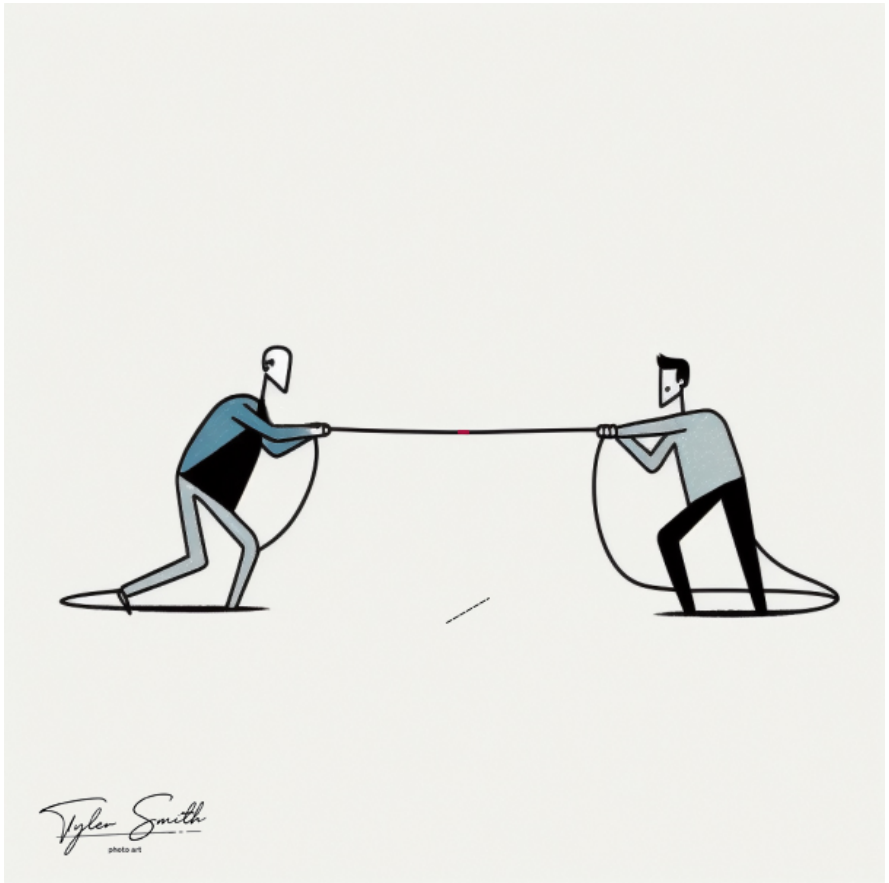
Zero-Sum Thinking and the Roots of U.S. Political Divides

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Sandra Sequeira, and Stefanie Stantcheva



SOCIAL ECONOMICS LAB

Background

- **Zero-sum thinking: the belief that the gains of an individual or group come at the expense of others.**
- **'Image of limited good'** developed by anthropologist George Foster (in 1960s) to explain the 'worldview' of small-scale pre-industrial societies, with scarce resources and low growth.
  - In these settings, for some to be gain, others must lose.
  - The world is (perhaps, correctly) perceived as being 'zero-sum.'
- This paper considers the **determinants and political importance of zero-sum thinking** in the United States (and to some extent in other countries)

Variation in zero-sum perceptions in the U.S.

Forbes

Jan 18, 2017, 09:05am EST

Extreme Wealth Does Not Cause Extreme Poverty



Jeffrey Dorfman Former Contributor

Policy

I use economic insight to analyze issues and critique policy.

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inequality does not cause poverty.

Capitalism has resulted in much more economic inequality in China, but much less poverty.

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10 Ways Bill Gates Is Saving The World

EVERY BILLIONAIRE IS A POLICY FAILURE



Zero-sum thinking and U.S. political & policy views

Question 1. Does zero-sum thinking explain differences in views about policy?

1. Support for government **redistribution**
2. Support for **affirmative action**
3. Policies promoting **gender equality**
4. **Immigration policies**

The roots of zero-sum thinking

Question 2. What are the determinants of differences in zero-sum thinking?

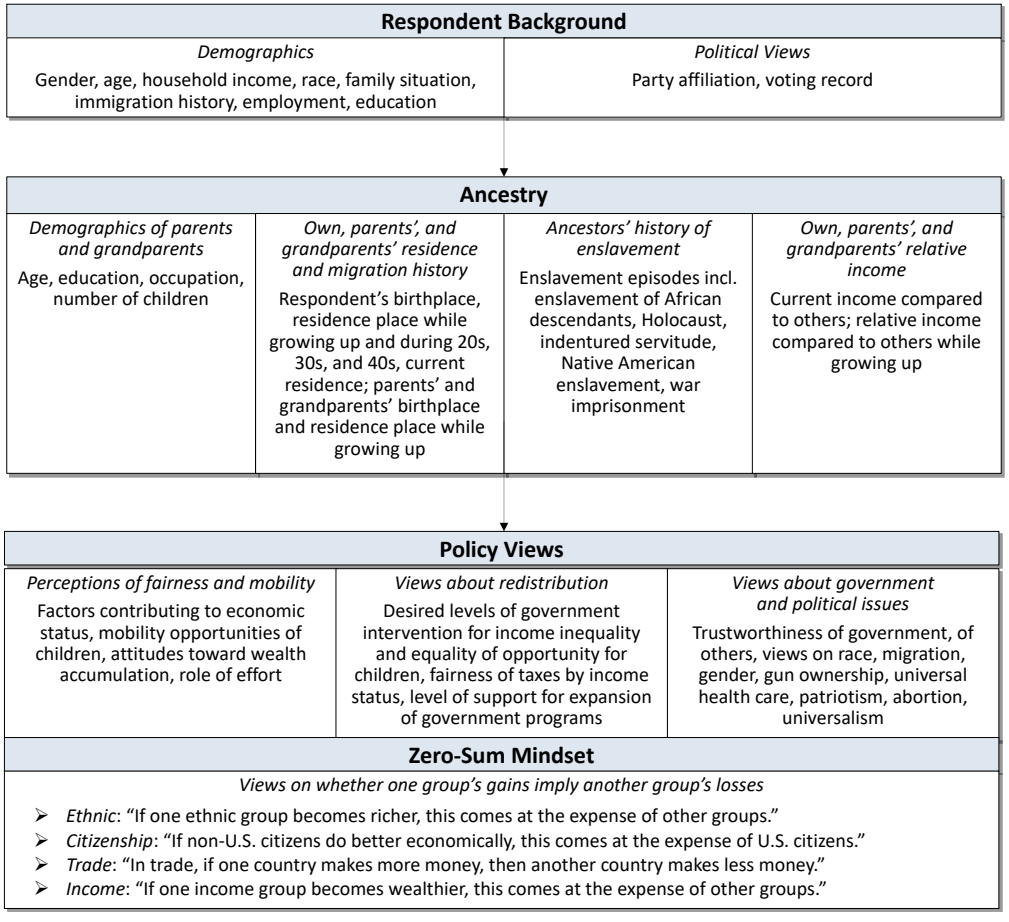
- Focus not only on one's **own experiences** but also those of one's **ancestors** (e.g., parents, and grandparents).

  For each generation, measure both direct experiences and those due to characteristics of the locations of past residence.

- Focus on **key aspects of U.S. history**:
  1. Economic mobility
  2. Immigration
  3. Enslavement

Large-scale survey on ZS, policy views, & ancestry

- 7 waves completed online
- Oct 2020–July 2023
- Representative $N = 20,400$
- 20–30 minutes
- Importance of asking about specific & direct experience at each generation



Summary statistics | Attrition | Predictors of attrition | Balance

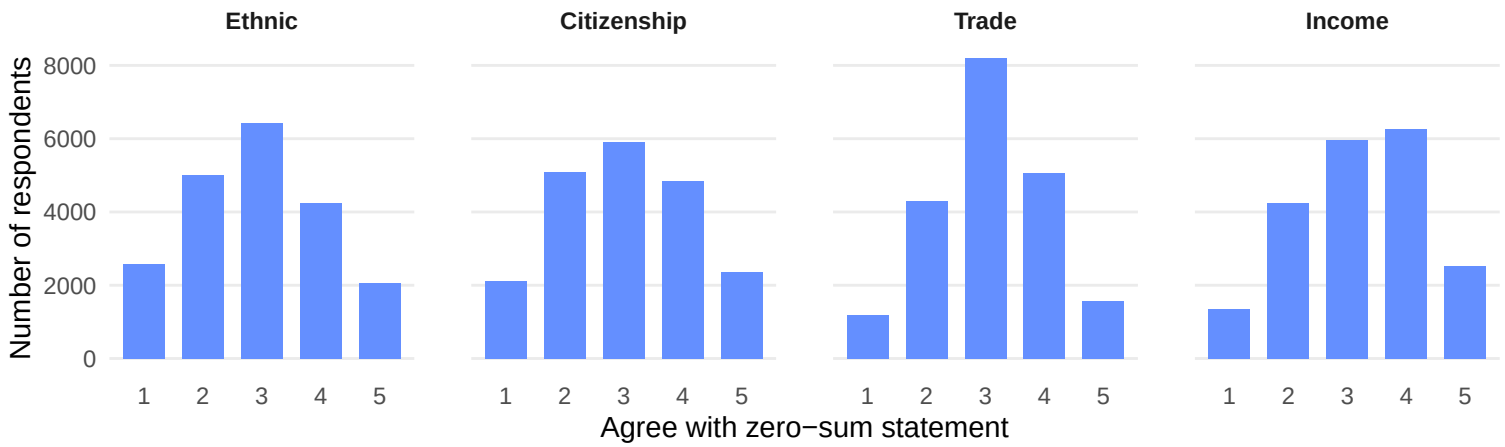
Measuring zero-sum thinking

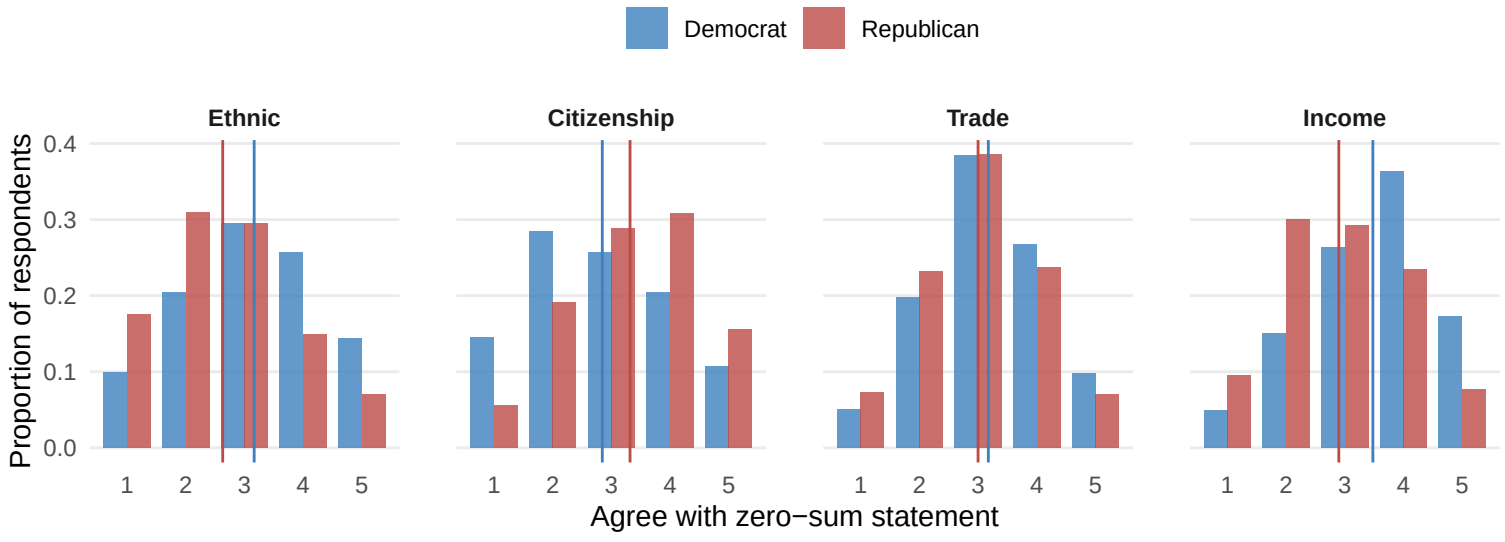
Elicit beliefs in zero-sum relations between following groups:

1. **[Between ethnic groups]** "In the United States, there are many different **ethnic groups** (Blacks, Whites, Asians, Hispanics, etc). If one ethnic group becomes richer, this generally comes at the expense of other groups in the country."
2. **[Between immigrants & non-immigrants]** "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."
3. **[Between countries]** "In international trade, if one **country** makes more money, then it is generally the case that the other country makes less money."
4. **[Between income groups]** "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."

1 = strongly disagree, 2 = disagree, 3 = neither, 4 = agree, 5 = strongly agree.

Distributions of ZS beliefs





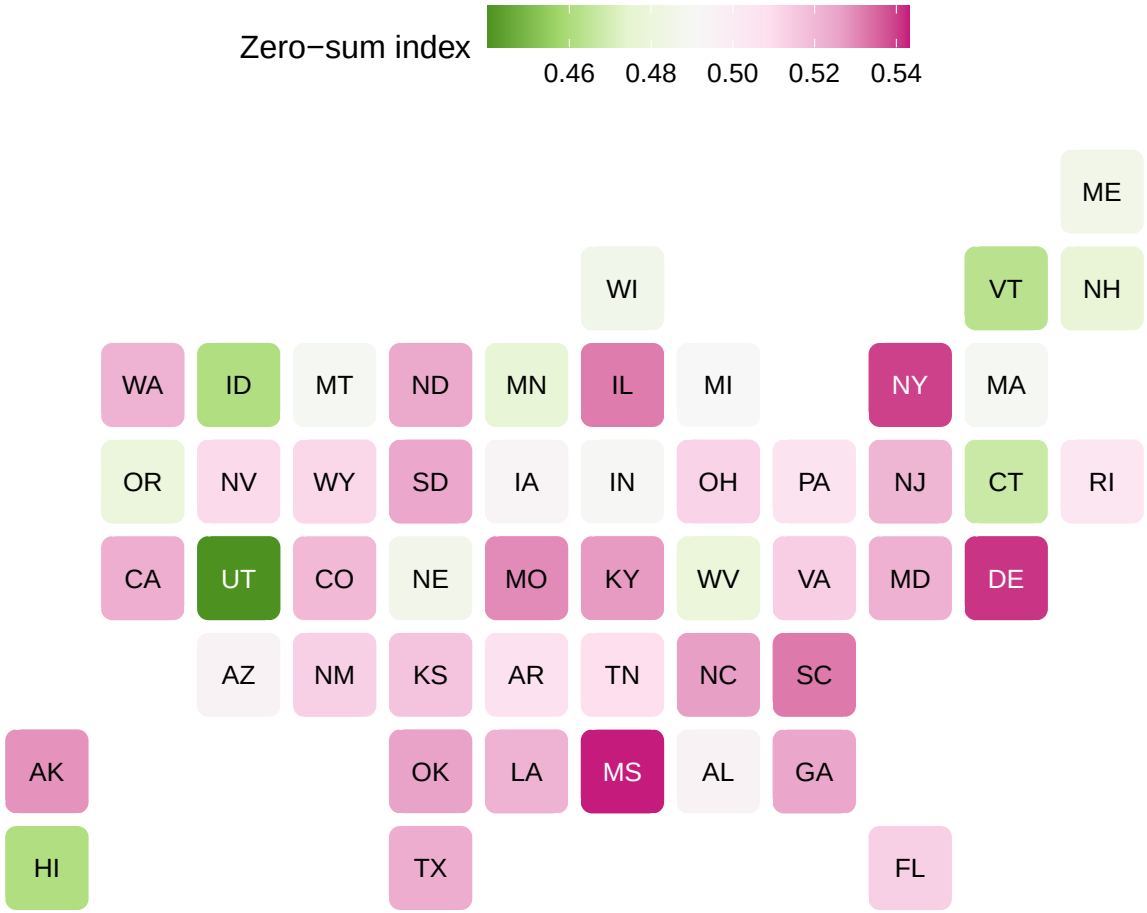
Checking for and creating a measure of generalized zero-sum thinking

