Supplemental Appendix for:

Immigration Attitudes and White Americans' Responsiveness to Rising Income Inequality

- **Supplemental Appendix A** - Contains: (1) descriptive statistics, and (2) details on how each variable was created and coded.

- **Supplemental Appendix B** - Contains: Tables B1-B9.

Supplemental Appendix A

Descriptive Statistics - CANES

This table shows descriptive statistics for all variables included in all Tables and Figures in the main paper. The number of observations is for white respondents in the following survey years: 1992, 1994, 2004, 2008, 2012, and 2016.

Table 1: Descriptive Statistics CANES, 1992-2016

Variable	Obs	Mean	Std Dev	Min	Max
Govt services & spending (VCF0839)	11,222	0.459	0.252	0	1
Govt health insurance (VCF0806)	11,215	0.485	0.317	0	1
FT: Illegal Immigrants (VCF0233)	10,660	0.353	0.252	0	1
Immigration Levels (VCF0879	10,606	0.339	0.268	0	1
Immigration Attitudes (factor score)	10,460	0.345	0.219	0	1
Partisanship (VCF0301)	11,747	0.523	0.347	0	1
Ideology (VCF0803)	11,375	0.547	0.231	0	1
Female (VCF0104)	11,792	0.524	0.499	0	1
Age (VCF0101)	11,700	50.0	17.5	18	93
College (VCF0140)	11,672	0.344	0.475	0	1
Income (VCF0114)	11,232	0.499	0.280	0	1
Homeowner (VCF0146)	11,681	0.716	0.451	0	1
Married (VCF0147)	11,790	0.552	0.497	0	1
State income inequality (top 1%)	11,818	18.7	5.4	10.2	34.4
State median household income (thousands of $)	11,818	58.4	8.4	35.7	79.8
State unemployment rate (%)	11,818	6.4	1.8	2.9	11.3
Southern State (VCF0113)	11,818	0.282	0.450	0	1
State income inequality (Gini)	11,818	0.607	0.045	0.528	0.711
State foreign born population (%)	11,818	10.5	7.5	0.876	27.2
Egalitarianism (factor score)	10,699	0.630	0.204	-0.001	1.000
Trust in government (VCF0656)	11,432	0.211	0.225	0	1
FT: Blacks (VCF0206)	10,608	0.656	0.203	0	1
FT: Poor (VCF0223)	10,613	0.708	0.187	0	1
FT: Big Business (VCF0209)	10,651	0.523	0.223	0	1

Detail on Variable Coding - CANES

This section details how each ANES variable used in Tables 3 and 4 in the main paper were created. The codebook for the Cumulative ANES is available from the ANES Data Center (`https://electionstudies.org/data-center/`).

- White

    0 = non-White; 1 = White, non-Hispanic

    Created from **VCF0105b**

- Support for Government Services & Spending

    Higher values = more liberal opinions; ranges 0-1

    Created from **VCF0839**

- Support for Government Health Insurance

    Higher values = more liberal opinions; ranges 0-1

    Created from **VCF0806**

- Partisanship

    Higher values indicate stronger Republican partisanship; ranges 0-1

    Created from **VCF0301**

- Ideology

    Higher values = stronger Conservative identification; ranges 0-1

    Created from **VCF0803**

- Immigration attitudes

    Higher values = more pro-immigration positions; ranges 0-1

    Created from **VCF0233** and **VCF0879**

Table 2: Principal Components Factor Analysis for Pro-immigration attitudes

Variable	Factor Loading
FT: Illegal immigrants (VCF0233)	0.843
Immigration levels (VCF0879)	0.843
Eigenvalue	1.42
Variance explained	71.0%

- Age

    Coded in years (18-93)

