Credit Shocks and Populism

PRELIMINARY DRAFT: PLEASE DO NOT CIRCULATE

Nicolò Fraccaroli
William R. Rhodes Center
for International Economics and Finance
Brown University
nicolo_fraccaroli@brown.edu

Alessandro Pizzigolotto
Department of Economics and FAIR-CELE
Norwegian School of Economics (NHH)
alessandro.pizzigolotto@nhh.no

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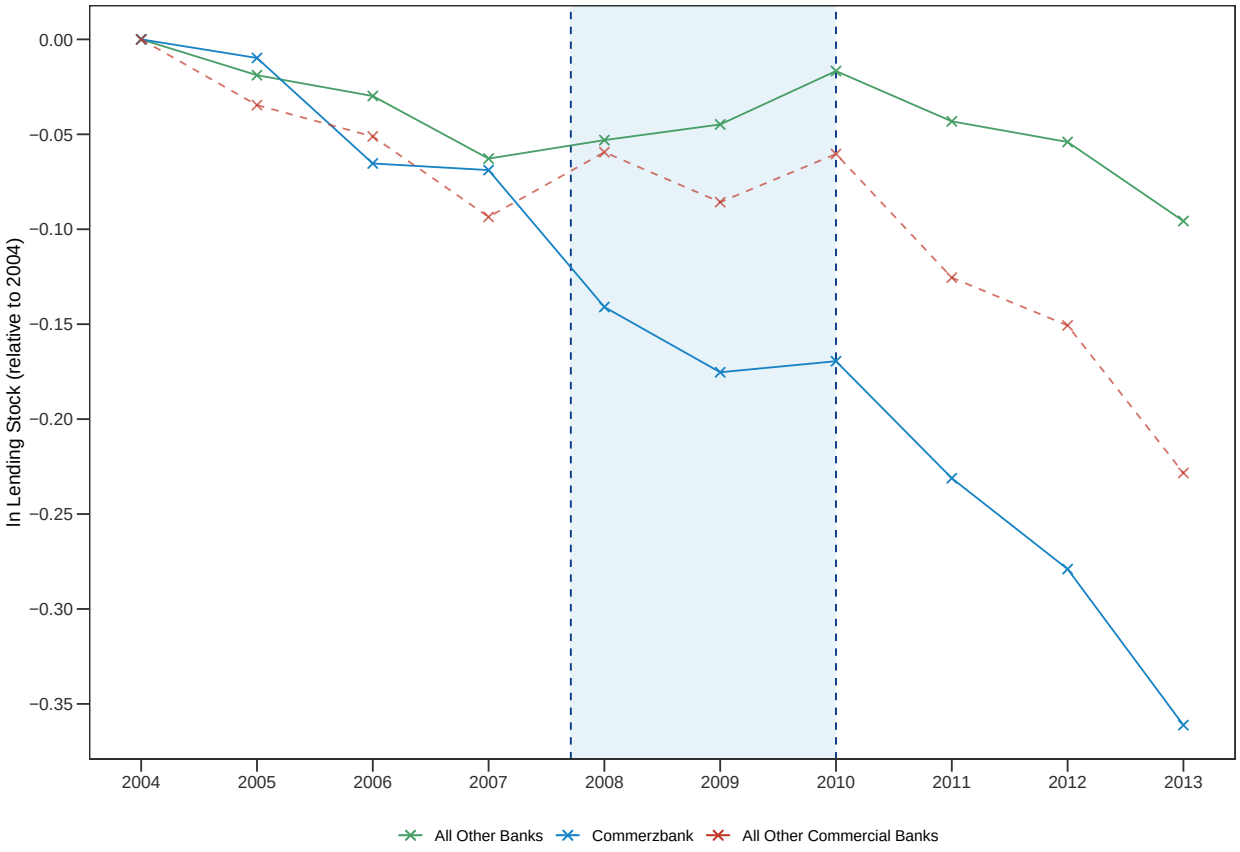
Figure 1: The Lending Stock of German Banks: Commerzbank vs. All