Question	1st PC (Eigenvalue: 2.30)	2nd PC (Eigenvalue: 0.77)
If an ethnic group becomes richer, this comes at the expense of other groups	0.55	-0.26
If non-U.S. citizens do better economically, this is at the expense of citizens	0.40	0.89
In international trade, if one country makes more money, then the other makes less	0.52	-0.03
If one income class becomes wealthier, it is at the expense of others	0.52	-0.38

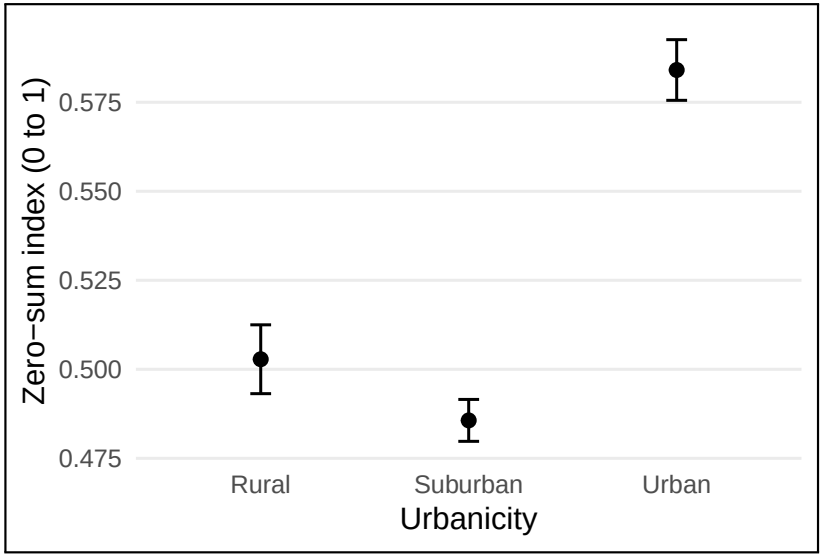
- Validate with "real-stakes" questions.

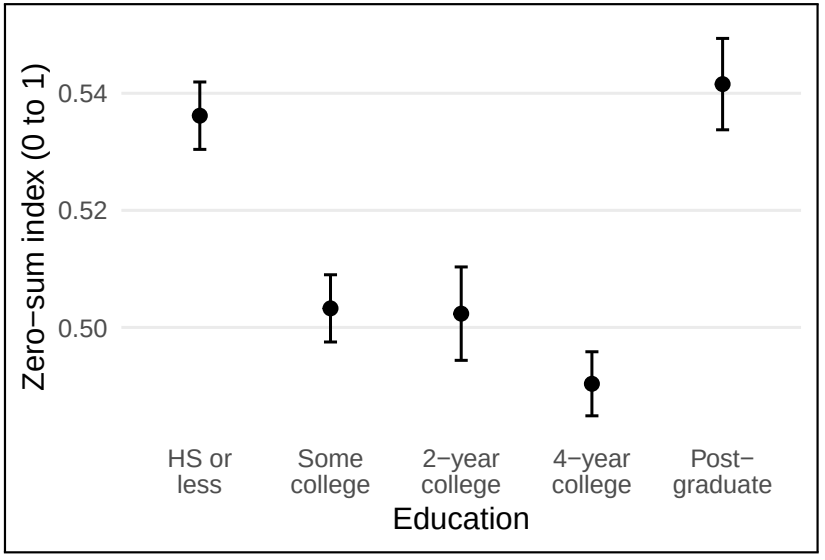
Incentivized question | Donation | Petition

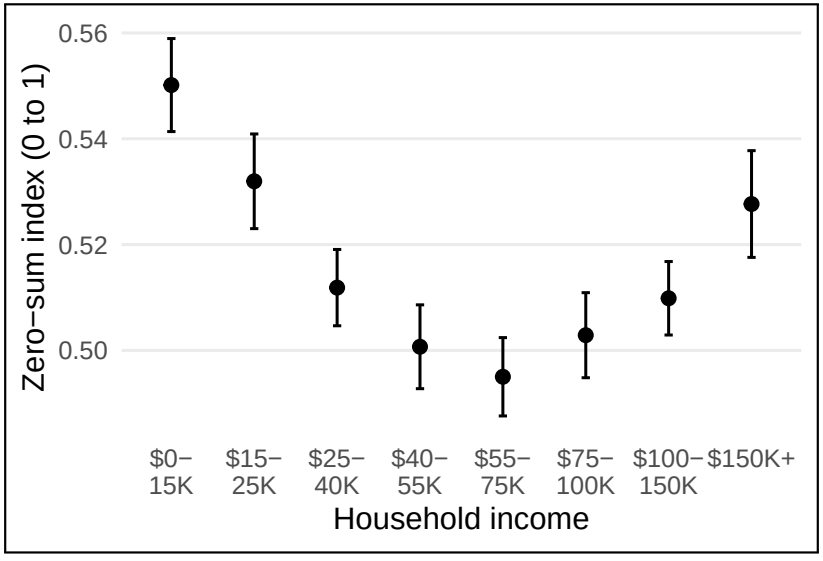
Averages by state of residence



ZS and economic characteristics

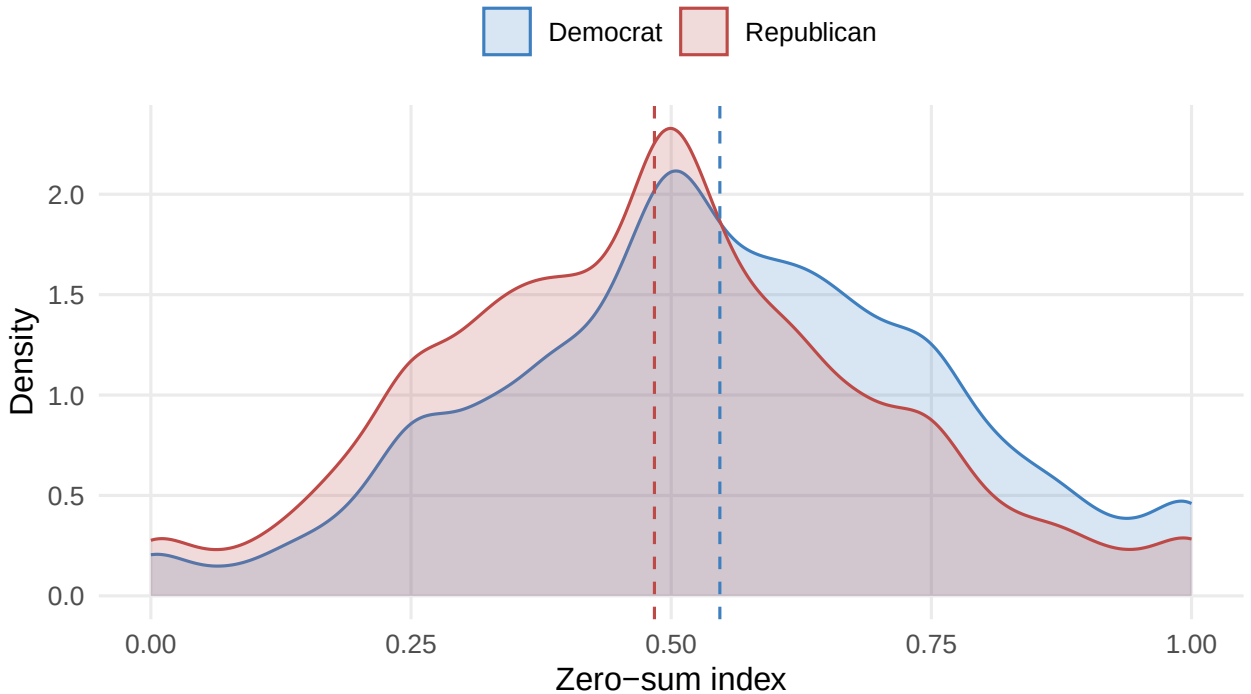






Zero-sum thinking and political leaning

Zero-sum thinking is not mainly a partisan issue



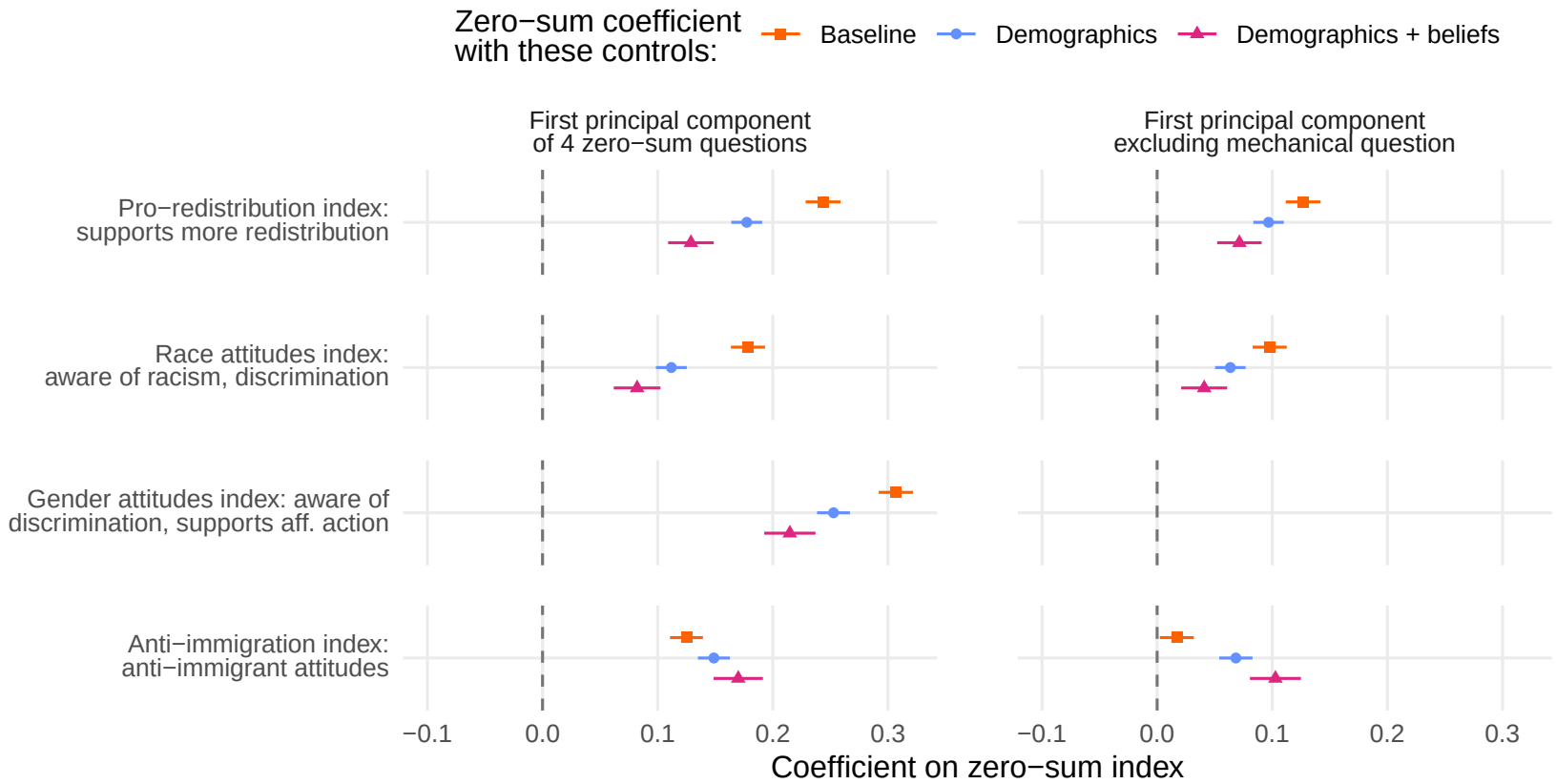
Zero-sum thinking and policy views

Conceptual link: Three main channels

1. **Externality correction:** ZS interaction means one group imposes a negative externality on another $\Rightarrow$ policy should correct this (Piketty, Saez, and Stantcheva, 2014).
2. **Procedural fairness concern:** People care about the process through which income/wealth are achieved, specifically whether they came at the expense of others (Saez and Stantcheva, 2016).
    - 1. and 2. might depend on whether the "advantaged" group (e.g., higher-incomes) or "disadvantaged" group (e.g., lower-incomes) loses from the ZS interaction.
3. **Self-interest:** People's views may differ depending on whether they are part of the group benefitting or losing from the ZS interaction.

Zero-sum thinking and policy views

Zero-sum thinking correlated with more support for redistribution, policies for gender and racial equity, & restrictive immigration policies.



PCA loadings for policy views
PCA loadings for ZS indices

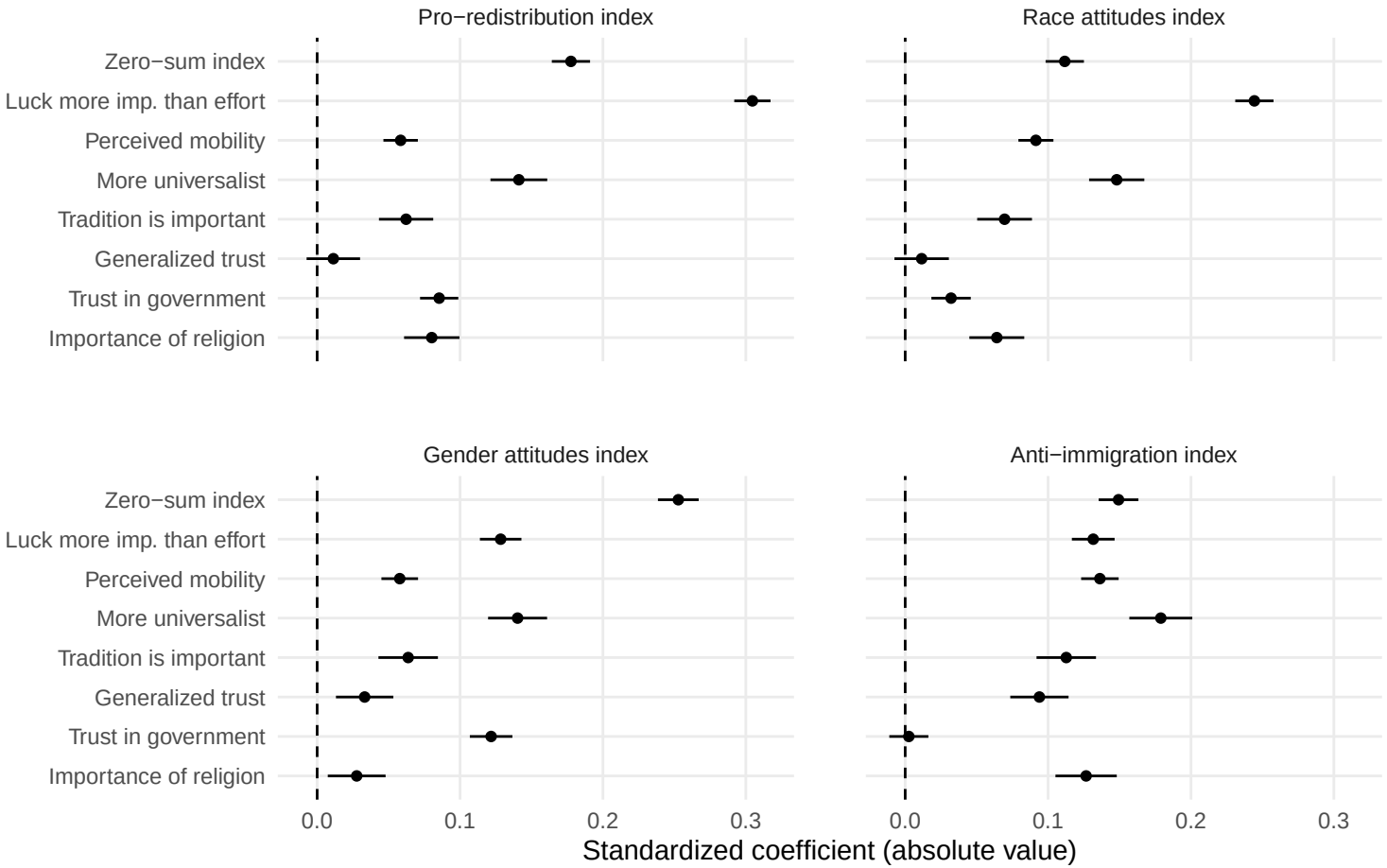
Zero-sum thinking and policy views: self-interest?