    Created from **VCF0101**

- Female

    0 = male; 1 = female

    Created from **VCF0104**

- Income

    Five percentiles (1, 2, 3, 4, 5); re-scaled to range 0-1

    Created from **VCF0114**

- College

    0 = Less than a four-year degree; 1 = four-year degree

    Created from **VCF0110**

- Homeowner

    0 = do not own home; 1 = own home

    Created from **VCF0146**

- Married

    0 = not married; 1 = not married

    Created from **VCF0147**

- Egalitarianism

    Coded 0-1; higher values = more egalitarian values

    Created from **VCF9013**, **VCF9016**, **VCF9017**, **VCF9018**

Table 3: Principal Components Factor Analysis for Egalitarianism

Variable	Factor Loading
Egalitarianism Q1 (VCF9013)	0.656
Egalitarianism Q4 (VCF9016)	0.721
Egalitarianism Q5 (VCF9017)	0.716
Egalitarianism Q6 (VCF9018)	0.696
Eigenvalue	1.95
Variance explained	48.7%

- Southern state

    0 = non-Confederacy; 1 = former Confederate state

    Created from **VCF0113**

- Trust in government index

    higher values = more trust; ranges 0-1

    Created from **VCF0656**

- Feeling thermometer: Blacks

    higher values = warmer feelings; ranges 0-1

    Created from **VCF0206**

- Feeling thermometer: Poor People

    higher values = warmer feelings; ranges 0-1

    Created from **VCF0223**

- Feeling thermometer: Big Business

    higher values = warmer feelings; ranges 0-1

    Created from **VCF0209**

Supplemental Appendix B

Table B1

This table displays regression models that include additional attitudinal controls. These models are associated with page 16 in the main paper.

Table B1: Additional Attitudinal Controls

	Services & Spending	Health Insurance
Top 1% income share	-0.002**	-0.001
	(0.001)	(0.001)
Immigration attitudes	-0.094***	-0.063
	(0.034)	(0.045)
Top 1% × Immigration attitudes	0.008***	0.008***
	(0.002)	(0.002)
Female	0.032***	-0.005
	(0.005)	(0.006)
Age	-0.001***	-0.000*
	(0.000)	(0.000)
College	-0.030***	-0.016**
	(0.005)	(0.006)
Income	-0.068***	-0.095***
	(0.010)	(0.013)
Homeowner	-0.011**	-0.010
	(0.005)	(0.007)
Married	0.001	-0.002
	(0.005)	(0.006)
Partisanship	-0.119***	-0.174***
	(0.010)	(0.012)
Ideology	-0.265***	-0.309***
	(0.013)	(0.018)
Egalitarianism	0.215***	0.250***
	(0.014)	(0.016)
FT: Blacks	-0.036***	-0.020
	(0.014)	(0.016)
FT: Poor	0.098***	0.089***
	(0.013)	(0.018)
FT: Big Business	-0.072***	-0.145***
	(0.011)	(0.015)
Trust in government	0.095***	0.033**
	(0.011)	(0.013)
Median household income	-0.000	0.000
	(0.000)	(0.000)
Unemployment rate	-0.000	0.003
	(0.002)	(0.003)
Southern state	0.003	-0.005
	(0.006)	(0.006)
Constant	0.593***	0.739***
	(0.038)	(0.044)
Year Fixed Effects	Yes	Yes
Observations	8,948	8,946
R^2	0.357	0.342

Note: Dependent variables range from 0-1; higher values = more liberal attitudes. Source is the Cumulative ANES. OLS coefficients with robust standard errors clustered by state-year in parentheses. *** p<0.01, ** p<0.05, * p<0.1, two-tailed.

Table B2

This table displays regression models that separately examine the "moderating effect" of feelings toward illegal immigrants and preferred immigration levels. These models are associated with page 16 in the main paper.

