandparents in adulthood (when the respondent's father was growing up).	Survey

Variable	Description	Source
Great-grandparents to respondent mobility	Difference between the current relative income of the respondent in adulthood and the relative income of the respondent's paternal great-grandparents in adulthood (when the respondent's paternal grandfather was growing up).	Survey
Grandparents to parents mobility	Difference between the relative income of the respondent's parents in adulthood (when the respondent was growing up) and the relative income of the respondent's paternal grandparents in adulthood (when the respondent's father was growing up).	Survey
Great-grandparents to grandparents mobility	Difference between the relative income of the respondent's paternal grandparents in adulthood (when the respondent's father was growing up) and the relative income of the respondent's paternal great-grandparents in adulthood (when the respondent's paternal grandfather was growing up).	Survey
Occupational status index	First principal component of occupational income score (based on the 1950 census), Duncan socio-economic index (based on the 1950 census and a 1947 survey), Siegel prestige score (based on 1960s surveys), occupational earnings score and educational score (based on the 1950 census), and Nam-Powers-Boyd occupational status score (based on the 1950 census). All variables use the 1950 occupational classification basis.	IPUMS
Respondent immigrated	Indicator variable that equals 1 if the respondent was born outside the U.S.	Survey
Parent immigrated	Indicator variable that equals 1 if the respondent was born in the U.S. and at least one of their parents was born outside of the U.S. If the respondent does not know whether either of their parents was born in the U.S. this variable is coded as missing.	Survey
Grandparent immigrated	Indicator variable that equals 1 if the respondent was born in the U.S. and either (1) their father was born in the U.S. and at least one paternal grandparent was born outside of the U.S., or (2) their mother was born in the U.S. and at least one maternal grandparent was born outside of the U.S. If the respondent indicates that they do not know where any of their four grandparents were born, this variable is coded as missing.	Survey
Enslaved ancestor	Indicator variable that equals 1 if the respondent reports having an ancestor who was enslaved at any point during the ancestor's lifetime.	Survey
Respondent's county foreign share	Proportion of individuals who were born outside of the U.S. over the 1860 to 1920 period in the county where the respondent grew up between ages 10 and 19.	U.S. Census
Parents' counties foreign share	Proportion of individuals who were born outside of the U.S. over the 1860 to 1920 period, averaged over the counties where the respondent's parents grew up between ages 7 and 17.	U.S. Census
Grandparents' counties foreign share	Proportion of individuals who were born outside of the U.S. over the 1860 to 1920 period, averaged over the counties where the respondent's grandparents grew up between ages 7 and 17.	U.S. Census
Respondent's county enslaved share	Proportion of individuals who were enslaved in 1860 in the county where the respondent grew up between ages 10 and 19. Counties in non-slave states or in states within the contiguous U.S. that did not exist in 1860 are coded as having zero enslaved share.	U.S. 1860 Census

Variable	Description	Source
Parents' counties enslaved share	Proportion of individuals who were enslaved in 1860, averaged over the counties in which the respondent's parents grew up between ages 7 and 17. Counties in non-slave states or in states within the contiguous U.S. that did not exist in 1860 are coded as having zero enslaved share.	U.S. 1860 Census
Grandparents' counties enslaved share	Proportion of individuals who were enslaved in 1860, averaged over the counties in which the respondent's grandparents grew up between ages 7 and 17. Counties in non-slave states or in states within the contiguous U.S. that did not exist in 1860 are coded as having zero enslaved share.	U.S. 1860 Census
Respondent's county southern white/Black share, 1900-1940	Proportion of white/Black individuals born in the U.S. South over the 1900 to 1940 period. Defined only for non-Southern counties and measured for the county where the respondent grew up between ages 10 and 19.	Bazzi et al. (2020)
Parents' counties southern white/Black share, 1900-1940	Proportion of white/Black individuals born in the U.S. South over the 1900 to 1940 period. Defined only for non-Southern counties and averaged over the counties where the respondent's parents grew up between ages 7 and 17.	Bazzi et al. (2020)
Grandparents' counties southern white/Black share, 1900-1940	Proportion of white/Black individuals born in the U.S. South over the 1900 to 1940 period. Defined only for non-Southern counties and averaged over the counties where the respondent's grandparents grew up between ages 7 and 17.	Bazzi et al. (2020)
Respondent's county Confederate Culture Index (0-4)	Index that combines information on whether a county had Confederate memorials, a KKK chapter, a United Daughters of the Confederacy chapter, and recorded lynchings of Black individuals. Measured for the county where the respondent grew up between ages 10 and 19.	Bazzi et al. (2023)
Parents' counties Confederate Culture Index (0-4)	Index that combines information on whether a county had Confederate memorials, a KKK chapter, a United Daughters of the Confederacy chapter, and recorded lynchings of Black individuals. The variable is averaged over the counties where the respondent's parents grew up between ages 7 and 17.	Bazzi et al. (2023)
Grandparents' counties Confederate Culture Index (0-4)	Index that combines information on whether a county had Confederate memorials, a KKK chapter, a United Daughters of the Confederacy chapter, and recorded lynchings of Black individuals. The variable is averaged over the counties where the respondent's grandparents grew up between ages 7 and 17.	Bazzi et al. (2023)

Notes: For all variables that refer to the "parents' counties," the variable is averaged over the respondent's mother and father when nonmissing; if one parent's location is missing, then the variable refers to the nonmissing parent alone; if both parents' locations are missing, then the variable is coded as missing. Likewise, for all variables that refer to the "grandparents' counties," the variable is averaged over the respondent's four grandparents when nonmissing; if one or more grandparents' locations are missing, then the variable refers to the nonmissing grandparents only; if all grandparents' locations are missing, then the variable is coded as missing.

Table B2: PCA Factor Loadings for Index Variables

		Eigenvalues		Factor Loadings			
Index	Variable	1st PC	2nd PC	1st PC	2nd PC	Cronbach's α	KMO
Zero-sum index		2.30	0.77			0.75	0.75
	If non-U.S. citizens do better economically, this is at the expense of citizens			0.40	0.89		
	If an ethnic group becomes richer, this comes at the expense of other groups			0.55	-0.26		
	If one income class becomes wealthier, it is at the expense of others			0.52	-0.38		
	In international trade, if one country makes more money, then the other makes less			0.52	-0.03		
Adjusted zero-sum index (income)		1.83	0.71			0.67	0.63
	If non-U.S. citizens do better economically, this is at the expense of citizens			0.51	0.86		
	If an ethnic group becomes richer, this comes at the expense of other groups			0.60	-0.42		
	In international trade, if one country makes more money, then the other makes less			0.61	-0.30		
Adjusted zero-sum index (ethnic)		1.76	0.73			0.64	0.62
	If non-U.S. citizens do better economically, this is at the expense of citizens			0.52	0.83		
	If one income class becomes wealthier, it is at the expense of others			0.59	-0.53		
	In international trade, if one country makes more money, then the other makes less			0.62	-0.20		
Adjusted zero-sum index (citizen)		2.06	0.53			0.77	0.69
	If an ethnic group becomes richer, this comes at the expense of other groups			0.60	0.14		
	If one income class becomes wealthier, it is at the expense of others			0.57	0.61		
	In international trade, if one country makes more money, then the other makes less			0.56	-0.78		
Pro-redistribution index		3.17	0.89			0.82	0.83
	Disagree with allowing wealth accumulation			0.34	-0.60		
	Gov. should spend on income support for poor			0.42	0.16		
	Gov. should equalize opportunity			0.45	0.30		
	Gov. should equalize outcome			0.45	0.32		
	Rich pay too little tax minus poor pay too little			0.34	-0.63		
	Universal healthcare			0.43	0.16		
Race attitudes index		1.52	0.48			0.68	0.50
	Slavery makes it hard for Blacks to escape poverty			0.71	-0.71		
	Racism is a problem			0.71	0.71		
Anti-immigration index		1.19	0.81			0.31	0.50
	Important for being American: Born in U.S.			0.71	-0.71		
	Disagree with increasing immigration			0.71	0.71		
Gender attitudes index		1.49	0.51			0.64	0.50
	Women experience discrimination			0.71	-0.71		
	Women should be given hiring preference			0.71	0.71		
Luck more important than effort		1.43	0.93			0.38	0.54
	In the U.S. everybody can be economically successful			0.66	-0.23		
	Hard work and effort have paid off			0.65	-0.29		
	Disagree with success in life is outside one's control			0.37	0.93		
Perceived mobility		1.98	1.40				
	Poor family to 1st quintile			0.55	0.46		
	Poor family to 2nd quintile			0.35	-0.33		
	Poor family to 3rd quintile			-0.11	-0.74		
	Poor family to 4th quintile			-0.52	0.05		
	Poor family to 5th quintile			-0.54	0.36		
Universalist morals		1.12	0.88			0.22	0.50
	Money to member of organization			0.71	0.71		
	Money to U.S. person			0.71	-0.71		

Notes: The table shows eigenvalues and factor loadings for the first two principal components for each of the component questions for the zero-sum indices, policy view indices, and indices of other fundamental attitudes. We also report Cronbach's α and the Kaiser–Meyer–Olkin index for each measure.

Table B3: Summary Statistics for Survey Variables

Variable	Mean	Std. dev.	Observations
Zero-sum index	0.51	0.21	20,278
Adjusted zero-sum index (income omitted)	0.50	0.22	20,293
Adjusted zero-sum index (ethnicity omitted)	0.53	0.21	20,282
Adjusted zero-sum index (citizenship omitted)	0.52	0.23	20,296
Pro-redistribution index	0.62	0.22	20,292
Rich pay too little tax minus poor pay too little	0.72	0.26	20,316
Universal healthcare	0.69	0.33	20,338
Disagree with allowing wealth accumulation	0.40	0.30	20,346
Gov. should spend on income support for poor	0.66	0.28	20,341
Gov. should equalize outcome	0.56	0.31	20,332
Gov. should equalize opportunity	0.65	0.29	20,337
Anti-immigration index	0.52	0.24	20,331
Disagree with increasing immigration	0.48	0.29	20,338
Important for being American: Born in U.S.	0.57	0.35	20,337
Race attitudes index	0.59	0.27	20,300
Racism is a problem	0.62	0.30	20,332
Slavery makes it hard for Blacks to escape poverty	0.56	0.33	20,312
Gender attitudes index	0.56	0.25	20,333
Women should be given hiring preference	0.53	0.28	20,341
Women experience discrimination	0.58	0.29	20,336
Luck more important than effort	0.61	0.21	20,296
In the U.S. everybody can be economically successful	3.55	1.16	20,344
Hard work and effort have paid off	2.22	0.62	20,301
Disagree with success in life is outside one's control	3.22	1.12	20,347
Perceived mobility	0.67	0.19	20,352
Poor family to 1st quintile	29.20	23.19	20,352
Poor family to 2nd quintile	21.40	13.42	20,352
Poor family to 3rd quintile	23.68	17.88	20,352
Poor family to 4th quintile	12.30	10.76	20,352
Poor family to 5th quintile	13.42	18.36	20,352
Universalist morals	0.60	0.20	8,819
Money to member of organization	59.68	27.22	8,819
Money to U.S. person	60.45	26.57	8,819
Tradition is important	0.41	0.31	8,811
Generalized trust	0.29	0.46	8,436
Trust in government	0.35	0.22	20,345
Importance of religion	0.62	0.37	8,797
Zero-sum thinking (WVS)	6.50	2.69	8,810
Immigrant	0.07	0.26	20,352
Child of immigrant	0.12	0.33	20,190
Grandchild of immigrant	0.17	0.37	18,775
Enslaved ancestor	0.11	0.31	20,341
Parents to respondent mobility	0.21	1.27	19,579
Grandparents to respondent mobility	0.53	1.37	17,339
Great-grandparents to respondent mobility	0.64	1.38	13,393
Grandparents to parents mobility	0.31	1.13	17,305
Great-grandparents to grandparents mobility	0.12	0.89	13,287
Abortions should be legal	0.66	0.32	8,737
Gov. should invest in infrastructure	0.69	0.23	20,329
Gov. should spend more on defense and national security	0.57	0.29	20,333
Laws covering the sale of firearms should be made more strict	0.73	0.36	20,339

Notes: The table shows summary statistics for the main survey variables.

Table B4: Summary Statistics for County-Level Variables

Variable	Mean	Std. dev.	Observations
Respondent's county enslaved share	0.07	0.15	18,227
Parents' counties enslaved share	0.07	0.15	16,177
Grandparents' counties enslaved share	0.08	0.15	12,725
Respondent's county foreign share	0.17	0.12	17,572
Parents' counties foreign share	0.18	0.12	15,845
Grandparents' counties foreign share	0.16	0.12	12,522
Respondent's county southern white share	0.03	0.03	13,171
Parents' counties southern white share	0.02	0.03	12,284
Grandparents' counties southern white share	0.02	0.03	9,474
Respondent's county Confederate Culture Index	2.25	1.24	18,227
Parents' counties Confederate Culture Index	2.18	1.16	16,177
Grandparents' counties Confederate Culture Index	2.13	1.16	12,725

Notes: The table shows summary statistics for the county-level variables assigned to each respondent according to the locations where they, their parents, and their grandparents grew up.

Appendix C. Appendix Tables and Figures

Table C1: Correlations Among Zero-Sum Questions

	Citizenship	Trade	Income
Ethnic	0.33	0.54	0.57
Citizenship		0.37	0.29
Trade			0.47

Notes: The table shows the correlations among the four survey questions about zero-sum thinking that constitute our baseline index.

Table C2: Correlations Among Location Questions

	Father	Mother	Paternal grandfather	Paternal grandmother	Maternal grandfather	Maternal grandmother
Respondent	0.38	0.40	0.20	0.20	0.19	0.21
Father		0.58	0.58	0.56	0.44	0.44
Mother			0.44	0.45	0.54	0.56
Paternal grandfather				0.76	0.60	0.57
Paternal grandmother					0.61	0.60
Maternal grandfather						0.77

Notes: The table shows the proportion of respondents for whom the indicated own or ancestral location variables (at the county level) are the same. For each cell, only respondents for whom both of that cell's location variables are non-missing are included.

Table C3: Correlations with Other Fundamental Attitudes

	Correlation with ZS	Std. err.
Luck more imp. than effort	-0.150	0.007
Perceived mobility	-0.136	0.007
More universalist	-0.157	0.011
Tradition is important	0.126	0.012
Generalized trust	-0.013	0.012
Trust government	0.193	0.008

Notes: The table shows the correlation between the zero-sum index and six other fundamental attitudes or core beliefs previously explored in the literature.

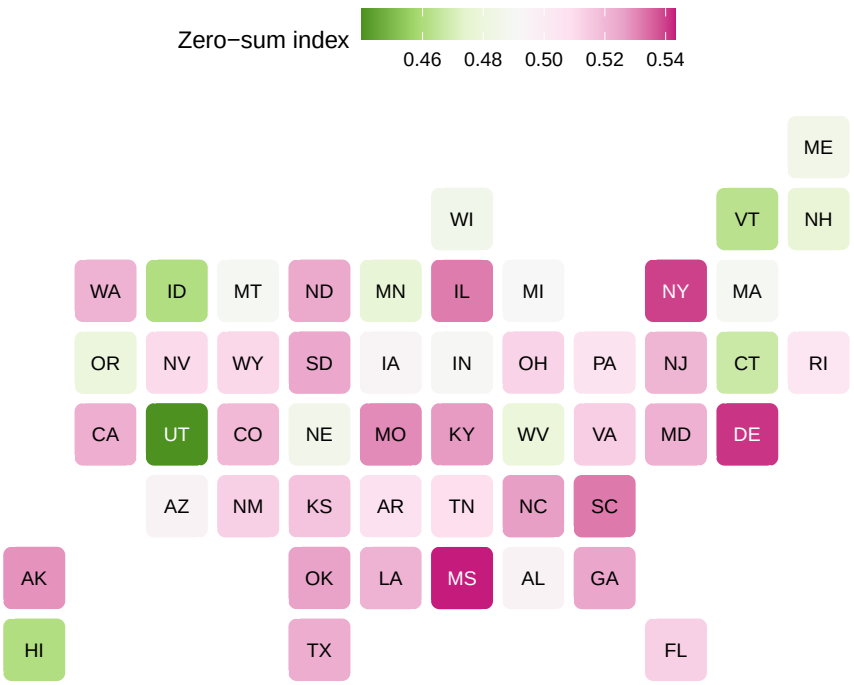


Figure C1: Average Zero-Sum Index by Respondent's State of Residence

Notes: The figure shows the average zero-sum index by the respondent's current state.

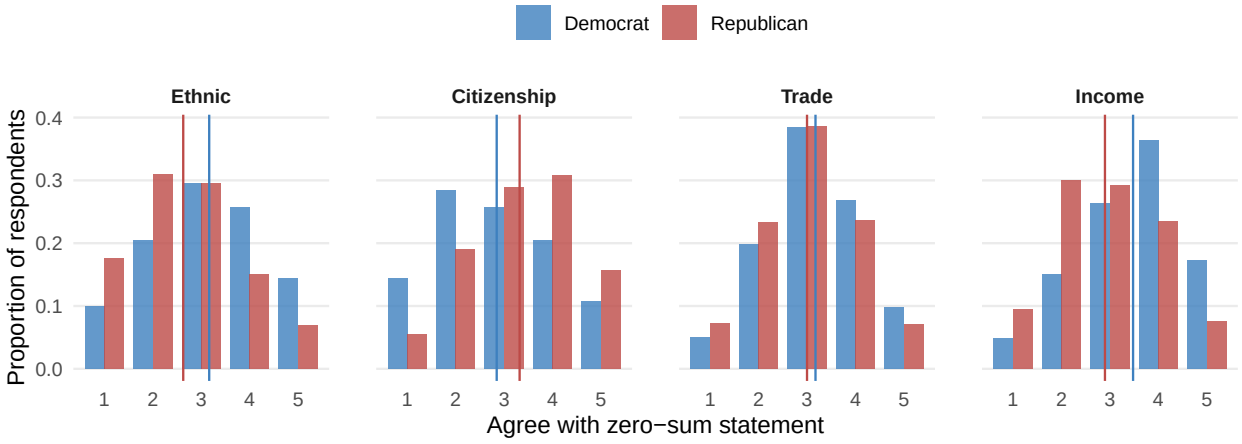


Figure C2: Responses to Zero-Sum Questions by Party

Notes: Vertical lines show the mean response for each party. "Republican" includes respondents who considered themselves "Strong Republican" or "Moderate Republican", and "Democrat" includes respondents who considered themselves "Strong Democrat" or "Moderate Democrat." Those who considered themselves "Independent" are not shown.

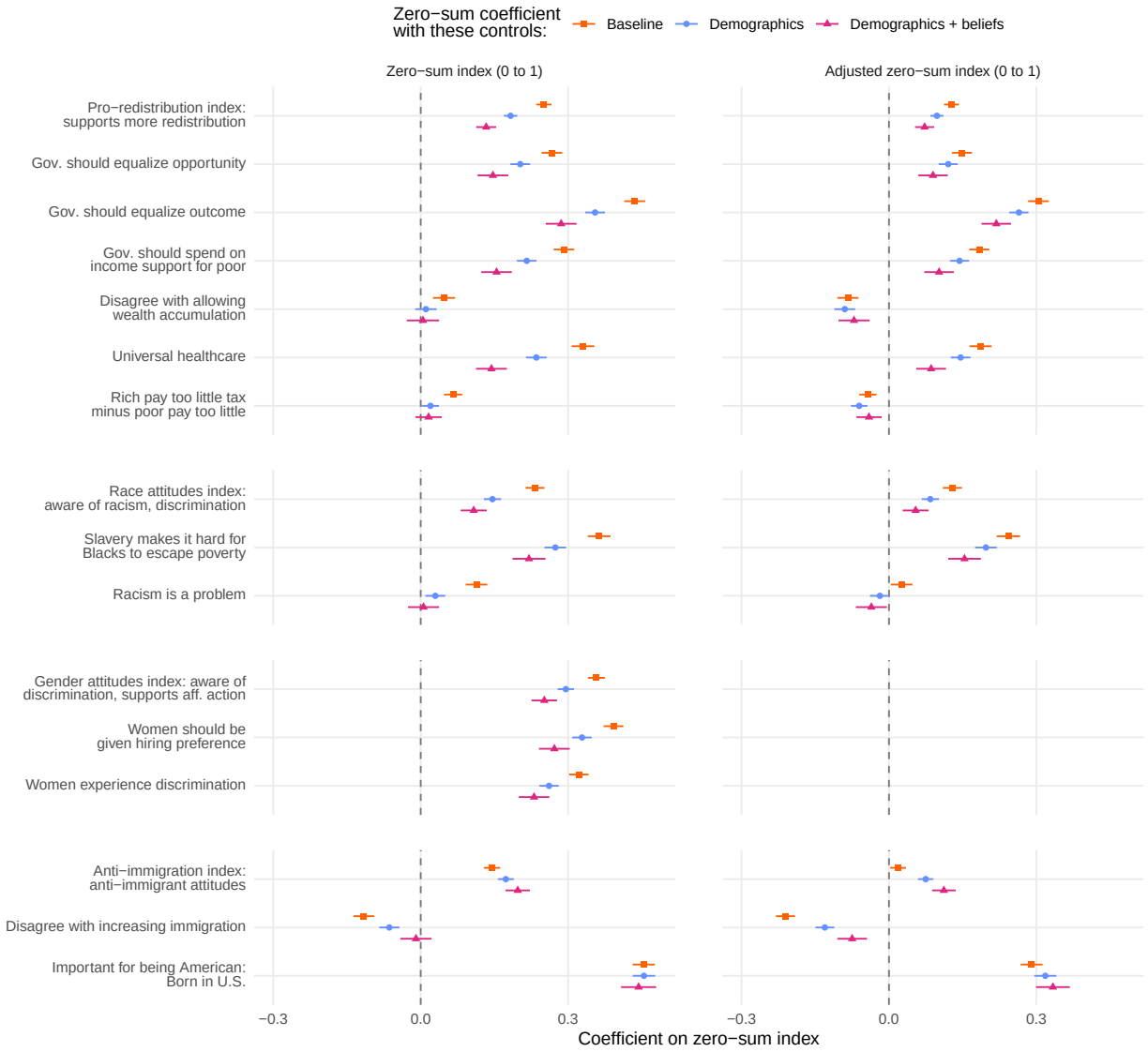


Figure C3: Zero-Sum Thinking and Policy Views, By Domain

Notes: Each coefficient is from a separate regression with controls for age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for survey wave. The three estimates in each column correspond to (1) the baseline specification, as well as specifications that add (2) demographic controls: fixed effects for race, household income, educational attainment, party affiliation, and fixed effects for household income interacted with a quadratic in age, and (3) controls for other core beliefs: whether the respondent thinks luck is more important than effort, their perceptions of economic mobility, the degree to which they are a moral universalist, how often they think the government can be trusted, whether they think people can generally be trusted, whether they think tradition is important, and how important religion is in their life. The beliefs controls are only available from the fifth wave of the survey onwards. Outcomes and regressors are normalized to be between zero and one. All variables are defined in Appendix B, with summary statistics in Table B3. In the first column, the coefficient estimate corresponds to the baseline zero-sum index, that is, the first principal component of the four baseline zero-sum questions about income, citizenship, ethnic groups, and trade. In the second column (with the adjusted zero-sum index), the coefficient corresponds to the first principal component of three of the baseline questions, removing the one most similar to the policy outcome in that group – income for the redistribution outcomes, ethnic groups for the race outcomes, and citizenship for the immigration outcomes. Note that no component in the zero-sum index is closely related to gender equality. Indices of policy views are the first principal component of the relevant questions. See Section 3 for details. Horizontal bars are 95% confidence intervals.

Table C4: Multivariate Regression of Zero-Sum Thinking on Individual Characteristics

	Zero-sum index (0 to 1)			
	(1)	(2)	(3)	(4)
Age 30-39	0.019*** (0.005)	0.022*** (0.005)	0.020*** (0.005)	0.019*** (0.005)
Age 40-49	0.008 (0.005)	0.009* (0.005)	0.008* (0.005)	0.008 (0.005)
Age 50-59	-0.056*** (0.005)	-0.052*** (0.005)	-0.051*** (0.005)	-0.051*** (0.005)
Age 60+	-0.085*** (0.004)	-0.083*** (0.004)	-0.085*** (0.004)	-0.084*** (0.004)
Male	0.030*** (0.003)	0.029*** (0.003)	0.030*** (0.003)	0.030*** (0.003)
Other gender	0.044** (0.019)	0.039** (0.019)	0.034* (0.019)	0.034* (0.019)
African American/Black	0.067*** (0.005)	0.062*** (0.005)	0.048*** (0.005)	0.045*** (0.005)
American Indian/Alaska Native	-0.006 (0.015)	-0.010 (0.015)	-0.006 (0.015)	-0.005 (0.015)
Asian/Asian American	-0.019*** (0.007)	-0.016** (0.007)	-0.017** (0.007)	-0.017** (0.007)
Hispanic/Latino	0.006 (0.005)	0.005 (0.005)	-0.0005 (0.005)	-0.003 (0.005)
Native Hawaiian/Pacific Islander	0.003 (0.026)	0.003 (0.026)	-0.002 (0.027)	0.004 (0.028)
Other race	-0.004 (0.009)	-0.008 (0.009)	-0.006 (0.009)	-0.007 (0.009)
Born in U.S.	0.040*** (0.006)	0.041*** (0.006)	0.036*** (0.006)	0.037*** (0.006)
$25,000–$54,999		-0.017*** (0.004)	-0.017*** (0.004)	-0.017*** (0.004)
$55,000–$99,999		-0.029*** (0.004)	-0.028*** (0.004)	-0.028*** (0.004)
$100,000+		-0.026*** (0.005)	-0.026*** (0.005)	-0.027*** (0.005)
Some high school		0.033 (0.027)	0.029 (0.027)	0.032 (0.027)
High school degree/GED		0.035 (0.026)	0.031 (0.026)	0.033 (0.026)
Some college		0.015 (0.026)	0.008 (0.026)	0.010 (0.026)
2-year college degree		0.021 (0.026)	0.014 (0.026)	0.016 (0.026)
4-year college degree		0.006 (0.026)	-0.004 (0.026)	-0.002 (0.026)
Master's degree, M.B.A.		0.040 (0.026)	0.025 (0.026)	0.026 (0.026)
Ph.D., J.D., M.D.		0.064** (0.027)	0.046* (0.027)	0.046* (0.027)
Strong Republican			0.006 (0.005)	0.004 (0.005)
Moderate Republican			-0.003 (0.004)	-0.004 (0.004)
Moderate Democrat			0.027*** (0.004)	0.027*** (0.004)
Strong Democrat			0.061*** (0.004)	0.059*** (0.004)
Other party			-0.006 (0.008)	-0.006 (0.008)
Wave fixed effects	✓	✓	✓	✓
State fixed effects				✓
Observations	20,278	20,276	20,271	20,271
R2	0.079	0.086	0.099	0.103
Dep. Var. mean	0.514	0.514	0.514	0.514
Dependent variable std. dev.	0.211	0.211	0.211	0.211

Notes: The table reports OLS estimates where the unit of observation is an individual. The omitted categories are 18-29 for age, female for gender, European American/white for race, $0–$15,000 for household income, no high school for education, and Independent for party affiliation. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

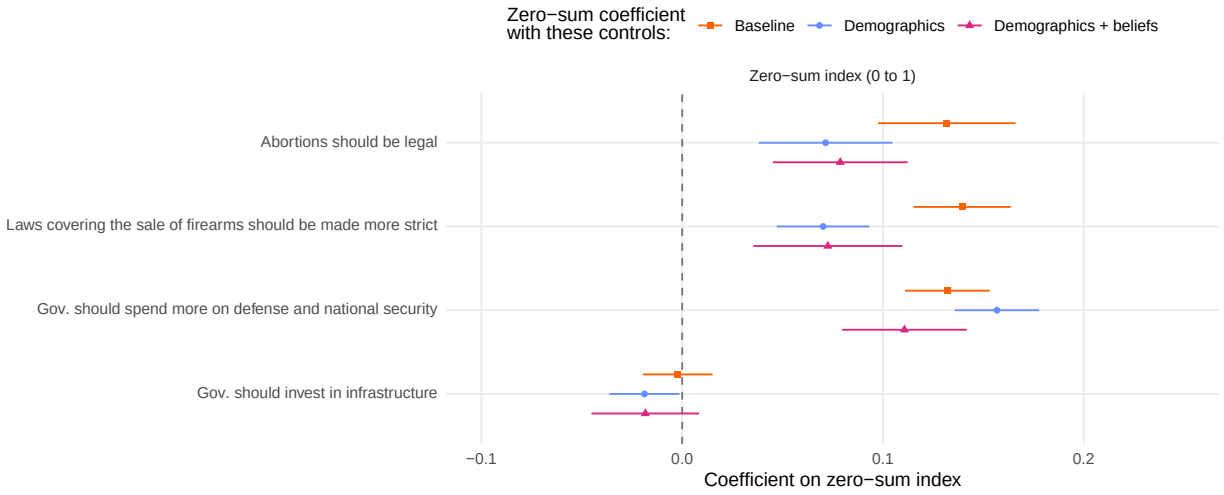


Figure C4: Zero-Sum Thinking and Policy Views – Other Policy Outcomes

Notes: Each coefficient is from a separate regression with controls for age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for survey wave. The three estimates in each column correspond to (1) the baseline specification, as well as specifications that add (2) demographic controls: fixed effects for race, household income, educational attainment, party affiliation, and fixed effects for household income interacted with a quadratic in age, and (3) controls for other core beliefs: whether the respondent thinks luck is more important than effort, their perceptions of economic mobility, the degree to which they are a moral universalist, how often they think the government can be trusted, whether they think people can generally be trusted, whether they think tradition is important, and how important religion is in their life. The beliefs controls are only available from the fifth wave of the survey onwards. Outcomes and regressors are normalized to be between zero and one. All variables are defined in Appendix B, with summary statistics in Table B3. The coefficient estimate corresponds to the baseline zero-sum index, that is, the first principal component of the four baseline zero-sum questions about income, citizenship, ethnic groups, and trade. Horizontal bars are 95% confidence intervals.