Notes: The graph shows the ln lending stock to German non-financial customers, relative to the year 2004, in 2010 billions of euros. Data for Commerzbank include lending by branches of Commerzbank and Dresdner bank, summing their lending stock for the years before 2009 Dresdner Bank's take-over, using information from the annual reports. For all other banks, data come from Deutsche Bundesbank on German banks and subtract lending by Commerzbank. For all other commercial banks, lending stock of Commerzbank, the savings banks, the Landesbanken, and the cooperative banks is removed. Replication from data and calculation in Huber (2018). We thank Kilian Huber for kindly share the information with us.

Table 1: Summary Statistics

	Mean	SD	Median	Min	Max	Non-Missing Obs.
Panel A: Demographic Variables						
Male	0.484	0.500	0.000	0.000	1.000	416,493
Birth Year	1,958.064	19.006	1,959.000	1,902.000	2,000.000	416,490
Age	50.371	18.540	50.000	16.000	105.000	416,490
Residence in GDR in 1989	0.208	0.406	0.000	0.000	1.000	410,576
Married	0.540	0.498	1.000	0.000	1.000	414,609
Direct/Indirect Migrant	0.174	0.379	0.000	0.000	1.000	416,493
Panel B: Education						
Vocational Degree or Higher	0.862	0.345	1.000	0.000	1.000	407,397
University Degree	0.187	0.390	0.000	0.000	1.000	407,397
Years of Education	11.952	2.560	11.500	7.000	18.000	398,224
Panel C: Occupational Status						
Currently Unemployed	0.065	0.246	0.000	0.000	1.000	409,059
In Working Age	0.740	0.439	1.000	0.000	1.000	416,493
In Labour Force	0.807	0.395	1.000	0.000	1.000	332,361
Self-Employed	0.031	0.174	0.000	0.000	1.000	416,493
In Education	0.040	0.197	0.000	0.000	1.000	416,493
Retired	0.046	0.209	0.000	0.000	1.000	416,493
EGP Score (Job Prestige Scale)	4.710	3.025	4.000	1.000	11.000	301,724
Contractual Working Hours per Week	34.249	9.601	38.500	0.300	80.000	191,318
Officially Unemployed Prev. Yr. No. Months	0.916	2.889	0.000	0.000	12.000	332,354
Monthly Gross Earnings (in 2016 EUR)	1,954.152	2,278.426	1,609.442	0.000	1.63e+05	332,361
Panel D: Household Variables						
Household Size	1.934	0.847	2.000	1.000	10.000	416,493
Number of Children in HH	0.411	0.814	0.000	0.000	11.000	416,493
Home-Ownership	0.488	0.500	0.000	0.000	1.000	409,794
Presence of Outstanding Loans	0.357	0.479	0.000	0.000	1.000	409,556
Annual Household Disposable Income (in 2016 EUR)	22045.461	19852.624	20247.000	-8.63e+04	8.38e+05	416,493
Panel E: County-Level Variables						
County GDP (in 2016 mln EUR)	7.129	10.960	4.375	1.009	139.831	7,155
County GDP per capita (in 2016 EUR)	32418.014	14219.515	28785.982	13772.455	1.81e+05	7,155
Population (1000 units)	205.681	231.220	151.546	33.944	3,613.495	7,155
Population Density (units/km2)	523.811	678.680	199.596	36.129	4,712.758	7,155
Unemployment Rate	7.970	4.256	7.000	1.200	25.400	7,155
Average Household Income (in 2016 EUR)	1,734.457	229.053	1,720.812	1,246.867	3,498.927	7,155
Share of Foreigners	7.607	4.734	6.800	0.600	35.000	7,155
County of Former GDR	0.190	0.392	0.000	0.000	1.000	7,155
Panel G: Variable of Interest						
County-Level Commerzbank Exposure	0.083	0.043	0.075	0.008	0.241	7,155
Panel F: Outcome Variables						
Intention to Vote for Populist Party	0.033	0.180	0.000	0.000	1.000	385,248
Political Supporter	0.453	0.498	0.000	0.000	1.000	385,248
Banking and Financial Crisis Index (sLDA)	3.181	0.270	3.208	2.357	3.745	161,680
Populism Index (sLDA)	0.090	0.024	0.089	0.043	0.227	161,680

Notes: This table shows ... XXX.