Table B2: Alternative Measures of Immigration Attitudes

	Services & Spending		Health Insurance	
Top 1% income share	-0.001	-0.001	-0.000	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)
FT: Illegal immigrants	-0.029		0.008	
	(0.032)		(0.040)	
Top 1% × FT: Illegal	0.006***		0.005***	
	(0.002)		(0.002)	
Immigration levels		-0.081***		-0.083**
		(0.029)		(0.034)
Top 1% × Immig Level		0.007***		0.007***
		(0.002)		(0.002)
Female	0.036***	0.039***	0.002	0.002
	(0.004)	(0.004)	(0.006)	(0.005)
Age	-0.001***	-0.001***	-0.000*	-0.000**
	(0.000)	(0.000)	(0.000)	(0.000)
College	-0.030***	-0.027***	-0.016***	-0.016***
	(0.005)	(0.005)	(0.006)	(0.006)
Income	-0.076***	-0.070***	-0.106***	-0.103***
	(0.009)	(0.009)	(0.013)	(0.013)
Homeowner	-0.020***	-0.018***	-0.013*	-0.017**
	(0.005)	(0.005)	(0.007)	(0.007)
Married	0.001	0.001	0.000	-0.002
	(0.005)	(0.005)	(0.006)	(0.006)
Partisanship	-0.147***	-0.155***	-0.217***	-0.220***
	(0.009)	(0.009)	(0.011)	(0.011)
Ideology	-0.326***	-0.328***	-0.373***	-0.401***
	(0.013)	(0.013)	(0.018)	(0.017)
Median household income	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Unemployment rate	-0.001	-0.000	0.001	0.003
	(0.002)	(0.002)	(0.003)	(0.003)
Southern state	-0.000	-0.002	-0.013*	-0.006
	(0.005)	(0.005)	(0.007)	(0.006)
Constant	0.820***	0.813***	0.862***	0.961***
	(0.030)	(0.033)	(0.040)	(0.039)
Year Fixed Effects	Yes	Yes	Yes	Yes
Observations	10,544	11,276	10,541	10,403
R^2	0.304	0.291	0.281	0.291

Note: Dependent variables range from 0-1; higher values = more liberal attitudes. Source is the Cumulative ANES. OLS coefficients with robust standard errors clustered by state-year in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$, two-tailed.

Table B3

This table displays regression models that examine whether immigration attitudes or general feelings toward racial/ethnic minorities condition whites' responsiveness to growing income inequality. These models are associated with pages 16-17 in the main paper.

Table B3: Immigration Attitudes or Feelings Toward Blacks?

	Services & Spending	Health Insurance
Top 1% income share	-0.003	-0.001
	(0.002)	(0.002)
Immigration attitudes	-0.062	-0.051
	(0.039)	(0.049)
Top 1% × Immigration attitudes	0.008***	0.008***
	(0.002)	(0.003)
FT: Blacks	-0.008	0.038
	(0.053)	(0.056)
Top 1% × FT: Blacks	0.001	-0.001
	(0.003)	(0.003)
Female	0.036***	0.000
	(0.005)	(0.006)
Age	-0.001***	-0.000**
	(0.000)	(0.000)
College	-0.032***	-0.019***
	(0.005)	(0.006)
Income	-0.075***	-0.102***
	(0.010)	(0.013)
Homeowner	-0.016***	-0.014*
	(0.005)	(0.008)
Married	0.001	-0.001
	(0.005)	(0.006)
Partisanship	-0.155***	-0.219***
	(0.010)	(0.012)
Ideology	-0.330***	-0.397***
	(0.013)	(0.018)
Median household income	0.000	0.000
	(0.000)	(0.000)
Unemployment rate	-0.000	0.003
	(0.002)	(0.003)
Southern state	0.003	-0.006
	(0.006)	(0.006)
Constant	0.819***	0.928***
	(0.047)	(0.049)
Year Fixed Effects	Yes	Yes
Observations	9,145	9,143
R^2	0.317	0.305

Note: Dependent variables range from 0-1; higher values = more liberal attitudes. Source is the Cumulative ANES. OLS coefficients with robust standard errors clustered by state-year in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$, two-tailed.