More ZS-minded high-income respondents support more redistribution; ZS-minded men support gender equality pol.; ZS-minded white resp. support racial equality pol.

	Pro-redist. index (1)	Gender index (2)	Race index (3)
Zero-sum index	0.0752***	0.1873***	0.0902***
	(0.0264)	(0.0104)	(0.0149)
Zero-sum index × 15-25K	0.1006***		
	(0.0359)		
Zero-sum index × 25-40K	0.1013***		
	(0.0329)		
Zero-sum index × 40-55K	0.0877***		
	(0.0340)		
Zero-sum index × 55-75K	0.1301***		
	(0.0323)		
Zero-sum index × 75-100K	0.1045***		
	(0.0323)		
Zero-sum index × 100-150K	0.0959***		
	(0.0299)		
Zero-sum index × 150K+	0.1416***		
	(0.0309)		
Zero-sum index × Male		0.1202***	
		(0.0141)	
Zero-sum index × Black			-0.0202
			(0.0242)
Zero-sum index × White			0.0350**
			(0.0169)
Demographic controls	✓	✓	✓
Wave fixed effects	✓	✓	✓
Observations	19,578	19,521	19,583
R^2	0.339	0.282	0.328

Zero-Sum thinking and other core beliefs: ZS is a distinct dimension

Effect remains when accounting for other cultural values and beliefs



Zero-sum in a global context

- In the WVS (N = 192,000, 72 countries) respondents are given two opposing statements and asked to choose a point on a ten-point scale that best summarizes their view:
  1. People can only get rich at the expense of others
  2. Wealth can grow so there's enough for everyone
- We replicate this question in our sample and show the WVS and our index are positively, albeit imperfectly, correlated. Validation
- As in the US, ZS generally associated with more left-leaning respondents but effect is weak. ZS & pol. leaning
- Confirm that ZS thinking associated with more support for redistribution and more anti-immigration policy support across the world. ZS & policy views

Zero-sum thinking and within-party divisions

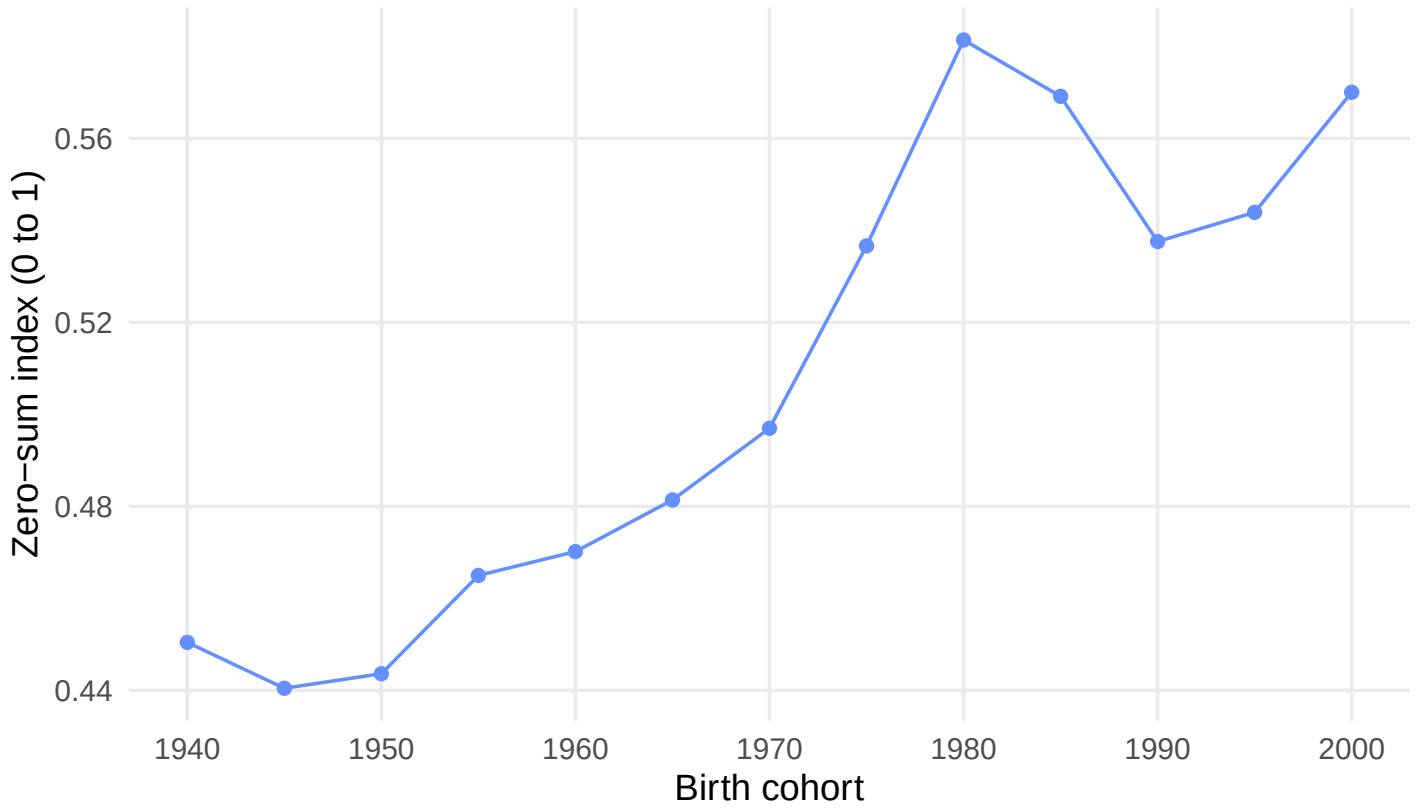
- Views about government and policy tend to be aligned with political affiliation.
- However, there is important individual variation (and differences) **within parties.**
  - See e.g., 2019 PEW report: *In a Politically Polarized Era, Sharp Divides in Both Partisan Coalitions*.
- Does variation in zero-sum thinking help us understand within-party variation?
- Among Republicans, support for government redistribution & universal health insurance highest among most zero-sum ones.

Redistribution Health insurance

- Among Dems, share voting for Trump in 2016 highest among most zero-sum ones.

Trump vote

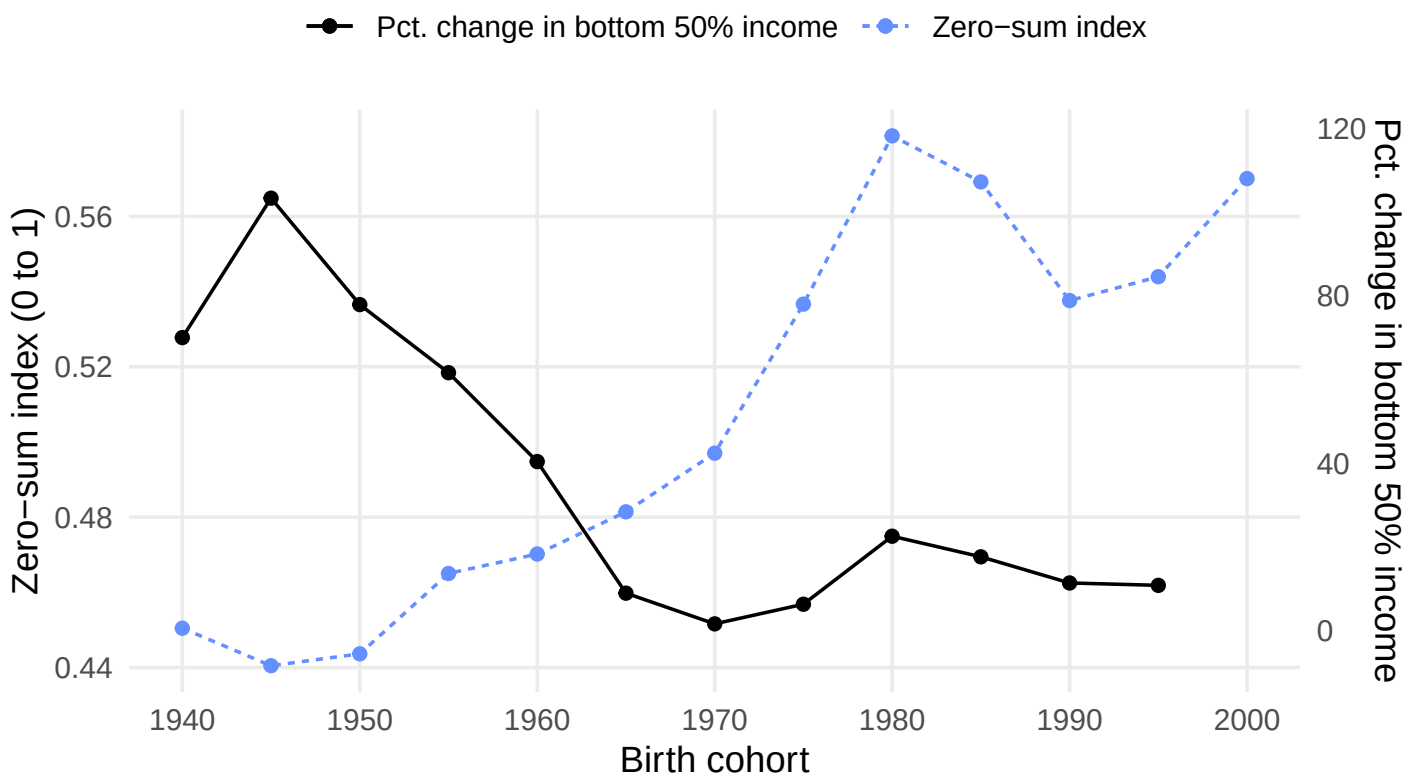
Zero-sum thinking by cohort: Younger generations are more zero-sum



Zero-sum by cohort: Favoring policies against one's economic self-interest

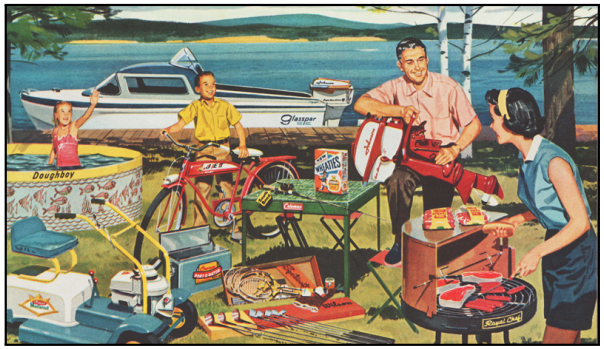
- Why do the **young** tend to **support redistributive govt programs** even though they bear more of the future costs? They are more zero-sum. Vice-versa for the elderly.
- **Why are the young more zero-sum?**
- In models of cultural evolution (e.g., Rogers, 1988), younger generations tend to have beliefs that are better matched to the current environment.
- Was the U.S. perhaps **less zero-sum in the past**?
  - In the mid-1800s, the U.S. had exceptionally high rates of **economic mobility** (Long & Ferrie, AER, 2013).
  - Since this time, mobility has steadily declined (Chetty et al., 2017; Feigenbaum, EJ, 2018, Song et al., PNAS, 2020).
  - **Economic growth** for the bottom 50% of incomes has also declined.

Zero-sum and income growth (bottom 50% of the U.S.) during first 20 years of life

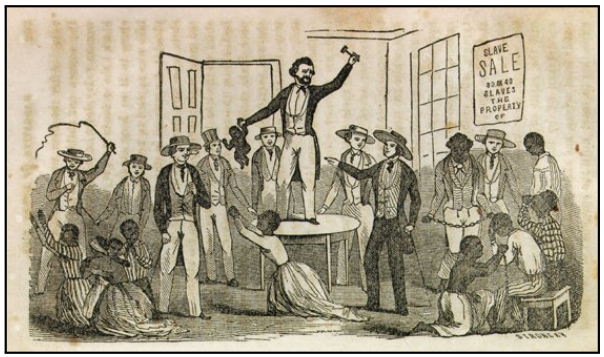


This generalizes to other countries in the WVS: it's a cohort, not an age effect. WVS

Determinants of zero-sum thinking in the U.S.



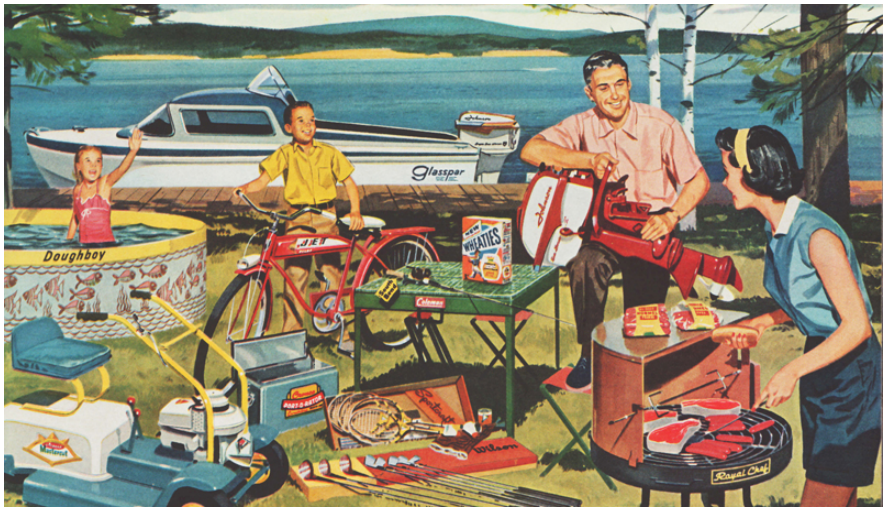




Relevant aspects of the country's history:

1. Economic mobility
2. Immigration
3. Race & enslavement

1. Economic mobility and zero-sum thinking





- We just saw that the economic environment (aggregate growth/mobility) matters.
- With economic stagnation, one can only gain at the expense of others. The world is zero-sum.
- With economic growth, everyone *could* be made better off.
- How about the mobility experienced by individual and their family?

Measuring economic mobility at different generations

Elicit relative economic standing among families at that time.