Table C5: Zero-Sum Thinking and Puzzles Related to U.S. Politics and Policies

Sample	Voted for Trump in 2016		Anti-immigration index Democrats			Pro-redistribution index Republicans		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Zero-sum index (0 to 1)	0.1505***	0.1493***	0.2153***	0.2141***		0.4054***	0.4034***	
	(0.0153)	(0.0152)	(0.0121)	(0.0121)		(0.0122)	(0.0123)	
Zero-sum index (0 to 1) excl. mechanical component					0.1141***			0.3386***
					(0.0120)			(0.0126)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Race fixed effects		✓		✓	✓		✓	✓
Observations	8,157	8,157	8,221	8,221	8,229	5,846	5,846	5,851
R^2	0.074	0.083	0.176	0.186	0.162	0.303	0.310	0.267
Dependent variable mean	0.082	0.082	0.453	0.453	0.453	0.471	0.471	0.471
Dependent variable std. dev.	0.275	0.275	0.231	0.231	0.231	0.211	0.211	0.211

Notes: The table reports OLS estimates where the unit of observation is an individual. The sample in the first five columns is restricted to those who reported being moderate or strong Democrats, and the sample in the last three columns is restricted to moderate or strong Republicans. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. In column (5), we exclude the question about citizens and non-citizens from the zero-sum index, and in column (8), we exclude the question about income groups. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

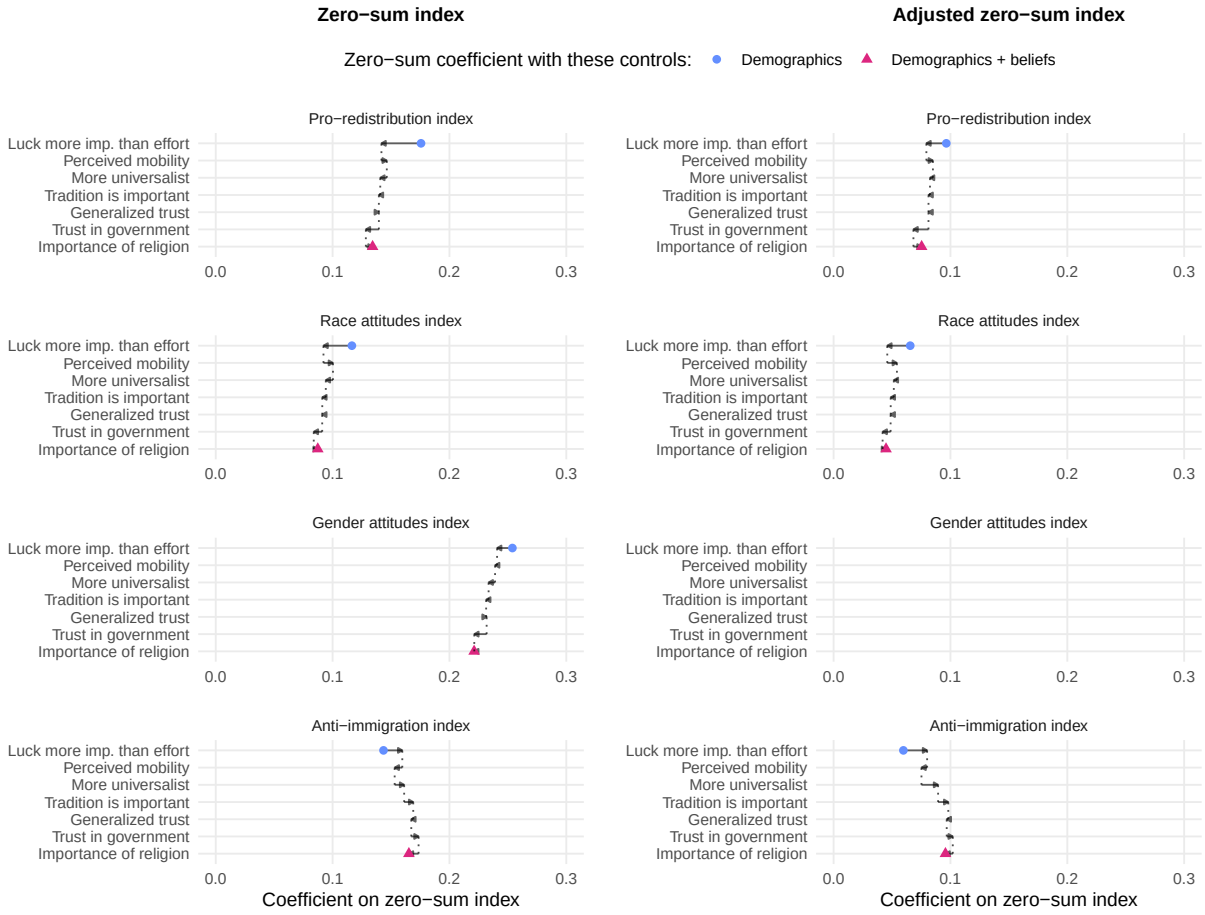


Figure C5: Gelbach Decompositions of Policy Views

Notes: The figure reports Gelbach decompositions (Gelbach, 2016) of the gap between (1) the coefficient on zero-sum thinking in a regression of each of the redistribution index, race attitudes index, anti-immigration index, and gender attitudes index on the zero-sum index with demographic controls only (the "restricted" regression) and (2) the coefficient on zero-sum thinking in the same regression, but with additional controls for other fundamental attitudes (the "full" regression). These additional controls, corresponding to the beliefs in Figure 5, include whether luck is more important than effort, perceived mobility, moral universalism, whether tradition is important, trust in government, generalized trust, and the importance of religion. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, respondent race, household income, educational attainment, party affiliation, and fixed effects for household income interacted with a quadratic in age; we also include fixed effects for survey wave. In the first column, the coefficient estimate corresponds to the baseline zero-sum index, that is, the first principal component of the four baseline zero-sum questions about income, citizenship, ethnic groups, and trade. In the second column (with the adjusted zero-sum index), the coefficient corresponds to the first principal component of three of the baseline questions, removing the one most similar to the policy outcome in that group – income for the redistribution outcomes, ethnic groups for the race outcomes, and citizenship for the immigration outcomes. Note that no component in the zero-sum index is closely related to gender equality. Indices of policy views are the first principal component of the relevant questions. See Section 3 for details.

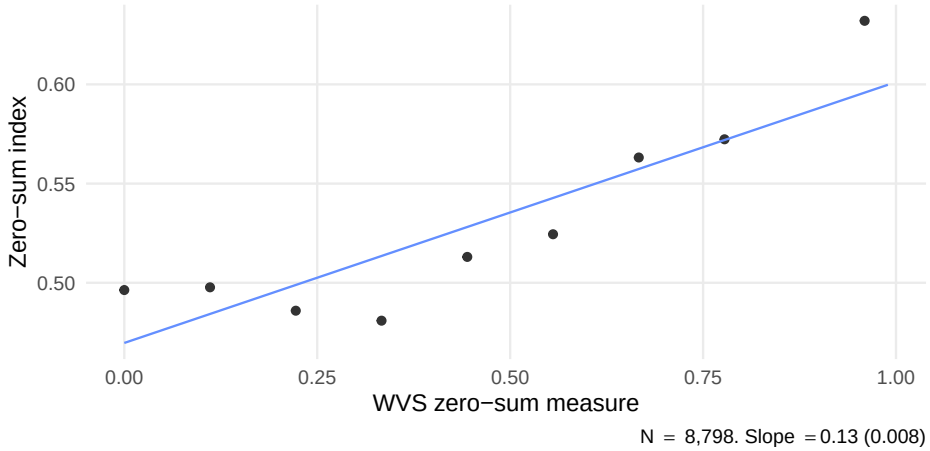


Figure C6: Zero-Sum Index and World Values Survey Measure of Zero-Sum Thinking

Notes: The figure reports a binscatter correlation plot (Cattaneo et al., 2024) of the relationship between the baseline zero-sum index and the World Values Survey question about zero-sum thinking. Both variables are scaled to be between 0 and 1. Data are from the last three waves of the survey.

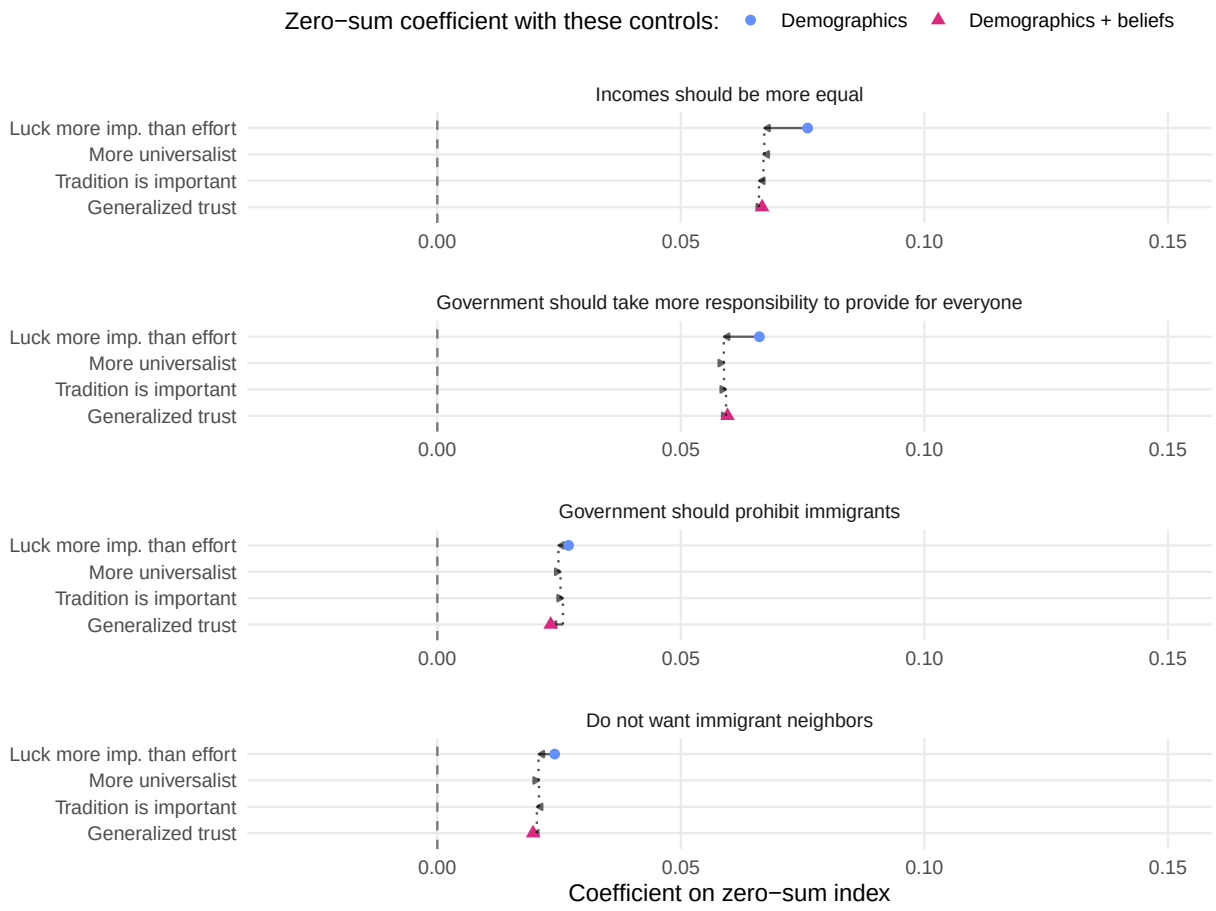


Figure C7: Gelbach Decompositions of Policy Views Across the World

Notes: The figure reports Gelbach decompositions (Gelbach, 2016) of the gap between (1) the coefficient on zero-sum thinking in a regression of each of four policy questions on the zero-sum index with demographic controls only (the "restricted" regression) and (2) the coefficient on zero-sum thinking in the same regression, but with additional controls for other fundamental attitudes (the "full" regression). These additional controls, corresponding to the beliefs in Figure 8, are whether luck is more important than effort, moral universalism, whether tradition is important, and generalized trust. Demographic controls include age and age squared, gender, and their interaction, fixed effects for income, education, political affiliation (on a left-right scale), region, and fixed effects for household income interacted with a quadratic in age. We also include country-by-survey-wave fixed effects. Data are from the World Values Survey.

Table C6: Zero-Sum Thinking by Birth Cohort

	Zero-sum index (0 to 1)		
	(1)	(2)	(3)
Birth cohorts = 1945-1949	-0.0115	-0.0105	-0.0099
	(0.0114)	(0.0115)	(0.0114)
Birth cohorts = 1950-1954	-0.0019	-0.0017	-0.0012
	(0.0109)	(0.0109)	(0.0108)
Birth cohorts = 1955-1959	0.0197*	0.0193*	0.0200*
	(0.0109)	(0.0109)	(0.0109)
Birth cohorts = 1960-1964	0.0309***	0.0302***	0.0296***
	(0.0108)	(0.0108)	(0.0107)
Birth cohorts = 1965-1969	0.0434***	0.0426***	0.0425***
	(0.0108)	(0.0108)	(0.0107)
Birth cohorts = 1970-1974	0.0607***	0.0602***	0.0599***
	(0.0111)	(0.0111)	(0.0111)
Birth cohorts = 1975-1979	0.0931***	0.0923***	0.0914***
	(0.0111)	(0.0111)	(0.0111)
Birth cohorts = 1980-1984	0.1303***	0.1292***	0.1288***
	(0.0109)	(0.0109)	(0.0109)
Birth cohorts = 1985-1989	0.1182***	0.1170***	0.1165***
	(0.0111)	(0.0111)	(0.0110)
Birth cohorts = 1990-1994	0.0956***	0.0948***	0.0941***
	(0.0108)	(0.0108)	(0.0108)
Birth cohorts = 1995-1999	0.0922***	0.0919***	0.0900***
	(0.0109)	(0.0110)	(0.0110)
Birth cohorts = 2000-2004	0.1075***	0.1058***	0.1028***
	(0.0112)	(0.0112)	(0.0112)
Demographic controls	✓	✓	✓
Wave fixed effects	✓	✓	✓
State fixed effects		✓	✓
Race fixed effects			✓
Observations	20,122	20,122	20,122
R^2	0.100	0.104	0.109
Dependent variable mean	0.514	0.514	0.514
Dependent variable std. dev.	0.211	0.211	0.211

Notes: The table reports OLS estimates where the unit of observation is an individual. We include only individuals born between 1940 and 2004, and the omitted category for the birth cohort dummies is 1940-1945. Demographic controls include gender, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

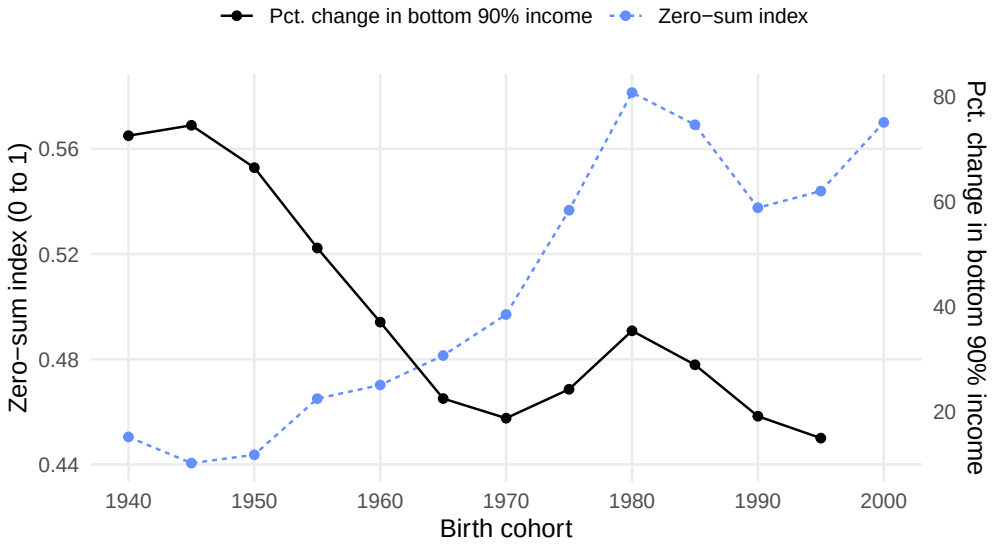


Figure C8: Economic Growth and Zero-Sum Thinking, By Birth Cohort, Bottom 90% Income Distribution

Notes: The black solid line is the percentage change in average income for the bottom 90% of the population during the first 20 years of an individual's life, averaged over five-year bins. Data are from the World Inequality Database. The blue dashed line is the average zero-sum index for respondents, also by five-year bins of birth year.

Table C7: Zero-Sum Thinking and Ancestral Economic Mobility, Respondents Older Than 40

	Zero-sum index (0 to 1)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Parents to respondent mobility	-0.0215***	-0.0217***	-0.0222***	-0.0332***				
	(0.0020)	(0.0020)	(0.0020)	(0.0030)				
Grandparents to parents mobility	-0.0193***	-0.0194***	-0.0198***	-0.0256***				
	(0.0024)	(0.0025)	(0.0025)	(0.0027)				
Great-grandpar. to grandparents mobility	-0.0135***	-0.0134***	-0.0142***	-0.0177***				
	(0.0030)	(0.0030)	(0.0030)	(0.0031)				
Great-grandpar. to respondent mobility					-0.0195***	-0.0197***	-0.0202***	-0.0256***
					(0.0017)	(0.0017)	(0.0017)	(0.0023)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓	✓		✓	✓	✓
Race fixed effects			✓	✓			✓	✓
Relative income control				✓				✓
Observations	7,679	7,679	7,679	7,679	7,794	7,794	7,794	7,794
R^2	0.132	0.138	0.144	0.147	0.131	0.136	0.142	0.144
Dependent variable mean	0.492	0.492	0.492	0.492	0.492	0.492	0.492	0.492
Dependent variable std. dev.	0.216	0.216	0.216	0.216	0.216	0.216	0.216	0.216

Notes: The table reports OLS estimates where the unit of observation is an individual. The sample is restricted to those more than 40 years old at the time of the survey. Mobility variables measure the change in economic standing between households when each generation was in adulthood. "Grandparents" refers to the respondent's paternal grandparents, and "great-grandparents" refers to the parents of the respondent's paternal grandfather. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for educational attainment and party affiliation. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table C8: Zero-Sum Thinking and Ancestral Economic Mobility, Variables Included Individually

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Parents to respondent mobility	-0.0123***	-0.0124***	-0.0190***						
	(0.0012)	(0.0012)	(0.0015)						
Grandparents to parents mobility				-0.0091***	-0.0090***	-0.0089***			
				(0.0014)	(0.0014)	(0.0014)			
Great-grandpar. to grandparents mobility							-0.0071***	-0.0074***	-0.0077***
							(0.0021)	(0.0021)	(0.0021)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Race fixed effects		✓	✓		✓	✓		✓	✓
Relative income control			✓			✓			✓
Observations	19,516	19,516	19,516	17,249	17,249	17,201	13,241	13,241	13,184
R^2	0.107	0.112	0.114	0.115	0.120	0.120	0.136	0.140	0.141
Dependent variable mean	0.513	0.513	0.513	0.516	0.516	0.515	0.529	0.529	0.529
Dependent variable std. dev.	0.211	0.211	0.211	0.215	0.215	0.215	0.222	0.222	0.222

Notes: The table reports OLS estimates where the unit of observation is an individual. Mobility variables measure the change in economic standing between households when each generation was in adulthood. "Grandparents" refers to the respondent's paternal grandparents, and "great-grandparents" refers to the parents of the respondent's paternal grandfather. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for educational attainment and party affiliation. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table C9: Zero-Sum Thinking and Occupational Mobility

(a) Occupational income score

	Zero-sum index (0 to 1)					
	(1)	(2)	(3)	(4)	(5)	(6)
Father to resp. occ. mobility	-0.0307**	-0.0324**	-0.0339**			
	(0.0136)	(0.0140)	(0.0135)			
Grandfather to father occ. mobility	-0.0157	-0.0181	-0.0185			
	(0.0126)	(0.0119)	(0.0115)			
Grandfather to resp. occ. mobility				-0.0206*	-0.0228**	-0.0239**
				(0.0107)	(0.0106)	(0.0101)
Demographic controls	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓		✓	✓
Race fixed effects			✓			✓
Observations	3,405	3,405	3,405	3,514	3,514	3,514
R^2	0.165	0.176	0.178	0.167	0.177	0.180
Num. clusters	266	266	266	269	269	269
Dependent variable mean	0.507	0.507	0.507	0.510	0.510	0.510
Dependent variable std. dev.	0.226	0.226	0.226	0.226	0.226	0.226

(b) PC measure of occupational status

	Zero-sum index (0 to 1)					
	(1)	(2)	(3)	(4)	(5)	(6)
Father to resp. occ. mobility (PC)	-0.1737**	-0.1831**	-0.1872**			
	(0.0803)	(0.0814)	(0.0803)			
Grandfather to father occ. mobility (PC)	-0.1853**	-0.1969**	-0.1939**			
	(0.0891)	(0.0816)	(0.0795)			
Grandfather to resp. occ. mobility (PC)				-0.1816***	-0.1924***	-0.1932***
				(0.0648)	(0.0639)	(0.0611)
Demographic controls	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓		✓	✓
Race fixed effects			✓			✓
Observations	3,173	3,173	3,173	3,363	3,363	3,363
R^2	0.171	0.181	0.184	0.171	0.182	0.185
Num. clusters	260	260	260	266	266	266
Dependent variable mean	0.505	0.505	0.505	0.509	0.509	0.509
Dependent variable std. dev.	0.225	0.225	0.225	0.226	0.226	0.226

Notes: The table reports OLS estimates where the unit of observation is an individual. In Panel (a), mobility is calculated using the 1950 occupational income score of the reported occupation, while in Panel (b), it is calculated using the first principal component of several measures of occupational status (Duncan Socioeconomic Index, Nam-Powers-Boyd occupational status score, occupational income score, Siegel prestige score, occupational earnings score, and the occupational educational score), all from IPUMS and using the 1950 occupational classification basis. Scores are measured in 1950 when possible; see Appendix for details. All measures are based on the respondent's described occupation (from an open response question), which is then matched to a Bureau of Labor Statistics broad Standard Occupational Classification (SOC) code. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for educational attainment and party affiliation. State fixed effects refer to the respondent's current state of residence. Standard errors are clustered by the relevant generations' occupations' broad SOC codes. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table C10: Zero-Sum Thinking and Ancestral Economic Mobility, Controlling for Current Income

	Zero-sum index (0 to 1)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Parents to respondent mobility	-0.0220***	-0.0221***	-0.0222***	-0.0237***				
	(0.0016)	(0.0016)	(0.0016)	(0.0017)				
Grandparents to parents mobility	-0.0240***	-0.0241***	-0.0241***	-0.0248***				
	(0.0019)	(0.0019)	(0.0019)	(0.0019)				
Great-grandpar. to grandparents mobility	-0.0184***	-0.0182***	-0.0186***	-0.0190***				
	(0.0022)	(0.0022)	(0.0022)	(0.0022)				
Great-grandpar. to respondent mobility					-0.0217***	-0.0218***	-0.0219***	-0.0229***
					(0.0014)	(0.0014)	(0.0013)	(0.0014)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓	✓		✓	✓	✓
Race fixed effects			✓	✓			✓	✓
Current income control				✓				✓
Observations	13,131	13,131	13,131	13,130	13,349	13,349	13,349	13,348
R^2	0.147	0.153	0.157	0.158	0.147	0.152	0.156	0.157
Dependent variable mean	0.529	0.529	0.529	0.529	0.529	0.529	0.529	0.529
Dependent variable std. dev.	0.222	0.222	0.222	0.222	0.221	0.221	0.221	0.221

Notes: The table reports OLS estimates where the unit of observation is an individual. Mobility variables measure the change in economic standing between households when each generation was in adulthood. "Grandparents" refers to the respondent's paternal grandparents, and "great-grandparents" refers to the parents of the respondent's paternal grandfather. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for educational attainment and party affiliation. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table C11: Zero-Sum Thinking and Ancestral Economic Mobility: U.S. Only

	Zero-sum index (0 to 1)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Parents to respondent mobility	-0.0220***	-0.0221***	-0.0227***	-0.0489***				
	(0.0019)	(0.0019)	(0.0019)	(0.0027)				
Grandparents to parents mobility	-0.0261***	-0.0262***	-0.0266***	-0.0407***				
	(0.0022)	(0.0022)	(0.0022)	(0.0025)				
Great-grandpar. to grandparents mobility	-0.0223***	-0.0222***	-0.0228***	-0.0309***				
	(0.0027)	(0.0027)	(0.0027)	(0.0027)				
Great-grandpar. to respondent mobility					-0.0229***	-0.0231***	-0.0235***	-0.0394***
					(0.0016)	(0.0016)	(0.0016)	(0.0020)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓	✓		✓	✓	✓
Race fixed effects			✓	✓			✓	✓
Relative income control				✓				✓
Observations	9,733	9,733	9,733	9,733	10,085	10,085	10,085	10,085
R^2	0.152	0.160	0.165	0.184	0.152	0.161	0.166	0.182
Dependent variable mean	0.537	0.537	0.537	0.537	0.539	0.539	0.539	0.539
Dependent variable std. dev.	0.222	0.222	0.222	0.222	0.222	0.222	0.222	0.222

Notes: The table reports OLS estimates where the unit of observation is an individual. Mobility variables measure the change in economic standing between households when each generation was in adulthood. "Grandparents" refers to the respondent's paternal grandparents, and "great-grandparents" refers to the parents of the respondent's paternal grandfather. Mobility measures are missing if they are in reference to relative income measured outside of the U.S. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for educational attainment and party affiliation. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table C12: Zero-Sum Thinking and Mobility, With Enslaved Ancestors and Immigrant Generation Controls