Table B4

This table displays regression models that examine heterogeneity (by partisanship, ideology, and income) in the relationship between whites' immigration attitudes and their support for economic redistribution/social welfare spending. The triple-interaction terms are of interest here. As such, I do not show all of the additional control variables (the same as in Table 3 in the main paper) even though they are included in the model These models are associated with page 17 in the main paper.

Table B4: Heterogeneity in the Relationship

	Services & Spending			Health Insurance		
Top 1% income share	0.002	0.001	-0.000	-0.000	0.001	0.002
	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Immigration attitudes	0.046	0.072	-0.110	0.043	0.111	-0.004
	(0.061)	(0.093)	(0.076)	(0.070)	(0.084)	(0.104)
Top 1% × Immigration attitudes	0.006**	0.007	0.007*	0.008**	0.007*	0.001
	(0.003)	(0.004)	(0.004)	(0.003)	(0.004)	(0.005)
Partisanship	-0.023	-0.154***	-0.155***	-0.133**	-0.219***	-0.220***
	(0.039)	(0.010)	(0.010)	(0.052)	(0.012)	(0.012)
Top 1% × Partisanship	-0.005***			-0.002		
	(0.002)			(0.003)		
Immigration attitudes × partisanship	-0.140			-0.082		
	(0.100)			(0.110)		
Top 1% × Immigration attitudes × Partisanship	0.001			-0.005		
	(0.005)			(0.005)		
Ideology	-0.318***	-0.183**	-0.328***	-0.381***	-0.244***	-0.392***
	(0.014)	(0.071)	(0.014)	(0.019)	(0.075)	(0.018)
Top 1% × Ideology		-0.004			-0.003	
		(0.003)			(0.003)	
Immigration attitudes × Ideology		-0.181			-0.184	
		(0.170)			(0.149)	
Top 1% × Immigration attitudes × Ideology		-0.001			-0.004	
		(0.008)			(0.007)	
Income	-0.077***	-0.076***	-0.073	-0.105***	-0.105***	-0.044
	(0.010)	(0.010)	(0.054)	(0.013)	(0.013)	(0.073)
Top 1% × Income			-0.003			-0.007*
			(0.003)			(0.004)
Immigration attitudes × Income			0.103			-0.035
			(0.125)			(0.166)
Top 1% × Immigration attitudes × Income			0.003			0.012
			(0.005)			(0.008)
Constant	0.728***	0.721***	0.807***	0.885***	0.849***	0.908***
	(0.040)	(0.050)	(0.047)	(0.049)	(0.060)	(0.059)
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	9,221	9,221	9,221	9,218	9,218	9,218
R^2	0.319	0.319	0.318	0.306	0.307	0.306

Note: Dependent variables range from 0-1; higher values = more liberal attitudes. Source is the Cumulative ANES. OLS coefficients with robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$, two-tailed.

Table B5

This table displays regression models use a Gini coefficient (theoretically ranging from 0 to 1) as an alternative measure of state income inequality (rather than the top 1%). These models are associated with page 16 in the main paper.

Table B5: Gini Coefficient

	Services & Spending	Health Insurance
Gini coefficient	-0.301***	-0.252*
	(0.113)	(0.129)
Immigration attitudes	-0.609***	-0.519***
	(0.145)	(0.185)
Gini × Immigration attitudes	1.150***	1.042***
	(0.240)	(0.307)
Female	0.038***	0.001
	(0.005)	(0.006)
Age	-0.001***	-0.000**
	(0.000)	(0.000)
College	-0.031***	-0.017***
	(0.005)	(0.006)
Income	-0.074***	-0.103***
	(0.010)	(0.013)
Homeowner	-0.017***	-0.014*
	(0.005)	(0.008)
Married	0.000	-0.001
	(0.005)	(0.006)
Partisanship	-0.155***	-0.221***
	(0.010)	(0.012)
Ideology	-0.329***	-0.394***
	(0.014)	(0.018)
Median household income	0.000	0.000
	(0.000)	(0.000)
Unemployment rate	0.000	0.003
	(0.002)	(0.003)
Southern state	0.002	-0.006
	(0.006)	(0.007)
Constant	0.955***	1.060***
	(0.071)	(0.079)
Year Fixed Effects	Yes	Yes
Observations	9,221	9,218
R^2	0.316	0.304

Note: Dependent variables range from 0-1; higher values = more liberal attitudes. Source is the Cumulative ANES. OLS coefficients with robust standard errors clustered by state-year in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$, two-tailed.