Table 2: The Effect of the Credit Shock on Political Support: Difference-in-Differences Results

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$Exposure_k \times Post$	0.768	0.901**	0.703	0.728*	0.817*	0.755**	0.757**	0.980**
	(0.481)	(0.419)	(0.435)	(0.426)	(0.472)	(0.356)	(0.355)	(0.483)
Number of Observations	385,248	362,246	325,947	325,947	325,947	314,765	314,765	314,765
Number of Counties	401	401	400	400	400	400	400	400
Outcome Mean (%)	45.349	45.944	44.918	44.918	44.918	45.085	45.09	45.085
$sd\,(Exposure_k)$ (%)	4.742	4.739	4.723	4.723	4.723	4.721	4.723	4.721
Within R^2	0.000	0.087	0.088	0.088	0.087	0.000	0.000	0.000
County-Level FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual FE	No	No	No	No	No	Yes	Yes	Yes
Individual Controls	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household Controls	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Regional Controls	No	No	No	Yes	No	No	Yes	No
County Time Trends	No	No	No	No	Yes	No	No	Yes

Notes: This table shows ... XXX.

Table 3: The Effect of the Credit Shock on Intention to Vote for a Populist Party: Difference-in-Differences Results

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$Exposure_k \times Post$	0.399**	0.490***	0.510***	0.534***	0.457***	0.577***	0.594***	0.613***
	(0.174)	(0.189)	(0.146)	(0.147)	(0.145)	(0.193)	(0.187)	(0.172)
Number of Observations	385,248	362,246	325,947	325,947	325,947	314,765	314,765	314,765
Number of Counties	401	401	400	400	400	400	400	400
Outcome Mean (%)	3.347	3.371	3.161	3.161	3.161	3.139	3.138	3.139
$sd\,(Exposure_k)$ (%)	4.742	4.739	4.723	4.723	4.723	4.721	4.723	4.721
Within R^2	0.000	0.009	0.010	0.011	0.010	0.001	0.001	0.000
County-Level FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual FE	No	No	No	No	No	Yes	Yes	Yes
Individual Controls	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household Controls	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Regional Controls	No	No	No	Yes	No	No	Yes	No
County Time Trends	No	No	No	No	Yes	No	No	Yes

Notes: This table shows ... XXX.

Table 4: The Effect of the Credit Shock on Political Support: Difference-in-Differences with Binary Treatment

	Median		**75th**		**90th**		**25th – 75th**		**10th – 90th**	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
D_{kt}	0.526	1.279	0.965	1.191	2.420*	2.014**	2.059	1.885	2.560	2.307
	(0.917)	(0.801)	(1.113)	(0.854)	(1.348)	(0.910)	(1.321)	(1.144)	(1.825)	(1.591)
Number of Observations	325,947	314,765	325,947	314,765	325,947	314,765	158,103	152,053	61,899	59,469
Number of Counties	400	400	400	400	400	400	199	199	79	79
Outcome Mean (%)	44.918	45.09	44.918	45.09	44.918	45.09	45.421	45.645	46.521	46.638
Treatment Assignment (%)	8.908	8.908	13.259	13.259	16.684	16.684	5.658	5.658	3.969	3.969
Within R^2	0.088	0.000	0.088	0.000	0.088	0.000	0.090	0.001	0.105	0.001
County-Level FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County Time Trends	No	No	No	No	No	No	No	No	No	No