	Zero-sum index (0 to 1)		
	(1)	(2)	(3)
Great-grandpar. to respondent mobility	-0.0347***	-0.0336***	-0.0333***
	(0.0017)	(0.0017)	(0.0017)
Enslaved ancestor		0.0854***	0.0899***
		(0.0060)	(0.0062)
Parent immigrated			-0.0307***
			(0.0065)
Grandparent immigrated			0.0058
			(0.0050)
Demographic controls	✓	✓	✓
Wave fixed effects	✓	✓	✓
State fixed effects	✓	✓	✓
Race fixed effects	✓	✓	✓
Relative income control	✓	✓	✓
Observations	13,349	13,344	12,719
R^2	0.167	0.180	0.184
Dependent variable mean	0.529	0.529	0.527
Dependent variable std. dev.	0.221	0.221	0.222

Notes: The table reports OLS estimates where the unit of observation is an individual. Mobility variables measure the change in economic standing between households when each generation was in adulthood. "Great-grandparents" refers to the parents of the respondent's paternal grandfather. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for educational attainment and party affiliation. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table C13: Zero-Sum Thinking and Ancestral Economic Mobility, By Gender of Respondent

	Zero-sum index (0 to 1)					
	All		Male		Female	
	(1)	(2)	(3)	(4)	(5)	(6)
Parents to respondent mobility	-0.0466***		-0.0566***		-0.0248***	
	(0.0023)		(0.0033)		(0.0033)	
Grandparents to parents mobility	-0.0382***		-0.0459***		-0.0210***	
	(0.0021)		(0.0031)		(0.0028)	
Great-grandpar. to grandparents mobility	-0.0267***		-0.0278***		-0.0190***	
	(0.0023)		(0.0032)		(0.0031)	
Great-grandpar. to respondent mobility		-0.0366***		-0.0426***		-0.0214***
		(0.0017)		(0.0024)		(0.0024)
Demographic controls	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓
Race fixed effects	✓	✓	✓	✓	✓	✓
Relative income control	✓	✓	✓	✓	✓	✓
Observations	13,131	13,349	6,891	6,997	6,240	6,352
R^2	0.165	0.160	0.221	0.213	0.118	0.117
Dependent variable mean	0.529	0.529	0.553	0.553	0.502	0.503
Dependent variable std. dev.	0.222	0.221	0.234	0.234	0.204	0.204

Notes: The table reports OLS estimates where the unit of observation is an individual. Mobility variables measure the change in economic standing between households when each generation was in adulthood. "Grandparents" refers to the respondent's paternal grandparents, and "great-grandparents" refers to the parents of the respondent's paternal grandfather. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for educational attainment and party affiliation. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table C14: Zero-Sum Thinking and Ancestral Economic Mobility, Mother's Line, By Gender of Respondent

	Zero-sum index (0 to 1)					
	All		Male		Female	
	(1)	(2)	(3)	(4)	(5)	(6)
Parents to respondent mobility	-0.0432***		-0.0546***		-0.0207***	
	(0.0023)		(0.0034)		(0.0032)	
Grandparents to parents mobility	-0.0294***		-0.0361***		-0.0146***	
	(0.0020)		(0.0031)		(0.0027)	
Great-grandpar. to grandparents mobility	-0.0220***		-0.0262***		-0.0118***	
	(0.0021)		(0.0031)		(0.0028)	
Great-grandpar. to respondent mobility		-0.0301***		-0.0372***		-0.0147***
		(0.0017)		(0.0025)		(0.0023)
Demographic controls	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓
Race fixed effects	✓	✓	✓	✓	✓	✓
Relative income control	✓	✓	✓	✓	✓	✓
Observations	13,896	14,094	7,028	7,110	6,868	6,984
R^2	0.147	0.141	0.207	0.199	0.104	0.101
Dependent variable mean	0.525	0.526	0.551	0.551	0.499	0.500
Dependent variable std. dev.	0.220	0.220	0.234	0.234	0.202	0.202

Notes: The table reports OLS estimates where the unit of observation is an individual. Mobility variables measure the change in economic standing between households when each generation was in adulthood. "Grandparents" refers to the respondent's maternal grandparents, and "great-grandparents" refers to the parents of the respondent's maternal grandmother. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for educational attainment and party affiliation. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table C15: Zero-Sum Thinking and Ancestral Economic Mobility, Separately for Downward and Upward Mobility

	Zero-sum index (0 to 1)							
	Downward				Upward			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Great-grandpar. to respondent mobility	-0.0002	-0.0014	-0.0008	-0.0122	-0.0226***	-0.0225***	-0.0228***	-0.0302***
	(0.0069)	(0.0069)	(0.0069)	(0.0079)	(0.0030)	(0.0030)	(0.0030)	(0.0034)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓	✓		✓	✓	✓
Race fixed effects			✓	✓			✓	✓
Relative income control				✓				✓
Observations	2,227	2,227	2,227	2,227	6,816	6,816	6,816	6,816
R^2	0.160	0.181	0.188	0.192	0.098	0.106	0.114	0.117
Dependent variable mean	0.554	0.554	0.554	0.554	0.491	0.491	0.491	0.491
Dependent variable std. dev.	0.219	0.219	0.219	0.219	0.211	0.211	0.211	0.211

Notes: The table reports OLS estimates where the unit of observation is an individual. Mobility variables measure the change in economic standing between households when each generation was in adulthood. We split the sample into two groups: those whose relative economic standing decreased between their great-grandparents' household and their own household ("downward" mobility), and those whose relative economic standing increased ("upward" mobility). Those whose relative economic standing did not change between these two generations are not included. "Great-grandparents" refers to the parents of the respondent's paternal grandfather. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for educational attainment and party affiliation. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table C16: Zero-Sum Thinking and Immigration, Variables Included Individually

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent immigrated	-0.0415***	-0.0421***	-0.0343***						
	(0.0056)	(0.0057)	(0.0062)						
Parent immigrated				-0.0243***	-0.0246***	-0.0180***			
				(0.0045)	(0.0045)	(0.0048)			
Grandparent immigrated							0.0055	0.0070*	0.0081**
							(0.0040)	(0.0040)	(0.0040)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓		✓	✓		✓	✓
Race fixed effects			✓			✓			✓
Observations	20,271	20,271	20,271	20,114	20,114	20,114	18,708	18,708	18,708
R^2	0.104	0.109	0.113	0.104	0.109	0.114	0.105	0.110	0.116
Dependent variable mean	0.514	0.514	0.514	0.514	0.514	0.514	0.512	0.512	0.512
Dependent variable std. dev.	0.211	0.211	0.211	0.211	0.211	0.211	0.212	0.212	0.212

Notes: The table reports OLS estimates where the unit of observation is an individual. Since all respondents are in the U.S. when surveyed, we define "Respondent immigrated" as an indicator equal to one if the respondent was born outside the United States. "Parent immigrated" is an indicator equal to one if the respondent was born in the U.S. and at least one of their parents was born outside the U.S. This variable is missing, and hence the respondent is not included in the regression, if they indicated that they do not know whether either of their parents was born in the U.S. "Grandparent immigrated" is an indicator equal to one if the respondent was born in the U.S. and either (1) their father was born in the U.S. and at least one paternal grandparent was born outside the U.S., or (2) their mother was born in the U.S. and at least one maternal grandparent was born outside the U.S. This variable is missing, and hence the respondent is not included in the regression, if they indicated that they do not know where any of their four grandparents were born. Demographic controls include age and age squared, gender, and their interaction, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table C17: Zero-Sum Thinking and County Foreign Share 1860-1920, Respondents With Grandparents Born Between 1870 and 1920

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county foreign share	0.0173	0.0217	0.0219						
	(0.0255)	(0.0260)	(0.0271)						
Parents' counties foreign share				-0.0584**	-0.0551**	-0.0576*			
				(0.0281)	(0.0275)	(0.0305)			
Grandparents' counties foreign share							-0.0330*	-0.0340**	-0.0338*
							(0.0172)	(0.0172)	(0.0180)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Race fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Child of immigrant		✓	✓		✓	✓		✓	✓
Grandchild of immigrant			✓			✓			✓
Observations	5,363	5,342	5,111	5,028	5,027	4,813	4,179	4,178	4,178
R^2	0.098	0.098	0.099	0.111	0.111	0.112	0.109	0.109	0.109
Num. clusters	1,211	1,211	1,197	1,367	1,367	1,342	1,196	1,196	1,196
Dependent variable mean	0.484	0.484	0.481	0.483	0.483	0.481	0.483	0.483	0.483
Dependent variable std. dev.	0.206	0.206	0.205	0.206	0.206	0.206	0.206	0.206	0.206
Indep. variable mean	0.181	0.181	0.181	0.179	0.179	0.179	0.163	0.163	0.163
Indep. variable std. dev.	0.123	0.123	0.123	0.125	0.125	0.125	0.124	0.124	0.124

Notes: The table reports OLS estimates where the unit of observation is an individual. The sample is restricted to respondents with at least one grandparent who was born between 1870 and 1920. "Foreign share" refers to the proportion of individuals in a county who were born outside of the U.S., averaged over the 1860 to 1920 period. All shares are for the counties where the respondent or their ancestor grew up, defined as ages 10 to 19 for respondents and ages 7 to 17 for parents and grandparents. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Standard errors are clustered by the respondent's county, parents' counties, or grandparents' counties, and are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table C18: Zero-Sum Thinking and Race, With Enslaved Ancestors Controls

	Zero-sum index (0 to 1)				
	(1)	(2)	(3)	(4)	(5)
African American/Black	0.0451***	0.0162***	0.0415***	0.0148*	0.0200**
	(0.0049)	(0.0053)	(0.0074)	(0.0078)	(0.0081)
American Indian or Alaska Native	-0.0076	-0.0177	-0.0016	-0.0119	-0.0015
	(0.0152)	(0.0154)	(0.0184)	(0.0185)	(0.0185)
Asian/Asian American	-0.0183***	-0.0180***	-0.0154	-0.0160	-0.0143
	(0.0069)	(0.0069)	(0.0111)	(0.0111)	(0.0112)
Hispanic/Latino	-0.0019	-0.0029	-0.0040	-0.0043	-0.0050
	(0.0051)	(0.0051)	(0.0071)	(0.0071)	(0.0071)
Native Hawaiian or Other Pacific Islander	0.0075	-0.0053	0.0798***	0.0665**	0.0815***
	(0.0277)	(0.0289)	(0.0296)	(0.0311)	(0.0300)
Other race	-0.0050	-0.0164*	0.0039	-0.0084	-0.0026
	(0.0090)	(0.0090)	(0.0127)	(0.0129)	(0.0128)
Enslaved ancestor		0.0837***		0.0794***	
		(0.0054)		(0.0078)	
Enslavement of African descendants					0.0448***
					(0.0069)
Demographic controls	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓
Observations	20,263	20,263	8,790	8,790	8,790
R^2	0.113	0.125	0.151	0.163	0.156
Dependent variable mean	0.514	0.514	0.521	0.521	0.521
Dependent variable std. dev.	0.211	0.211	0.215	0.215	0.215

Notes: The table reports OLS estimates where the unit of observation is an individual. Columns 3-5 restrict the sample to waves 5–7, where we asked additional questions about episode of enslavement. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table C19: Zero-Sum Thinking and Growing Up in Counties With Historical Enslavement: Fathers and Grandfathers

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county enslaved share	0.0464***	0.0337***	0.0349***						
	(0.0130)	(0.0130)	(0.0129)						
Father's county enslaved share				0.0646***	0.0406***	0.0382***			
				(0.0128)	(0.0133)	(0.0131)			
Grandfather's county enslaved share							0.0491***	0.0244*	0.0174
							(0.0142)	(0.0137)	(0.0142)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Race fixed effects		✓	✓		✓	✓		✓	✓
Enslaved ancestor			✓			✓			✓
Observations	18,161	18,161	18,154	14,347	14,347	14,343	9,001	9,001	9,000
R^2	0.090	0.095	0.101	0.109	0.114	0.123	0.123	0.128	0.143
Num. clusters	2,051	2,051	2,051	2,128	2,128	2,127	1,785	1,785	1,785
Dependent variable mean	0.507	0.507	0.507	0.509	0.509	0.509	0.518	0.518	0.518
Dependent variable std. dev.	0.206	0.206	0.206	0.211	0.211	0.210	0.216	0.216	0.216

Notes: The table reports OLS estimates where the unit of observation is an individual. "Enslaved share" refers to the proportion of individuals in a county who were enslaved according to the 1860 Census. Counties in non-slave states or in states within that contiguous U.S. that did not exist in 1860 are coded as having zero enslaved share. All shares are for the counties where the respondent or their ancestor grew up, defined as ages 10 to 19 for respondents and ages 7 to 17 for fathers and paternal grandfathers. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Standard errors are clustered by the respondent's county, father' county, or paternal grandfather's county, and are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table C20: Zero-Sum Thinking and Growing Up in Counties With In-Migration from the U.S. South and Confederate Culture, With Controls for Southern Black Share and Enslaved Ancestor

(a) Share of Southern whites

	Zero-sum index (0 to 1)											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Respondent's county southern white share	0.0233	0.0612	0.0893	0.0914								
	(0.0709)	(0.0760)	(0.0781)	(0.0767)								
Respondent's county southern Black share	0.9699***	0.8100***	0.5537*	0.5315*								
	(0.2738)	(0.2739)	(0.2965)	(0.2840)								
Parents' counties southern white share					0.1129*	0.1725***	0.1892***	0.1875***				
					(0.0603)	(0.0642)	(0.0651)	(0.0640)				
Parents' counties southern Black share					0.6248***	0.4576**	0.2223	0.1986				
					(0.2286)	(0.1988)	(0.2173)	(0.2073)				
Grandparents' counties southern white share									0.1981**	0.2437***	0.2471***	0.2434***
									(0.0814)	(0.0771)	(0.0744)	(0.0746)
Grandparents' counties southern Black share									0.4595***	0.3141**	0.1127	0.0862
									(0.1476)	(0.1417)	(0.1388)	(0.1362)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓	✓		✓	✓	✓		✓	✓	✓
Race fixed effects			✓	✓			✓	✓			✓	✓
Enslaved ancestor				✓				✓				✓
Observations	13,131	13,131	13,131	13,126	12,247	12,247	12,247	12,243	9,445	9,445	9,445	9,444
R^2	0.091	0.096	0.102	0.109	0.101	0.108	0.115	0.122	0.105	0.116	0.122	0.135
Num. clusters	1,239	1,239	1,239	1,239	1,555	1,555	1,555	1,555	1,462	1,462	1,462	1,462
Dependent variable mean	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.502	0.502	0.502	0.502
Dependent variable std. dev.	0.205	0.205	0.205	0.205	0.208	0.208	0.208	0.208	0.212	0.212	0.212	0.212

(b) Confederate Culture Index

	Zero-sum index (0 to 1)											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Respondent's county CCI (0 to 4)	0.0062***	0.0064***	0.0051***	0.0049***								
	(0.0014)	(0.0016)	(0.0017)	(0.0016)								
Parents' counties CCI (0 to 4)					0.0095***	0.0091***	0.0071***	0.0068***				
					(0.0015)	(0.0017)	(0.0016)	(0.0016)				
Grandparents' counties CCI (0 to 4)									0.0117***	0.0115***	0.0088***	0.0081***
									(0.0019)	(0.0024)	(0.0022)	(0.0022)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓	✓		✓	✓	✓		✓	✓	✓
Race fixed effects			✓	✓			✓	✓			✓	✓
Enslaved ancestor				✓				✓				✓
Observations	18,161	18,161	18,161	18,154	16,126	16,126	16,126	16,120	12,682	12,682	12,682	12,681
R^2	0.086	0.090	0.095	0.102	0.101	0.106	0.111	0.119	0.103	0.110	0.115	0.128
Num. clusters	2,051	2,051	2,051	2,051	2,200	2,200	2,200	2,199	2,023	2,023	2,023	2,023
Dependent variable mean	0.507	0.507	0.507	0.507	0.510	0.510	0.510	0.510	0.512	0.512	0.512	0.512
Dependent variable std. dev.	0.206	0.206	0.206	0.206	0.209	0.209	0.209	0.209	0.212	0.212	0.212	0.212

Notes: The table reports OLS estimates where the unit of observation is an individual. "Southern white share" and "Southern Black share" refer to the proportion of individuals in a non-Southern county who were born in the U.S. South. The sample in the first panel omits all counties from the U.S. Confederate South. "CCI" is the Confederate Culture Index from Bazzi et al. (2023a); see text for more details. All shares are for the counties where the respondent or their ancestor grew up, defined as ages 10 to 19 for respondents and ages 7 to 17 for parents and grandparents. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Standard errors are clustered by the respondent's county, parents' counties, or grandparents' counties, and are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table C21: Zero-Sum Thinking and Growing Up in Counties With Confederate Culture: Separately for Black and White Respondents

	Zero-sum index (0 to 1)					
	Black			White		
	(1)	(2)	(3)	(4)	(5)	(6)
Respondent's county CCI (0 to 4)	0.0058			0.0063***		
	(0.0046)			(0.0020)		
Parents' counties CCI (0 to 4)		0.0058			0.0082***	
		(0.0045)			(0.0019)	
Grandparents' counties CCI (0 to 4)			0.0003			0.0103***
			(0.0050)			(0.0027)
Demographic controls	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓
Observations	2,146	1,964	1,544	12,668	12,104	9,794
R^2	0.067	0.075	0.087	0.107	0.117	0.120
Num. clusters	562	579	441	1,873	1,966	1,814
Dependent variable mean	0.568	0.575	0.576	0.495	0.497	0.499
Dependent variable std. dev.	0.196	0.196	0.201	0.207	0.210	0.212

Notes: The table reports OLS estimates where the unit of observation is an individual. We show results separately for Black respondents in columns 1-3 and white respondents in columns 4-6. "CCI" is the Confederate Culture Index from Bazzi et al. (2023a); see text for more details. All shares are for the counties where the respondent or their ancestor grew up, defined as ages 10 to 19 for respondents and ages 7 to 17 for parents and grandparents. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. All variables are defined in Appendix B, with summary statistics in Tables B3 and B4. Standard errors are clustered by the respondent's county, parents' counties, or grandparents' counties, and are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table C22: Zero-Sum Thinking and Growing Up in Counties With In-Migration from the U.S. South and Confederate Culture: Fathers and Grandfathers

(a) Share of Southern whites

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county southern white share	0.0788	0.1387*	0.1421**						
	(0.0693)	(0.0720)	(0.0717)						
Father's county southern white share				0.1350*	0.1812***	0.1709**			
				(0.0753)	(0.0684)	(0.0680)			
Grandfather's county southern white share							0.3529***	0.4225***	0.4024***
							(0.1127)	(0.1041)	(0.1017)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓		✓	✓		✓	✓
Race fixed effects			✓			✓			✓
Observations	13,131	13,131	13,131	10,491	10,491	10,491	6,278	6,278	6,278
R^2	0.087	0.094	0.101	0.102	0.112	0.119	0.122	0.137	0.144
Num. clusters	1,239	1,239	1,239	1,334	1,334	1,334	1,218	1,218	1,218
Dependent variable mean	0.500	0.500	0.500	0.499	0.499	0.499	0.509	0.509	0.509
Dependent variable std. dev.	0.205	0.205	0.205	0.210	0.210	0.210	0.215	0.215	0.215

(b) Confederate Culture Index

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county CCI (0 to 4)	0.0062***	0.0064***	0.0051***						
	(0.0014)	(0.0016)	(0.0017)						
Father's county CCI (0 to 4)				0.0084***	0.0075***	0.0057***			
				(0.0016)	(0.0017)	(0.0017)			
Grandfather's county CCI (0 to 4)							0.0105***	0.0101***	0.0082***
							(0.0021)	(0.0023)	(0.0023)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓		✓	✓		✓	✓
Race fixed effects			✓			✓			✓
Observations	18,161	18,161	18,161	14,347	14,347	14,347	9,001	9,001	9,001
R^2	0.086	0.090	0.095	0.103	0.109	0.114	0.116	0.125	0.130
Num. clusters	2,051	2,051	2,051	2,206	2,206	2,206	2,005	2,005	2,005
Dependent variable mean	0.507	0.507	0.507	0.509	0.509	0.509	0.518	0.518	0.518
Dependent variable std. dev.	0.206	0.206	0.206	0.211	0.211	0.211	0.216	0.216	0.216

Notes: The table reports OLS estimates where the unit of observation is an individual. "Southern white share" and "Southern black share" refer to the proportion of individuals in a non-Southern county who were born in the U.S. South. The sample in the first panel omits all counties from the U.S. Confederate South. "CCI" is the Confederate Culture Index from Bazzi et al. (2023a); see text for more details. All shares are for the counties where the respondent or their ancestor grew up, defined as ages 10 to 19 for respondents and ages 7 to 17 for parents and grandparents. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Standard errors are clustered by the respondent's county, father's county, or paternal grandfather's county, and are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Appendix D. Robustness to Keeping Only the Most Attentive Respondents

Here, we examine the robustness of our main results to the respondents' level of attentiveness and care in answering the survey. We implement four criteria that help us flag the most attentive respondents. Note that these criteria are intentionally strict for the sake of checking the robustness of our results, and respondents who do not meet them are not necessarily inattentive.

We first identify respondents in the following categories:

1. Those who answer in the negative to a question asking respondents to report honestly whether they have devoted their full attention to the survey (1% of respondents).

2. Those who frequently answer with "extreme" options: the 10% of respondents in each wave who answered the highest share of questions with either the smallest or largest possible answer.

3. Those who frequently answer with the "middle" option: the 10% of respondents in each wave who answered the highest share of questions with the middle response (when applicable).

In Section A, we reproduce our main results dropping the 19% of respondents that are flagged using one of these three criteria. Then, we add an additional, stricter criterion:

4. Those who fall into a subtle attention trap, which is a question that asks respondents whether they agree with the following statement: "It is easy to find accurate and reliable information in the media these days." However, the instruction block that precedes the question says, "To show that you are reading the full set of instructions, just go ahead and select both strongly agree and strongly disagree among the alternatives below, no matter what your opinion is." Passing this attention trap requires very careful reading. Even attentive respondents who do not rush tend to fail this test. Nevertheless, we view this as a very stringent test that only keeps the most attentive respondents.

In Section B, we reproduce our main results dropping the 52% of respondents that are flagged using any of the four methods.

Specifically, we show the following tables and figures:

- Figures D1 and D8 reproduce Figure 2, showing the distribution of responses to the four baseline zero-sum questions.
- Tables D1 and D10 reproduce (part of) Table B2, showing the first and second principal components of the four zero-sum questions.
- Figures D2 and D9 reproduce Figure 3, showing demographic correlates of zero-sum thinking.
- Figures D3 and D10 reproduce Figure 4, showing the density of the zero-sum index by party.
- Figures D4 and D11 reproduce Figure 5, showing correlations between the zero-sum index and policy views.
- Figures D5 and D12 reproduce Figure C5, showing a Gelbach decomposition of the effect of adding controls for other fundamental beliefs to a regression of policy views on the zero-sum index.
- Figures D6 and D13 reproduce Figure 9, showing the proportion of Democrats who voted for Donald Trump by zero-sum quartile.
- Figures D7 and D14 reproduce Figure 10, showing an index of anti-immigration attitudes among Democrats and an index of pro-redistribution attitudes among Republicans by zero-sum quartile.
- Tables D2 and D11 reproduce Table 2, showing the relationship between the zero-sum index and ancestral mobility.
- Tables D3 and D12 reproduce Table 3, showing the relationship between the zero-sum index and the respondent's immigrant generation.
- Tables D4 and D13 reproduce Table 4, showing the relationship between the zero-sum index and the foreign share in the respondents' own county, their parents' counties, and their grandparents' counties.
- Tables D5 and D14 reproduce Table 5, showing the relationship between the zero-sum index and the respondent's race.

- Tables D6 and D15 reproduce Table 6, showing the relationship between the zero-sum index and the respondent's family's history of enslavement.
- Tables D7 and D16 reproduce Table 8, showing the relationship between the zero-sum index and the fraction of enslaved people in 1860 in the respondents' own county, their parents' counties, and their grandparents' counties.
- Tables D8 and D17 reproduce Table 9, showing the relationship between the zero-sum index and the share of southern whites in the respondents' own county, their parents' counties, and their grandparents' counties.
- Tables D9 and D18 reproduce Table 10, showing the relationship between the zero-sum index and the Confederate Culture Index in the respondents' own county, their parents' counties, and their grandparents' counties.

A. Three criteria for attentiveness

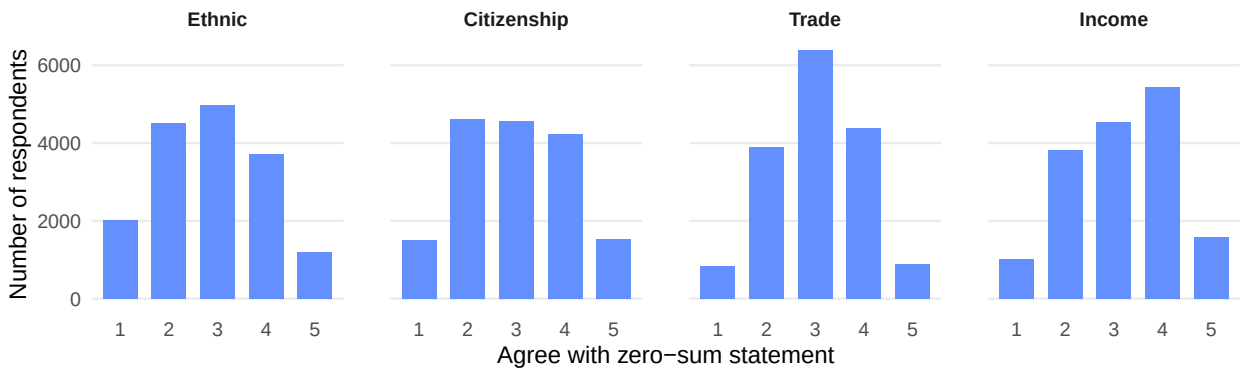


Figure D1: Distributions of Responses to Zero-Sum Questions

Notes: The figure shows the distribution of responses to the two-statement zero-sum questions. Statement 2 is the more zero-sum statement, and answer options are (1) Strongly agree with 1, (2) Agree with 1, (3) Agree with 2, (4) Strongly agree with 2.

Table D1: PCA Factor Loadings: First and Second Principal Components

Question	1st PC (Eigenvalue: 2.25)	2nd PC (Eigenvalue: 0.77)
Ethnicity	0.55	-0.26
Citizenship	0.40	0.90
Trade	0.52	-0.07
Income	0.52	-0.34

Notes: The table shows factor loadings for the first two principal components for each of the four component questions of the zero-sum index.

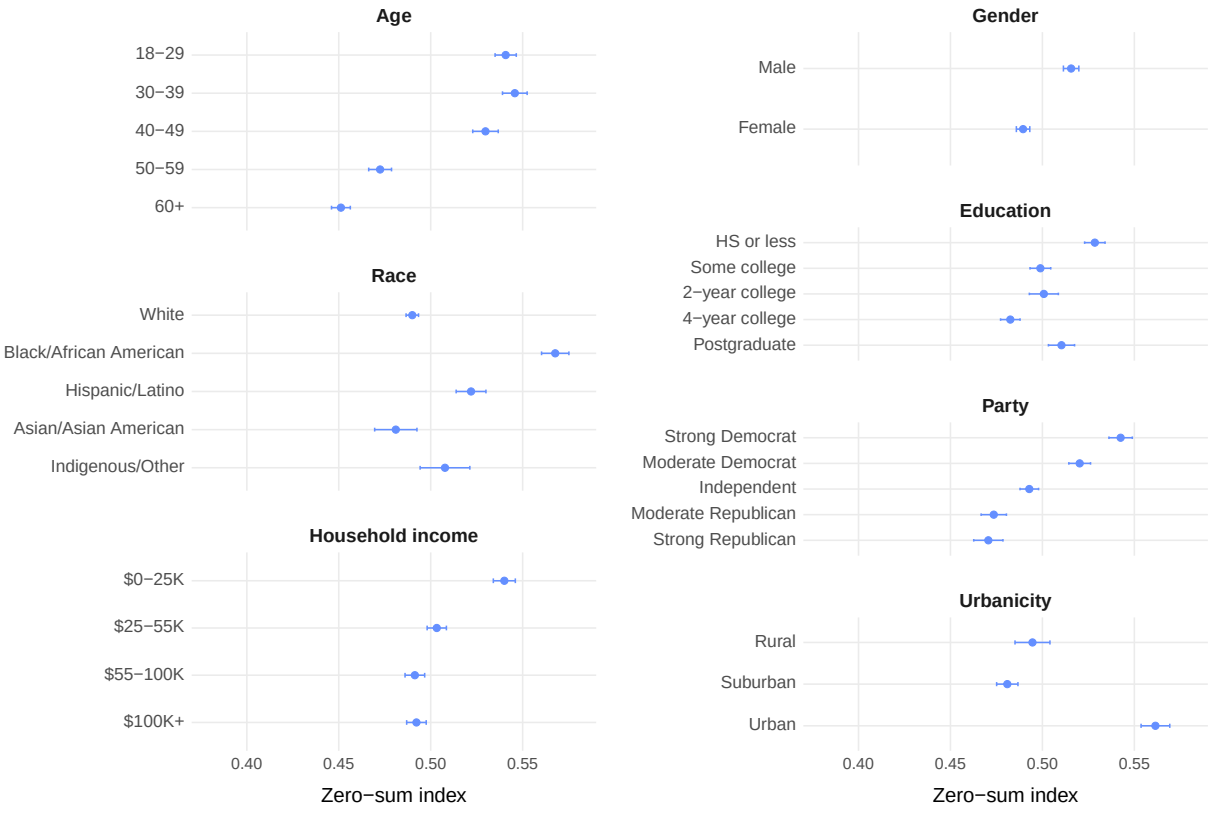


Figure D2: Average Zero-Sum Index by Demographic Group

Notes: Horizontal bars are 95% confidence intervals.