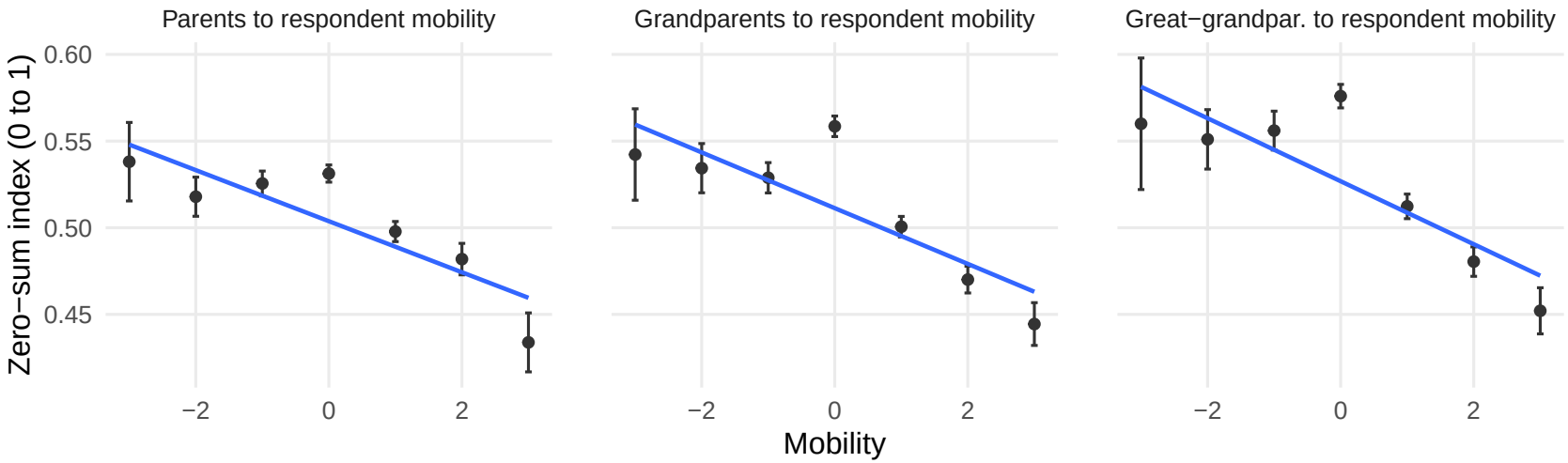
1. **Respondent:** Right now, compared with other families in America, would you say your own household income is:

   (1) Far below average; (2) A little below average; (3) Average; (4) A little above average; (5) Far above average.

2. **Parents:** When you were growing up (i.e., age 7-17)...
3. **Grandparents:** When your father was growing up...
4. **Great Grandparents:** When your grandfather was growing up...

Upward mobility is measured as the change in the score between each generation.

Economic mobility and zero-sum thinking: Raw data



Not including measures together yields to downward bias

Stronger if age 40+

Similar if non-imm. only

Similar w/ immig. + enslaved control

Using occupations for less subjective measure

Stronger for men

Weaker for maternal line

Ancestral upward mobility: OLS estimates

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

Not including measures together yields to downward bias

Stronger if age 40+

Similar if non-imm. only

Similar w/ immig. + enslaved control

Using occupations for less subjective measure

Stronger for men

Weaker for maternal line

2. Immigration and zero-sum thinking



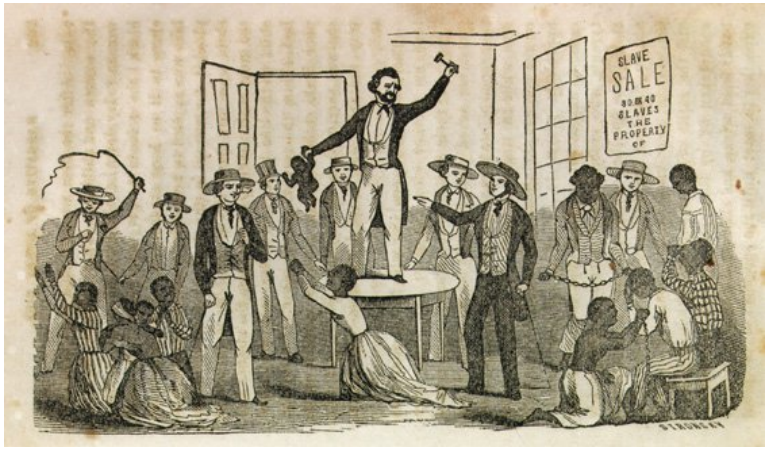


- Immigrants had an improved quality of life, particularly for their children. Research shows this didn't come at expense of others (Sequeira et al., ReStud, 2020).
- **Direct effect:** Having immigrant ancestry associated with lower ZS thinking. Raw OLS
- **Indirect effect:** Exposure to immigrants. Focus on most important episode of immigration in recent history of the US: the **"Age of Mass Migration" (1860-1920)**.

Growing up in 'Age of mass migration' counties

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county foreign share	0.0104	0.0150	0.0189						
	(0.0247)	(0.0254)	(0.0248)						
Parents' counties foreign share				-0.0332	-0.0305	-0.0342			
				(0.0211)	(0.0208)	(0.0242)			
Grandparents' counties foreign share							-0.0390***	-0.0388***	-0.0381***
							(0.0074)	(0.0074)	(0.0082)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Race fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
2nd generation immigrant		✓	✓		✓	✓		✓	✓
3rd generation immigrant			✓			✓			✓
Observations	17,512	17,405	16,168	15,796	15,794	14,834	12,482	12,477	12,477
R^2	0.095	0.096	0.098	0.109	0.109	0.111	0.111	0.112	0.112
Num. clusters	1,968	1,967	1,933	2,163	2,163	2,130	2,002	2,002	2,002
Dependent variable mean	0.507	0.507	0.505	0.509	0.509	0.507	0.511	0.510	0.510
Dependent variable std. dev.	0.205	0.206	0.207	0.209	0.209	0.209	0.211	0.211	0.211
Indep. variable mean	0.174	0.174	0.174	0.176	0.176	0.176	0.165	0.165	0.165
Indep. variable std. dev.	0.124	0.124	0.124	0.124	0.124	0.124	0.124	0.124	0.124

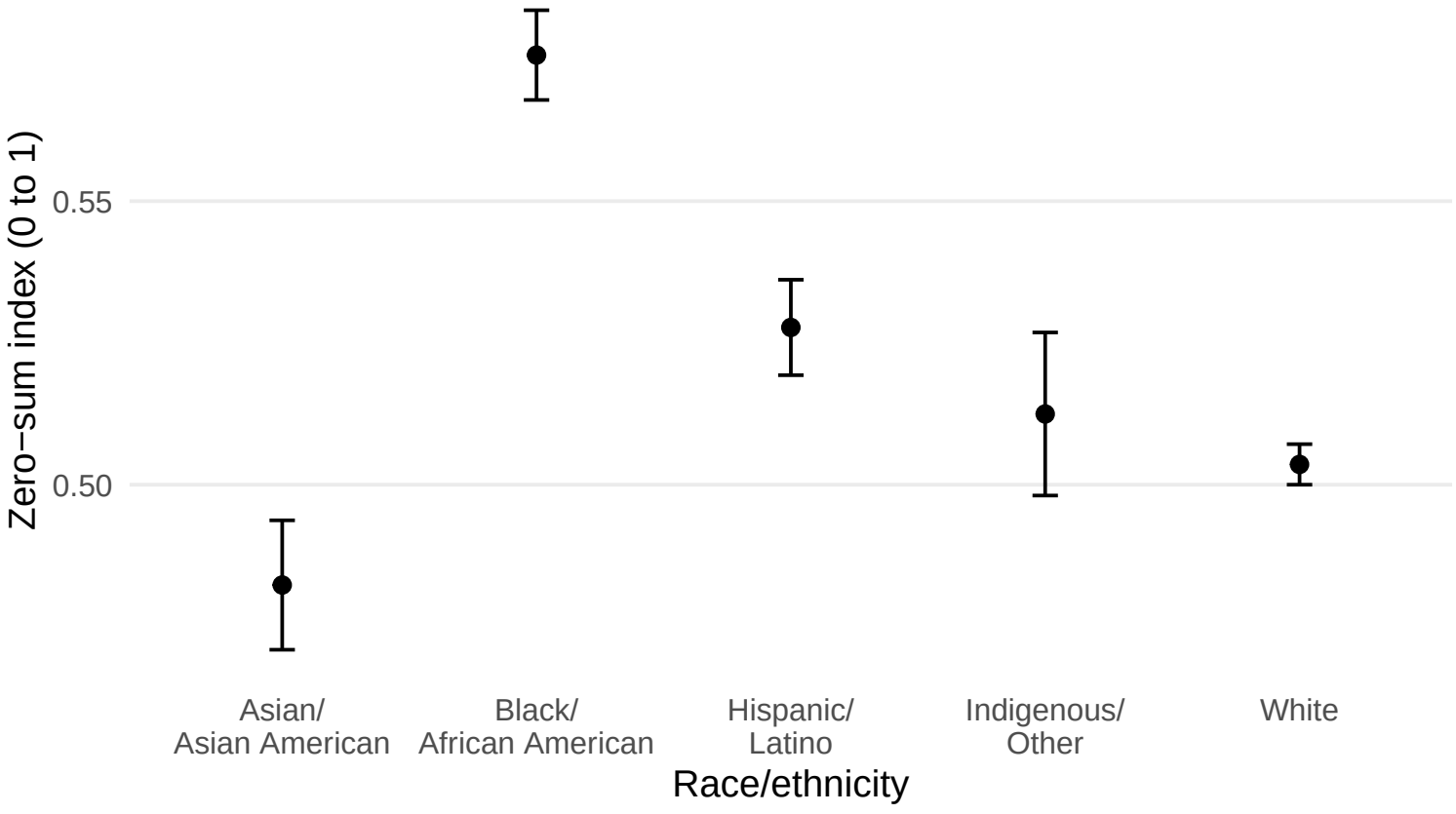
3. Race, enslavement, and zero-sum thinking





- Plantation slavery was an extremely zero-sum form of production.
- After abolition, coercion, oppression, and racism persisted in places that had slavery (and beyond) (Archarya et al., 2018).

Race and zero-sum thinking: Raw data



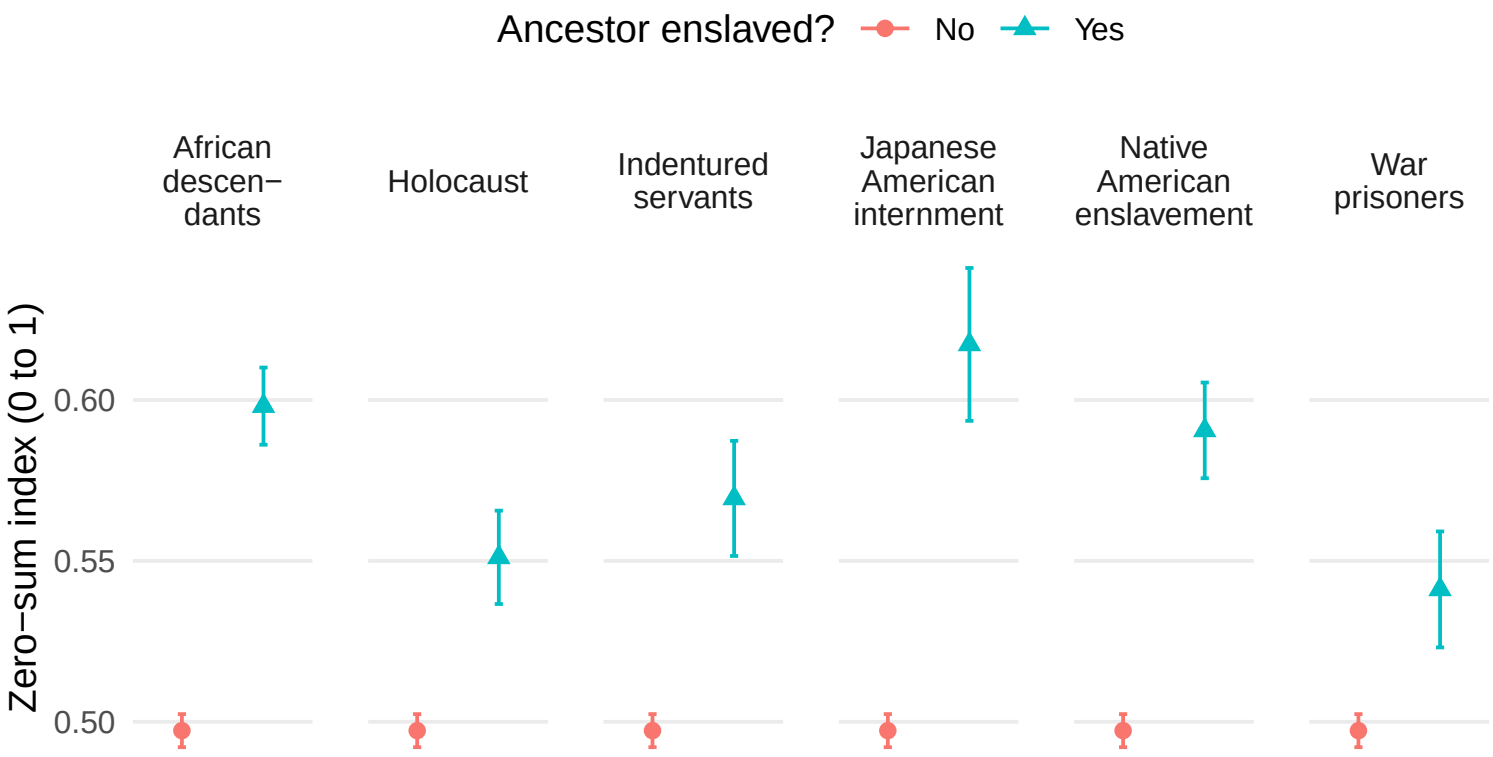
OLS

Having enslaved ancestors and ZS: Raw data



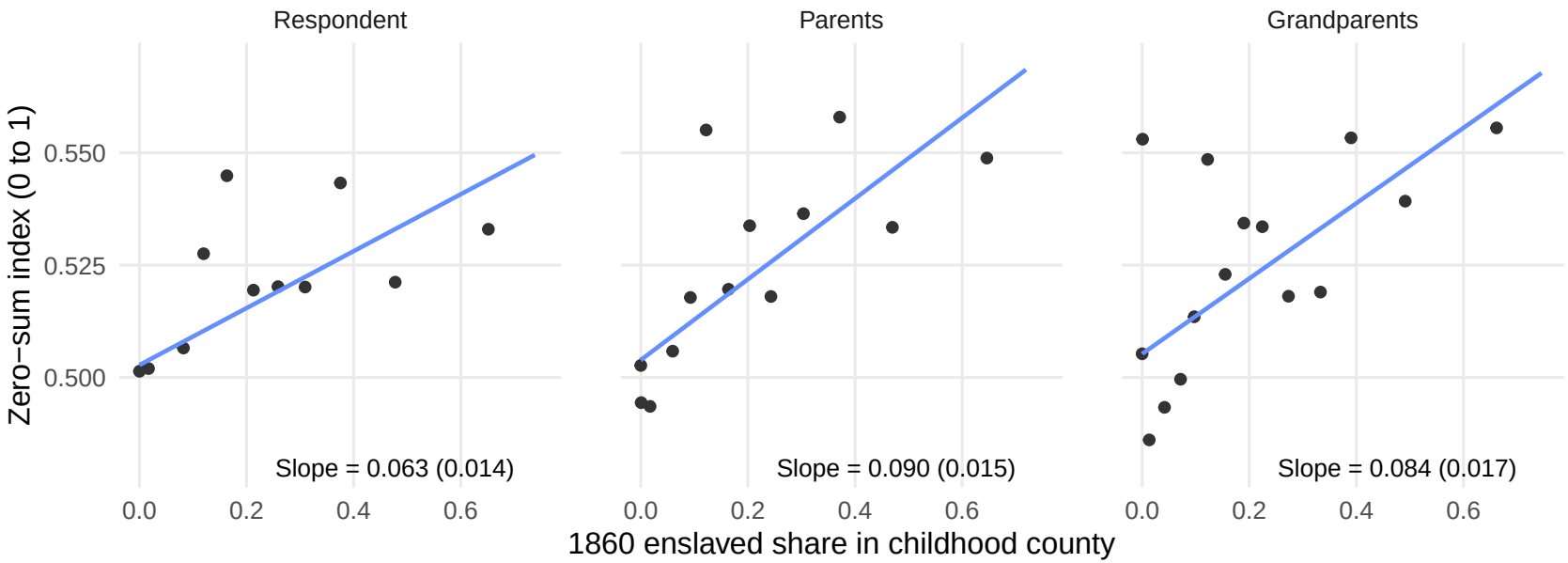
- Black respondents are more zero-sum even after controlling for enslaved ancestry; marginal effect of enslaved ancestor weakest for Black respondents
- Slavery led to pervasive racism and institutional biases that persisted (not only in the South, more below).