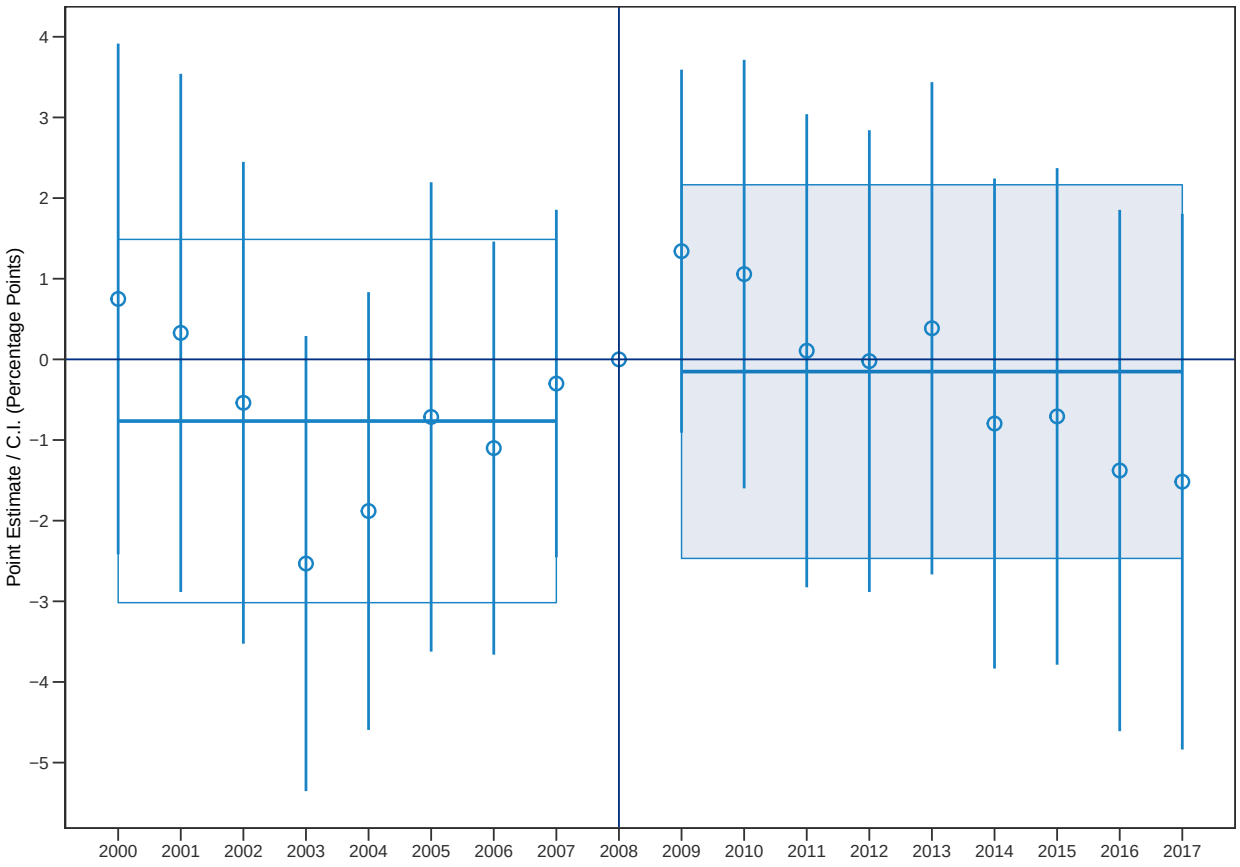
Notes: This table shows ... XXX.