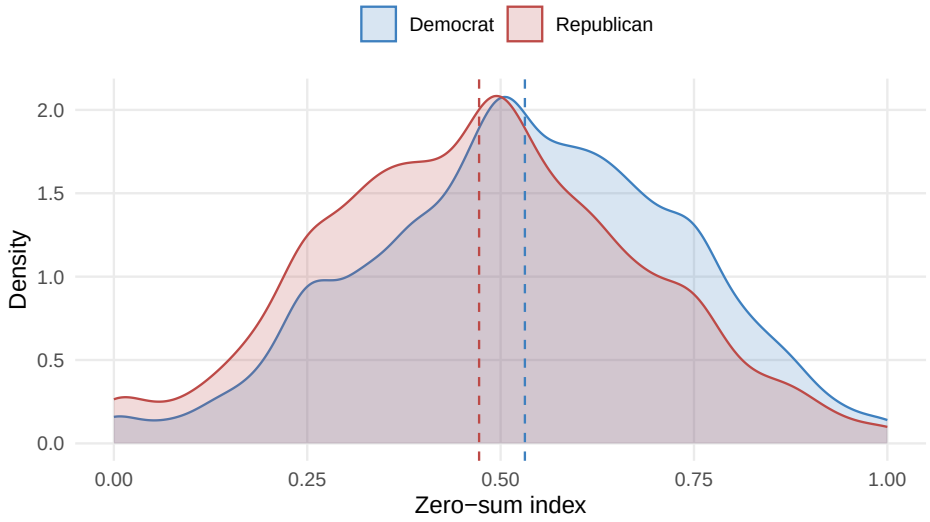


Figure D3: Density of Zero-Sum Index By Party

Notes: Vertical lines show the mean zero-sum index for each party. "Republican" includes respondents who considered themselves "Strong Republican" or "Moderate Republican", and "Democrat" includes respondents who considered themselves "Strong Democrat" or "Moderate Democrat." Those who considered themselves "Independent" are not shown.

Table D2: Zero-Sum Thinking and Ancestral Economic Mobility

	Zero-sum index (0 to 1)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Parents to respondent mobility	-0.0197***	-0.0197***	-0.0199***	-0.0311***				
	(0.0017)	(0.0017)	(0.0017)	(0.0025)				
Grandparents to parents mobility	-0.0208***	-0.0207***	-0.0209***	-0.0272***				
	(0.0020)	(0.0020)	(0.0020)	(0.0022)				
Great-grandpar. to grandparents mobility	-0.0148***	-0.0144***	-0.0150***	-0.0186***				
	(0.0023)	(0.0023)	(0.0023)	(0.0023)				
Great-grandpar. to respondent mobility					-0.0190***	-0.0189***	-0.0192***	-0.0251***
					(0.0014)	(0.0014)	(0.0014)	(0.0018)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓	✓		✓	✓	✓
Race fixed effects			✓	✓			✓	✓
Relative income control				✓				✓
Observations	10,554	10,554	10,554	10,554	10,717	10,717	10,717	10,717
R^2	0.125	0.132	0.137	0.141	0.125	0.131	0.136	0.139
Dependent variable mean	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514
Dependent variable std. dev.	0.211	0.211	0.211	0.211	0.210	0.210	0.210	0.210

Notes: The table reports OLS estimates where the unit of observation is an individual. Mobility variables measure the change in economic standing experienced by a generation from the household in which they grew up to their household as an adult. See text for more details. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for educational attainment and party affiliation. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

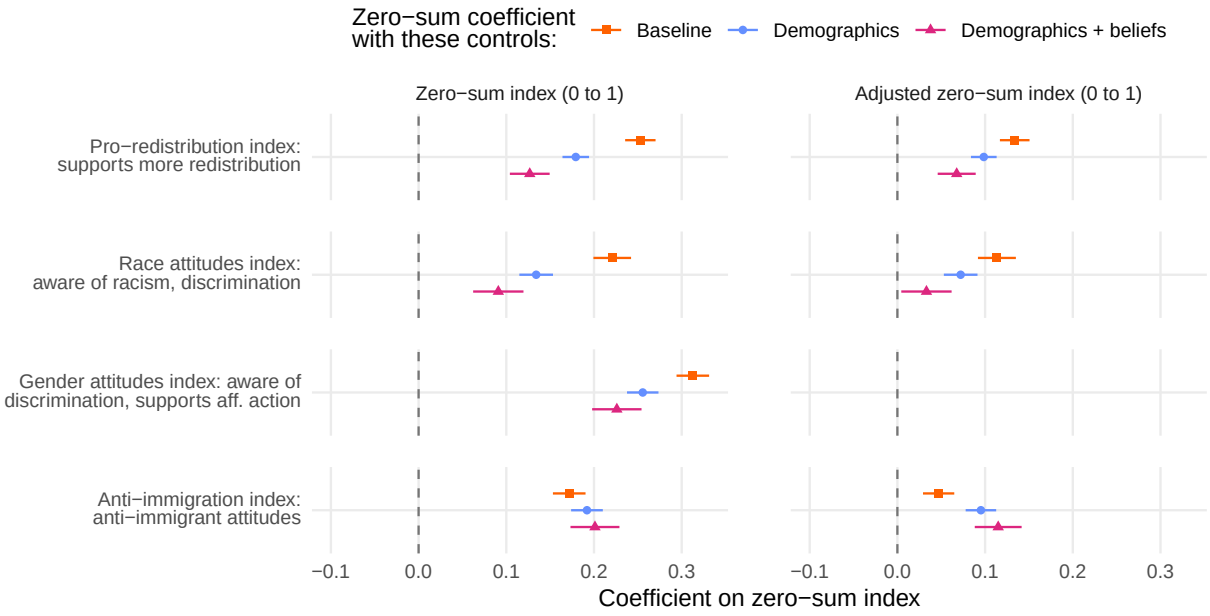


Figure D4: Zero-Sum Thinking and Policy Views

Notes: Each coefficient is from a separate regression with controls for age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for survey wave. The three estimates in each column correspond to the baseline specification, as well as specifications that add (1) demographic controls: fixed effects for race, household income, educational attainment, party affiliation, and fixed effects for household income interacted with a quadratic in age, and (2) controls for other core beliefs: whether the respondent thinks luck is more important than effort, their perceptions of economic mobility, the degree to which they are a moral universalist, whether they think tradition is important, and whether they think people can generally be trusted. The latter three attitudes are only available from the fifth wave of the survey onwards. Outcomes and regressors are normalized to be between zero and one. All variables are defined in Appendix B, with summary statistics in Table B3. In the first column, the coefficient estimate corresponds to the baseline zero-sum index, that is, the first principal component of the four baseline zero-sum questions about income, citizenship, ethnic groups, and trade. In the second column (with the adjusted zero-sum index), the coefficient corresponds to the first principal component of three of the baseline questions, removing the one most similar to the policy outcome in that group – income for the redistribution outcomes, ethnic groups for the race outcomes, and citizenship for the immigration outcomes. Note that no component in the zero-sum index is closely related to gender equality. Indices of policy views are the first principal component of the relevant questions. See Section 3 for details. Horizontal bars are 95% confidence intervals.

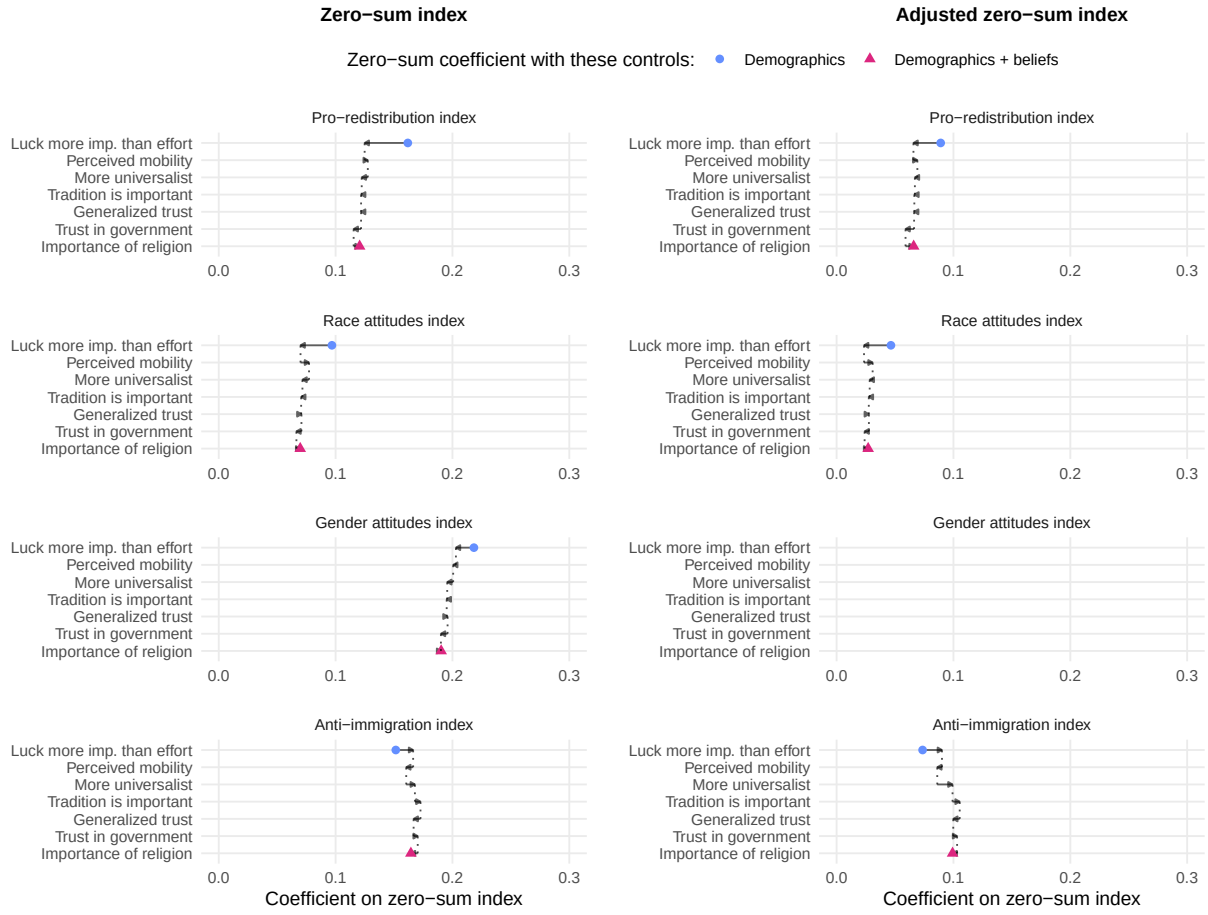


Figure D5: Gelbach Decompositions of Policy Views

Notes: The figure reports Gelbach decompositions (Gelbach, 2016) of the gap between (1) the coefficient on zero-sum thinking in a regression of each of the redistribution index, race attitudes index, anti-immigration index, and gender attitudes index on the zero-sum index with demographic controls only (the "restricted" regression) and (2) the coefficient on zero-sum thinking in the same regression, but with additional controls for other fundamental attitudes (the "full" regression). These additional controls, corresponding to the core beliefs in Figure 5, include whether luck is more important than effort, perceived mobility, moral universalism, whether tradition is important, and generalized trust. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, fixed effects for respondent race, household income, educational attainment, party affiliation, and fixed effects for household income interacted with a quadratic in age. In the first column, the coefficient estimate corresponds to the baseline zero-sum index, that is, the first principal component of the four baseline zero-sum questions about income, citizenship, ethnic groups, and trade. In the second column (with the adjusted zero-sum index), the coefficient corresponds to the first principal component of three of the baseline questions, removing the one most similar to the policy outcome in that group – income for the redistribution outcomes, ethnic groups for the race outcomes, and citizenship for the immigration outcomes. Note that no component in the zero-sum index is closely related to gender equality. Indices of policy views are the first principal component of the relevant questions. See Section 3 for details.

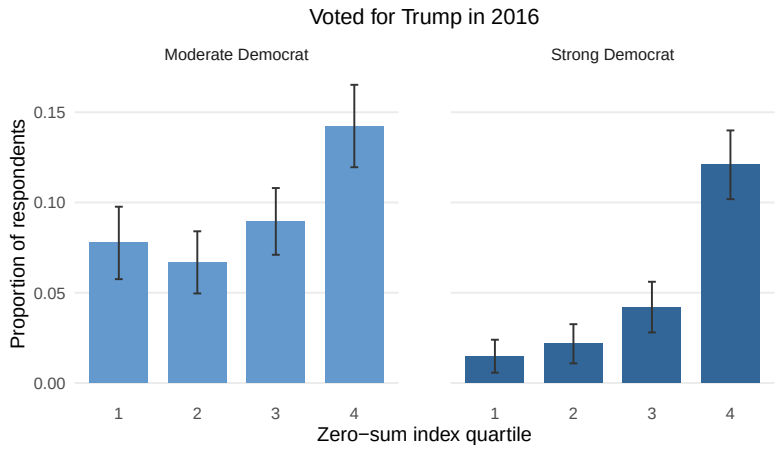
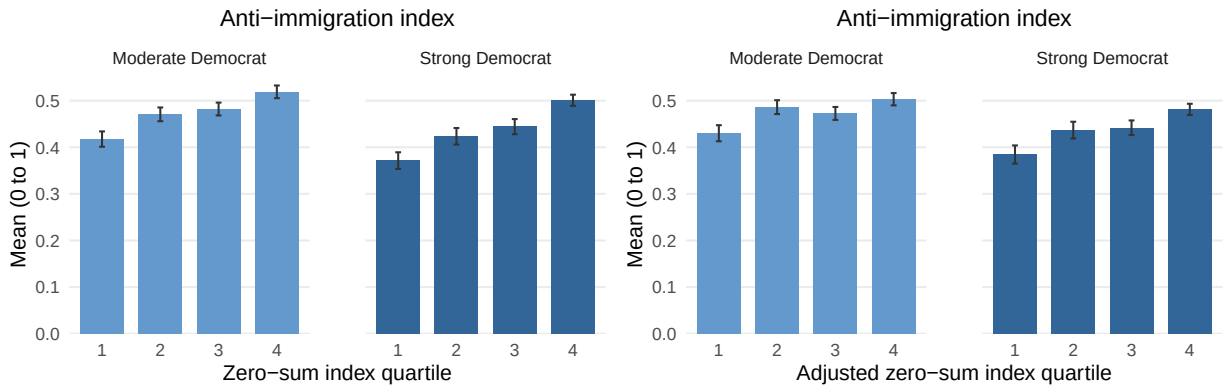
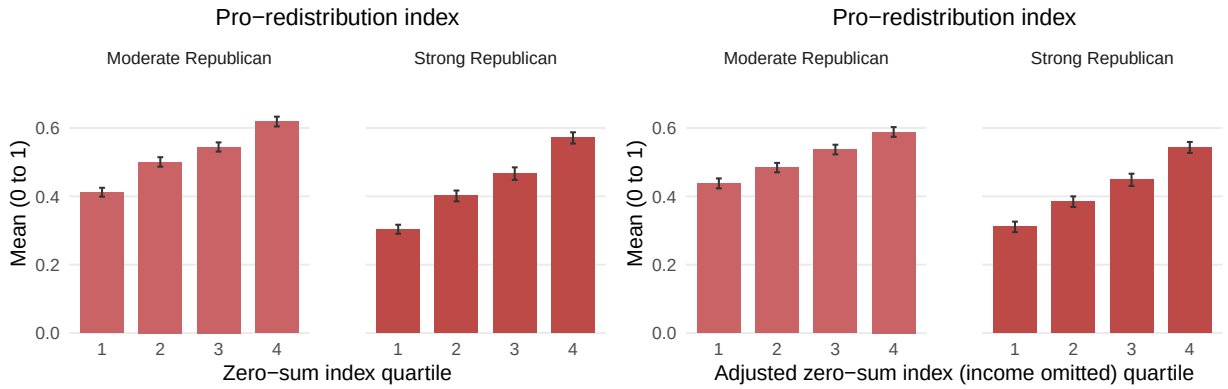


Figure D6: Democrats Voting for Trump by Zero-Sum Quartile

Notes: Vertical bars are 95% confidence intervals.



(a)



(b)

Figure D7: Zero-Sum Thinking and Within-Party Differences

Notes: In the left figures, the quartiles correspond to the baseline zero-sum index, that is, the first principal component of the four baseline zero-sum questions about income, citizenship, ethnic groups, and trade. In the right figures, the quartiles correspond to the adjusted zero-sum index, that is, the first principal component of three of the baseline questions, removing the one most similar to the policy outcome in that group – citizenship for the immigration index and income for the redistribution index. Vertical bars are 95% confidence intervals.

Table D3: Zero-Sum Thinking and Immigration

	Zero-sum index (0 to 1)		
	(1)	(2)	(3)
Respondent immigrated	-0.0342***	-0.0355***	-0.0326***
	(0.0065)	(0.0066)	(0.0073)
Parent immigrated	-0.0254***	-0.0266***	-0.0240***
	(0.0050)	(0.0051)	(0.0056)
Grandparent immigrated	-0.0002	0.0007	0.0036
	(0.0043)	(0.0044)	(0.0044)
Demographic controls	✓	✓	✓
Wave fixed effects	✓	✓	✓
State fixed effects		✓	✓
Race fixed effects			✓
Observations	15,260	15,260	15,260
R^2	0.095	0.101	0.106
Dependent variable mean	0.500	0.500	0.500
Dependent variable std. dev.	0.202	0.202	0.202

Notes: The table reports OLS estimates where the unit of observation is an individual. Since all respondents are in the U.S. when surveyed, we define "Respondent immigrated" as an indicator equal to one if the respondent was born outside the United States. "Parent immigrated" is an indicator equal to one if the respondent was born in the U.S. and at least one of their parents was born outside the U.S. This variable is missing, and hence the respondent is not included in the regression, if they indicated that they do not know whether either of their parents was born in the U.S. "Grandparent immigrated" is an indicator equal to one if the respondent was born in the U.S. and either (1) their father was born in the U.S. and at least one paternal grandparent was born outside the U.S., or (2) their mother was born in the U.S. and at least one maternal grandparent was born outside the U.S. This variable is missing, and hence the respondent is not included in the regression, if they indicated that they do not know where any of their four grandparents were born. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table D4: Zero-Sum Thinking and County Foreign Share 1860-1920, With Immigrant Generation Controls

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county foreign share	0.0058	0.0103	0.0127						
	(0.0220)	(0.0225)	(0.0225)						
Parents' counties foreign share				-0.0277	-0.0252	-0.0309			
				(0.0204)	(0.0200)	(0.0228)			
Grandparents' counties foreign share							-0.0330***	-0.0327***	-0.0338***
							(0.0101)	(0.0101)	(0.0102)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Race fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Child of immigrant		✓	✓		✓	✓		✓	✓
Grandchild of immigrant			✓			✓			✓
Observations	14,294	14,231	13,331	12,933	12,932	12,219	10,276	10,273	10,273
R^2	0.089	0.090	0.092	0.099	0.100	0.102	0.099	0.099	0.099
Num. clusters	1,851	1,850	1,823	2,024	2,024	1,991	1,849	1,849	1,849
Dependent variable mean	0.498	0.498	0.496	0.498	0.498	0.497	0.498	0.498	0.498
Dependent variable std. dev.	0.198	0.198	0.199	0.200	0.200	0.200	0.201	0.201	0.201
Indep. variable mean	0.174	0.174	0.174	0.176	0.176	0.176	0.164	0.164	0.164
Indep. variable std. dev.	0.123	0.123	0.123	0.123	0.123	0.123	0.123	0.123	0.123

Notes: The table reports OLS estimates where the unit of observation is an individual. "Foreign share" refers to the proportion of individuals in a county who were born outside of the U.S., averaged over the 1860 to 1920 period. All shares are for the counties where the respondent or their ancestor grew up, defined as ages 10 to 19 for respondents and ages 7 to 17 for parents and grandparents. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Standard errors are clustered by the respondent's county, parents' counties, or grandparents' counties, and are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table D5: Zero-Sum Thinking and Race

	Zero-sum index (0 to 1)		
	(1)	(2)	(3)
African American/Black	0.0479***	0.0451***	0.0439***
	(0.0051)	(0.0053)	(0.0071)
American Indian or Alaska Native	0.0120	0.0108	0.0178
	(0.0167)	(0.0168)	(0.0222)
Asian/Asian American	-0.0136*	-0.0123	-0.0225*
	(0.0073)	(0.0076)	(0.0119)
Hispanic/Latino	0.0008	-0.0008	-0.0073
	(0.0053)	(0.0055)	(0.0077)
Native Hawaiian or Other Pacific Islander	0.0112	0.0162	-0.0231
	(0.0295)	(0.0300)	(0.0342)
Other race	-0.0066	-0.0060	-0.0035
	(0.0094)	(0.0095)	(0.0118)
Demographic controls	✓	✓	✓
Wave fixed effects	✓	✓	✓
State fixed effects		✓	✓
Birth town fixed effects			✓
Observations	16,363	16,363	15,224
R^2	0.098	0.103	0.349
Dependent variable mean	0.502	0.502	0.505
Dependent variable std. dev.	0.201	0.201	0.200

Notes: The table reports OLS estimates where the unit of observation is an individual. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table D6: Zero-Sum Thinking and Ancestral Enslavement

	Zero-sum index (0 to 1)							
	Black only		Latino, Indig., Asian, other		White only		Full sample	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enslaved ancestor	0.0084	0.0092	0.0406***	0.0389***	0.1095***	0.1092***	0.0574***	0.0575***
	(0.0089)	(0.0089)	(0.0119)	(0.0121)	(0.0096)	(0.0096)	(0.0058)	(0.0058)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Race fixed effects	–	–	✓	✓	–	–	✓	✓
State fixed effects		✓		✓		✓		✓
Observations	1,862	1,862	3,303	3,303	11,192	11,192	16,357	16,357
R^2	0.060	0.082	0.089	0.102	0.111	0.118	0.103	0.108
Dependent variable mean	0.568	0.568	0.507	0.507	0.490	0.490	0.502	0.502
Dependent variable std. dev.	0.187	0.187	0.198	0.198	0.202	0.202	0.201	0.201
Indep. variable mean	0.423	0.423	0.088	0.088	0.047	0.047	0.099	0.099
Indep. variable std. dev.	0.494	0.494	0.284	0.284	0.213	0.213	0.298	0.298

Notes: The table reports OLS estimates where the unit of observation is an individual. The "enslaved ancestor" indicator is one if the respondent reports having an ancestor who was enslaved at any point during the ancestor's lifetime. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table D7: Zero-Sum Thinking and Growing Up in Counties With Historical Enslavement

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county enslaved share	0.0558***	0.0436***	0.0439***						
	(0.0140)	(0.0141)	(0.0141)						
Parents' counties enslaved share				0.0870***	0.0620***	0.0612***			
				(0.0134)	(0.0141)	(0.0141)			
Grandparents' counties enslaved share							0.0844***	0.0537***	0.0501***
							(0.0134)	(0.0146)	(0.0145)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Race fixed effects		✓	✓		✓	✓		✓	✓
Enslaved ancestor			✓			✓			✓
Observations	14,827	14,827	14,821	13,193	13,193	13,188	10,439	10,439	10,438
R^2	0.086	0.090	0.093	0.097	0.102	0.105	0.097	0.102	0.108
Num. clusters	1,925	1,925	1,925	2,055	2,055	2,055	1,868	1,868	1,868
Dependent variable mean	0.498	0.498	0.498	0.499	0.499	0.499	0.499	0.499	0.499
Dependent variable std. dev.	0.198	0.198	0.198	0.200	0.200	0.200	0.201	0.201	0.201
Indep. variable mean	0.065	0.065	0.065	0.066	0.066	0.066	0.076	0.076	0.076
Indep. variable std. dev.	0.146	0.146	0.146	0.145	0.145	0.145	0.151	0.151	0.151

Notes: The table reports OLS estimates where the unit of observation is an individual. "Enslaved share" refers to the proportion of individuals in a county who were enslaved according to the 1860 Census. Counties in non-slave states or in states within the contiguous U.S. that did not exist in 1860 are coded as having zero enslaved share. All shares are for the counties where the respondent or their ancestor grew up, defined as ages 10 to 19 for respondents and ages 7 to 17 for parents and grandparents. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Standard errors are clustered by the respondent's county, parents' counties, or grandparents' counties, and are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table D8: Zero-Sum Thinking and Growing Up in Counties With In-Migration from the U.S. South

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county southern white share	0.1515**	0.1522**	0.1732**						
	(0.0691)	(0.0688)	(0.0708)						
Parents' counties southern white share				0.2216***	0.2204***	0.2611***			
				(0.0619)	(0.0619)	(0.0654)			
Grandparents' counties southern white share							0.2390***	0.2383***	0.2394***
							(0.0678)	(0.0678)	(0.0681)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓		✓	✓		✓	✓
Race fixed effects			✓			✓			✓
Observations	10,831	10,782	10,128	10,136	10,136	9,591	7,847	7,845	7,845
R^2	0.095	0.096	0.099	0.102	0.103	0.105	0.109	0.109	0.109
Num. clusters	1,177	1,176	1,162	1,451	1,451	1,428	1,344	1,344	1,344
Dependent variable mean	0.492	0.491	0.490	0.490	0.490	0.488	0.490	0.490	0.490
Dependent variable std. dev.	0.198	0.198	0.198	0.200	0.200	0.200	0.201	0.201	0.201
Indep. variable mean	0.025	0.025	0.025	0.022	0.022	0.022	0.022	0.022	0.022
Indep. variable std. dev.	0.034	0.034	0.034	0.033	0.033	0.033	0.031	0.031	0.031

Notes: The table reports OLS estimates where the unit of observation is an individual. "Southern white share" refers to the proportion of individuals in a non-Southern county who were born in the U.S. South. The sample omits all counties from the U.S. Confederate South. All shares are for the counties where the respondent or their ancestor grew up, defined as ages 10 to 19 for respondents and ages 7 to 17 for parents and grandparents. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. All variables are defined in Appendix B, with summary statistics in Tables B3 and B4. Standard errors are clustered by the respondent's county, parents' counties, or grandparents' counties, and are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table D9: Zero-Sum Thinking and Growing Up in Counties With Confederate Culture

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county CCI (0 to 4)	0.0054***	0.0054***	0.0043**						
	(0.0014)	(0.0016)	(0.0017)						
Parents' counties CCI (0 to 4)				0.0085***	0.0080***	0.0061***			
				(0.0014)	(0.0016)	(0.0015)			
Grandparents' counties CCI (0 to 4)							0.0105***	0.0100***	0.0075***
							(0.0020)	(0.0024)	(0.0024)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓		✓	✓		✓	✓
Race fixed effects			✓			✓			✓
Observations	14,827	14,827	14,827	13,193	13,193	13,193	10,439	10,439	10,439
R^2	0.079	0.086	0.090	0.089	0.096	0.101	0.088	0.097	0.102
Num. clusters	1,925	1,925	1,925	2,055	2,055	2,055	1,868	1,868	1,868
Dependent variable mean	0.498	0.498	0.498	0.499	0.499	0.499	0.499	0.499	0.499
Dependent variable std. dev.	0.198	0.198	0.198	0.200	0.200	0.200	0.201	0.201	0.201
Indep. variable mean	2.230	2.230	2.230	2.154	2.154	2.154	2.102	2.102	2.102
Indep. variable std. dev.	1.235	1.235	1.235	1.155	1.155	1.155	1.151	1.151	1.151

Notes: The table reports OLS estimates where the unit of observation is an individual. "CCI" is the Confederate Culture Index from Bazzi et al. (2023a); see text for more details. All shares are for the counties where the respondent or their ancestor grew up, defined as ages 10 to 19 for respondents and ages 7 to 17 for parents and grandparents. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. All variables are defined in Appendix B, with summary statistics in Tables B3 and B4. Standard errors are clustered by the respondent's county, parents' counties, or grandparents' counties, and are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

B. Four criteria for attentiveness

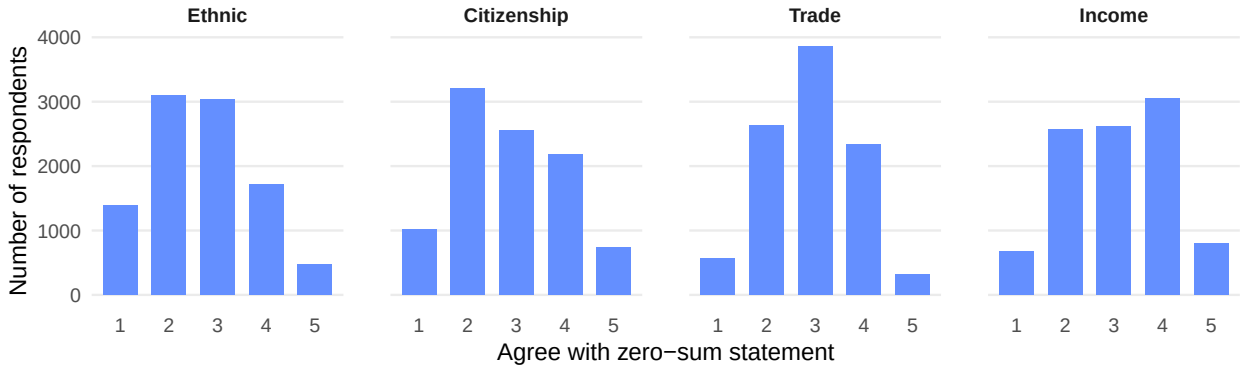


Figure D8: Distributions of Responses to Zero-Sum Questions

Notes: The figure shows the distribution of responses to the two-statement zero-sum questions. Statement 2 is the more zero-sum statement, and answer options are (1) Strongly agree with 1, (2) Agree with 1, (3) Agree with 2, (4) Strongly agree with 2.