Table B6

This table displays regression models that include state fixed effects (dropping the "Southern state" dummy variable). These models are associated with Footnote 13 in the main paper.

Table B6: State Fixed Effects

	Services & Spending	Health Insurance
Top 1% income share	-0.004***	-0.005***
	(0.002)	(0.001)
Immigration attitudes	-0.069*	-0.046
	(0.037)	(0.045)
Top 1% × Immigration attitudes	0.008***	0.009***
	(0.002)	(0.002)
Female	0.038***	0.001
	(0.005)	(0.006)
Age	-0.001***	-0.000**
	(0.000)	(0.000)
College	-0.031***	-0.017***
	(0.005)	(0.006)
Income	-0.074***	-0.104***
	(0.010)	(0.013)
Homeowner	-0.018***	-0.013*
	(0.005)	(0.008)
Married	0.001	-0.001
	(0.005)	(0.006)
Partisanship	-0.156***	-0.223***
	(0.010)	(0.011)
Ideology	-0.330***	-0.394***
	(0.014)	(0.018)
Median household income	0.001	0.003**
	(0.001)	(0.001)
Unemployment rate	-0.008**	0.003
	(0.004)	(0.004)
Constant	0.896***	0.898***
	(0.057)	(0.072)
Year Fixed Effects	Yes	Yes
State Fixed Effects	Yes	Yes
Observations	9,221	9,218
R^2	0.322	0.310

Note: Dependent variables range from 0-1; higher values = more liberal attitudes. Source is the Cumulative ANES. OLS coefficients with robust standard errors clustered by state-year in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$, two-tailed.

Table B7

This table displays regression models use ordered probit regression rather than OLS. These models are associated with Footnote 13 in the main paper.

Table B7: Ordered Probit

	Services & Spending	Health Insurance
Top 1% income share	-0.009**	-0.008*
	(0.005)	(0.004)
Immigration attitudes	-0.346*	-0.168
	(0.191)	(0.181)
Top 1% × Immigration attitudes	0.043***	0.034***
	(0.010)	(0.010)
Female	0.185***	0.002
	(0.024)	(0.023)
Age	-0.003***	-0.002**
	(0.001)	(0.001)
College	-0.153***	-0.066***
	(0.026)	(0.025)
Income	-0.365***	-0.402***
	(0.048)	(0.053)
Homeowner	-0.085***	-0.054*
	(0.026)	(0.031)
Married	0.003	-0.003
	(0.024)	(0.024)
Partisanship	-0.774***	-0.822***
	(0.051)	(0.046)
Ideology	-1.637***	-1.555***
	(0.070)	(0.075)
Median household income	0.000	0.001
	(0.002)	(0.002)
Unemployment rate	-0.001	0.014
	(0.012)	(0.011)
Southern state	0.006	-0.014
	(0.029)	(0.024)
Cut1	-3.467***	-3.095***
	(0.190)	(0.166)
Cut2	-2.751***	-2.504***
	(0.187)	(0.164)
Cut3	-2.132***	-2.055***
	(0.184)	(0.164)
Cut4	-1.030***	-1.268***
	(0.186)	(0.163)
Cut5	-0.325*	-0.878***
	(0.184)	(0.163)
Cut6	0.210	-0.433***
	(0.182)	(0.162)
Year Fixed Effects	Yes	Yes
Observations	9,221	9,218

Note: Dependent variables range from 1-7 (1,2,3,4,5,6,7); higher values = more liberal attitudes. Source is the Cumulative ANES. Ordered probit coefficients with robust standard errors clustered by state-year in parentheses. *** p<0.01, ** p<0.05, * p<0.1, two-tailed.