Episodes of enslavement: Raw data



OLS

Living in counties that had slavery: Raw data



Characteristics shaping zero-sumness in places with high enslaved shares in 1860 have persisted until today (different from what we just saw for historical migration). OLS

Diffusion of zero-sum thinking from the U.S. South

- **The 'Confederate culture'** created by plantation slavery was transmitted by migrants who moved from the South to other parts of the U.S.
  - The 'other great migration' (Bazzi et al. (2023)).

- Respondents who live in **non-southern counties with higher historical shares of white southern migrants** are more ZS; same for parents' counties and grandparents' counties.

  Share of Southern Whites Raw | Share of Southern Whites OLS

- Similar effect for counties with stronger Confederate culture

  CCI raw | CCI OLS

Conclusions

- Fundamental question: **Do gains come at the expense of others? How zero-sum is the world?**

- One's view of this has important implications for U.S. policy and politics.
  - Has the potential to help us better understand the complex set of political and policy relationships that exist.

- We find that variation in zero-sum thinking is associated with one's own experience, as well as the experience of one's ancestors for key aspects of US history:
  1. Economic mobility
  2. Immigration
  3. Enslavement

THANK YOU!



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Appendix

Summary Statistics

	U.S. Population	Survey Sample
Male	0.488	0.486
18–29 years old	0.199	0.199
30–39 years old	0.176	0.182
40–49 years old	0.159	0.178
50–59 years old	0.163	0.184
60+ years old	0.303	0.257
$0–$14,999	0.093	0.087
$15,000–$24,999	0.070	0.086
$25,000–$39,999	0.111	0.133
$40,000–$54,999	0.107	0.114
$55,000–$74,999	0.122	0.134
$75,000–$99,999	0.116	0.126
$100,000–$149,999	0.162	0.198
$150,000+	0.218	0.123
4-year college degree or more	0.348	0.478
High school graduate or less	0.388	0.207
Employed	0.613	0.549
Unemployed	0.021	0.093
Self-employed	0.066	0.068
Married	0.515	0.509
White	0.621	0.673
Black/African American	0.120	0.120
Hispanic/Latino	0.172	0.107
Asian/Asian American	0.062	0.061
Democrat	0.310	0.438
Republican	0.290	0.289
Independent	0.390	0.273
Voted for Clinton in 2016	0.480	0.518
Voted for Trump in 2016	0.460	0.474
Voted for Biden in 2020	0.510	0.616
Voted for Trump in 2020	0.470	0.383
Sample size		20,352

Back

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

Back

Predictors of Attrition

	Completed survey (1)
Constant	0.6695*** (0.0388)
Age 30-39	-0.0152** (0.0072)
Age 40-49	-0.0317*** (0.0074)
Age 50-59	-0.0440*** (0.0074)
Age 60+	-0.0286*** (0.0071)
Missing age	0.2881* (0.1615)
male:1	0.0215*** (0.0044)
male:999999	-0.0071 (0.0323)
American Indian/Alaska Native	0.0317 (0.0236)
Asian/Asian American	0.0716*** (0.0107)
White	0.0449*** (0.0077)
Hispanic/Latino	0.0286*** (0.0096)
Native Hawaiian/Pacific Islander	-0.0036 (0.0410)
Other race	0.0042 (0.0156)
Missing race	-0.0445*** (0.0088)
$15,000–$24,999	0.0351*** (0.0111)
$25,000–$39,999	0.0498*** (0.0101)
$40,000–$54,999	0.0620*** (0.0103)
$55,000–$74,999	0.0605*** (0.0100)
$75,000–$99,999	0.0666*** (0.0102)
$100,000–$149,999	0.0780*** (0.0098)
$150,000+	0.0899*** (0.0106)
Missing income	-0.1799 (0.1583)
Some high school	0.0121 (0.0406)
High school degree/GED	0.0707* (0.0377)
Some college	0.0881** (0.0377)
2-year college degree	0.1078*** (0.0380)
4-year college degree	0.1220*** (0.0377)
Master's degree, M.B.A.	0.1288*** (0.0379)
Ph.D., J.D., M.D.	0.1320*** (0.0389)
Reached education question but did not answer	0.0636* (0.0380)
Did not reach education question	0.0730* (0.0377)
Moderate Republican	0.0178** (0.0086)
Independent	0.0003 (0.0079)
Moderate Democrat	0.0106 (0.0084)
Strong Democrat	0.0354*** (0.0081)
Other party	-0.0497*** (0.0158)
Reached party question but did not answer	-0.0955 (0.1316)
Did not reach party question	-0.7311*** (0.0104)
Wave 2	-0.0147* (0.0076)
Wave 3	-0.0212*** (0.0079)
Wave 4	-0.0374*** (0.0083)
Wave 5	-0.0947*** (0.0082)
Wave 6	-0.1193*** (0.0083)
Wave 7	0.0919*** (0.0070)
Observations	27,271
R^2	0.336
Dependent variable mean	0.758

Balance Table for 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–$14,999	0.21 (0.000)	0.10 (0.000)	0.12 (0.000)	0.06 (0.000)
$15,000–$24,999	0.06 (0.037)	0.04 (0.000)	0.06 (0.000)	0.03 (0.000)
$25,000–$39,999	-0.03 (0.156)	0.01 (0.210)	0.04 (0.000)	0.04 (0.000)
$40,000–$54,999	-0.05 (0.023)	0.00 (0.987)	0.00 (0.500)	0.01 (0.007)
$55,000–$74,999	-0.04 (0.074)	-0.02 (0.062)	-0.02 (0.002)	-0.00 (0.866)
$75,000–$99,999	-0.05 (0.012)	-0.03 (0.001)	-0.04 (0.000)	-0.03 (0.000)
$100,000–$149,999	-0.07 (0.011)	-0.05 (0.000)	-0.10 (0.000)	-0.06 (0.000)
$150,000+	-0.02 (0.322)	-0.05 (0.000)	-0.07 (0.000)	-0.05 (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)

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PCA Factor Loadings for Index Variables

Index	Variable	1st PC	2nd PC
Zero-sum index	If an ethnic group becomes richer, this comes at the expense of other groups	0.55	-0.26
	In international trade, if one country makes more money, then the other makes less	0.52	-0.03
	If one income class becomes wealthier, it is at the expense of others	0.52	-0.38
	If non-U.S. citizens do better economically, this is at the expense of citizens	0.40	0.89
Pro-redistribution index	Gov. should equalize outcome	0.45	0.32
	Gov. should equalize opportunity	0.45	0.30
	Universal healthcare	0.43	0.16
	Gov. should spend on income support for poor	0.42	0.16
	Rich pay too little tax minus poor pay too little	0.34	-0.63
	Disagree with allowing wealth accumulation	0.34	-0.60
Race attitudes index	Slavery makes it hard for Blacks to escape poverty	0.71	-0.71
	Racism is a problem	0.71	0.71
Anti-immigration index	Disagree with increasing immigration	0.71	0.71
	Important for being American: Born in U.S.	0.71	-0.71
Gender attitudes index	Women experience discrimination	0.71	-0.71
	Women should be given hiring preference	0.71	0.71
Luck more important than effort	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	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	Money to U.S. person	0.71	-0.71
	Money to member of organization	0.71	0.71

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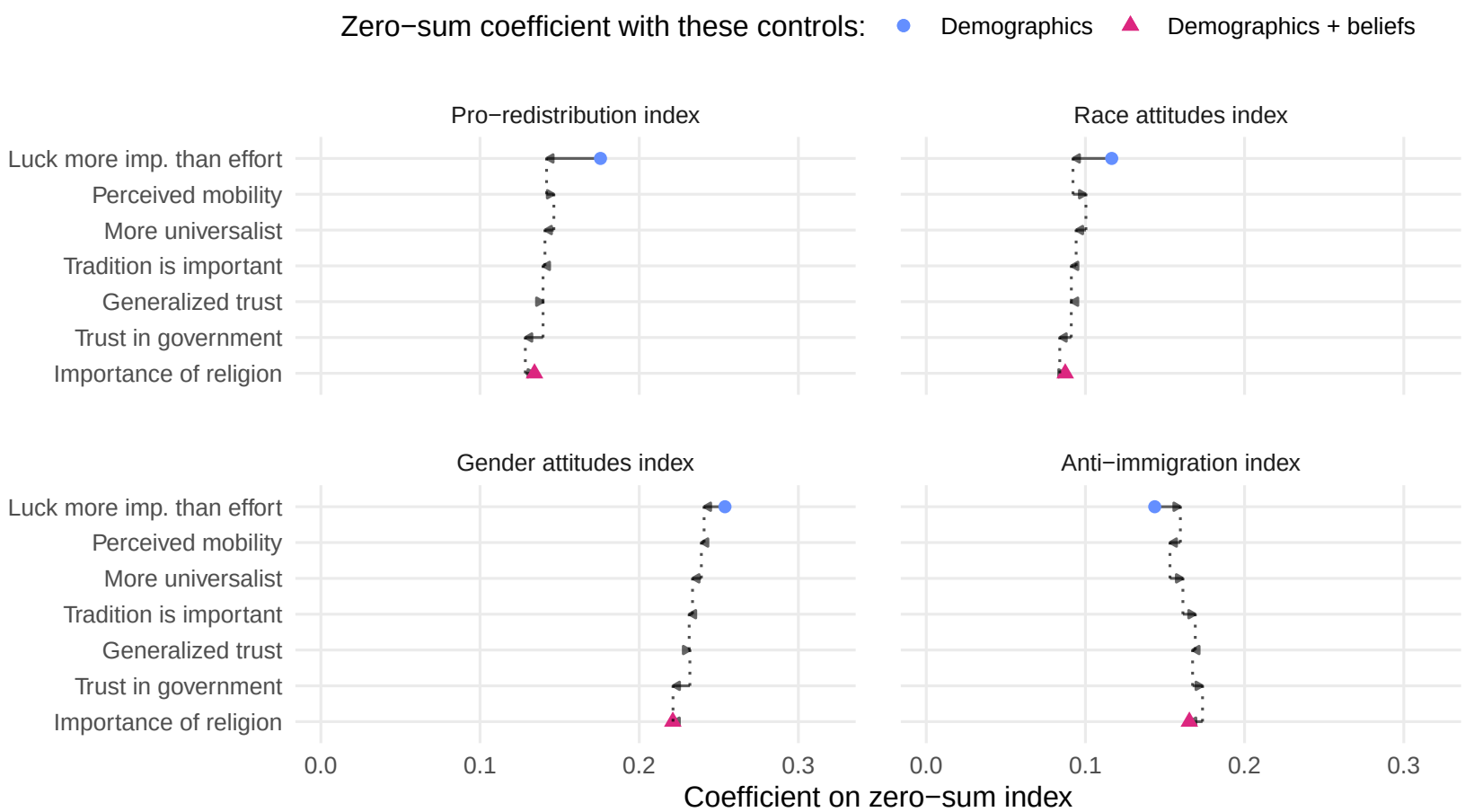
PCA Factor Loadings for Zero-Sum Indices

	Factor loading					
	Ethnic	Citizen	Income	Trade	Cronbach's α	KMO
Zero-sum index	0.55	0.40	0.52	0.52	0.75	0.75
Minus ethnic	-	0.52	0.59	0.62	0.64	0.62
Minus citizen	0.60	-	0.57	0.56	0.77	0.69
Minus income	0.60	0.51	-	0.61	0.67	0.63

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Zero-Sum is a Distinct Dimension: Gelbach Decomposition

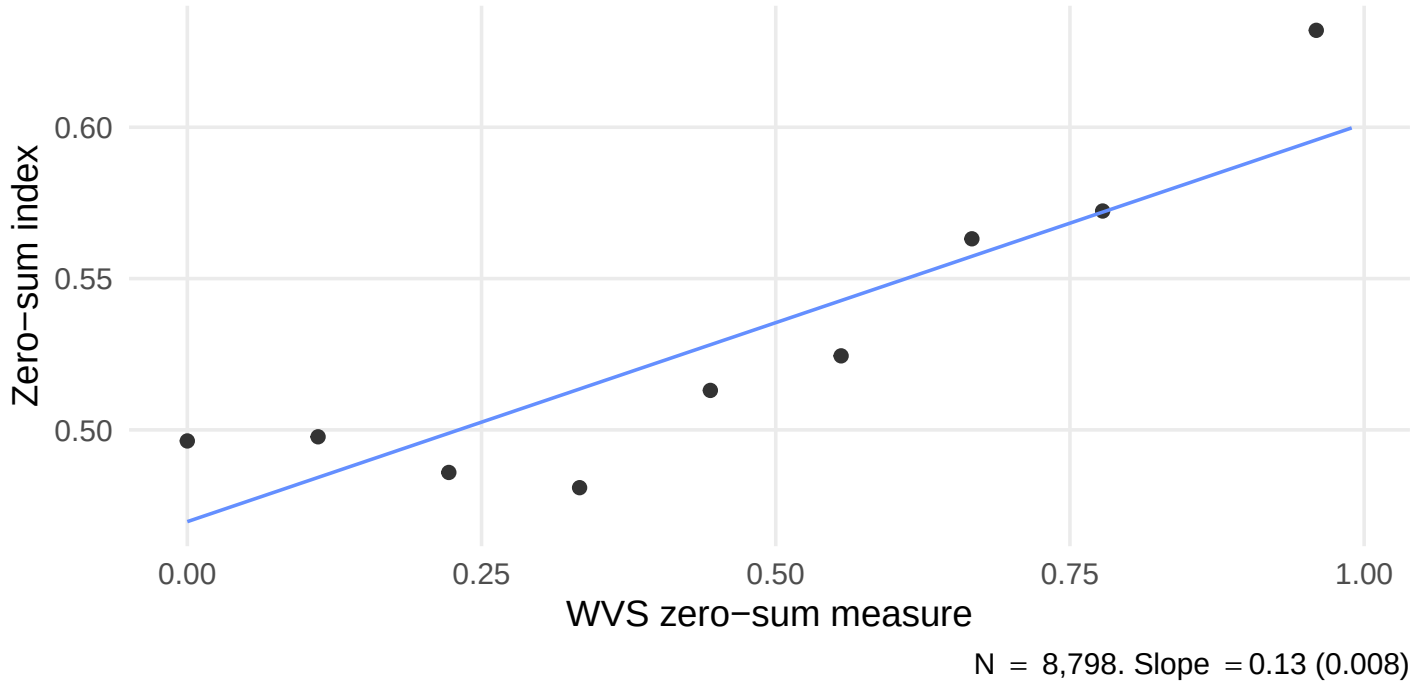
Effect remains when accounting for other cultural values and beliefs



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Validating the WVS zero-sum question