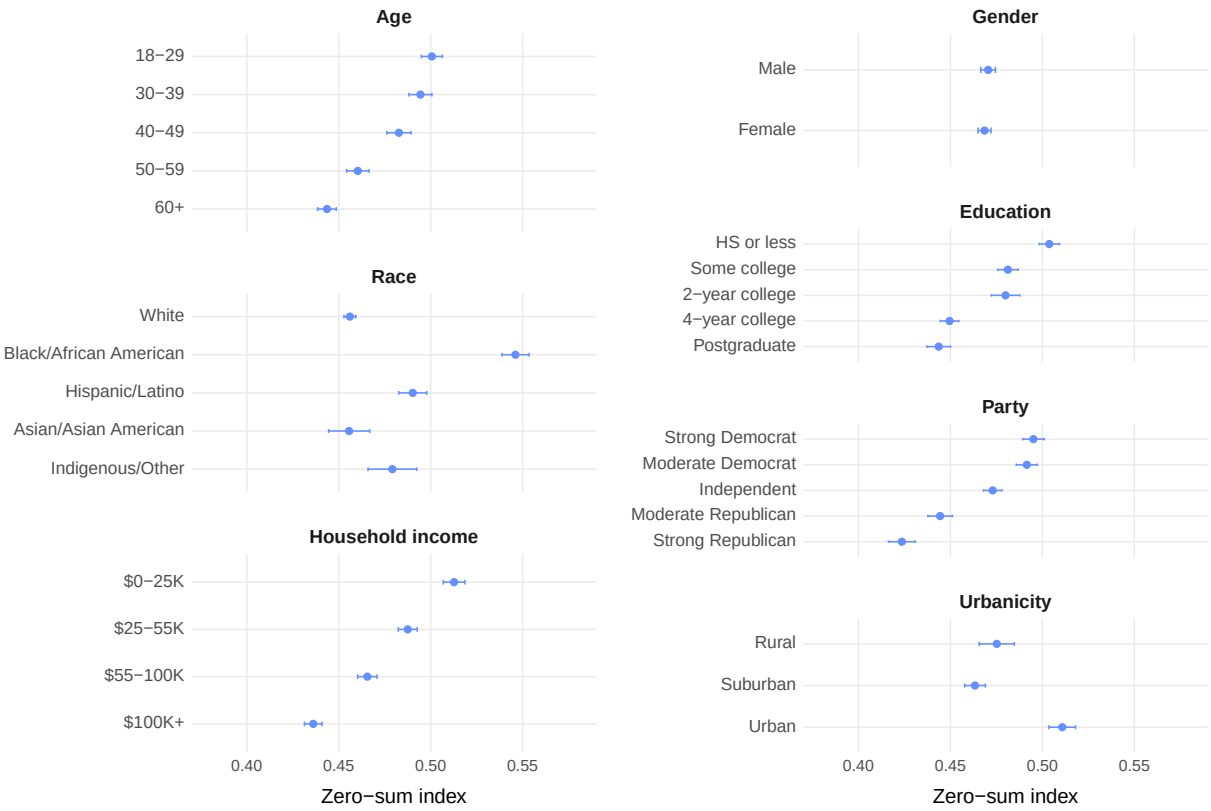


Figure D9: Average Zero-Sum Index by Demographic Group

Notes: Horizontal bars are 95% confidence intervals.

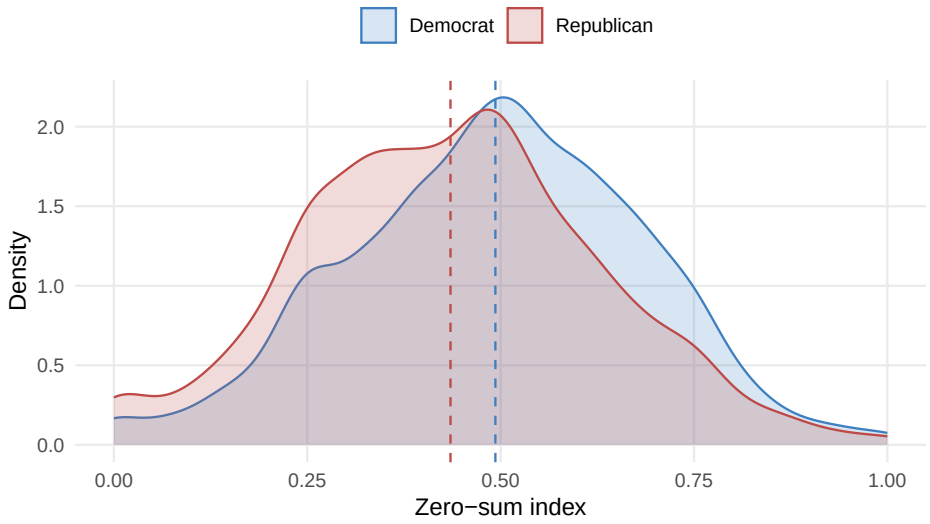


Figure D10: Density of Zero-Sum Index By Party

Notes: Vertical lines show the mean zero-sum index for each party. "Republican" includes respondents who considered themselves "Strong Republican" or "Moderate Republican", and "Democrat" includes respondents who considered themselves "Strong Democrat" or "Moderate Democrat." Those who considered themselves "Independent" are not shown.

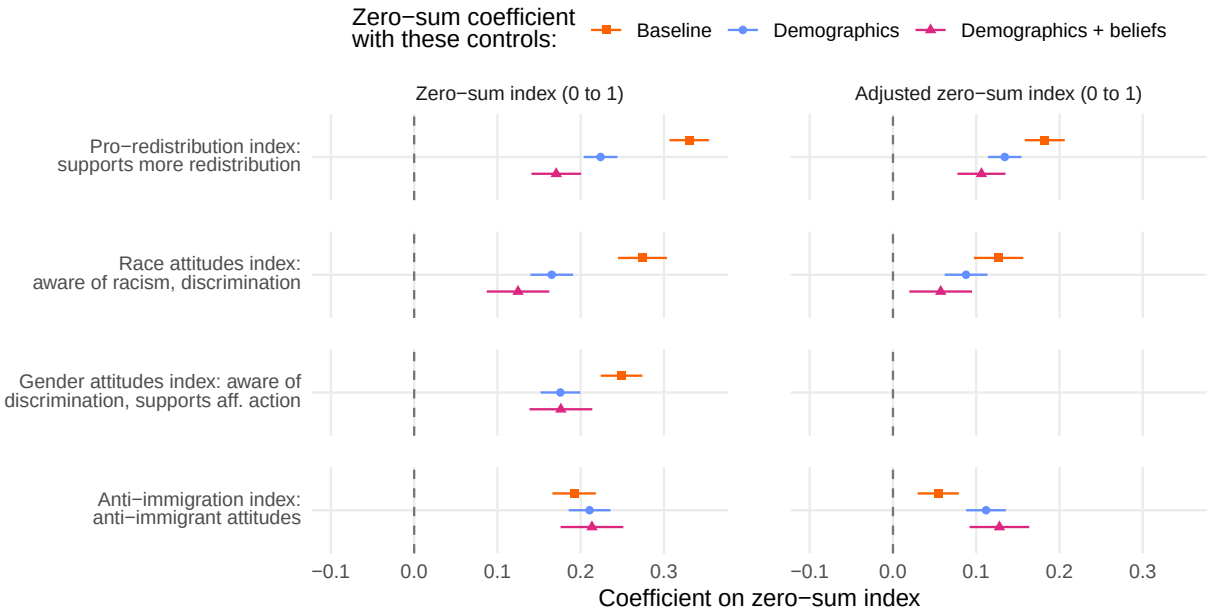


Figure D11: Zero-Sum Thinking and Policy Views

Notes: Each coefficient is from a separate regression with controls for age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for survey wave. The three estimates in each column correspond to the baseline specification, as well as specifications that add (1) demographic controls: fixed effects for race, household income, educational attainment, party affiliation, and fixed effects for household income interacted with a quadratic in age, and (2) controls for other core beliefs: whether the respondent thinks luck is more important than effort, their perceptions of economic mobility, the degree to which they are a moral universalist, whether they think tradition is important, and whether they think people can generally be trusted. The latter three attitudes are only available from the fifth wave of the survey onwards. Outcomes and regressors are normalized to be between zero and one. All variables are defined in Appendix B, with summary statistics in Table B3. In the first column, the coefficient estimate corresponds to the baseline zero-sum index, that is, the first principal component of the four baseline zero-sum questions about income, citizenship, ethnic groups, and trade. In the second column (with the adjusted zero-sum index), the coefficient corresponds to the first principal component of three of the baseline questions, removing the one most similar to the policy outcome in that group – income for the redistribution outcomes, ethnic groups for the race outcomes, and citizenship for the immigration outcomes. Note that no component in the zero-sum index is closely related to gender equality. Indices of policy views are the first principal component of the relevant questions. See Section 3 for details. Horizontal bars are 95% confidence intervals.

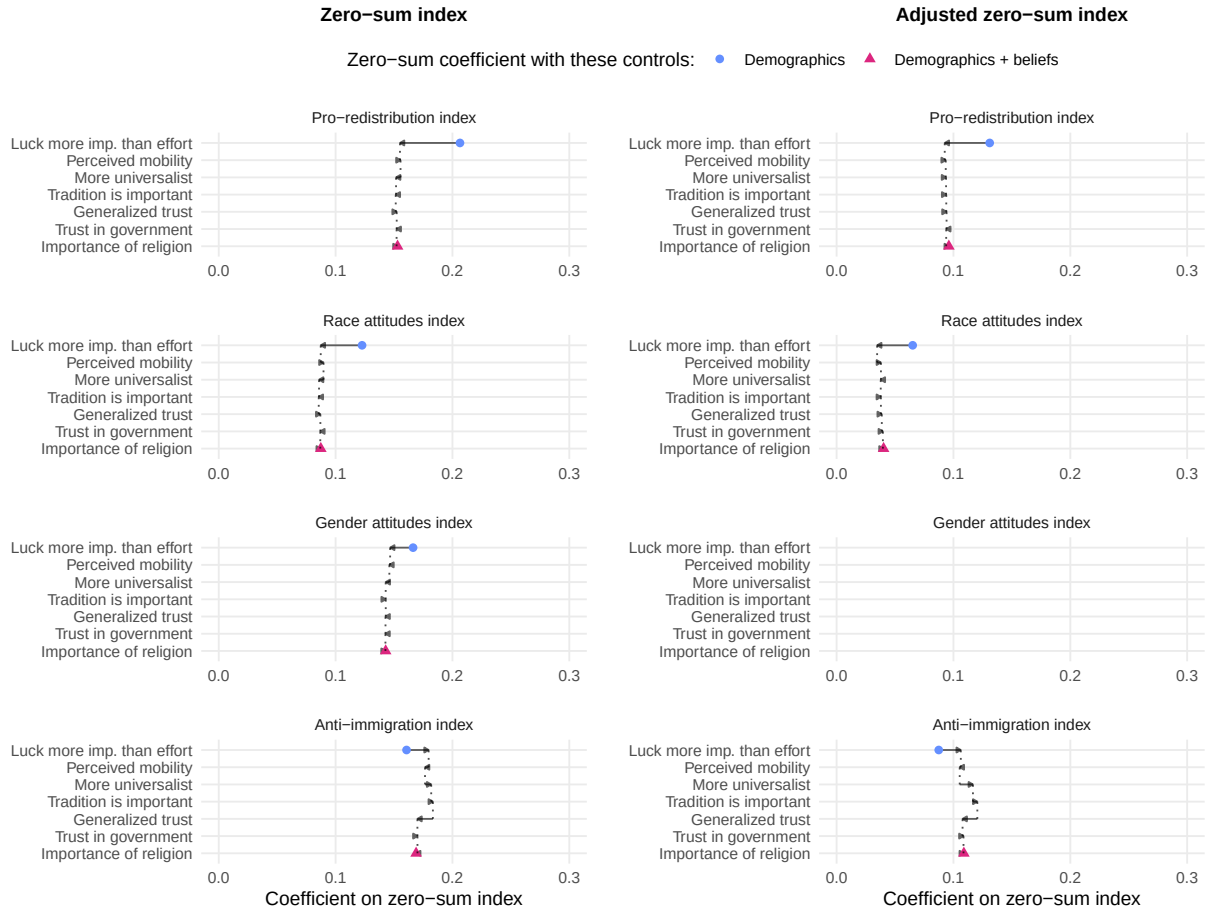


Figure D12: Gelbach Decompositions of Policy Views

Notes: The figure reports Gelbach decompositions (Gelbach, 2016) of the gap between (1) the coefficient on zero-sum thinking in a regression of each of the redistribution index, race attitudes index, anti-immigration index, and gender attitudes index on the zero-sum index with demographic controls only (the "restricted" regression) and (2) the coefficient on zero-sum thinking in the same regression, but with additional controls for other fundamental attitudes (the "full" regression). These additional controls, corresponding to the core beliefs in Figure 5, include whether luck is more important than effort, perceived mobility, moral universalism, whether tradition is important, and generalized trust. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, fixed effects for respondent race, household income, educational attainment, party affiliation, and fixed effects for household income interacted with a quadratic in age. In the first column, the coefficient estimate corresponds to the baseline zero-sum index, that is, the first principal component of the four baseline zero-sum questions about income, citizenship, ethnic groups, and trade. In the second column (with the adjusted zero-sum index), the coefficient corresponds to the first principal component of three of the baseline questions, removing the one most similar to the policy outcome in that group – income for the redistribution outcomes, ethnic groups for the race outcomes, and citizenship for the immigration outcomes. Note that no component in the zero-sum index is closely related to gender equality. Indices of policy views are the first principal component of the relevant questions. See Section 3 for details.

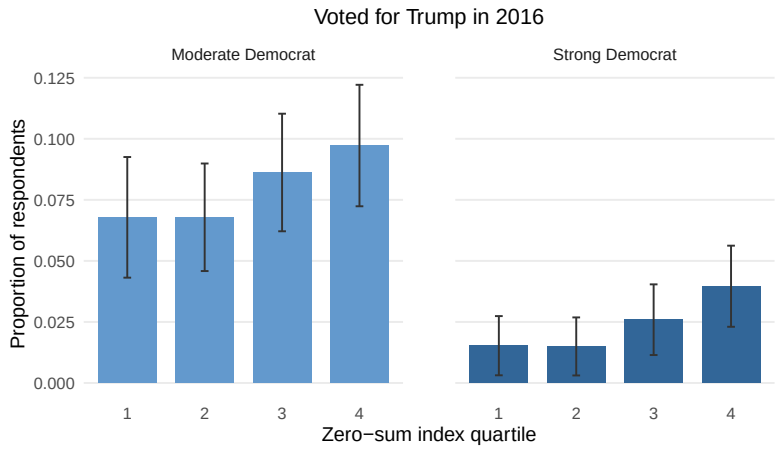
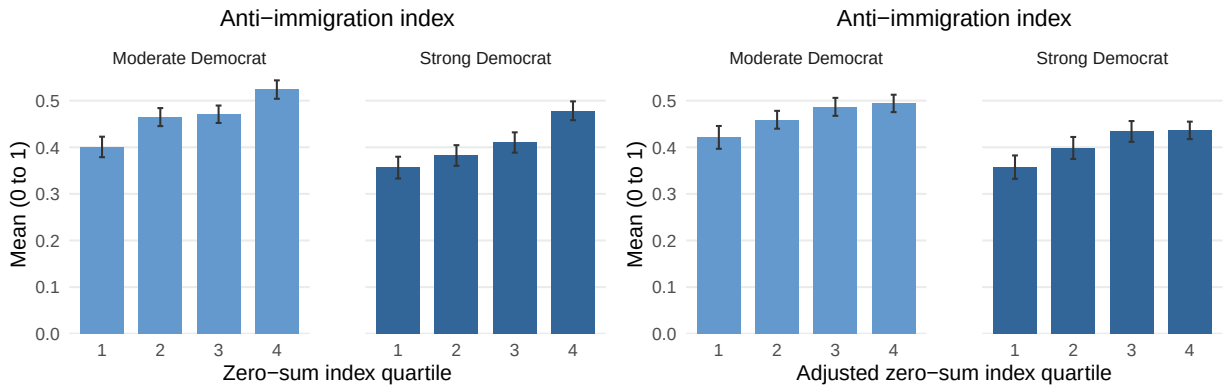
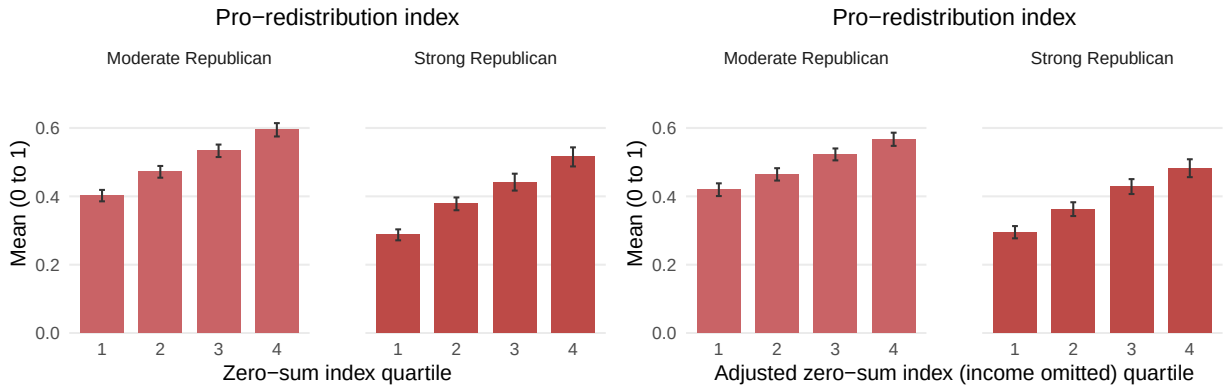


Figure D13: Democrats Voting for Trump by Zero-Sum Quartile

Notes: Vertical bars are 95% confidence intervals.



(a)



(b)

Figure D14: Zero-Sum Thinking and Within-Party Differences

Notes: In the left figures, the quartiles correspond to the baseline zero-sum index, that is, the first principal component of the four baseline zero-sum questions about income, citizenship, ethnic groups, and trade. In the right figures, the quartiles correspond to the adjusted zero-sum index, that is, the first principal component of three of the baseline questions, removing the one most similar to the policy outcome in that group – citizenship for the immigration index and income for the redistribution index. Vertical bars are 95% confidence intervals.

Table D10: PCA Factor Loadings: First and Second Principal Components

Question	1st PC (Eigenvalue: 2.12)	2nd PC (Eigenvalue: 0.86)
Ethnicity	0.55	-0.30
Citizenship	0.35	0.91
Trade	0.53	0.01
Income	0.54	-0.30

Notes: The table shows factor loadings for the first two principal components for each of the four component questions of the zero-sum index.

Table D11: Zero-Sum Thinking and Ancestral Economic Mobility

	Zero-sum index (0 to 1)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Parents to respondent mobility	-0.0141***	-0.0142***	-0.0150***	-0.0081**				
	(0.0022)	(0.0022)	(0.0022)	(0.0034)				
Grandparents to parents mobility	-0.0107***	-0.0109***	-0.0118***	-0.0078***				
	(0.0025)	(0.0025)	(0.0025)	(0.0029)				
Great-grandpar. to grandparents mobility	-0.0059**	-0.0057*	-0.0067**	-0.0042				
	(0.0030)	(0.0030)	(0.0030)	(0.0031)				
Great-grandpar. to respondent mobility					-0.0120***	-0.0121***	-0.0130***	-0.0073***
					(0.0018)	(0.0018)	(0.0018)	(0.0025)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓	✓		✓	✓	✓
Race fixed effects			✓	✓			✓	✓
Relative income control				✓				✓
Observations	5,758	5,758	5,758	5,758	5,844	5,844	5,844	5,844
R^2	0.069	0.080	0.088	0.089	0.068	0.079	0.087	0.089
Dependent variable mean	0.468	0.468	0.468	0.468	0.469	0.469	0.469	0.469
Dependent variable std. dev.	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200

Notes: The table reports OLS estimates where the unit of observation is an individual. Mobility variables measure the change in economic standing experienced by a generation from the household in which they grew up to their household as an adult. See text for more details. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for educational attainment and party affiliation. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table D12: Zero-Sum Thinking and Immigration

	Zero-sum index (0 to 1)		
	(1)	(2)	(3)
Respondent immigrated	-0.0362***	-0.0352***	-0.0393***
	(0.0084)	(0.0085)	(0.0094)
Parent immigrated	-0.0201***	-0.0193***	-0.0195***
	(0.0064)	(0.0065)	(0.0072)
Grandparent immigrated	-0.0175***	-0.0155***	-0.0115**
	(0.0056)	(0.0057)	(0.0058)
Demographic controls	✓	✓	✓
Wave fixed effects	✓	✓	✓
State fixed effects		✓	✓
Race fixed effects			✓
Observations	9,169	9,169	9,169
R^2	0.069	0.077	0.084
Dependent variable mean	0.468	0.468	0.468
Dependent variable std. dev.	0.193	0.193	0.193

Notes: The table reports OLS estimates where the unit of observation is an individual. Since all respondents are in the U.S. when surveyed, we define "Respondent immigrated" as an indicator equal to one if the respondent was born outside the United States. "Parent immigrated" is an indicator equal to one if the respondent was born in the U.S. and at least one of their parents was born outside the U.S. This variable is missing, and hence the respondent is not included in the regression, if they indicated that they do not know whether either of their parents was born in the U.S. "Grandparent immigrated" is an indicator equal to one if the respondent was born in the U.S. and either (1) their father was born in the U.S. and at least one paternal grandparent was born outside the U.S., or (2) their mother was born in the U.S. and at least one maternal grandparent was born outside the U.S. This variable is missing, and hence the respondent is not included in the regression, if they indicated that they do not know where any of their four grandparents were born. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table D13: Zero-Sum Thinking and County Foreign Share 1860-1920, With Immigrant Generation Controls

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county foreign share	-0.0043	-0.0004	0.0048						
	(0.0190)	(0.0194)	(0.0200)						
Parents' counties foreign share				-0.0275	-0.0253	-0.0201			
				(0.0212)	(0.0210)	(0.0227)			
Grandparents' counties foreign share							-0.0452***	-0.0450***	-0.0408**
							(0.0147)	(0.0146)	(0.0168)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Race fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Child of immigrant		✓	✓		✓	✓		✓	✓
Grandchild of immigrant			✓			✓			✓
Observations	8,774	8,743	8,290	7,953	7,952	7,596	6,327	6,325	6,325
R^2	0.080	0.080	0.085	0.084	0.084	0.088	0.090	0.090	0.090
Num. clusters	1,600	1,599	1,575	1,729	1,729	1,707	1,509	1,509	1,509
Dependent variable mean	0.471	0.471	0.470	0.470	0.470	0.468	0.468	0.468	0.468
Dependent variable std. dev.	0.192	0.192	0.192	0.192	0.192	0.193	0.193	0.193	0.193
Indep. variable mean	0.172	0.172	0.172	0.175	0.175	0.175	0.162	0.162	0.162
Indep. variable std. dev.	0.122	0.122	0.122	0.123	0.123	0.123	0.122	0.122	0.122

Notes: The table reports OLS estimates where the unit of observation is an individual. "Foreign share" refers to the proportion of individuals in a county who were born outside of the U.S., averaged over the 1860 to 1920 period. All shares are for the counties where the respondent or their ancestor grew up, defined as ages 10 to 19 for respondents and ages 7 to 17 for parents and grandparents. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Standard errors are clustered by the respondent's county, parents' counties, or grandparents' counties, and are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table D14: Zero-Sum Thinking and Race

	Zero-sum index (0 to 1)		
	(1)	(2)	(3)
African American/Black	0.0579***	0.0558***	0.0581***
	(0.0069)	(0.0071)	(0.0100)
American Indian or Alaska Native	0.0288	0.0293	0.0190
	(0.0199)	(0.0203)	(0.0252)
Asian/Asian American	0.0035	0.0067	0.0014
	(0.0095)	(0.0099)	(0.0161)
Hispanic/Latino	0.0041	0.0047	0.0094
	(0.0066)	(0.0070)	(0.0104)
Native Hawaiian or Other Pacific Islander	0.0135	0.0166	-0.0454
	(0.0485)	(0.0505)	(0.0632)
Other race	-0.0104	-0.0093	-0.0079
	(0.0116)	(0.0116)	(0.0155)
Demographic controls	✓	✓	✓
Wave fixed effects	✓	✓	✓
State fixed effects		✓	✓
Birth town fixed effects			✓
Observations	9,695	9,695	9,055
R^2	0.073	0.080	0.357
Dependent variable mean	0.470	0.470	0.472
Dependent variable std. dev.	0.192	0.192	0.191

Notes: The table reports OLS estimates where the unit of observation is an individual. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table D15: Zero-Sum Thinking and Ancestral Enslavement