Table 5: The Effect of the Credit Shock on Intention to Vote for a Populist Party: Difference-in-Differences with Binary Treatment

	Median		**75th**		**90th**		**25th – 75th**		**10th – 90th**	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
D_{kt}	1.010***	1.115***	0.769*	1.300**	1.102***	1.065	1.023**	1.643***	1.017*	1.441*
	(0.321)	(0.353)	(0.427)	(0.509)	(0.406)	(0.805)	(0.461)	(0.535)	(0.604)	(0.806)
Number of Observations	325,947	314,765	325,947	314,765	325,947	314,765	158,103	152,053	61,899	59,469
Number of Counties	400	400	400	400	400	400	199	199	79	79
Outcome Mean (%)	3.161	3.138	3.161	3.138	3.161	3.138	3.27	3.248	3.27	3.208
Treatment Assignment (%)	8.908	8.908	13.259	13.259	16.684	16.684	5.658	5.658	3.969	3.969
Within R^2	0.010	0.001	0.010	0.001	0.010	0.000	0.014	0.001	0.027	0.001
County-Level FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County Time Trends	No	No	No	No	No	No	No	No	No	No

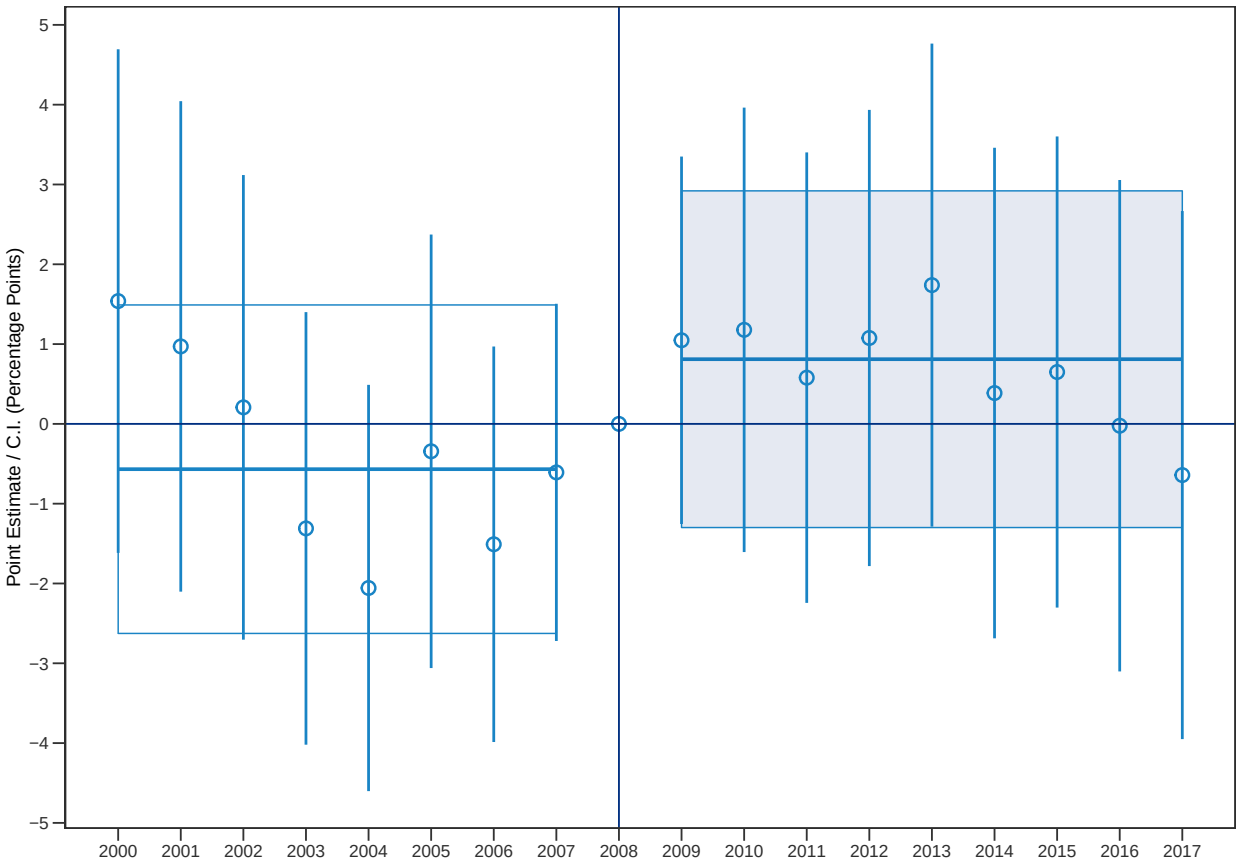
Notes: This table shows ... XXX.