Table B8

This table displays models that use multiple imputation for the following ANES survey years: 1992, 1994, 2004, 2008, 2012, and 2016. This is done in order to avoid unnecessarily dropping cases via listwise deletion (King et al. 2001, APSR). I conduct this by following the following guide for Stata 15 (`https://stats.idre.ucla.edu/stata/seminars/mi_in_stata_pt1_new/`). I use the following ANES variables to impute missing values: services/spending, health insurance, immigration attitudes, gender, age, education, income, home ownership, marital status, partisanship, and symbolic ideology. This results in 11,818 white respondents rather than the 9,200 (approximately) that are included in Table 3 in the main paper. As shown below, the results are largely similar, i.e., immigration attitudes significantly condition the relationship between state income inequality and whites' support for economic redistribution.

Table B8: Models Using Multiple Imputation

	Services & Spending	Health Insurance
Top 1% income share	-0.002**	-0.001
	(0.001)	(0.001)
Immigration attitudes	-0.064*	-0.023
	(0.036)	(0.046)
Top 1% × Immigration attitudes	0.008***	0.007***
	(0.002)	(0.002)
Female	0.034***	-0.002
	(0.005)	(0.005)
Age	-0.001***	-0.000**
(0.000)	(0.000)	
College	-0.031***	-0.019***
	(0.005)	(0.006)
Income	-0.072***	-0.095***
	(0.009)	(0.012)
Own home	-0.017***	-0.014*
	(0.005)	(0.007)
Married	0.000	-0.001
	(0.004)	(0.006)
Partisanship	-0.153***	-0.222***
	(0.009)	(0.010)
Ideology	-0.322***	
	(0.013)	(0.017)
Median household income	0.000	-0.000
	(0.000)	(0.000)
Unemployment rate	-0.001	0.002
	(0.002)	(0.003)
Southern state	-0.002	-0.009
	(0.005)	(0.006)
Constant	0.814***	0.954***
	(0.032)	(0.006)
Year Fixed Effects	Yes	Yes
Observations	11,818	11,818

Note: Dependent variables range from 0-1; higher values = more liberal attitudes. Source is the Cumulative ANES. OLS coefficients with robust standard errors clustered by state-year in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$, two-tailed.

Table B9

This table displays the full regression model associated with Table 4 (see page 15 in the main paper).

Table B9: Full Models Associated with Table 4 in Main Paper

	Services & Spending	Health Insurance
Immigration Attitudes	0.093***	0.116***
	(0.014)	(0.016)
State foreign born pct	0.000	0.002**
	(0.001)	(0.001)
Female	0.037***	0.001
	(0.005)	(0.006)
Age	-0.001***	-0.000**
	(0.000)	(0.000)
College	-0.031***	-0.017***
	(0.005)	(0.006)
Income	-0.074***	-0.104***
	(0.010)	(0.013)
Homeowner	-0.018***	-0.014*
	(0.005)	(0.008)
Married	0.001	-0.001
	(0.005)	(0.006)
Partisanship	-0.157***	-0.223***
	(0.010)	(0.012)
Ideology	-0.331***	-0.395***
	(0.014)	(0.018)
Top 1% income share	0.001	-0.000
	(0.001)	(0.001)
Median household income	-0.000	-0.000
	(0.000)	(0.000)
Unemployment rate	-0.001	0.000
	(0.003)	(0.003)
Southern state	0.001	-0.008
	(0.006)	(0.006)
Constant	0.767***	0.955***
	(0.037)	(0.042)
Year Fixed Effects	Yes	Yes
Observations	9,221	9,218
R^2	0.315	0.304

Note: Dependent variables range from 0-1; higher values = more liberal attitudes. Source is the Cumulative ANES. OLS coefficients with robust standard errors clustered by state-year in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$, two-tailed.