	Zero-sum index (0 to 1)							
	Black only		Latino, Indig., Asian, other		White only		Full sample	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enslaved ancestor	0.0151	0.0146	0.0190	0.0174	0.0288*	0.0290*	0.0218***	0.0219***
	(0.0121)	(0.0125)	(0.0171)	(0.0175)	(0.0161)	(0.0162)	(0.0084)	(0.0084)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Race fixed effects	–	–	✓	✓	–	–	✓	✓
State fixed effects		✓		✓		✓		✓
Observations	1,019	1,019	1,866	1,866	6,809	6,809	9,694	9,694
R^2	0.059	0.098	0.083	0.106	0.062	0.071	0.074	0.080
Dependent variable mean	0.546	0.546	0.478	0.478	0.456	0.456	0.470	0.470
Dependent variable std. dev.	0.186	0.186	0.190	0.190	0.191	0.191	0.192	0.192
Indep. variable mean	0.444	0.444	0.078	0.078	0.028	0.028	0.082	0.082
Indep. variable std. dev.	0.497	0.497	0.269	0.269	0.166	0.166	0.274	0.274

Notes: The table reports OLS estimates where the unit of observation is an individual. The "enslaved ancestor" indicator is one if the respondent reports having an ancestor who was enslaved at any point during the ancestor's lifetime. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table D16: Zero-Sum Thinking and Growing Up in Counties With Historical Enslavement

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county enslaved share	0.0486***	0.0345**	0.0352**						
	(0.0169)	(0.0167)	(0.0167)						
Parents' counties enslaved share				0.0780***	0.0458***	0.0458***			
				(0.0161)	(0.0163)	(0.0163)			
Grandparents' counties enslaved share							0.0850***	0.0472***	0.0466***
							(0.0096)	(0.0083)	(0.0084)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Race fixed effects		✓	✓		✓	✓		✓	✓
Enslaved ancestor			✓			✓			✓
Observations	9,084	9,084	9,083	8,097	8,097	8,096	6,398	6,398	6,398
R^2	0.074	0.080	0.081	0.078	0.084	0.085	0.083	0.091	0.092
Num. clusters	1,659	1,659	1,659	1,756	1,756	1,756	1,525	1,525	1,525
Dependent variable mean	0.471	0.471	0.471	0.470	0.470	0.470	0.469	0.469	0.469
Dependent variable std. dev.	0.192	0.192	0.192	0.192	0.192	0.192	0.193	0.193	0.193
Indep. variable mean	0.064	0.064	0.064	0.065	0.065	0.065	0.075	0.075	0.075
Indep. variable std. dev.	0.146	0.146	0.146	0.144	0.144	0.144	0.151	0.151	0.151

Notes: The table reports OLS estimates where the unit of observation is an individual. "Enslaved share" refers to the proportion of individuals in a county who were enslaved according to the 1860 Census. Counties in non-slave states or in states within the contiguous U.S. that did not exist in 1860 are coded as having zero enslaved share. All shares are for the counties where the respondent or their ancestor grew up, defined as ages 10 to 19 for respondents and ages 7 to 17 for parents and grandparents. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Standard errors are clustered by the respondent's county, parents' counties, or grandparents' counties, and are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table D17: Zero-Sum Thinking and Growing Up in Counties With In-Migration from the U.S. South

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county southern white share	0.1151	0.1175	0.1269*						
	(0.0770)	(0.0764)	(0.0764)						
Parents' counties southern white share				0.0728	0.0718	0.1056*			
				(0.0668)	(0.0669)	(0.0606)			
Grandparents' counties southern white share							0.0132	0.0116	0.0069
							(0.0493)	(0.0503)	(0.0506)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓		✓	✓		✓	✓
Race fixed effects			✓			✓			✓
Observations	6,694	6,669	6,326	6,310	6,310	6,025	4,873	4,872	4,872
R^2	0.089	0.089	0.094	0.092	0.092	0.097	0.098	0.098	0.098
Num. clusters	1,027	1,027	1,014	1,239	1,239	1,221	1,082	1,082	1,082
Dependent variable mean	0.467	0.466	0.465	0.463	0.463	0.461	0.460	0.460	0.460
Dependent variable std. dev.	0.191	0.191	0.192	0.191	0.191	0.192	0.192	0.192	0.192
Indep. variable mean	0.025	0.025	0.025	0.021	0.021	0.021	0.020	0.020	0.020
Indep. variable std. dev.	0.036	0.036	0.036	0.033	0.033	0.033	0.031	0.031	0.031

Notes: The table reports OLS estimates where the unit of observation is an individual. "Southern white share" refers to the proportion of individuals in a non-Southern county who were born in the U.S. South. The sample omits all counties from the U.S. Confederate South. All shares are for the counties where the respondent or their ancestor grew up, defined as ages 10 to 19 for respondents and ages 7 to 17 for parents and grandparents. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. All variables are defined in Appendix B, with summary statistics in Tables B3 and B4. Standard errors are clustered by the respondent's county, parents' counties, or grandparents' counties, and are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table D18: Zero-Sum Thinking and Growing Up in Counties With Confederate Culture

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county CCI (0 to 4)	0.0016	0.0015	0.0001						
	(0.0016)	(0.0018)	(0.0018)						
Parents' counties CCI (0 to 4)				0.0023	0.0016	-0.0008			
				(0.0018)	(0.0019)	(0.0018)			
Grandparents' counties CCI (0 to 4)							0.0066***	0.0061***	0.0029
							(0.0013)	(0.0018)	(0.0019)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓		✓	✓		✓	✓
Race fixed effects			✓			✓			✓
Observations	9,084	9,084	9,084	8,097	8,097	8,097	6,398	6,398	6,398
R^2	0.065	0.073	0.080	0.066	0.075	0.084	0.069	0.081	0.090
Num. clusters	1,659	1,659	1,659	1,756	1,756	1,756	1,525	1,525	1,525
Dependent variable mean	0.471	0.471	0.471	0.470	0.470	0.470	0.469	0.469	0.469
Dependent variable std. dev.	0.192	0.192	0.192	0.192	0.192	0.192	0.193	0.193	0.193
Indep. variable mean	2.168	2.168	2.168	2.069	2.069	2.069	2.005	2.005	2.005
Indep. variable std. dev.	1.230	1.230	1.230	1.138	1.138	1.138	1.124	1.124	1.124

Notes: The table reports OLS estimates where the unit of observation is an individual. "CCI" is the Confederate Culture Index from Bazzi et al. (2023a); see text for more details. All shares are for the counties where the respondent or their ancestor grew up, defined as ages 10 to 19 for respondents and ages 7 to 17 for parents and grandparents. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. All variables are defined in Appendix B, with summary statistics in Tables B3 and B4. Standard errors are clustered by the respondent's county, parents' counties, or grandparents' counties, and are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Appendix E. Robustness to Question Formulation

To mitigate concerns about bias due to acquiescence – the tendency to answer items in a positive way regardless of their content, for example, systematically selecting "agree," "true," or "yes" (Stantcheva, 2023) – we asked respondents in later waves four "two-statement" zero-sum questions. Each question asks respondents to consider two opposing statements and report which one they agree with and the extent to which they agree, using one of the following four options: (1) Strongly agree with 1, (2) Agree with 1, (3) Agree with 2, (4) Strongly agree with 2. We asked these questions across the four domains corresponding to our primary zero-sum questions: ethnicity, trade, citizenship, and wealth/income. The statements are listed below:

Ethnicity

- Statement 1: If one ethnic group becomes richer, this generally does not come at the expense of other ethnic groups in the country
- Statement 2: If one ethnic group becomes richer, this generally comes at the expense of other ethnic groups in the country

Trade

- Statement 1: If one country makes more money, this generally does not come at the expense of other countries
- Statement 2: If one country makes more money, this generally comes at the expense of other countries

Citizenship

- Statement 1: If people without American citizenship do better economically, this generally does not come at the expense of American citizens
- Statement 2: If people without American citizenship do better economically, this generally comes at the expense of American citizens

Income

- Statement 1: Most of the wealth of the rich was created without taking it from others

- Statement 2: Most of the wealth of the rich was obtained by taking it from others

The distributions of answers are shown in Figure E1, and like the baseline questions, we see significant variation in views in all four domains.

We first use these questions to identify internally inconsistent respondents: those who answer with the *least* zero-sum response when asked the baseline zero-sum question about e.g., ethnicity, but answer with the *most* zero-sum response when asked the two-statement zero-sum question about ethnicity. We do this for all four domains: ethnicity, citizenship, trade, and income. We exclude the 4.1% of internally inconsistent respondents from the following analysis.

We then reproduce the main analysis in the paper with these two-statement questions. First, we conduct a principal component analysis, and show that the four two-statement questions all load positively on the first principal component, like the questions in our baseline zero-sum index. Table E1 shows the factor loadings. We take the first principal component, scaled between 0 and 1, and confirm that our main results are robust to this alternative measure of zero-sum thinking. In Figure E2, we show that the two-statement zero-sum index lines up with the baseline zero-sum measure with a slope coefficient of 0.719 (s.e. $= 0.011$).

Figure E3 reproduces Figure 3, showing demographic correlates of zero-sum thinking. Figure E4 reproduces Figure 4, showing the density of the zero-sum index by party. Figure E5 reproduces Figure 5, showing correlations between the zero-sum index and policy views controlling for demographics and other core beliefs.

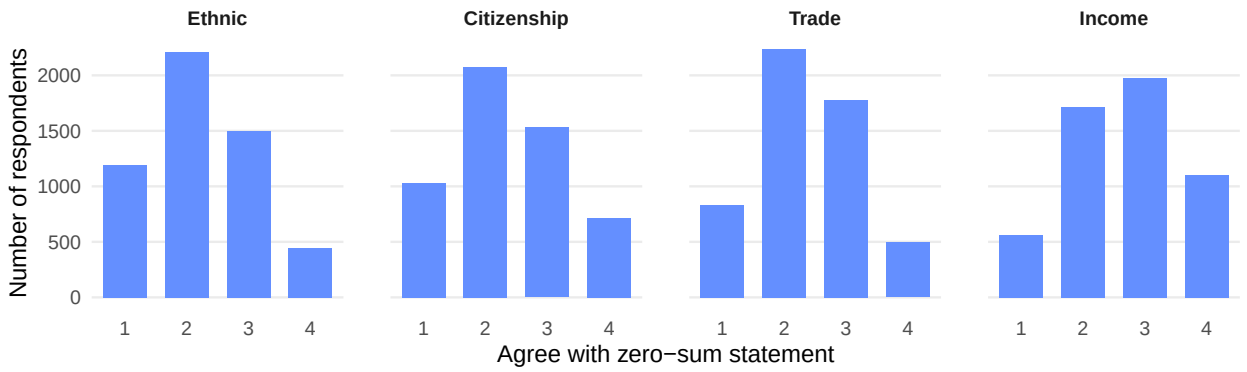


Figure E1: Distributions of Responses to Zero-Sum Questions

Notes: The figure shows the distribution of responses to the two-statement zero-sum questions. Statement 2 is the more zero-sum statement, and answer options are (1) Strongly agree with 1, (2) Agree with 1, (3) Agree with 2, (4) Strongly agree with 2.

Table E1: PCA Factor Loadings: First and Second Principal Components

Question	1st PC (Eigenvalue: 2.01)	2nd PC (Eigenvalue: 0.93)
Ethnicity	0.58	0.01
Citizenship	0.37	-0.80
Trade	0.57	0.03
Wealth	0.46	0.59

Notes: The table shows factor loadings for the first two principal components for the four component questions of the two-statement zero-sum index.

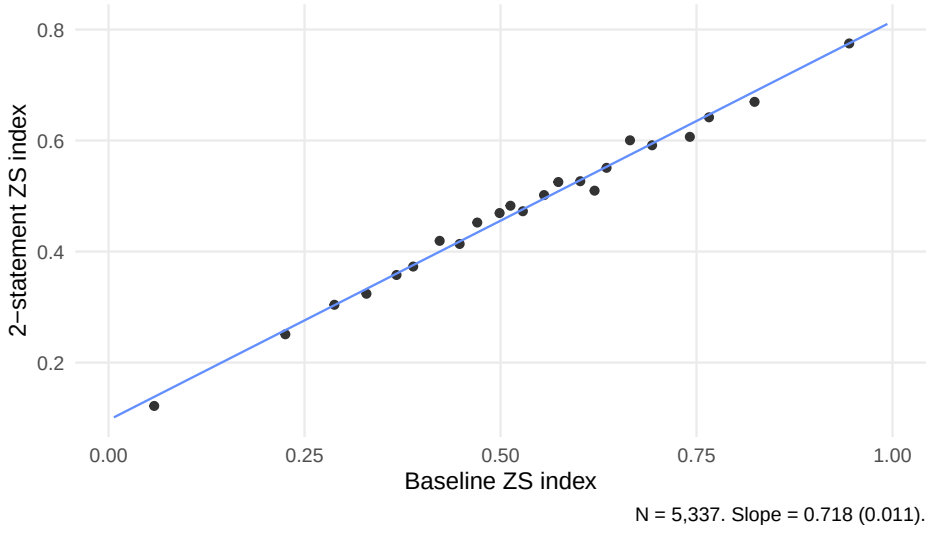


Figure E2: Relationship Between Baseline Zero-Sum Index and Two-Statement Zero-Sum Index

Notes: The figure shows a binscatter plot of the relationship between the baseline zero-sum index and the two-statement zero-sum index, measured for waves 6 and 7 of our survey sample.

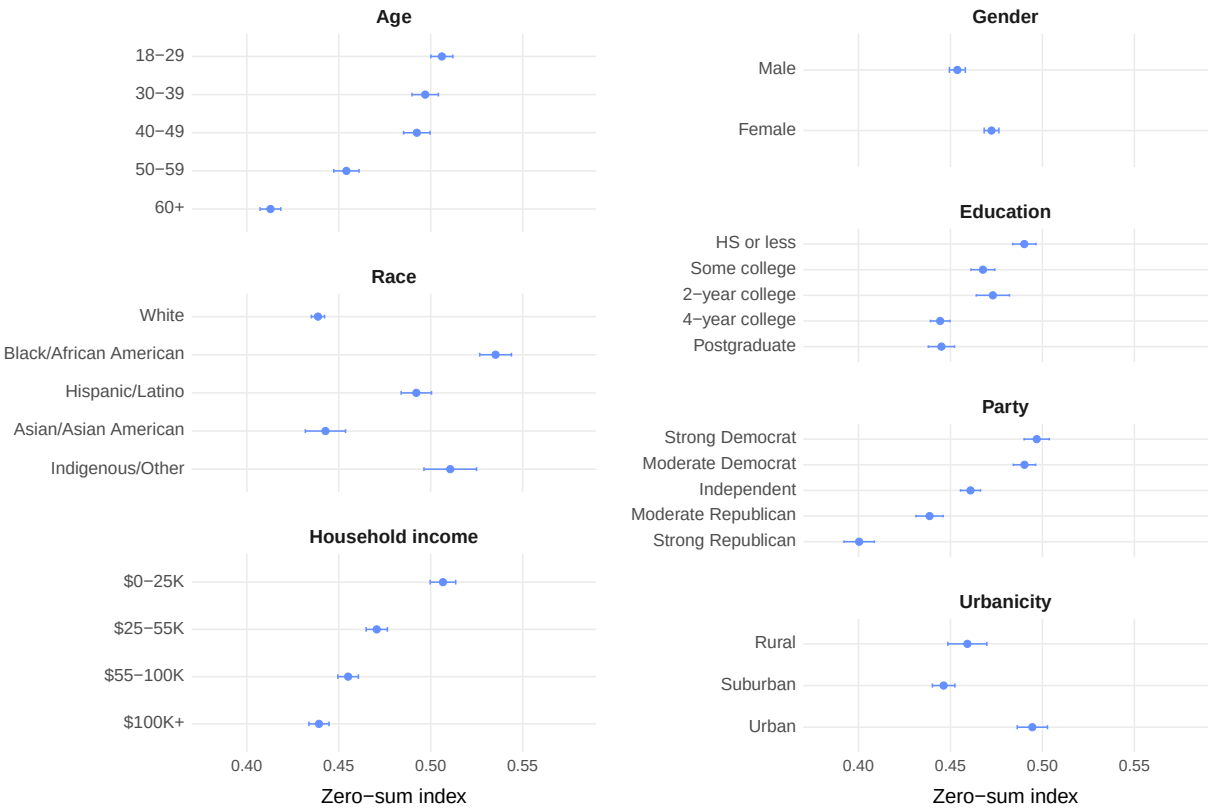


Figure E3: Average Zero-Sum Index by Demographic Group

Notes: Horizontal bars are 95% confidence intervals.

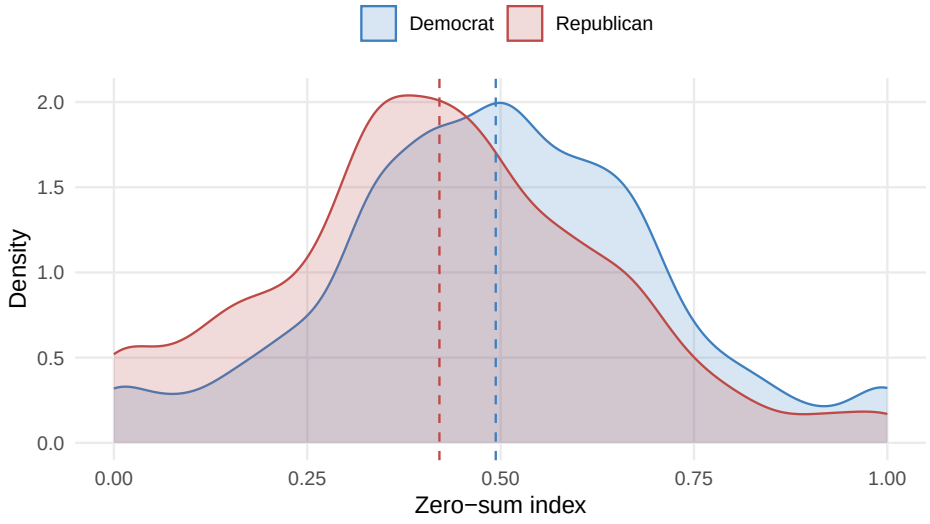


Figure E4: Density of Zero-Sum Index By Party

Notes: Vertical lines show the mean zero-sum index for each party. "Republican" includes respondents who considered themselves "Strong Republican" or "Moderate Republican", and "Democrat" includes respondents who considered themselves "Strong Democrat" or "Moderate Democrat." Those who considered themselves "Independent" are not shown.

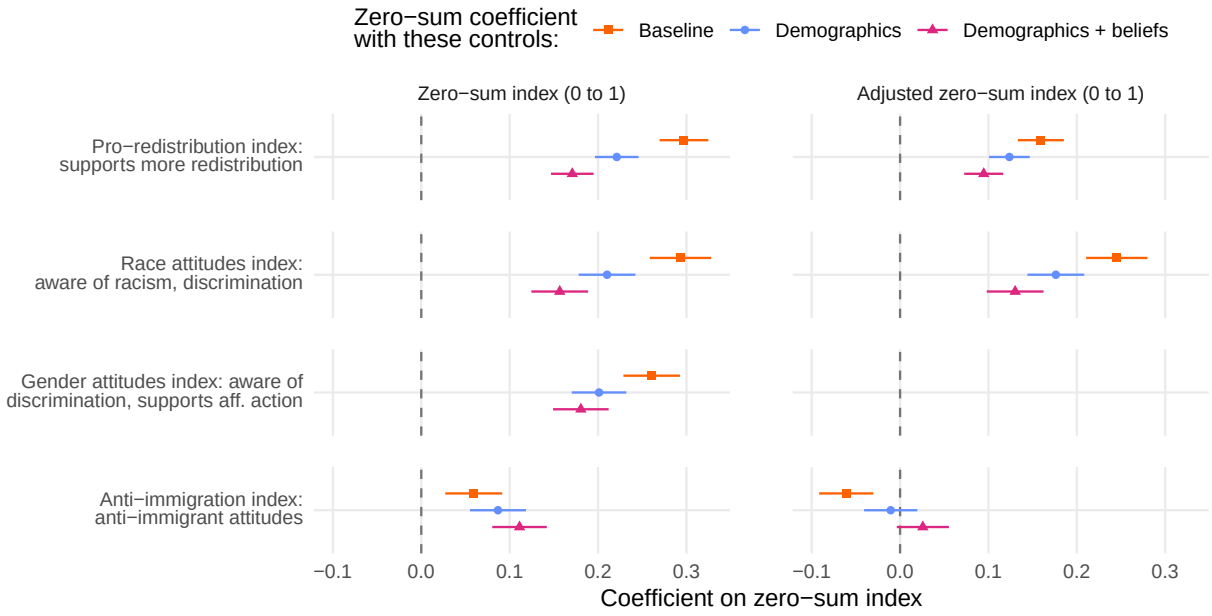


Figure E5: Zero-Sum Thinking and Policy Views

Notes: Each coefficient is from a separate regression with controls for age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for survey wave. The three estimates in each column correspond to the baseline specification, as well as specifications that add (1) demographic controls: fixed effects for race, household income, educational attainment, party affiliation, and fixed effects for household income interacted with a quadratic in age, and (2) controls for other core beliefs: whether the respondent thinks luck is more important than effort, their perceptions of economic mobility, the degree to which they are a moral universalist, whether they think tradition is important, and whether they think people can generally be trusted. The latter three attitudes are only available from the fifth wave of the survey onwards. Outcomes and regressors are normalized to be between zero and one. All variables are defined in Appendix B, with summary statistics in Table B3. In the first column, the coefficient estimate corresponds to the baseline zero-sum index, that is, the first principal component of the four baseline zero-sum questions about income, citizenship, ethnic groups, and trade. In the second column (with the adjusted zero-sum index), the coefficient corresponds to the first principal component of three of the baseline questions, removing the one most similar to the policy outcome in that group – income for the redistribution outcomes, ethnic groups for the race outcomes, and citizenship for the immigration outcomes. Note that no component in the zero-sum index is closely related to gender equality. Indices of policy views are the first principal component of the relevant questions. See Section 3 for details. Horizontal bars are 95% confidence intervals.

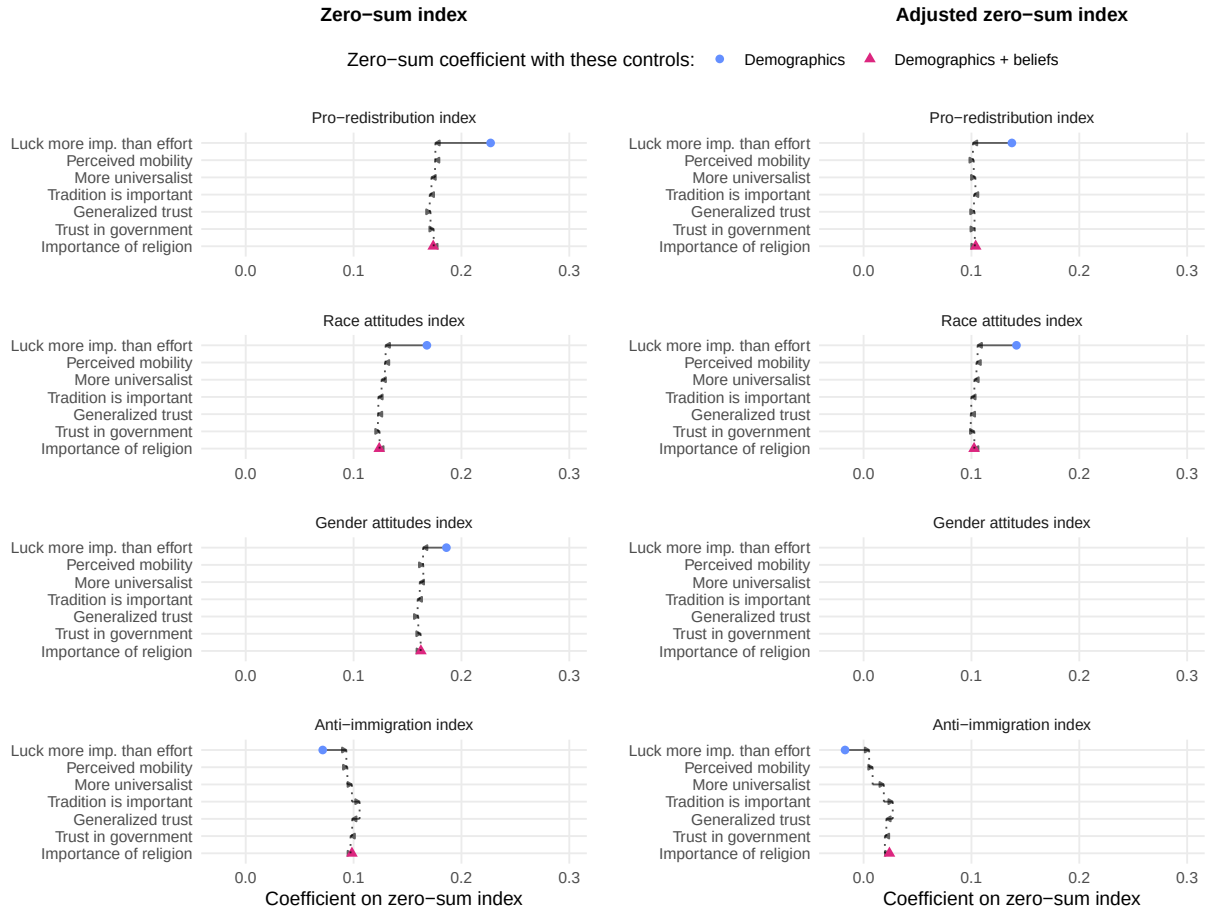


Figure E6: Gelbach Decompositions of Policy Views

Notes: The figure reports Gelbach decompositions (Gelbach, 2016) of the gap between (1) the coefficient on zero-sum thinking in a regression of each of the redistribution index, race attitudes index, anti-immigration index, and gender attitudes index on the zero-sum index with demographic controls only (the "restricted" regression) and (2) the coefficient on zero-sum thinking in the same regression, but with additional controls for other fundamental attitudes (the "full" regression). These additional controls, corresponding to the core beliefs in Figure 5, include whether luck is more important than effort, perceived mobility, moral universalism, whether tradition is important, and generalized trust. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, respondent race, household income, educational attainment, party affiliation, and fixed effects for household income interacted with a quadratic in age; we also include fixed effects for survey wave. In the first column, the coefficient estimate corresponds to the baseline zero-sum index, that is, the first principal component of the four baseline zero-sum questions about income, citizenship, ethnic groups, and trade. In the second column (with the adjusted zero-sum index), the coefficient corresponds to the first principal component of three of the baseline questions, removing the one most similar to the policy outcome in that group – income for the redistribution outcomes, ethnic groups for the race outcomes, and citizenship for the immigration outcomes. Note that no component in the zero-sum index is closely related to gender equality. Indices of policy views are the first principal component of the relevant questions. See Section 3 for details.

Appendix F. Real-Stakes Questions

In the final wave of our survey, we asked three questions with monetary incentives or "real stakes" (Stantcheva, 2023) to encourage respondents to report their perceptions accurately and to ensure that our measure of zero-sum thinking reflects respondents' real-world behavior.

Incentivized zero-sum question

First, we informed respondents that if they answered the following question correctly, they would be entered in a lottery to win a $1,000 bonus:

Over the last 50 years, the income of the richest 1% of individuals in the U.S. (the top 1%) has increased more than four times (400%). A recent academic study examined how much of the increase in income of the top 1% came at the expense of the income of the poorest 50% of individuals in the U.S. (the bottom 50%). We want to know your best guess about the finding of this study.

Respondents could answer that "some" or "none" of the increase in the income of the top 1% over the last 50 years has come at the expense of the income of the poorest 50% in the U.S. The academic study referred to in the question is Piketty et al. (2014).

Most people – 84.7% of respondents – chose the correct answer, "some." Table F1 shows that those who chose this answer were also more zero-sum on average, more pro-redistribution, and were more aware of racism and discrimination. These correlations hold with baseline demographic controls as well as party fixed effects. We take this as evidence that the zero-sum perceptions measured by our baseline questions reflect respondents' true beliefs, and that these perceptions are indeed correlated with policy views.