Figure 2: Event Study Plot: Political Support - Cutoff Median (without individual FE)



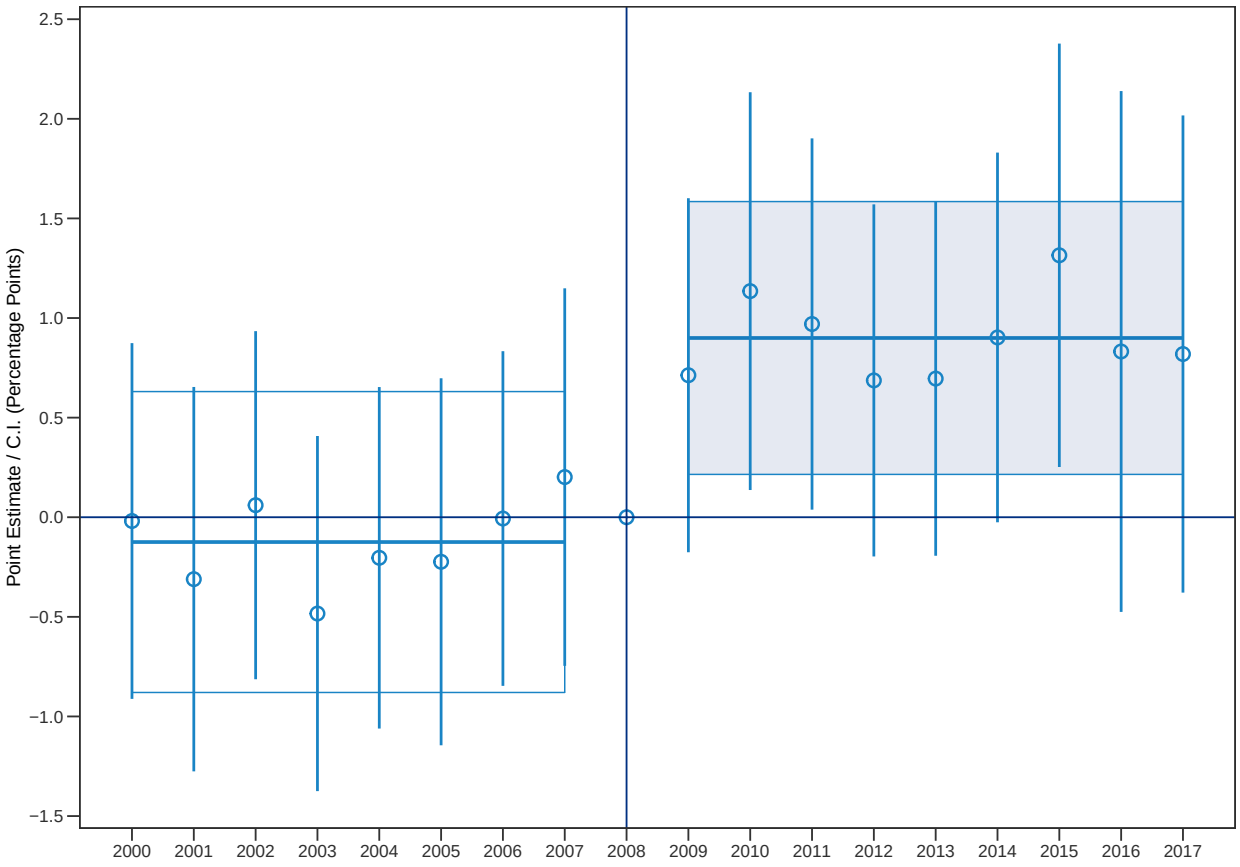
Notes: This table shows ... XXX.