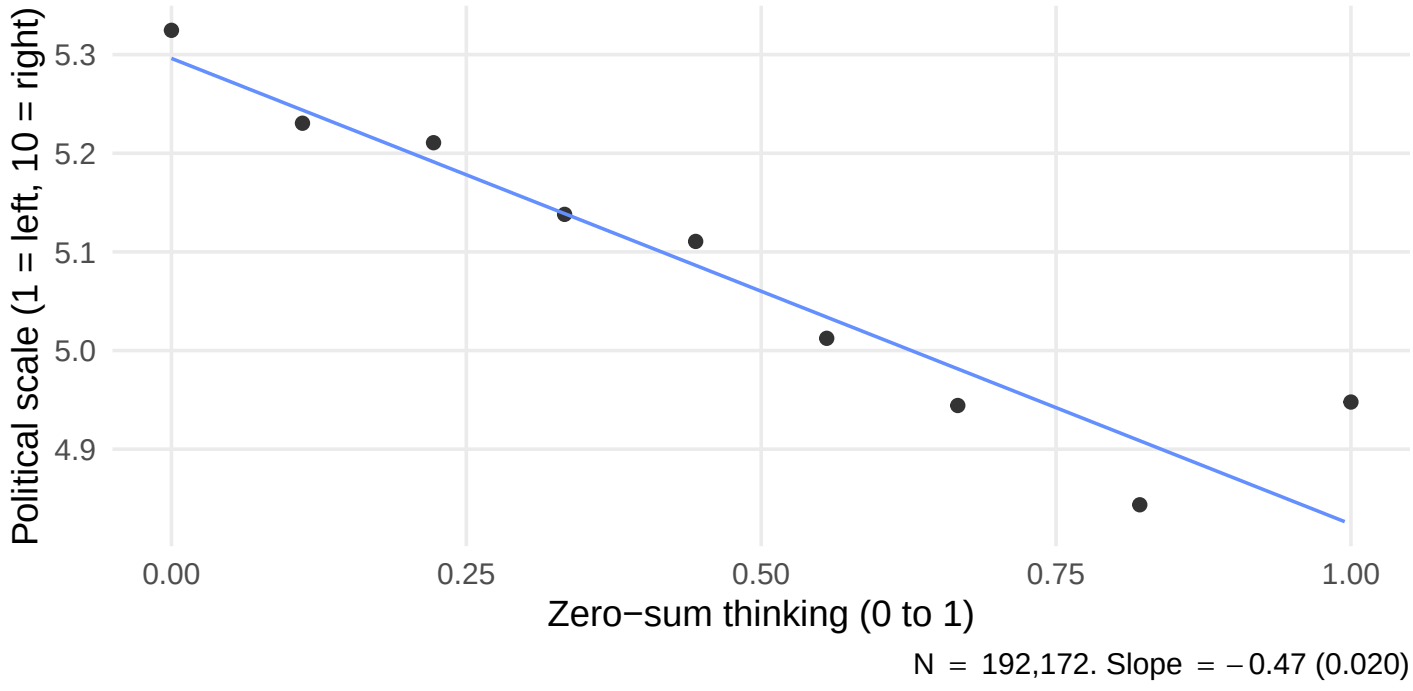
WVS question and our index are positively, albeit imperfectly, correlated



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Zero-sum thinking & political views across the world

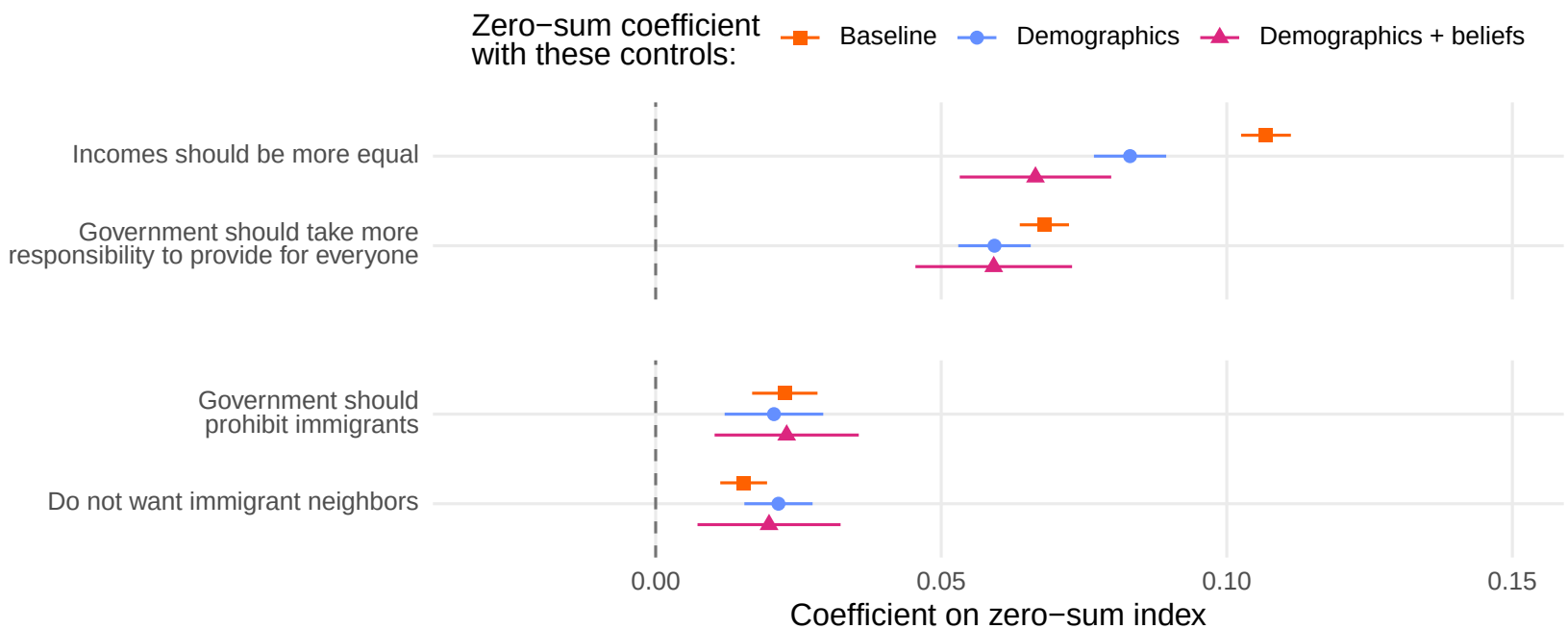
Mildly correlated with left-leaning political affiliations



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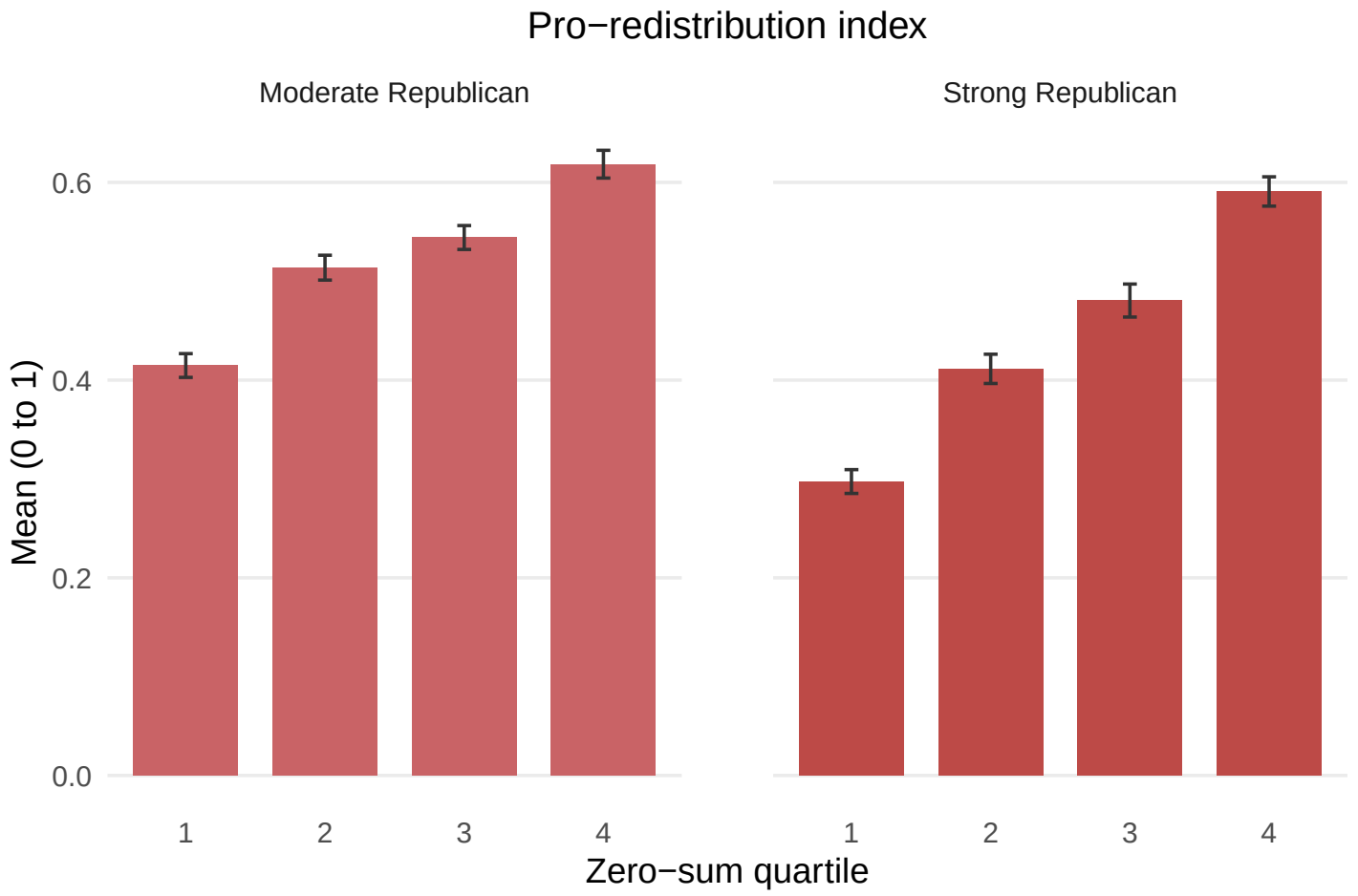
Zero-sum thinking and policy views across the world

Correlated with more support for redistribution and restrictive immigration policies



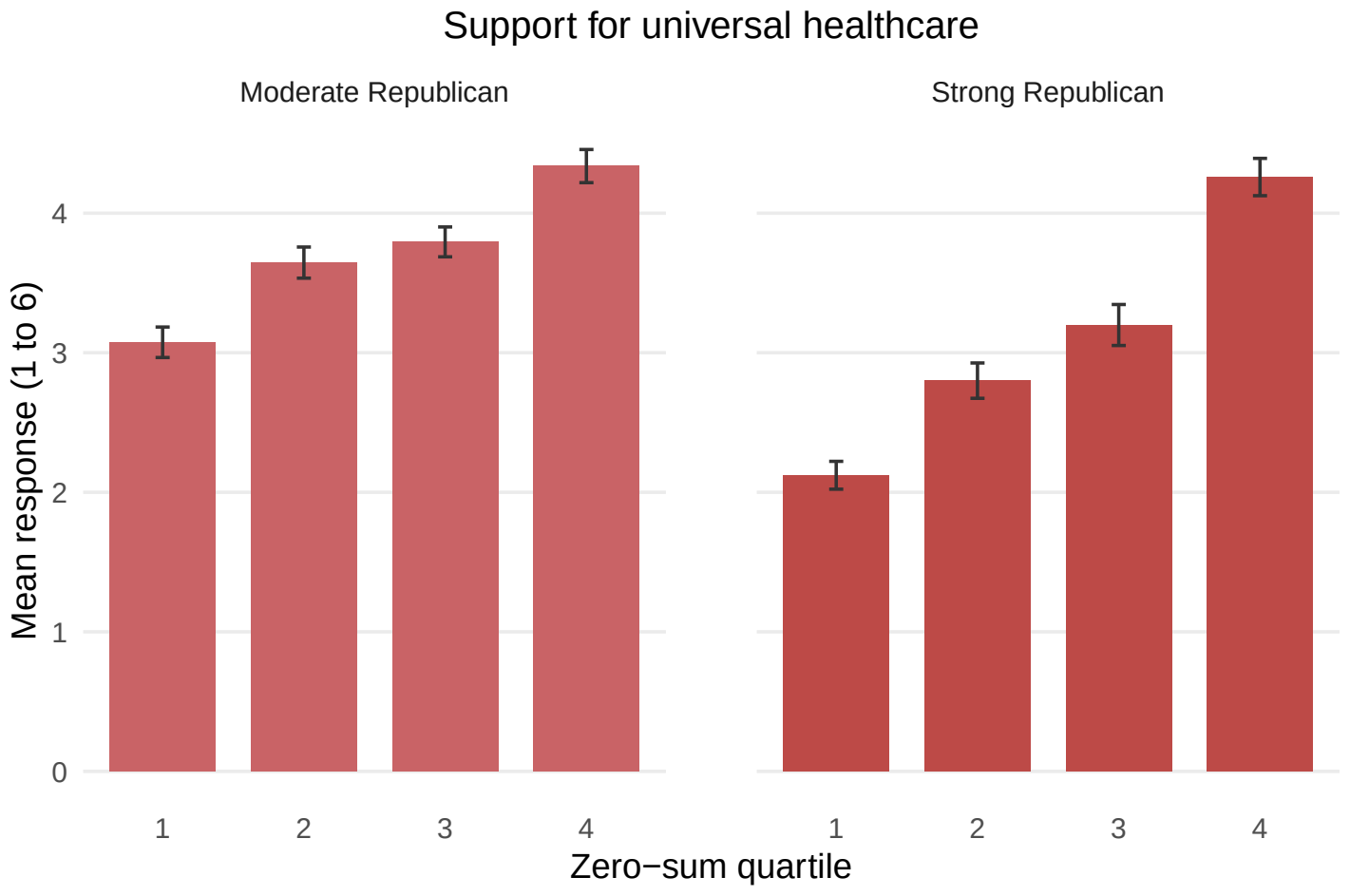
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Support for government redistribution highest among most zero-sum Republicans



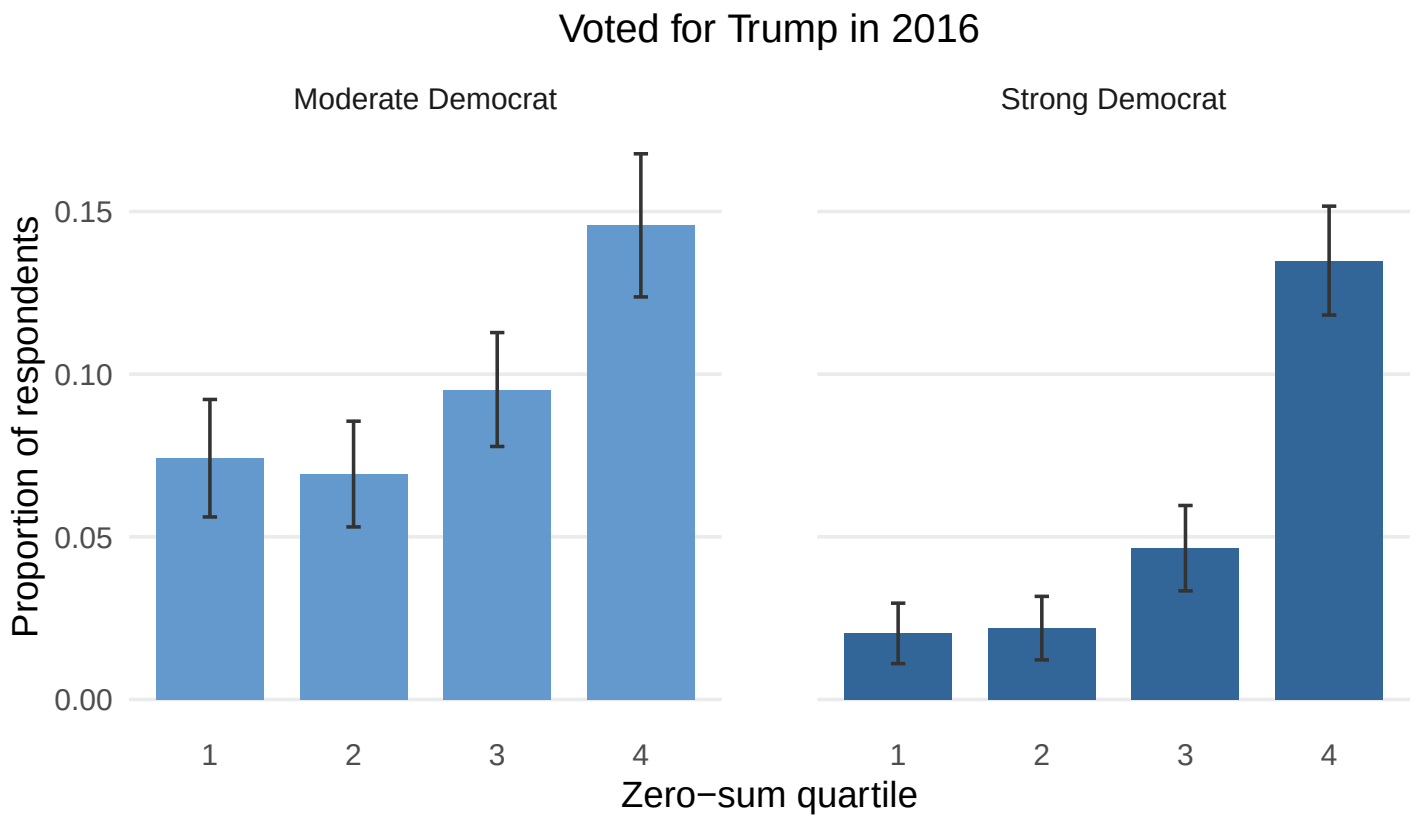
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Support for universal healthcare highest among most zero-sum Republicans



