

Supplementary File

The two main quantities of interest in the article are the mediation effect of the resentment-threat index, which is composed of resentment and perceptions of cultural and economic threat, and the proportion of the effect of household economic situation on support for populism that is jointly mediated by those factors. These two quantities can be expressed using structural equations and path analysis (Baron & Kenny, 1986; Hayes, 2009) or, similarly, they can be formulated in terms of mediation analyses under the potential outcome framework (Imai et al., 2010) as follows. The average causal effect (ACE) of two levels of income (t_1 and t_0) on vote for populism (y) is denoted by:

$$ACE = E[Y(t_1) - Y(t_0)]$$

The average causal effect (ACE) measures the total average effect of income on vote for populism, regardless of the mechanism connecting income and populist vote. The main focus of this article, however, is the whole of resentment and threat perception as a mediating mechanism connecting economic conditions (here using family's income as a proxy) and right-wing populist votes. We can study that mechanism by decomposing the ACE into an average direct effect (ADE) and an average mediated causal effect (ACME). The average direct effect (ADE) is the effect of income on right-wing populist vote that is not mediated by resentment and threat perceptions. The ACME is the main focus of this article, and it captures the effect of income on populist vote mediated by resentment and threat perception. In other words, ACME quantifies the effect of income on populist vote that occurred because income affected perceptions and resentment, and then resentment and perceptions affected vote for populists. If we denote by $M(t)$ the value of perceptions and resentment at a given level of income (t), then the ADE is the expected difference in the outcome (vote for populist party) at two different levels of income (t_1 and t_0) after we hold perceptions and resentment fixed at a given value it would have taken if income value were t :

$$ADE = E[Y(t_1, M(t)) - Y(t_0, M(t))]$$

The average mediation effect (ACME), on the other hand, is the average effect of income on support for populism only through its effect on threat perceptions and resentment. That is, it is the effect we estimate if we could block all the ways people's income affects their support for populism, except the effect that occurred because it affected how much people resent the status quo and feel culturally and economically threatened. Again, denoted $M(t_1)$ the value of perceptions and resentment when income is t_1 (likewise for t_0) and $Y(t, M(t_1))$ the vote for populists when income is t and the value of perceptions and resentment is $M(t_1)$ if income were t_1 . Then, we can denote the ACME as follows:

$$ACME = E[Y(t, M(t_1)) - Y(t, M(t_0))]$$

Note that this expression for ACME captures only the mediated effect, because only resentment and threat perceptions "changed" from $M(t_1)$ to $M(t_0)$, but we keep the direct effect of income fixed at t . Because they are formulated in terms

of potential outcomes, we can read $Y(t, M(t1))$ as the populist vote of a given person if that person's income were t and resentment and threat perception were $M(t1)$.

Finally, we are interested in the proportion of the average effect of economic conditions on support for populism that is mediated by resentment and threat perceptions, which is just $ACME/ACE$. All of these quantities can be estimated using observational data as long as sequential ignorability holds. Sequential ignorability means that, conditional on the observed covariates included in the estimation, there are no unobserved confounders between income and the mediator, neither between the mediator and the outcome given income and the other controls. We discuss below what these conditions mean in the context of the present analysis.

Table A1: Descriptive statistics

Variable	N	Missing	Mean	Std.Dev	Min	Max
Right-wing populist vote	144062	0	0,13	0,33	0	1
Household income (decile)	81007	63055	6,03	2,69	1	10
Religion	142329	1733	0,54	0,5	0	1
Gender	143989	73	0,51	0,5	0	1
Unemployed	144062	0	0,03	0,18	0	1
Union	143661	401	0,52	0,5	0	1
Years of education	143285	777	13,46	3,7	0	30
Age	143612	450	46,91	13,93	18	70
Ideology	138776	5286	0,12	2,24	-5	5
Variables used in the resentment-threat index						
Cultural threat (by immigrants)	141648	2414	-0,86	2,49	-5	5
Economic threat (by immigrants)	141078	2984	-0,11	2,36	-5	5
Variables used in the dissatisfaction index						
Dissatisfied with country's economy	142890	1172	-0,11	2,42	-5	5
Dissatisfied with democracy(*)	142520	1542	-0,69	2,39	-5	5
Dissatisfied with life as a whole	143849	213	-2,33	2,02	-5	5
Dissatisfied with national government	142410	1652	0,47	2,37	-5	5
Variables used in the institutional trust index						