Donation to racial justice charities

Second, we informed respondents that they had automatically been entered into another lottery to win an additional $1,000, but that they could choose to donate some or all of this bonus:

"You can donate a part of this bonus payment (should you be selected in the lottery) to three nonprofit organizations working to advance racial equality and civil rights for people of color: Black Lives Matter, the NAACP (National Association for the Advancement of Colored People), and Color of Change. These organizations are dedicated to fighting against racial injustice."

Participants entered the amount that they would allocate to each of the three groups. 50.9% percent of people chose to donate a nonzero amount, and the average donation amount was $175.

Table F2 shows that choosing to donate a nonzero amount correlates positively with the zero-sum index, pro-redistribution index, and race attitudes index; these correlations again hold within party.[F1] We take this as further evidence that zero-sum beliefs correspond to real-world behavior.

Petition to raise taxes

Finally, we asked whether respondents were willing to sign a petition asking Congress to raise taxes on high-income households:

Now we would like to ask you about a petition that we will send to the federal government. When the survey is complete, we will send the results to Congress, informing them what share of people who took this survey were willing to support the following petition:

"The wealthiest people in our country keep getting richer while working families struggle to make ends meet. Congress must raise the tax rate for high-income families to increase funding for programs that help low-income families. We need a more just tax system to build an economy that works for all of us."

Do you support this petition? (You will not be asked to provide your name and your answer will remain anonymous.)

Participants could choose "Yes" or "No", and 79.7% of respondents indicated that they supported the petition. As seen in Table F3, support for the petition correlates positively with the zero-sum index, pro-redistribution index, and race attitudes index, and again, these correlations hold within party. We interpret this as another example that zero-sum beliefs correlate with real-world policy preferences.

[F1] The relationships are similar but slightly noisier if we use the total donation amount instead of an indicator for whether the respondent chose to donate a nonzero amount.

Table F1: Incentivized Zero-Sum Question

	Zero-sum index (0 to 1)		Pro-redistribution index		Race attitudes index	
	(1)	(2)	(3)	(4)	(5)	(6)
Correct on incentivized ZS question	0.1015***	0.0956***	0.1580***	0.1131***	0.1464***	0.0903***
	(0.0098)	(0.0100)	(0.0112)	(0.0097)	(0.0138)	(0.0120)
Demographic controls	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓
Race fixed effects	✓	✓	✓	✓	✓	✓
Party fixed effects		✓		✓		✓
Observations	2,980	2,978	2,980	2,978	2,981	2,979
R^2	0.129	0.134	0.220	0.435	0.216	0.432
Dependent variable mean	0.490	0.490	0.657	0.657	0.609	0.609
Dependent variable std. dev.	0.199	0.199	0.223	0.223	0.282	0.282

Notes: The table reports OLS estimates where the unit of observation is an individual. "Correct" refers to responding that "Some of the increase in the income of the top 1% over the last 50 years has come at the expense of the income of the poorest 50% in the U.S." Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table F2: Donation to Racial Injustice Charities

	Zero-sum index (0 to 1)		Pro-redistribution index		Race attitudes index	
	(1)	(2)	(3)	(4)	(5)	(6)
Donated	0.0331***	0.0244***	0.1404***	0.0818***	0.1855***	0.1148***
	(0.0072)	(0.0075)	(0.0074)	(0.0068)	(0.0094)	(0.0087)
Demographic controls	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓
Race fixed effects	✓	✓	✓	✓	✓	✓
Party fixed effects		✓		✓		✓
Observations	2,976	2,974	2,976	2,974	2,976	2,974
R^2	0.103	0.110	0.249	0.433	0.283	0.454
Dependent variable mean	0.490	0.490	0.656	0.656	0.608	0.608
Dependent variable std. dev.	0.199	0.199	0.223	0.223	0.282	0.282

Notes: The table reports OLS estimates where the unit of observation is an individual. "Donated" refers to choosing to donate a nonzero amount to a charity if selected in the lottery; see text for details. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table F3: Petition to Raise Tax Rate

	Zero-sum index (0 to 1)		Pro-redistribution index		Race attitudes index	
	(1)	(2)	(3)	(4)	(5)	(6)
Supports petition	0.1182***	0.1162***	0.3159***	0.2446***	0.2796***	0.1737***
	(0.0089)	(0.0098)	(0.0087)	(0.0090)	(0.0112)	(0.0112)
Demographic controls	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓
Party fixed effects		✓		✓		✓
Observations	2,985	2,983	2,985	2,983	2,986	2,984
R^2	0.149	0.149	0.454	0.556	0.328	0.468
Dependent variable mean	0.491	0.490	0.657	0.656	0.609	0.609
Dependent variable std. dev.	0.199	0.199	0.223	0.223	0.282	0.282

Notes: The table reports OLS estimates where the unit of observation is an individual. "Supports petition" refers to being willing to support a petition to raise the tax rate for high-income families. Demographic controls include age and age squared, gender, and their interaction, whether the respondent was born in the United States, and fixed effects for household income, educational attainment, party affiliation, and household income interacted with a quadratic in age. State fixed effects refer to the respondent's current state of residence. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Appendix G. A Model of Redistribution with Zero-Sum Concerns

This model is adapted from Piketty et al. (2014). Imagine that each respondent j has their own specific model of the economy so that all parameters introduced below can have respondent-specific values, corresponding to a respondent's perceptions of them. To reduce notational clutter, we do not explicitly index each parameter by j. Let i index agents in the economy, as perceived by respondent j. Each person i exerts effort to produce output y_i and is paid $z_i = \eta_i \cdot y_i$. Pay can differ from marginal product and the gap between the two is $\pi_i := (\eta_i - 1)y_i$, which is the extent of zero- or positive-sumness in the economy (as perceived by respondent j). If $\eta_i > 1$, pay is above marginal product, and agent i is extracting resources from someone else in the economy (we might call these "rents," for instance through monopoly power in their business). In this case, agent i is part of a zero-sum interaction and is imposing a negative externality on others. On the contrary, if $\eta_i < 1$, pay is below marginal product, and agent i creates a positive spillover on others, e.g., if they are "job creators" whose economic activity benefits even those with lower incomes through increased employment and career opportunities. In this case, agent i contributes to a positive-sum interaction.

Agents face increasing and convex costs of producing output and increasing their pay relative to their output, $h_i(y)$ and $k_i(\eta)$. Their utility payoff is:

$$u_i(c,\eta,y) = c - h_i(y) - k_i(\eta) \tag{A1}$$

To capture preferences for redistribution, focus on the top tax rate. Top earners, of mass one, are those who make income above $\bar{z}$. The government can set a linear tax rate τ in the top tax bracket. Let $z(1-\tau) := \int_{i:z_i \geq \bar{z}} z_i di$ be the average income of top bracket taxpayers and $\pi(1-\tau) := \int_{i:z_i \geq \bar{z}} \pi_i di$ their average rent, which are both functions of the top net-of-tax rate. Let $e = \frac{d\log(z)}{d\log(1-\tau)}$ be the elasticity of earnings to the net-of-tax rate and $e_\pi = \frac{d\log(\pi)}{d\log(1-\tau)}$ the elasticity of the rent. Define $a = z/(z-\bar{z})$ to be the Pareto parameter of the top tail of the distribution. The average zero-sumness (or rent) in the economy must come at the expense or benefit of some agents. For simplicity, we assume that all agents bear it uniformly. This assumption can be relaxed and we discuss this below. Thus, the government can fully tax or rebate back the average rent or surplus to everyone with a lump-sum tax or transfer (the demogrant).

A general way to capture the heterogeneous objectives of respondents relies on generalized marginal social welfare weights (Saez and Stantcheva, 2016). The weight g_i on person i measures the social value (according to respondent j) of transferring \$1 to person i. These weights can be used to aggregate the gains and losses from tax changes of different people in the economy. They embody the social preferences of individuals when it comes to taxes and transfers and can depend on their social fairness concerns and many other factors. For instance, we can write:

$$g_i = g(c_i, T_i, ZS_i, \mathbb{X}_i) \tag{A2}$$

where the weight on agent i is a function of their consumption c_i, their total tax paid T_i, and other personal characteristics captured by vector $\mathbb{X}_i$ (e.g., age or family status). Importantly, it can be a function of the perceived contribution of agent i to a zero-sum or not zero-sum interaction, captured by ZS_i.

To go from these individual weights to social marginal welfare weights for a given income level, respondents need to average the weights across all individuals earning that income level. The income-weighted average marginal social welfare weight on top earners relative to the average weight in the economy is $\bar{g}^{top} = \frac{\int_{i:z_i \geq z} z_i g_i}{z \int_i g_i}$.

According to respondent j, the optimal top income tax rate that the government should set is given by:

$$\tau^{top} = \frac{1 - \bar{g}^{top} + a \cdot \pi / z \cdot e_\pi}{1 - \bar{g}^{top} + a \cdot e} \tag{A3}$$

where all parameters are as perceived by the respondent, and may or may not correspond to reality.

One standard case is when social marginal welfare weights capture an aversion to inequality (e.g., decrease in disposable income c) and faster declining weights lead to higher preferred tax rates. This inequality concern might lead people to want to help disadvantaged groups, regardless of whether there are zero-sum interactions or not. But it will also interact with zero-sum concerns as we outline below. We now discuss how zero-sum mindsets affect the preferred top tax rate.

1. Externality correction: The preferred tax depends on perceived spillover effects from top tax rates, either through zero-sum (often called "trickle-up" when it comes to income) or positive-sum ("trickle-down") effects embodied in $\pi / z \cdot e_\pi$. Respondents who perceive that there is more zero-sumness will want a higher tax rate to correct for this negative externality.

If the externality does not affect others uniformly but instead comes only at the expense of non-top taxpayers (in this case, the "disadvantaged group"), then this would increase the preferred top tax rate, all else equal (for any redistributive weights, since lower-income people will generically get a higher weight). Our survey question corresponds most closely to a setting in which the externality is imposed exclusively on lower-income people by higher-income people.

2. ***Procedural fairness concerns:*** Social preferences are embodied in $\bar{g}$. If people dislike those who impose zero-sum interactions, the weight g_i on agent i will be decreasing in ZS_i, i.e., when that agent is perceived to be part of a group that is imposing zero-sum externalities on others. People may dislike those who impose zero-sum externalities for fairness reasons. One major such criterion is "procedural fairness," whereby people care not only about the outcome (in this case, someone's income) but also about how the outcome was achieved. This criterion commonly appears in other well-studied settings, such as concerns about equality of opportunity and a level playing field (see, e.g., Alesina et al. (2018)). In our case, when income is achieved through a zero-sum interaction (taking from others), this might be considered unfair by respondents. The strength of this concern might depend on whether the group imposing the zero-sum interaction is the disadvantaged or advantaged one (i.e., ZS_i might interact with c_i in the function $g()$). In other words, people may consider it less unfair if a disadvantaged group is engaging in a zero-sum interaction at the expense of an advantaged group.

3. ***Self-interest:*** If agents are entirely self-interested, then the respondent assigns a positive social marginal welfare weight only to themselves, with everyone else receiving a weight of zero. This would lead respondents to prefer the tax rate that most benefits people with their income level. Therefore, it matters whether a respondent is part of the group losing from the zero-sum interaction or the group benefiting from it. Given how our questions are phrased, a respondent who is more zero-sum according to our measure believes that the top-income people gain at the expense of lower-income ones. Hence, the effect of this channel depends whether the respondent is part of the top income group or not.

Suppose a respondent is part of the top income group. If the externality is exclusively imposed by high-income on low-income agents (as most closely aligns with our survey question), they should demand no redistribution at all (zero top tax rates), even if they believe the world is zero-sum. On the other hand, as long as they put *some* weight on others and/or care about procedural fairness, they will also demand some redistribution above and beyond their narrow

self-interest. In principle, then, the correlation between zero-sum thinking and our core policy views is an empirical question for respondents who are part of a group that benefits from the zero-sum interaction. In fact, our results suggest that high-income respondents support more redistribution when they are zero-sum minded, suggesting that there is a procedural fairness concern and/or an externality correction one. If, on the contrary, a respondent is not part of the top income group, then all effects point in the same direction, and they will support more redistribution if they believe the world is more zero-sum.

Similar reasoning applies to two other policy outcomes that we study: favoring policies to promote gender equality and racial equality. For immigration, the link between a zero-sum mindset and policy depends on which group is considered disadvantaged. Respondents who say that the gains of immigrants come at the expense of non-immigrants might believe that immigrants are the disadvantaged group if they come from, on average, poorer countries, which would dampen their wish to correct for this externality or their procedural fairness concern. The self-interest motive would push people to be more anti-immigration.

Appendix H. Survey questionnaire

By default, the questions were asked in all survey waves. Brackets indicate variations in the questions between survey waves, where [WX] means that a given question or answer choice was used in the survey wave X and [WX-WY] means it was used in survey waves X to Y.

Consent

1. **We are a group of non-partisan academic researchers.** Our goal is to understand how the external environment of an individual and their ancestors influences their views on policies. By completing this survey, you are contributing to our knowledge as a society. The survey also gives you an opportunity to express your own views. If you do not feel comfortable with any question, you can skip it.
   Please note that it is very important for the success of our research that you **answer honestly** and **read the questions very carefully** before answering. Please be sure to spend enough time reading and understanding each question. To ensure the quality of survey data, your responses will be subject to sophisticated statistical control methods, which can detect incoherent or rushed answers. **Responding without adequate effort or skipping many questions may result in your responses being flagged for low quality and you may not receive your payment.** It is also very important for the success of our research project that you **complete the entire survey** once you have started. This survey should take (on average) about 25 minutes to complete.
   Notes: Your participation in this study is purely voluntary. Your name will never be recorded by researchers. Results may include summary data, but you will never be identified. The data will be stored on Harvard servers and will be kept confidential. The collected anonymous data may be made available to other researchers for replication purposes. Please print or take a screenshot of this page for your records. If you have any question about this study, you may contact us at socialsciencestudies@gmail.com. For any question about your rights as a research participant you may contact cuhs@harvard.edu.
   Yes, I would like to take part in this study, and confirm that I am 18 or older; No, I would not like to participate

Basic Demographics

2. What is your gender?
   Male; Female; Other gender identity
3. What is your year of birth?
   [text box]
4. What was your **TOTAL household** income, **before taxes,** last year (2021)?
   - $0 -$14,999
   - *$15,000 - $24,999*
   - *$25,000 - $39,999*
   - *$40,000 - $54,999*
   - *$55,000 - $74,999*
   - *$75,000 - $99,999*
   - *$100,000 - $149,999*
   - *$150,000+*
5. In which U.S. state do you currently live?
   [dropdown menu]
6. Which one of these best describes your ethnicity/race?
   European American/White; African American/Black; Hispanic/Latino; Asian/Asian American; Native Hawaiian or Other Pacific Islander; American Indian or Alaska Native; Other [text box]
7. [W5-W7] Would you describe the area in which you live as:
   Urban; Suburban; Rural

Own demographics: location questions

8. Were you born in the United States?
   Yes; No

9. (If “No" to Q8) In what country were you born? Note: to use this dropdown menu, simply type the first letters and the country will appear automatically.
[dropdown menu]

10. (If “Yes" to Q8) In which US state were you born? Note: to use this dropdown menu, simply type the first letters and the state will appear automatically.

    N.B. For all questions where a respondent is asked where they or a family member “primarily" lived, the question is followed by the statement: “*If you lived in multiple locations, please choose the location where you lived for the longest period of time.*"

11. Between the age of 0 and 9, did you primarily live in the United States?
Yes; No

12. (If “No" to Q11) In what country did you primarily live between the age of 0 and 9?
[dropdown menu]

13. (If “Yes" to Q11) In which state did you primarily live between the age of 0 and 9?
[dropdown menu]

14. (If “Yes" to Q11) In which town did you primarily live between the age of 0 and 9?
[text box]

15. Between the age of 10 and 19, did you primarily live in the United States?
Yes; No

16. (If “No" to Q15) In what country did you primarily live between the age of 10 and 19?
[dropdown menu]

17. (If “Yes" to Q15) In which state did you primarily live between the age of 10 and 19?
[dropdown menu]

18. (If “Yes" to Q15) In which town did you primarily live between the age of 10 and 19?
[text box]

19. (If $\leq$ 1999 to Q3) Did you primarily live in the United States in your 20s?
Yes; No

20. (If “No" to Q19) In what country did you primarily live in your 20s?
[dropdown menu]

21. (If “Yes" to Q19) In which state did you primarily live in your 20s?
[dropdown menu]

22. (If “Yes" to Q19) In which town did you primarily live in your 20s?
[text box]

23. [W1-W4] (If $\leq$ 1989 to Q3) Did you primarily live in the United States in your 30s?
Yes; No

24. [W1-W4] (If “No" to Q23) In what country did you primarily live in your 30s?
[dropdown menu]

25. [W1-W4] (If “Yes" to Q23) In which state did you primarily live in your 30s?
[dropdown menu]

26. [W1-W4] (If “Yes" to Q23) In which town did you primarily live in your 30s?
[text box]

27. [W1-W4] (If $\leq$ 1979 to Q3) Did you primarily live in the United States in your 40s and after?
Yes; No

28. [W1-W4] (If “No" to Q27) In what country did you primarily live in your 40s and after?
[dropdown menu]

29. [W1-W4] (If “Yes" to Q27) In which state did you primarily live in your 40s and after?
[dropdown menu]

30. [W1-W4] (If “Yes" to Q27) In which town did you primarily live in your 40s and after?
[text box]

Own demographics, cont.

31. [W5-W7] How many children did your parents have?
1; 2; 3; 4; 5; 6; 7; 8; 9; 10 or more

32. Are/were your parents divorced?
Yes; No

33. (If "Yes" to Q32) How old were you when your parents divorced?
[text box]

34. (If "Yes" to Q32) With whom were you primarily living after your parents divorced?
Mother; Father; Other

35. Please indicate your marital status.
Never Married; Married; Legally Separated or Divorced; Widowed

36. How many children do you have?
0; 1; 2; 3; 4; 5; 6; 7; 8; 9; 10 or more

37. What is your ancestry or ethnic origin? For example: Italian, Jamaican, African Am., Cambodian, Cape Verdean, Norwegian, Dominican, French Canadian, Haitian, Korean, Lebanese, Polish, Nigerian, Mexican, Taiwanese, Ukrainian, and so on. You should indicate all that apply.
[text box]

38. Which category best describes your highest level of education?
No high school; Some high school; High school degree/GED; Some college; 2-year college degree; 4-year college degree; Master's degree, MBA; PhD, JD, MD

39. What is your current employment status?
Full-time employee; Part-time employee; Self-employed or small business owner; Unemployed and looking for work; Unemployed and not looking for work (including student)

40. (If "Unemployed and not looking for work (including student) to Q39") What is your current status?
Student; Retired; Full-time parent; Stay-at-home wife/husband; Disabled

41. [W6-W7] What is/was your occupation?
[text box]

42. [W6-W7] Which category best describes your occupation?

- *Farmer or agricultural laborer, rancher, fisher*
- *Manual laborer (e.g. factory worker, miner)*
- *Tradesperson (e.g. mechanic, welder, painter, railroad worker, plumber, tailor)*
- *Service worker (e.g. driver, waiter, cook, retail worker, cashier, barber, janitor, housekeeper)*
- *Clerical worker (e.g. secretary, bookkeeper, receptionist, telephone operator)*
- *White-collar worker (e.g. manager, executive, businessperson, salesperson, accountant, banker)*
- *Professional (e.g. doctor, lawyer, engineer, IT/computer programmer)*
- *Medical or social worker (e.g. nurse, EMT, pharmacist)*
- *Protective service worker (e.g. police, fire)*
- *Educational service worker (e.g. teacher, professor)*
- *Public servant (e.g. bureaucrat, politician, military)*
- *Homemaker/stay-at-home parent*
- *Self-employed/small business owner (excluding farm owners)*
- *Other (please specify) [text box]*
- *Don't know*

43. [W5-W7] What is your present religion, if any?

- *Protestant (for example, Baptist, Methodist, Non-denominational, Lutheran, Presbyterian, Pentecostal, Episcopalian, Reformed, Church of Christ, etc.)*
- *Roman Catholic*
- *Mormon (Church of Jesus Christ of Latter-day Saints)*
- *Orthodox (such as Greek, Russian, or some other Orthodox church)*
- *Jewish*
- *Muslim*
- *Buddhist*
- *Hindu*
- *Atheist (believes God does not exist)*
- *Agnostic (does not know whether God exists or not)*
- *Other [text box]*

44. [W5-W7] How important is religion in your life?
Very important; Somewhat important; Not too important; Not at all important

Political views

45. In politics, as of today, do you consider yourself a Republican, a Democrat, or an independent?
Strong Democrat; Moderate Democrat; Independent; Moderate Republican; Strong Republican; Other [text box]

46. Who did you vote for in the 2016 election?
Hillary Clinton; Donald Trump; Other [text box]; I did not vote

47. (If "I did not vote" to Q46) Who would you have voted for in the 2016 election if you had voted?
Hillary Clinton; Donald Trump; Other [text box]

48. [W4-W7] Who did you vote for in the 2020 election?
Joe Biden; Donald Trump; Other [text box] I did not vote

49. [W5-W7] (If "I did not vote" to Q48) Who would you have voted for in the 2020 election if you had voted?
Joe Biden; Donald Trump; Other [text box]

50. On economic policy matters, where do you see yourself on the liberal/conservative spectrum?
Very liberal, Liberal, Moderate, Conservative, Very conservative

Parents' demographics

N.B. The brackets indicate that we asked the demographic questions in this section for the respondent's father and mother.

*Now we'd like you to think of your **[father/mother]**. We are going to ask you questions about [him/her]. Please answer as best as you can. If you have **absolutely** no idea about the answer, you can leave it blank. Otherwise, please answer as accurately as you are able to.*

51. [W4-W7] Is your [father/mother] currently alive?
Yes; No; Don't know

52. [W4-W7] (If "Yes" to Q51) What is the age of your [father/mother]?
[text box]

53. [W4-W7] (If "Yes" to Q51 and no response to Q52) What is the year of birth of your [father/mother]?
[text box]

54. [W4-W7] (If "No" to Q51) In what year did [he/she] die?
[text box]

55. [W4-W7] (If "No" to Q51) How old was he when [he/she] died?
[text box]

56. [W4-W7] (If "No" to Q51 and no response to Q54 or Q55) What is the year of birth of your [father/mother]?
[text box]

N.B. For all following questions that ask about where a person spent their time, the respondent is presented the instruction to select the location where the person spent most of their time.

57. [W1-W4] Was your [father/mother] born in the United States?
[Yes; No; Don't know]

58. [W1-W4] (If "No" to Q57) In what country was your [father/mother] born?
[dropdown]

59. [W1-W4] (If "Yes" to Q57) In which state was your [father/mother] born?
[dropdown]

60. [W1-W4] (If "Yes" to Q57) In which town was your [father/mother] born?
[text box]

61. Did your **[father/mother]** primarily grow up (age 7-17) in the United States?
Yes; No; Don't know

62. (If "No" to Q61) In what country did you **[father/mother]** primarily grow up?
[dropdown menu]

63. (If "Yes" to Q61) In which state did your **[father/mother]** primarily grow up?
[dropdown menu]

64. (If "Yes" to Q61) In which town did your **[father/mother]** primarily grow up?
[text box]

65. Which category best describes your **[father's/mother's]** highest level of education?
No high school; Some high school; High school degree/GED; Some college; 2-year college degree; 4-year college degree; Master's degree, MBA; PhD, JD, MD; Don't know

66. What was/is the occupation of your **[father/mother]** as an adult?
[text box]

67. [W5-W7] Which category best describes your **[father's/mother's]** occupation?

- *Farmer or agricultural laborer, rancher, fisher*
- *Manual laborer (e.g. factory worker, miner)*
- *Tradesperson (e.g. mechanic, welder, painter, railroad worker, plumber, tailor)*
- *Service worker (e.g. driver, waiter, cook, retail worker, cashier, barber, janitor, housekeeper)*
- *Clerical worker (e.g. secretary, bookkeeper, receptionist, telephone operator)*
- *White-collar worker (e.g. manager, executive, businessperson, salesperson, accountant, banker)*
- *Professional (e.g. doctor, lawyer, engineer, IT/computer programmer)*
- *Medical or social worker (e.g. nurse, EMT, pharmacist)*
- *Protective service worker (e.g. police, fire)*
- *Educational service worker (e.g. teacher, professor)*
- *Public servant (e.g. bureaucrat, politician, military)*
- *Homemaker/stay-at-home parent*
- *Self-employed/small business owner (excluding farm owners)*
- *Other (please specify) [text box]*
- *Don't know*

68. **Before proceeding to the next set of questions, we want to ask for your feedback about the responses you provided so far.** It is vital to our study that we only include responses from people who devoted their full attention to this study. This will not affect in any way the payment you will receive for taking this survey. In your honest opinion, should we use your responses, or should we discard your responses since you did not devote your full attention to the questions so far?

- *Yes, I have devoted full attention to the questions so far and I think you should use my responses for your study.*
- *No, I have not devoted full attention to the questions so far and I think you should not use my responses for your study.*

Grandparents' demographics

N.B. For the demographic questions below, the brackets indicate that we asked these questions for the paternal grandfather, paternal grandmother, maternal grandfather, and maternal grandmother, and that each of these was defined. For example, "maternal grandmother" was defined as the "mother of your mother."

*Now we'd like you to think of your **[paternal/maternal] [grandfather/grandmother]**. We are going to ask you questions about [him/her]. Please answer as best as you can. If you have **absolutely** no idea about the answer, you can leave it blank. Otherwise, please answer as accurately as you are able to.*

69. [W4-W7] Is your [paternal/maternal] [grandfather/grandmother] ([father/mother] of your [father/mother]) currently alive?
Yes; No; Don't know

70. [W4-W7] (If "Yes" to Q69) What is the age of your [paternal/maternal] [grandfather/grandmother] ([father/mother] of your [father/mother])?
[text box]

71. [W4-W7] (If "Yes" to Q69 and no response to Q70) What is the year of birth of your [paternal/maternal] [grandfather/grandmother] ([father/mother] of your [father/mother])?
[text box]

72. [W4-W7] (If "No" to Q69) In what year did [she/he] die?
[text box]

73. [W4-W7] (If "No" to Q69) How old was he when [she/he] died?
[text box]

74. [W4-W7] (If "No" to Q69 and no response to Q72 or Q73) What is the year of birth of your [paternal/maternal] [grandfather/grandmother] ([father/mother] of your [father/mother])?
[text box]

75. Did your **[paternal/maternal] [grandfather/grandmother]** ([father/mother] of your [father/mother]) primarily grow up (age 7-17) in the United States?
Yes; No; Don't know

76. (If "No" to Q75) In what country did your **[paternal/maternal] [grandfather/grandmother]** ([father/mother] of your [father/mother]) primarily grow up?
[dropdown menu]

77. (If "Yes" to Q75) In which state did your **[paternal/maternal] [grandfather/grandmother]** ([father/mother] of your [father/mother]) primarily grow up?
[dropdown menu]

78. (If "Yes" to Q75) In which town did your **[paternal/maternal] [grandfather/grandmother]** ([father/mother] of your [father/mother]) primarily grow up?
[text box]

79. Which category best describes the highest level of education of your **[paternal/maternal] [grandfather/grandmother]** ([father/mother] of your [father/mother])?
No schooling; Some primary school; Completed primary school; Some high school; High school degree/GED; Some college or more; I don't know

80. What was the occupation of your **[paternal/maternal] [grandfather/grandmother]** ([parent of your parent]) as an adult?
[text box]

81. [W5-W7] Which category best describes your **[paternal/maternal] [grandfather/grandmother's]** occupation?