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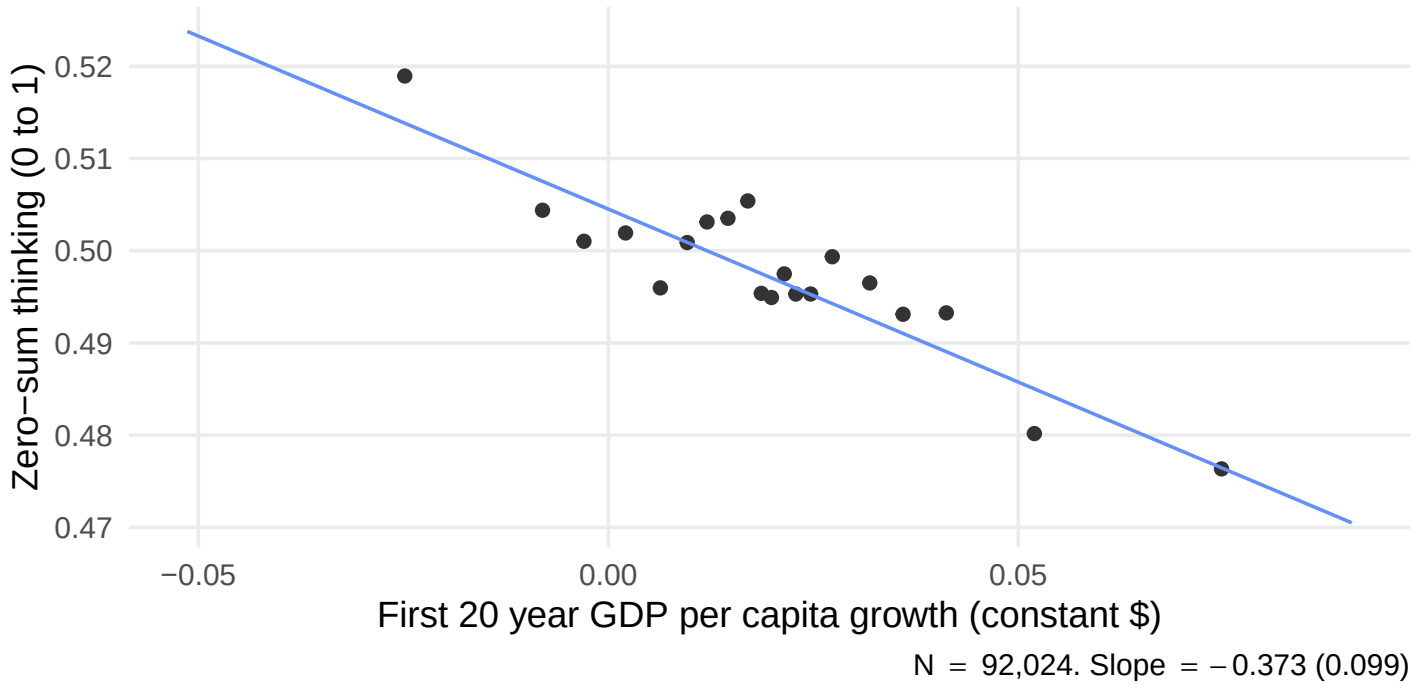
Share Voting for Trump in 2016 highest among most zero-sum Democrats



Back

How general is this relationship? Global evidence from the WVS

(Accounting for birth-year FE, country-by-wave FE, etc)



Back

Ancestral Economic Mobility: 40 and Older

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

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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***	-0.0123***	-0.0124***						
	(0.0012)	(0.0012)	(0.0012)						
Grandparents to parents mobility				-0.0092***	-0.0091***	-0.0090***			
				(0.0014)	(0.0014)	(0.0014)			
Great-grandpar. to grandparents mobility							-0.0074***	-0.0071***	-0.0074***
							(0.0021)	(0.0021)	(0.0021)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓		✓	✓		✓	✓
Race fixed effects			✓			✓			✓
Observations	19,516	19,516	19,516	17,249	17,249	17,249	13,241	13,241	13,241
R^2	0.102	0.107	0.112	0.110	0.115	0.120	0.131	0.136	0.140
Dependent variable mean	0.513	0.513	0.513	0.516	0.516	0.516	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

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Ancestral Economic Mobility: U.S. Only

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

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Ancestral Economic Mobility: Enslaved Ancestors and Immigrant Generation Controls

	Zero-sum index (0 to 1)		
	(1)	(2)	(3)
Great-grandpar. to respondent mobility	-0.0219***	-0.0215***	-0.0213***
	(0.0013)	(0.0013)	(0.0014)
Enslaved ancestor		0.0890***	0.0938***
		(0.0062)	(0.0063)
Parent immigrated			-0.0295***
			(0.0065)
Grandparent immigrated			0.0067
			(0.0050)
Demographic controls	✓	✓	✓
Wave fixed effects	✓	✓	✓
State fixed effects	✓	✓	✓
Race fixed effects	✓	✓	✓
Observations	13,349	13,344	12,719
R^2	0.156	0.171	0.175
Dependent variable mean	0.529	0.529	0.527
Dependent variable std. dev.	0.221	0.221	0.222

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Ancestral Economic Mobility: Enslaved Ancestors and Occupational Mobility

	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

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Ancestral Economic Mobility: By Respondent Gender

	Zero-sum index (0 to 1)					
	All		Male		Female	
	(1)	(2)	(3)	(4)	(5)	(6)
Parents to respondent mobility	-0.0230***		-0.0264***		-0.0161***	
	(0.0016)		(0.0024)		(0.0022)	
Grandparents to parents mobility	-0.0255***		-0.0297***		-0.0161***	
	(0.0019)		(0.0028)		(0.0025)	
Great-grandpar. to grandparents mobility	-0.0196***		-0.0197***		-0.0159***	
	(0.0022)		(0.0032)		(0.0030)	
Great-grandpar. to respondent mobility		-0.0229***		-0.0258***		-0.0161***
		(0.0013)		(0.0020)		(0.0018)
Demographic controls	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓
Race fixed effects	✓	✓	✓	✓	✓	✓
Observations	13,131	13,349	6,891	6,997	6,240	6,352
R^2	0.148	0.148	0.198	0.196	0.115	0.115
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

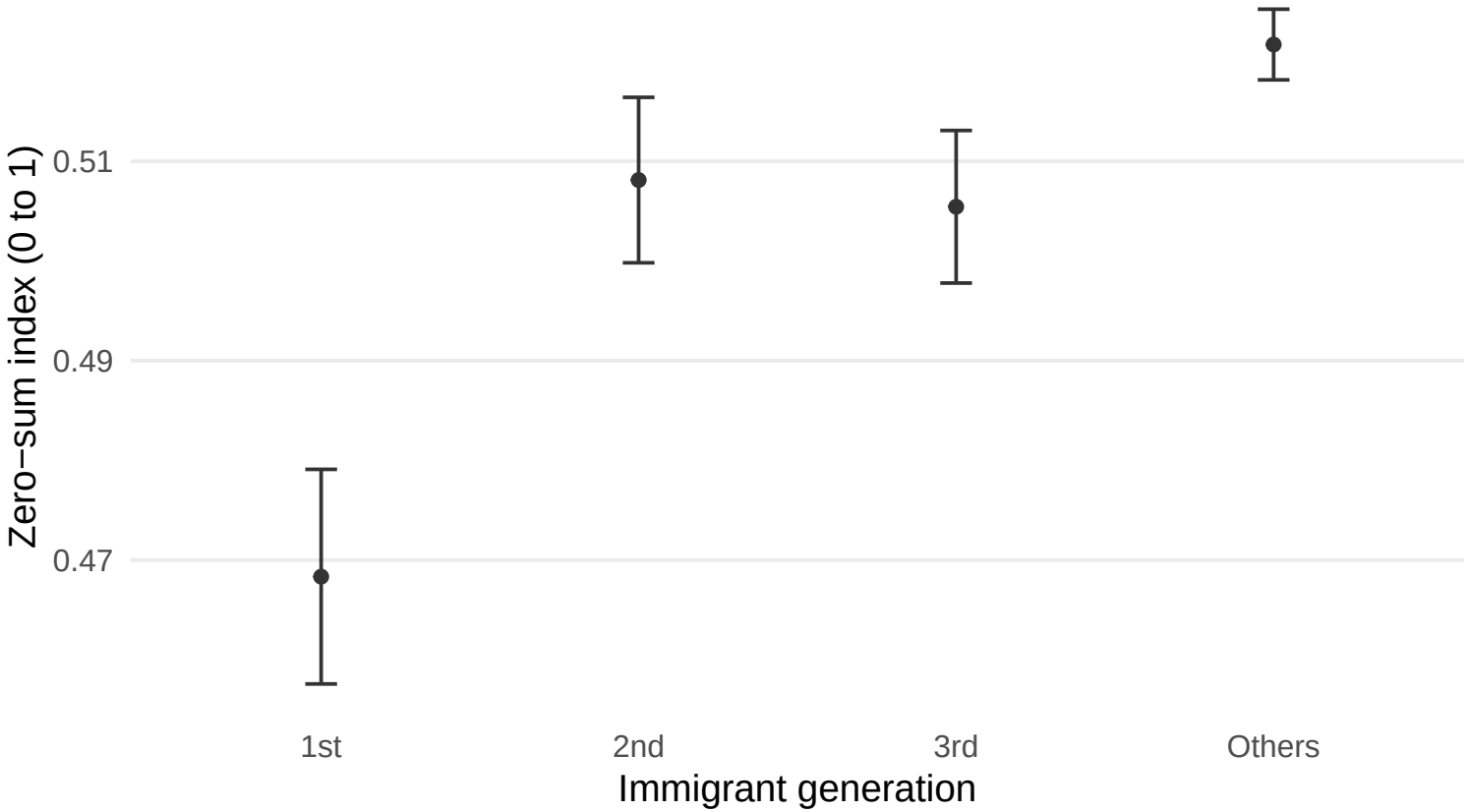
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Ancestral Economic Mobility: Maternal Line

	Zero-sum index (0 to 1)					
	All		Male		Female	
	(1)	(2)	(3)	(4)	(5)	(6)
Parents to respondent mobility	-0.0205***		-0.0247***		-0.0135***	
	(0.0016)		(0.0024)		(0.0021)	
Grandparents to parents mobility	-0.0167***		-0.0196***		-0.0104***	
	(0.0018)		(0.0028)		(0.0024)	
Great-grandpar. to grandparents mobility	-0.0152***		-0.0180***		-0.0094***	
	(0.0021)		(0.0031)		(0.0027)	
Great-grandpar. to respondent mobility		-0.0181***		-0.0216***		-0.0116***
		(0.0013)		(0.0020)		(0.0017)
Demographic controls	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓
Race fixed effects	✓	✓	✓	✓	✓	✓
Observations	13,896	14,094	7,028	7,110	6,868	6,984
R^2	0.133	0.132	0.186	0.185	0.102	0.100
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

Back

Immigrant ancestry and zero-sum thinking: Raw data



Back

Immigrant ancestry and zero-sum thinking

	Zero-sum index (0 to 1)		
	(1)	(2)	(3)
Respondent immigrated	-0.0442***	-0.0460***	-0.0412***
	(0.0059)	(0.0059)	(0.0067)
Parent immigrated	-0.0304***	-0.0321***	-0.0285***
	(0.0047)	(0.0048)	(0.0053)
Grandparent immigrated	-0.0027	-0.0023	0.0005
	(0.0041)	(0.0041)	(0.0042)
Demographic controls	✓	✓	✓
Wave fixed effects	✓	✓	✓
State fixed effects		✓	✓
Race fixed effects			✓
Observations	18,687	18,687	18,687
R^2	0.110	0.115	0.119
Dependent variable mean	0.512	0.512	0.512
Dependent variable std. dev.	0.212	0.212	0.212

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Immigrant Ancestry: 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

Back

Race and zero-sum thinking

	Zero-sum index (0 to 1)		
	(1)	(2)	(3)
African American/Black	0.0478***	0.0449***	0.0454***
	(0.0048)	(0.0049)	(0.0060)
American Indian or Alaska Native	-0.0064	-0.0067	0.0009
	(0.0150)	(0.0151)	(0.0182)
Asian/Asian American	-0.0187***	-0.0184***	-0.0260***
	(0.0067)	(0.0069)	(0.0097)
Hispanic/Latino	0.0002	-0.0021	-0.0084
	(0.0049)	(0.0051)	(0.0065)
Native Hawaiian or Other Pacific Islander	0.0021	0.0074	-0.0158
	(0.0270)	(0.0277)	(0.0310)
Other race	-0.0047	-0.0050	-0.0026
	(0.0089)	(0.0090)	(0.0103)
Demographic controls	✓	✓	✓
Wave fixed effects	✓	✓	✓
State fixed effects		✓	✓
Birth town fixed effects			✓
Observations	20,271	20,271	18,851
R^2	0.110	0.113	0.285
Dependent variable mean	0.514	0.514	0.517
Dependent variable std. dev.	0.211	0.211	0.211

Enslaved ancestor controls Back

Race: 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

Back

Having enslaved ancestors and zero-sum thinking

	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	0.0196**	0.0198**	0.0558***	0.0546***	0.1443***	0.1443***	0.0834***	0.0837***
	(0.0084)	(0.0084)	(0.0118)	(0.0120)	(0.0086)	(0.0086)	(0.0054)	(0.0054)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Race fixed effects	–	–	✓	✓	–	–	✓	✓
State fixed effects		✓		✓		✓		✓
Observations	2,417	2,417	4,199	4,199	13,647	13,647	20,263	20,263
R^2	0.057	0.078	0.080	0.090	0.149	0.155	0.122	0.125
Dependent variable mean	0.576	0.576	0.511	0.511	0.503	0.503	0.514	0.514
Dependent variable std. dev.	0.199	0.199	0.204	0.204	0.213	0.213	0.211	0.211
Indep. variable mean	0.400	0.400	0.091	0.091	0.058	0.058	0.105	0.105
Indep. variable std. dev.	0.490	0.490	0.288	0.288	0.233	0.233	0.307	0.307