Distrust in political parties	125074	18988	0,95	2,25	-5	5
Distrust in politicians	143354	708	0,95	2,28	-5	5
Distrust in the police	143584	478	-1,46	2,3	-5	5
Distrust legal system	142983	1079	-0,71	2,51	-5	5
Distrust parliament	143087	975	0,02	2,44	-5	5

Variables used in the social trust index

Distrust people	143862	200	-0,49	2,34	-5	5
People are selfish	143775	287	-0,16	2,18	-5	5
People try to take advantage	143610	452	-0,98	2,17	-5	5

1 (*) This variable is also use as a proxy for resentment, so it is part of the *resentment-threat index*.

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Table A2: Effect of household income on vote for populist parties through its effect on *resentment and perceptions of being economically and culturally threatened by immigrants*. Regional-level economic conditions included as controls.

	Threat/Resentment Index	Threat/Resentment Index
	First Stage	Second Stage
Income	-0.0926 (-0.1136,—0.0715)	-0.0712 (-0.1237,—0.0188)
Threat/Resentment Index		0.5518 (0.4984, 0.6053)
Ideology	0.1942 (0.175, 0.2134)	0.2959 (0.2451, 0.3468)
Age	-0.0235 (-0.0447,—0.0023)	-0.1004 (-0.1538,—0.047)
Education (years)	-0.2344 (-0.2549,—0.2138)	-0.1804 (-0.2393,—0.1216)

Female	0.0195 (-0.0182, 0.0572)	-0.2051 (-0.3005, -0.1097)
Unemployed	0.1307 (0.0895, 0.1718)	0.1829 (0.0834, 0.2824)
Religion	-0.0159 (-0.0224, -0.0094)	-0.0267 (-0.0435, -0.0099)
Union Membership	0.0594 (0.0174, 0.1014)	-0.0036 (-0.1104, 0.1032)
Import Shock	0.0143 (-0.0918, 0.1205)	0.1555 (-0.1121, 0.4231)
Region Unemployment Rate	0.066 (-0.0829, 0.2149)	-0.5522 (-0.9272, -0.1773)
Region Unemployment Rate (lag 1)	-0.088 (-0.2656, 0.0897)	0.6082 (0.1661, 1.0504)
Region Unemployment Rate (lag 5)	0.0832 (0.0139, 0.1526)	-0.087 (-0.2665, 0.0924)
Region Econ. Growth Rate	0.0009 (-0.0281, 0.0298)	-0.0235 (-0.1033, 0.0564)
Region Pop.	-0.0349 (-0.0675, -0.0023)	-0.1214 (-0.2298, -0.013)
Total Pop.	-0.0857 (-0.4261, 0.2548)	-0.2497 (-1.2081, 0.7088)
Region Density	-0.0632 (-0.0868, -0.0395)	-0.0401 (-0.1255, 0.0453)
Inflow of Immigrants	-0.011 (-0.0528, 0.0309)	-0.1008 (-0.2169, 0.0152)
Regional Trade Balance	-0.0087 (-0.1019, 0.0845)	-0.089 (-0.3413, 0.1633)

ACME		-0.006
		(-0.0075, -0.0045)
ADE		-0.0085
		(-0.0143, -0.0029)
Prop. Mediated		0.411
		(0.2754, 0.6956)
Adj./Pseudo R2	0.2375	0.2769

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8 **References**

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