- *Farmer or agricultural laborer, rancher, fisher*
- *Manual laborer (e.g. factory worker, miner)*
- *Tradesperson (e.g. mechanic, welder, painter, railroad worker, plumber, tailor)*
- *Service worker (e.g. driver, waiter, cook, retail worker, cashier, barber, janitor, housekeeper)*
- *Clerical worker (e.g. secretary, bookkeeper, receptionist, telephone operator)*
- *White-collar worker (e.g. manager, executive, businessperson, salesperson, accountant, banker)*
- *Professional (e.g. doctor, lawyer, engineer, IT/computer programmer)*
- *Medical or social worker (e.g. nurse, EMT, pharmacist)*
- *Protective service worker (e.g. police, fire)*
- *Educational service worker (e.g. teacher, professor)*
- *Public servant (e.g. bureaucrat, politician, military)*
- *Homemaker/stay-at-home parent*
- *Self-employed/small business owner (excluding farm owners)*
- *Other (please specify) [text box]*
- *Don't know*

82. How many children did your [paternal/maternal] grandparents (your [father's/mother's] parents) have?
1; 2; 3; 4; 5; 6; 7; 8; 9; 10 or more; Don't know

Family's veteran status

83. Have you, or have any of your parents, grandparents or children ever served in the U.S. Armed Forces as either an active duty or reserve member (including the Army, Navy, Marine Corps, Air Force, Army Air Corps, National Guard, and Coast Guard)? Check all that apply.
Myself; My spouse; My father; My mother; My paternal grandfather (father of my father); My paternal grandmother (mother of my father); My maternal grandfather (father of my mother); My maternal grandmother (mother of my mother); My son/daughter; None; Don't know

84. [W1-W4] (If "None" or "I don't know" is not selected for Q83) Do you, or does anyone in your family have veteran status? If yes, check all that apply.
Myself; My father; My mother; My paternal grandfather (father's father); My paternal grandmother (father's mother); My maternal grandfather (mother's father); My maternal grandmother (mother's mother); My son/daughter; None; I don't know

85. [W1-W4] (If "None" or "I don't know" is not selected for Q83) Did any of your grandparents serve on active duty in World War II? If yes, check all that apply.
My paternal grandfather (father's father); My paternal grandmother (father's mother); My maternal grandfather (mother's father); My maternal grandmother (mother's mother); None; I don't know

86. [W1-W4] (If "None" or "I don't know" is not selected for Q83) Did any of your grandparents serve on active duty in the Korean War? If yes, check all that apply
My paternal grandfather (father's father); My paternal grandmother (father's mother); My maternal grandfather (mother's father); My maternal grandmother (mother's mother); None; I don't know

87. [W1-W4] (If “None" or “I don’t know" is not selected for Q83) Did any of your grandparents serve on active duty in the Vietnam War? If yes, check all that apply
My paternal grandfather (father’s father); My paternal grandmother (father’s mother); My maternal grandfather (mother’s father); My maternal grandmother (mother’s mother); None; I don’t know

88. [W1-W4] (If “None" or “I don’t know" is not selected for Q83) Did anyone in your family serve on active duty in the Iraq and/or Afghanistan War? If yes, check all that apply
My father; My mother; My paternal grandfather (father’s father); My paternal grandmother (father’s mother); My maternal grandfather (mother’s father); My maternal grandmother (mother’s mother); My son/daughter; None; I don’t know

Veteran details

N.B. We ask the questions below about veteran status and service history for the respondent and every family member except for son/daughter (i.e., the spouse, father, mother, paternal grandfather, paternal grandmother, maternal grandfather, and the maternal grandmother) for whom the respondent indicated that they served in the military. In the brackets, “person" indicates that the question was asked for the respondent and a given family member. The pronoun “they” in brackets means that the appropriate pronoun was used for the person in question (i.e., it stands in for “you,” “she,” or “he”).

89. (If “None" or “Don’t know" is not selected to Q83) What is/was [person’s] affiliation? Check all that apply.
Army; Army Reserve; Navy; Navy Reserve; Marine Corps; Marine Corps Reserve; Air Force; Air Force Reserve; Coast Guard; Coast Guard Reserve; National Guard

90. For how many years did [person] serve/have [they] served on active duty? If none, please enter “0", if less than 1 year, enter “1."
[text box]

91. (If “National Guard" or a “Reserve" to Q89) For how many years did was/has [person] been in the Reserve or National Guard?
[text box]

92. (If > 0 to Q90) In which year did [person’s] active duty status begin?
[text box]

93. Did [person] serve in any of the following conflicts?
World War I [for parents and grandparents only]; World War II; Korean War; Vietnam War; Persian Gulf War (Kuwait, Iraq, Operations Desert Storm/Desert Shield); Global War on Terrorism (Afghanistan/Iraq Wars); Other [text box]

94. (If “World War II," “Korean War," or “Vietnam War" to Q93) Was [person] drafted or did [they] volunteer?
Drafted, Volunteered, Don’t know [for other family members only])

Enslavement history

95. Thinking about your recent ancestors (say the last 6 or 7 generations), were any of them enslaved at any point in their life?
Yes; No; Don’t know

96. [W1-W4] (If “Yes" to Q95) Which of your ancestors were enslaved at some point in their life?
[textbox]

97. [W5-W7] When thinking about historical episodes of enslavement, the following examples often come to mind. Which, if any, apply to your own ancestors? Check all that apply.
Enslavement of African descendants; Holocaust; Indentured servants; Internment of Japanese-Americans; Native American enslavement; War prisoner; Other [text box]; None; Don’t know

Relative income

N.B. The brackets for Q98 indicate that we ask the about the relative income for the respondent, their mother, father, paternal grandfather, paternal grandmother, maternal grandfather, and maternal grandmother.

98. **When [person] was growing up** (age 7-17), compared with other families in [person’s] country back then, would you say [person’s] household income was:
Far above average; A little above average; Average; A little below average; Far below average; I don’t know

99. **Right now**, compared with other families in America, would you say your own household income is:
Far above average; A little above average; Average; A little below average; Far below average; I don’t know

Perceptions of fairness and mobility

100. *Please tell us whether you agree with the following statement:* "Success in life is pretty much determined by forces outside our control."
Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree

101. *Please tell us whether you agree with the following statement:* "In the United States everybody has a chance to make it and be economically successful."
Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree

102. Which has more to do with why a person is poor?
Lack of effort on their own part; Circumstances beyond their control

103. [W1-W4] Which has more to do with why a person is rich?
the person worked harder than others; The person had more advantages than others

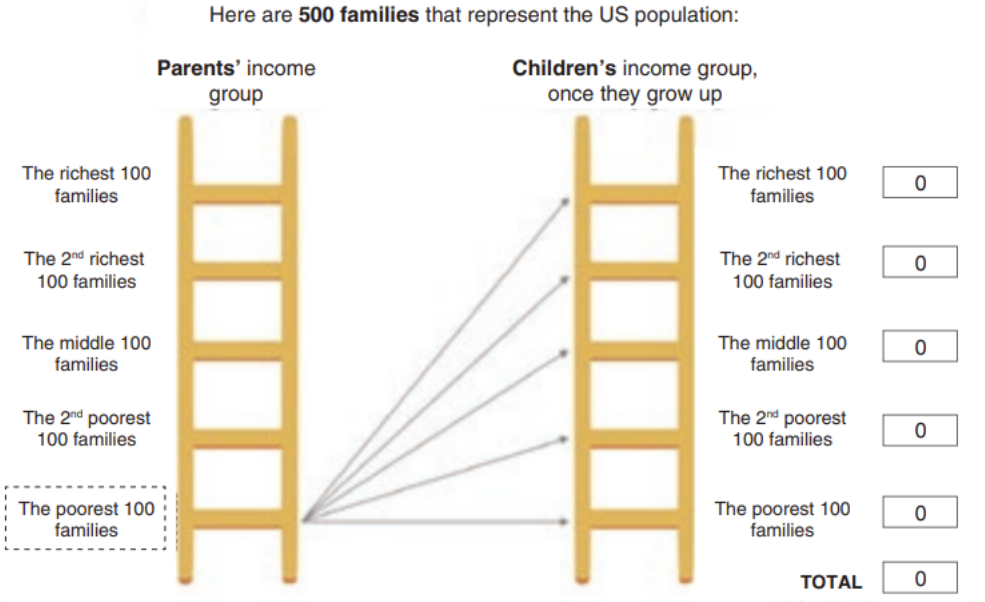
104. **We would now like to ask you what you think about the life opportunities of children from very poor families.**

For the following questions, we focus on 500 families that represent the U.S. population. We divide them into five groups on the basis of their income, with each group containing 100 families. These groups are: the poorest 100 families, the second poorest 100 families, the middle 100 families, the second richest 100 families, and the richest 100 families.

Please fill out the entries to the right of the figure below to tell us, in your opinion, how many out of 100 children coming from the **poorest** 100 families will grow up to be in each income group.

From our experience, this question takes some time to answer.

Please note that your entries need to add up to 100 or you will not be able to move on to the next page.



105. [W1-W4] Do you think that a child from the **poorest** 100 families will grow up to be among the **richest 100 families** are:
Close to zero; Low; Fairly low; Fairly high; High

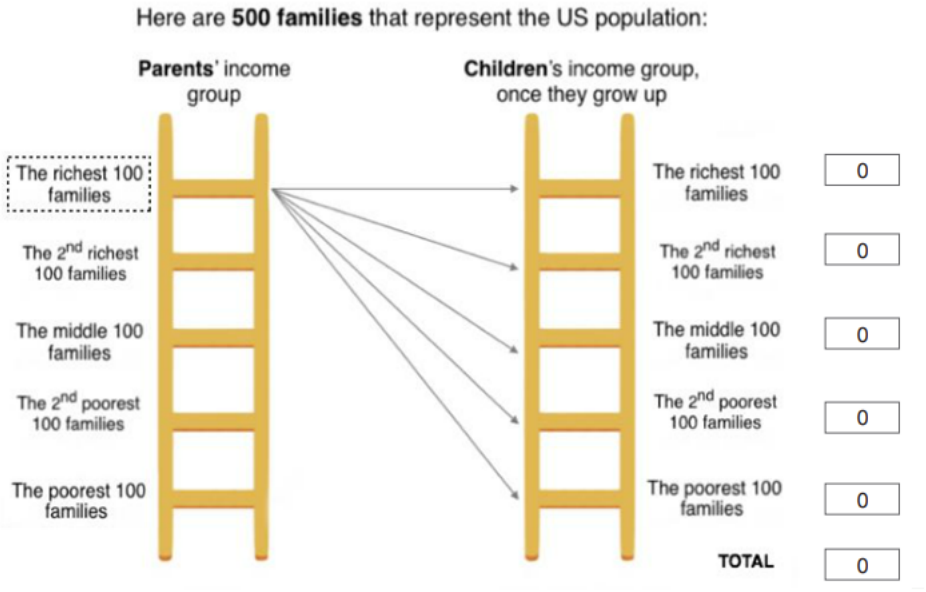
106. [W1-W4] Do you think that a child from the **poorest** 100 families will grow up to be among the **second richest 100 families** are:
Close to zero; Low; Fairly low; Fairly high; High

107. [W1-W4] **We are still interested in your opinion about the life opportunities for children from different backgrounds, but now we focus on children from very rich families.**

From our experience, this question takes some time to answer.

Consider 100 children coming from the richest 100 families.

Please fill out the entries to the right of the figure below to tell us, in your opinion, how many out of these 100 children will grow up to be in each income group. Please note that your entries need to add up to 100 or you will not be able to move on to the next page.



108. *Please tell us whether you agree with the following statement:* "People should be allowed to accumulate as much wealth as they can even if some make millions while others live in poverty."
Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree

109. Thinking about your past achievements, do you believe that your hard work and effort in life have paid off or not?
They have paid off a lot; They have paid off somewhat; They have not paid of at all

110. [W1-W4] Thinking about your future achievements, do you believe that your hard work in life will pay off or not?
[They will pay off a lot; They well pay off somewhat; They will not pay off at all]

111. [W1-W4] (If $\geq$ 1975 to Q3) Thinking of yourself, how likely is it that you will ever be among the top 20% richest household in the U.S., i.e., households which earn more than $130,000 per year?
Very likely; Likely; Somewhat likely; Not likely; Not likely; Not likely at all

112. [W1-W4] (If < 1975 to Q3 and < 0 to Q36) Thinking of your children, how likely is it that they will ever be among the top 20% richest household in the U.S., i.e., households which earn more than $130,000 per year?
Very likely; Likely; Somewhat likely; Not likely; Not likely; Not likely at all

Views about redistribution

113. Let's think about the role of the government when it comes to **large income differences** between rich and poor people. Think of a scale where:

- 1 means that the government **should not concern itself** with reducing income differences between rich and poor people
- 7 means that the government **should do everything in its power** to reduce income differences between rich and poor people

What score between 1 and 7 comes closest to the way you feel?
1; 2; 3; 4; 5; 6; 7

114. Some people think that the government should not concern itself with making the **opportunities for children** from poor and rich families more equal. Others think that the government should do everything in its power to make the opportunities for children from poor and rich families more equal.
Think of a scale where:

- 1 means that the government **should not concern** itself with making the opportunities for children from poor and rich families more equal
- 7 means that the government **should do everything in its power** to reduce this inequality of opportunities

What score between 1 and 7 comes closest to the way you feel?
1; 2; 3; 4; 5; 6; 7

115. Please tell us if you think that **upper-income people** are paying their fair share in federal taxes, paying too much, or paying too little.
Too much; Fair share; Too little

116. Please tell us if you think that **low-income people** are paying their fair share in federal taxes, paying too much, or paying too little.
Too much; Fair share; Too little

117. Here are several things that the local, state, or federal government might spend more funds on. Please indicate if you favor or oppose them. Keep in mind that **in order to finance an expansion of any of these programs, other types of spending would have to be scaled down or taxes would have to be raised.**

	Strongly favor	Favor	Indifferent	Oppose	Strongly oppose
Increasing income support for the poor	◯	◯	◯	◯	◯
[W1-W4] Improving the conditions of the poorest neighborhoods	◯	◯	◯	◯	◯
[W1-W4] Helping low income households pay for their health insurance and health care	◯	◯	◯	◯	◯
Spending more on defense and national security	◯	◯	◯	◯	◯
Spending more on infrastructure	◯	◯	◯	◯	◯

Petition

118. [W7] Now we would like to ask you about a petition that we will send to the federal government. When the survey is complete, we will send the results to Congress, informing them what share of people who took this survey were willing to support the following petition:

"The wealthiest people in our country keep getting richer while working families struggle to make ends meet. Congress must raise the tax rate for high-income families to increase funding for programs that help low-income families. We need a more just tax system to build an economy that works for all of us."

Do you support this petition? (You will not be asked to provide your name and your answer will remain anonymous.)
Yes; No

Views

Now we'd like you to tell us your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between.

119. [W5-W7]

- *Left*: It **is** important to follow the traditions and customs that are passed down by one's community or family over time.
- *Right*: It **is not** important to follow the traditions and customs that are passed down by one's community or family over time.

1 (agree with left); 2; 3; 4; 5; 6; 7; 8; 9; 10 (agree with right)

120. [W5-W7]

- *Left*: People can only get rich at the expense of others
- *Right*: Wealth can grow so there's enough for everyone.

1 (agree with left); 2; 3; 4; 5; 6; 7; 8; 9; 10 (agree with right)

121. [W5] In the last decade, the salaries of CEOs have grown much faster than the salaries of average workers.

- *Left*: These gains in CEO salaries **have been** at the expense of the salaries of average workers.
- *Right*: These gains in CEO salaries **have not been** at the expense of the salaries of average workers.

1 (agree with left); 2; 3; 4; 5; 6; 7; 8; 9; 10 (agree with right)

122. [W5] Since the 1960s, the average wages of women have risen relative to the wages of men.
    - *Left*: Women's wage gains **have been** at the expense of men's wages.
    - *Right*: Women's wage gains **have not been** at the expense of men's wages.

    1 (agree with left); 2; 3; 4; 5; 6; 7; 8; 9; 10 (agree with right)

Views about government

123. How often do you think you can trust the government to do what is right?
Never; Some of the time; Most of the time; Always

124. [W5-W7] Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?
Most people can be trusted; Need to be very careful; Don't know

125. *We are interested in whether you are paying attention to the survey. To show that you are reading the full set of instructions, just go ahead and select both strongly agree and strongly disagree among the alternatives below, no matter what your opinion is.*
Please tell us whether you agree with the following statement:
"It is easy to find accurate and reliable information in the media these days".
Strongly agree, Agree, Disagree, Strongly disagree

Views about race

126. *Please tell us whether you agree with the following statement:* "It's really a matter of some people not trying hard enough; if Black people would only try harder, they could be just as well off as white people"
Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree

127. Do you believe racism in the US is:
Not a problem at all; A small problem; A problem; A serious problem; A very serious problem

128. *Please tell us whether you agree or disagree with the following statement:* "Generations of slavery and discrimination have created conditions that make it difficult for Black people to work their way out of the lower class."
Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree

129. [W1-W4] Please, tell us whether you agree or disagree with the following statement: "The Irish, Italians, Jews, and many other minorities overcame prejudice and worked their way up. Today's immigrants should do the same without any special favors"
Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree

130. [W1-W4] How often do you think that Black people experience discrimination or are hassled or made to feel inferior because of their race?
[Very often; Often; Sometimes; Never]

131. [W1-W4] During interactions with the police, how often do you think that Black people experience discrimination or are hassled or made to feel inferior because of their race?
Often; Sometimes; Never

Donation

132. [W7] **By taking this survey, you are automatically entered into a lottery to win a $1,000 bonus, which is 1,000,000 points.** A few days after the survey is complete, you will know whether you have been selected in the lottery. The payment will be made to you in the same way as your compensation for this survey, so no further action is required on your part.

    You can donate a part of this bonus payment (should you be selected in the lottery) to **three nonprofit organizations** working to advance racial equality and civil rights for people of color: Black Lives Matter, the NAACP (National Association for the Advancement of Colored People), and Color of Change. These organizations are dedicated to fighting against racial injustice.

    Should you win the lottery, please enter the amounts you would like to donate **to each group**. The total amount you donate can be any number between 0 and $1,000 and the rest of the bonus would be paid to you. **The amounts you choose to donate do not affect your chance of winning the lottery.**

- *[text box] Black Lives Matter*
- *[text box] National Association for the Advancement of Colored People (NAACP)*
- *[text box] Color of Change*

Views about migration

133. What do you think will happen as a result of more immigrants coming to this country? Is each of these possible results very likely, somewhat likely, not too likely, or not at all likely?

	Very likely	Somewhat likely	Not too likely	Not at all likely
Higher economic growth	◯	◯	◯	◯
Higher unemployment	◯	◯	◯	◯
Making it harder to keep the country united	◯	◯	◯	◯
Higher crime rates	◯	◯	◯	◯
Making the country more open to new ideas and cultures	◯	◯	◯	◯
People born in the US losing their jobs	◯	◯	◯	◯

134. Some people think that the government (at the local, state, or federal level) should only support people who were born in the U.S. Others think that the government should care equally about all the people living in the country, regardless of their country of origin and regardless of whether they are born in the U.S.
Think of a scale where:

- 1 means that the government should focus on supporting people **born in the U.S.**
- 7 means that the government should care **equally about everyone**.

What score between 1 and 7 comes closest to the way you feel?
1; 2; 3; 4; 5; 6; 7

135. Do you think the number of immigrants from foreign countries who are permitted to come to the United States to live should be increased a lot, increased a little, left the same as it is now, decreased a little, or decreased a lot?
Increased a lot; Increase a little; Same sa now; Decreased a little; Decreased a lot

Views about gender

136. Some people say that because of past discrimination, women should be given preference in hiring and promotion. Others say that such preference in hiring and promotion of women is wrong because it discriminates against men. What about your opinion – are you for or against preferential hiring and promotion of women?
Strongly in favor; In favor; Neither in favor nor against; Against; Strongly against

137. How often do you think that women experience discrimination or are hassled or made to feel inferior because of their gender?
Very often; Often; Sometimes; Never

Views about gun ownership

138. In general, do you feel that the laws covering the sale of firearms should be made more strict, less strict, or kept as they are?
More strict; Less strict; Kept as they are

Views about universal health care

139. Do you favor/oppose publicly supported universal health insurance for all Americans (with the possibility to still purchase extra private insurance)?
Favor a great deal; Favor moderately; Favor a little; Oppose a little; Oppose moderately; Oppose a great deal

Views about patriotism

140. Some people say the following things are important for being truly American. Others say they are not important. How important do you consider each of the following?

	Very important	Fairly important	Not very important	Not important at all
To have been born in America	◯	◯	◯	◯
[W1-W4] To have American citizenship	◯	◯	◯	◯
[W1-W4] To have lived in America for most of one's life	◯	◯	◯	◯
[W1-W4] To be able to speak English	◯	◯	◯	◯
To be a Christian	◯	◯	◯	◯

141. How much do you agree or disagree with the following statements?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
[W1-W4] I would rather be a citizen of America than of any other country in the world	◯	◯	◯	◯	◯
There are some things about America today that make me feel ashamed of America	◯	◯	◯	◯	◯
[W1-W4] People should support their country even if the country is in the wrong	◯	◯	◯	◯	◯

142. [W1-W3] How much do you agree or disagree with the following statements?

	Extremely important	Very important	Moderately important	Somewhat important	Not too important
Freedom is having a government that doesn't control me or interfere in my life	◯	◯	◯	◯	◯
Freedom is having the right to participate in politics and elections	◯	◯	◯	◯	◯
Freedom is having the power to choose what I want in life	◯	◯	◯	◯	◯
Freedom is being able to express unpopular ideas without fearing for my safety	◯	◯	◯	◯	◯

Zero-sum mentality

Please tell us whether you agree with the following statements:

143. "In the United States, there are many different ethnic groups (Black, White, Asian, Hispanic, etc.). If one ethnic group becomes richer, this generally comes at the expense of other groups in the country."
Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree

144. "In international trade, if one country makes more money, then it is generally the case that the other country makes less money."
Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree

145. "In the United States, there are those with American citizenship and those without. If those without American citizenship do better economically, this will generally come at the expense of American citizens."
Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree

146. "In the United States, there are many different income classes. If one group becomes wealthier, it is usually the case that this comes at the expense of other groups."
Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree

Happiness

147. All things considered, how satisfied are you with your life as a whole these days?
10 (Completely satisfied); 9; 8; 7; 6; 7; 5; 4; 3; 2; 1 (Completely dissatisfied)

Mental health

148. [W1-W4] Over the last 2 weeks, how often have you been bothered by the following problems?

	Not at all	Several days	More than half the days	Nearly every day
Not been able to stop or control worrying	◯	◯	◯	◯
Experienced feeling down, depressed or hopeless	◯	◯	◯	◯

Universalism

For the following questions, imagine that you are given $100 to split between two people. You must give away the full amount and you cannot keep any for yourself. Please note that the two values need to add up to 100 or you will not be able to move on.

149. [W5-W7] How would you split $100 between a member of one of your past or current organizations (local church, club, association, etc.) and a randomly-selected person who lives in the United States?

- *[text box] A member of one of your organizations*;
- *[text box] A randomly-selected U.S. person*

150. [W5-W7] How would you split $100 between a randomly-selected person who lives anywhere in the world and a randomly-selected person who lives in the United States?

- *[text box] A randomly-selected person from anywhere in the world*;
- *[text box] A randomly-selected U.S. person*

Open-ended questions

151. [W1-W4] In your view, what are America's strengths?
[text box]

152. [W1-W4] In your view, what are America's weaknesses?
[text box]

QAnon and Capitol riots

153. [W3] How many of the following things do you believe in:

- UFOs
- Vaccinations make more harm than benefit
- The principles of QAnon [A random selection of respondents was shown this option]
- Life after death
- Spirits
- Karma
- Global warming due to humans

0; 1; 2; 3; 4; 5; 6; [7]

154. [W3, W6] Do you think that QAnon contains some truths about US politics?
Yes, it definitely does; Yes, probably does; Uncertain one way or the other; No, probably does not; No, definitely does not; I don't know what QAnon is

155. [W3, W6] On a scale of 1 to 10, how sympathetic do you feel towards those who were charged for entering the U.S. Capitol building on January 6, 2021?
1 (Not sympathetic at all); 2; 3; 4; 5; 6; 7; 8; 9; 10 (Very sympathetic); Don't know

Abortion

156. [W5-W7] Do you think abortions should be legal under any circumstances, legal only under certain circumstances, or illegal in all circumstances?
Legal under any circumstances; Legal only under certain circumstances; Illegal in all circumstances

Two-statement zero-sum questions

157. [W5-W7] *The following question shows two statements that represent opposing points of view. Please choose the option that indicates which statement you agree with most and how strongly you agree.*
Now we'd like you to think about the different ethnic groups (Black, White, Asian, Hispanic, etc.) in the United States.

- **Statement 1:** If one ethnic group becomes richer, this generally **does not come at the expense of** other ethnic groups in the country
- **Statement 2:** If one ethnic group becomes richer, this generally **comes at the expense of** other ethnic groups in the country

Strongly agree with 1; Agree with 1; Agree with 2; Strongly agree with 2

158. [W5-W7] *The following question shows two statements that represent opposing points of view. Please choose the option that indicates which statement you agree with most and how strongly you agree.*
Now we'd like you to think about international trade.

- **Statement 1:** If one country makes more money, this generally **does not come at the expense of** other countries
- **Statement 2:** If one country makes more money, this generally **comes at the expense of** other countries

Strongly agree with 1; Agree with 1; Agree with 2; Strongly agree with 2

159. [W5-W7] *The following question shows two statements that represent opposing points of view. Please choose the option that indicates which statement you agree with most and how strongly you agree.*
Now we'd like you to think about those with American citizenship and those without.

- **Statement 1:** If people without American citizenship do better economically, this generally **does not come at the expense of** American citizens
- **Statement 2:** If people without American citizenship do better economically, this generally **comes at the expense of** American citizens

Strongly agree with 1; Agree with 1; Agree with 2; Strongly agree with 2

160. [W4-W7] *The following question shows two statements that represent opposing points of view. Please choose the option that indicates which statement you agree with most and how strongly you agree.*

- **Statement 1:** Most of the wealth of the rich was created **without taking it** from others
- **Statement 2:** Most of the wealth of the rich was obtained **by taking it** from others

Strongly agree with 1; Agree with 1; Agree with 2; Strongly agree with 2

Incentivized zero-sum question

161. [W7] **If your answer to this question is accurate, you will be entered in a second lottery to win a $1,000 bonus, which is 1,000,000 points.** Only those who answer correctly will be part of this lottery. In a few days, you will know whether you have been selected in the lottery. The payment will be made to you in the same way as your compensation for this survey, so no further action is required on your part.
Over the last 50 years, the income of the richest 1% of individuals in the U.S. (the top 1%) has increased more than four times (400%). A recent academic study examined how much of the increase in income of the top 1% came at the expense of the income of the poorest 50% of individuals in the U.S. (the bottom 50%). We want to know your best guess about the finding of this study.
Please select the statement that best summarizes the finding of this study:
***Some** of the increase in the income of the top 1% over the last 50 years has come at the expense of the income of the poorest 50% in the U.S.; **None** of the increase in the income of the top 1% over the last 50 years has come at the expense of the income of the poorest 50% in the U.S.*

Perceptions of others' zero-sum thinking

162. [W7] **In the next task, you will have the opportunity to earn a $100 bonus, which is 100,000 points.** A few days after the survey is complete, you will know whether you have earned this bonus. The payment will be made to you in the same way as your compensation for this survey, so no further action is required on your part.

You will be shown a question which you have already seen in the survey. We will then display the possible choices. We would like you to evaluate each choice and determine **how likely it is that each response is chosen by those taking this survey**. (Note: This survey is taken by individuals all across the United States and those taking it are representative of the full U.S. population in terms of age, gender, race, income, and state of residence.) We would like you to answer as carefully as possible based on what you think others will answer. After you have completed the task, we will look at the choices made by all other people who took this survey. If your response matches the answers given by all other people taking the survey, then you will earn the 100,000 point bonus. We now turn to the question.

Please tell us whether you agree with the following statement:

"In the United States, there are many different income classes. If one group becomes wealthier, it is usually the case that this comes at the expense of other groups."

Out of 100 respondents who took the survey, how many do you think selected each of these choices? Your answers must add up to 100.

- *[text box] Strongly agree*
- *[text box] Agree*
- *[text box] Neither agree nor disagree*
- *[text box] Disagree*
- *[text box] Strongly disagree*

Feedback

163. [W6-W7] Please feel free to give us any feedback regarding this survey.
[text box]