Back

Episodes of enslavement

	Zero-sum index (0 to 1)					
	(1)	(2)	(3)	(4)	(5)	(6)
Enslavement of African descendants	0.0446***					
	(0.0069)					
Holocaust		0.0152**				
		(0.0071)				
Indentured servants			0.0272***			
			(0.0082)			
Internment of Japanese-Americans				0.0617***		
				(0.0107)		
Native American enslavement					0.0418***	
					(0.0075)	
War prisoner						0.0126
						(0.0087)
Demographic controls	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓
Race fixed effects	✓	✓	✓	✓	✓	✓
State fixed effects	✓	✓	✓	✓	✓	✓
Observations	8,798	8,798	8,798	8,798	8,798	8,798
R^2	0.157	0.153	0.153	0.156	0.155	0.152
Dependent variable mean	0.521	0.521	0.521	0.521	0.521	0.521
Dependent variable std. dev.	0.215	0.215	0.215	0.215	0.215	0.215
Indep. variable mean	0.161	0.110	0.084	0.048	0.101	0.072
Indep. variable std. dev.	0.368	0.313	0.277	0.214	0.301	0.258

Back

Living in counties that had slavery

	Zero-sum index (0 to 1)											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Respondent's county enslaved share	0.0433***	0.0468***	0.0340***	0.0352***								
	(0.0116)	(0.0130)	(0.0130)	(0.0130)								
Parents' counties enslaved share					0.0691***	0.0748***	0.0485***	0.0479***				
					(0.0109)	(0.0132)	(0.0141)	(0.0144)				
Grandparents' counties enslaved share									0.0671***	0.0762***	0.0425***	0.0369***
									(0.0123)	(0.0143)	(0.0130)	(0.0125)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓	✓		✓	✓	✓		✓	✓	✓
Race fixed effects			✓	✓			✓	✓			✓	✓
Enslaved ancestor				✓				✓				✓
Observations	18,302	18,302	18,302	18,295	16,290	16,290	16,290	16,284	12,848	12,848	12,848	12,847
R^2	0.084	0.089	0.094	0.101	0.100	0.106	0.110	0.118	0.100	0.108	0.112	0.126
Num. clusters	2,086	2,086	2,086	2,086	2,234	2,234	2,234	2,233	2,060	2,060	2,060	2,060
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	0.211	0.211	0.211	0.211
Indep. variable mean	0.066	0.066	0.066	0.066	0.067	0.067	0.067	0.067	0.076	0.076	0.076	0.076
Indep. variable std. dev.	0.147	0.147	0.147	0.147	0.145	0.145	0.145	0.145	0.153	0.153	0.153	0.153

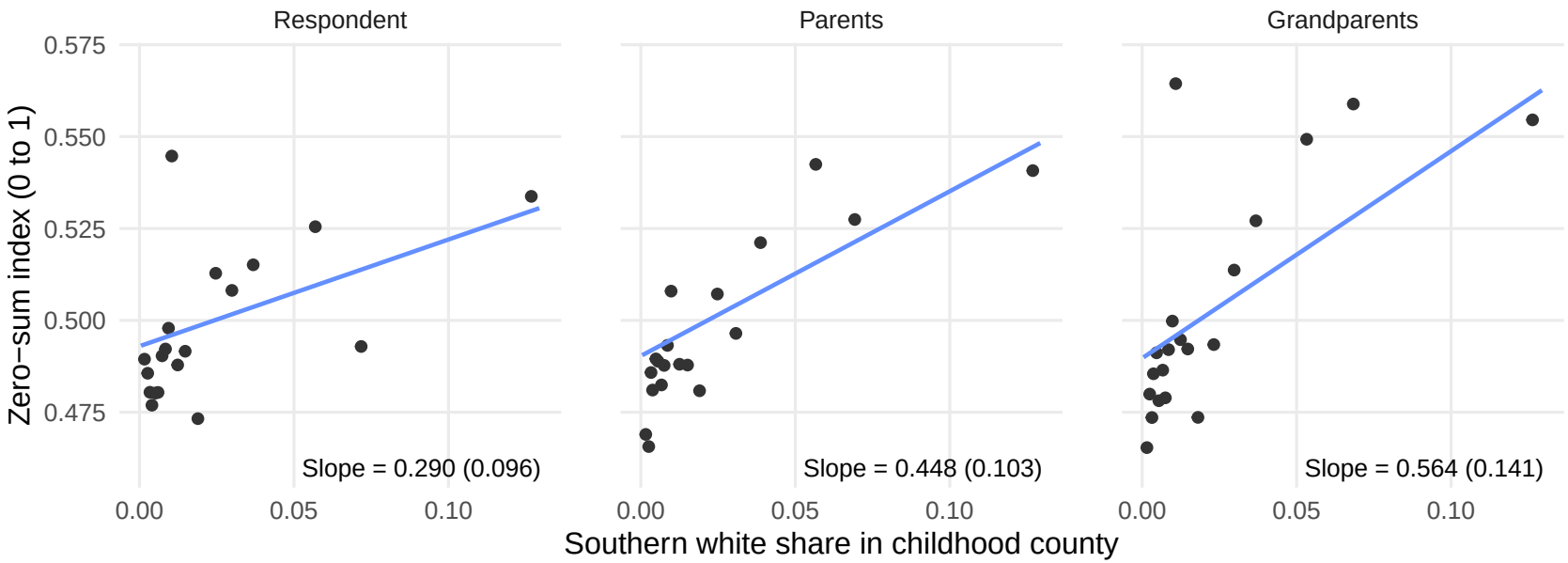
Fathers and grandfathers Back

Historical Enslavement: Fathers and Grandfathers

	Zero-sum index (0 to 1)											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Respondent's county enslaved share	0.0433***	0.0468***	0.0340***	0.0352***								
	(0.0116)	(0.0130)	(0.0130)	(0.0130)								
Parents' counties enslaved share					0.0691***	0.0748***	0.0485***	0.0479***				
					(0.0109)	(0.0132)	(0.0141)	(0.0144)				
Grandparents' counties enslaved share									0.0671***	0.0762***	0.0425***	0.0369***
									(0.0123)	(0.0143)	(0.0130)	(0.0125)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓	✓		✓	✓	✓		✓	✓	✓
Race fixed effects			✓	✓			✓	✓			✓	✓
Enslaved ancestor				✓				✓				✓
Observations	18,302	18,302	18,302	18,295	16,290	16,290	16,290	16,284	12,848	12,848	12,848	12,847
R^2	0.084	0.089	0.094	0.101	0.100	0.106	0.110	0.118	0.100	0.108	0.112	0.126
Num. clusters	2,086	2,086	2,086	2,086	2,234	2,234	2,234	2,233	2,060	2,060	2,060	2,060
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	0.211	0.211	0.211	0.211

Back

Living in counties with white Southern migrants, 1900-40: Raw data



Back

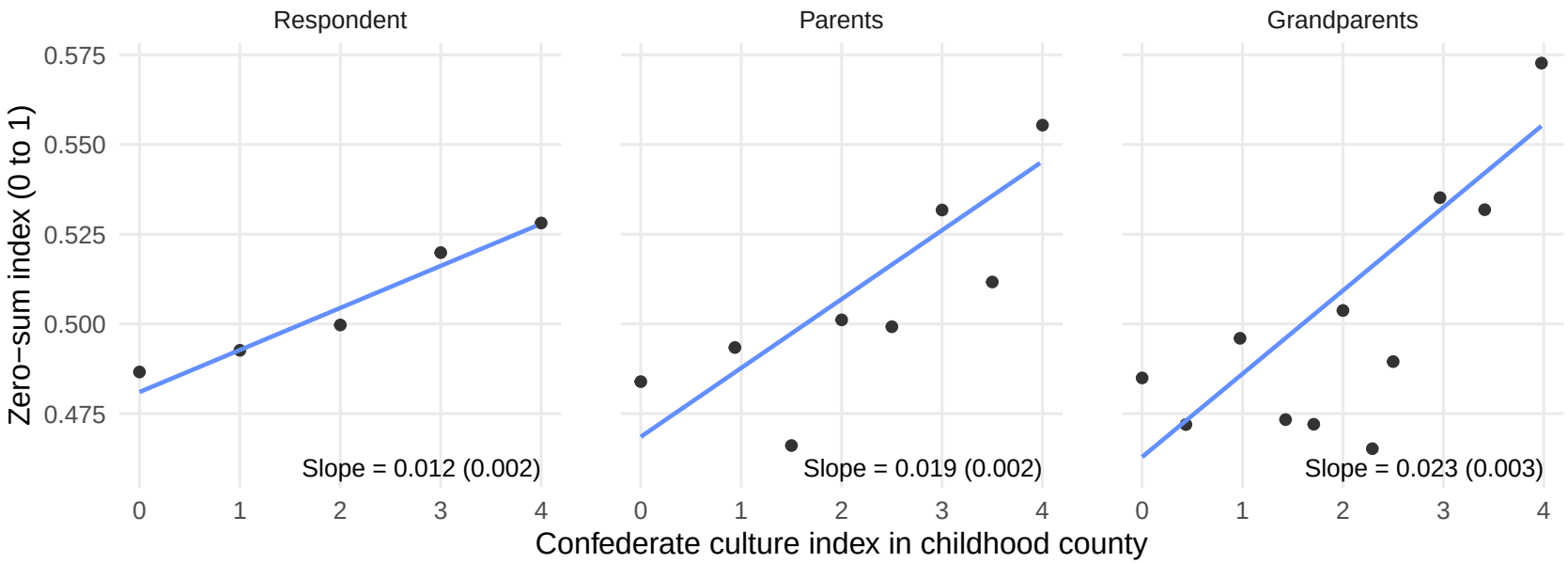
Living in counties with white Southern migrants, 1900-40

Non-South counties only

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county southern white share	0.1421**	0.1399**	0.1600**						
	(0.0717)	(0.0712)	(0.0741)						
Parents' counties southern white share				0.2150***	0.2134***	0.2566***			
				(0.0612)	(0.0611)	(0.0655)			
Grandparents' counties southern white share							0.2621***	0.2616***	0.2606***
							(0.0711)	(0.0710)	(0.0715)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓		✓	✓		✓	✓
Race fixed effects			✓			✓			✓
Observations	13,131	13,051	12,161	12,247	12,246	11,526	9,445	9,441	9,441
R^2	0.101	0.103	0.105	0.114	0.115	0.117	0.122	0.122	0.122
Num. clusters	1,239	1,238	1,220	1,555	1,555	1,528	1,462	1,462	1,462
Dependent variable mean	0.500	0.500	0.498	0.500	0.500	0.499	0.502	0.502	0.502
Dependent variable std. dev.	0.205	0.205	0.206	0.208	0.208	0.209	0.212	0.212	0.212
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	0.032	0.032	0.032	0.032	0.032	0.032

Share of Southern Blacks + enslaved ancestor controls | Fathers and grandfathers | Back

Living in counties with stronger 'Confederate culture': Raw data



Back

Living in counties with stronger 'Confederate culture'

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county CCI (0 to 4)	0.0061***	0.0063***	0.0050***						
	(0.0014)	(0.0016)	(0.0017)						
Parents' counties CCI (0 to 4)				0.0094***	0.0090***	0.0070***			
				(0.0015)	(0.0017)	(0.0016)			
Grandparents' counties CCI (0 to 4)							0.0119***	0.0119***	0.0092***
							(0.0020)	(0.0024)	(0.0022)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓		✓	✓		✓	✓
Race fixed effects			✓			✓			✓
Observations	18,160	18,160	18,160	16,125	16,125	16,125	12,681	12,681	12,681
R^2	0.086	0.090	0.095	0.101	0.106	0.111	0.104	0.110	0.115
Num. clusters	2,050	2,050	2,050	2,199	2,199	2,199	2,023	2,023	2,023
Dependent variable mean	0.507	0.507	0.507	0.510	0.510	0.510	0.512	0.512	0.512
Dependent variable std. dev.	0.206	0.206	0.206	0.209	0.209	0.209	0.212	0.212	0.212
Indep. variable mean	2.236	2.236	2.236	2.161	2.161	2.161	2.106	2.106	2.106
Indep. variable std. dev.	1.234	1.234	1.234	1.160	1.160	1.160	1.153	1.153	1.153

Back

Confederate culture index is from Bazzi et al. (2023): lynchings, 2nd KKK chapter, confederate street name, UDC chapter.

Enslaved ancestor controls Fathers and grandfathers

Southern Migrants: Enslaved Ancestor Controls

	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

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Southern Migrants: Fathers and Grandfathers

	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

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Confederate Culture: Enslaved Ancestor Controls

	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)	0.0061***	0.0063***	0.0050***	0.0048***								
	(0.0014)	(0.0016)	(0.0017)	(0.0016)								
Parents' counties CCI (0 to 4)					0.0094***	0.0090***	0.0070***	0.0067***				
					(0.0015)	(0.0017)	(0.0016)	(0.0016)				
Grandparents' counties CCI (0 to 4)									0.0119***	0.0119***	0.0092***	0.0085***
									(0.0020)	(0.0024)	(0.0022)	(0.0022)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓	✓		✓	✓	✓		✓	✓	✓
Race fixed effects			✓	✓			✓	✓			✓	✓
Enslaved ancestor				✓				✓				✓
Observations	18,160	18,160	18,160	18,153	16,125	16,125	16,125	16,119	12,681	12,681	12,681	12,680
R^2	0.086	0.090	0.095	0.102	0.101	0.106	0.111	0.119	0.104	0.110	0.115	0.128
Num. clusters	2,050	2,050	2,050	2,050	2,199	2,199	2,199	2,198	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

Back

Confederate Culture: Fathers and Grandfathers

	Zero-sum index (0 to 1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Respondent's county CCI (0 to 4)	0.0061***	0.0063***	0.0050***						
	(0.0014)	(0.0016)	(0.0017)						
Father's county CCI (0 to 4)				0.0082***	0.0075***	0.0057***			
				(0.0016)	(0.0017)	(0.0017)			
Grandfather's county CCI (0 to 4)							0.0106***	0.0103***	0.0084***
							(0.0021)	(0.0023)	(0.0023)
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
State fixed effects		✓	✓		✓	✓		✓	✓
Race fixed effects			✓			✓			✓
Observations	18,160	18,160	18,160	14,346	14,346	14,346	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	2,050	2,050	2,050	2,205	2,205	2,205	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

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Real Stakes: Incentivized Zero-Sum Question

	Zero-sum index		Pro-redistribution index		Race attitudes index	
	(1)	(2)	(3)	(4)	(5)	(6)
Correct on incentivized ZS question	0.1025***	0.0952***	0.1592***	0.1120***	0.1511***	0.0892***
	(0.0099)	(0.0100)	(0.0112)	(0.0096)	(0.0141)	(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	0.103	0.111	0.178	0.418	0.129	0.395
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

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Real Stakes: Donation to Racial Injustice Charities

	Zero-sum index		Pro-redistribution index		Race attitudes index	
	(1)	(2)	(3)	(4)	(5)	(6)
Donated	0.0378***	0.0266***	0.1471***	0.0823***	0.2053***	0.1231***
	(0.0071)	(0.0074)	(0.0074)	(0.0067)	(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	0.079	0.087	0.220	0.418	0.222	0.424
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

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Real Stakes: Petition to Raise Tax Rate

	Zero-sum index		Pro-redistribution index		Race attitudes index	
	(1)	(2)	(3)	(4)	(5)	(6)
Supports petition	0.1191***	0.1140***	0.3220***	0.2452***	0.2964***	0.1754***
	(0.0088)	(0.0097)	(0.0087)	(0.0089)	(0.0113)	(0.0114)
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	0.124	0.125	0.433	0.544	0.263	0.433
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

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