Figure 3: Event Study Plot: Political Support - Cutoff Median (with individual FE)



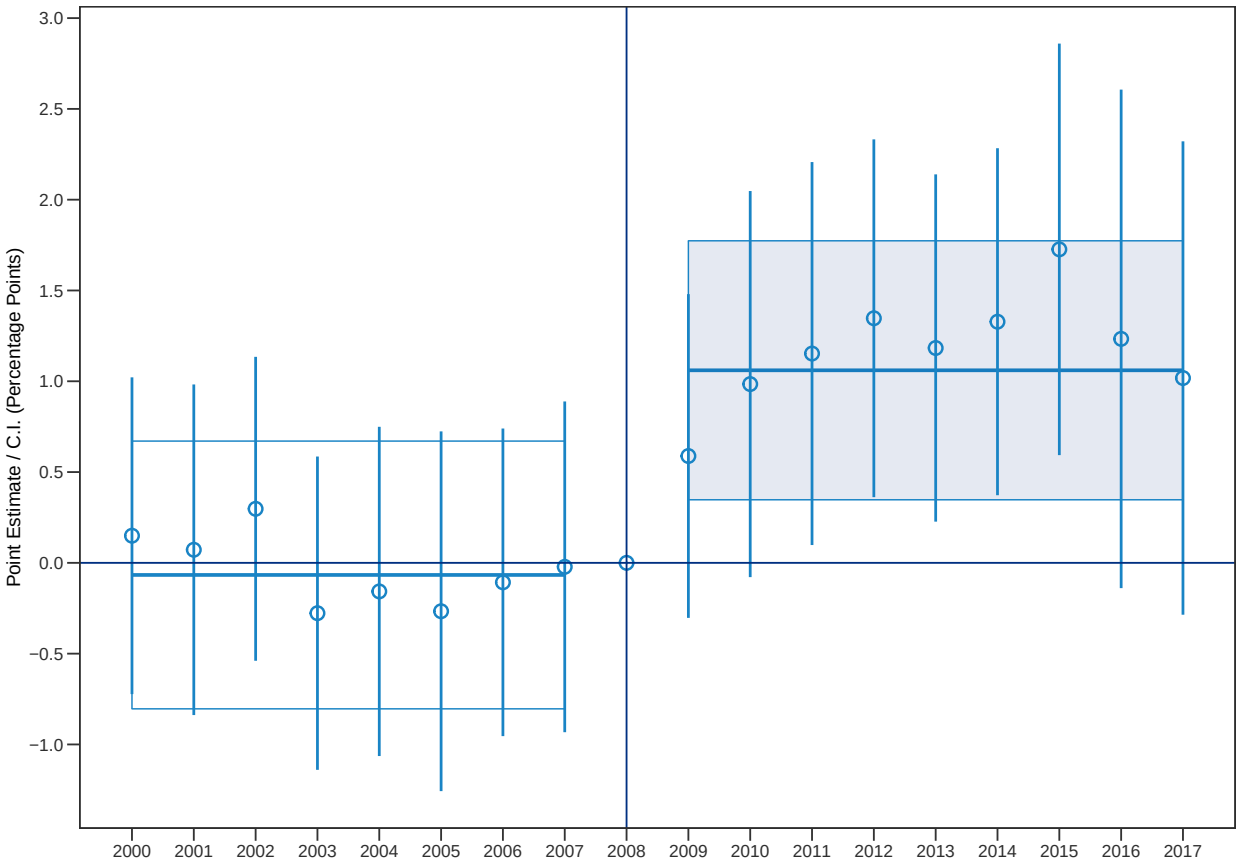
Notes: This table shows ... XXX.

Figure 4: Event Study Plot: Populist Party - Cutoff Median (without individual FE)



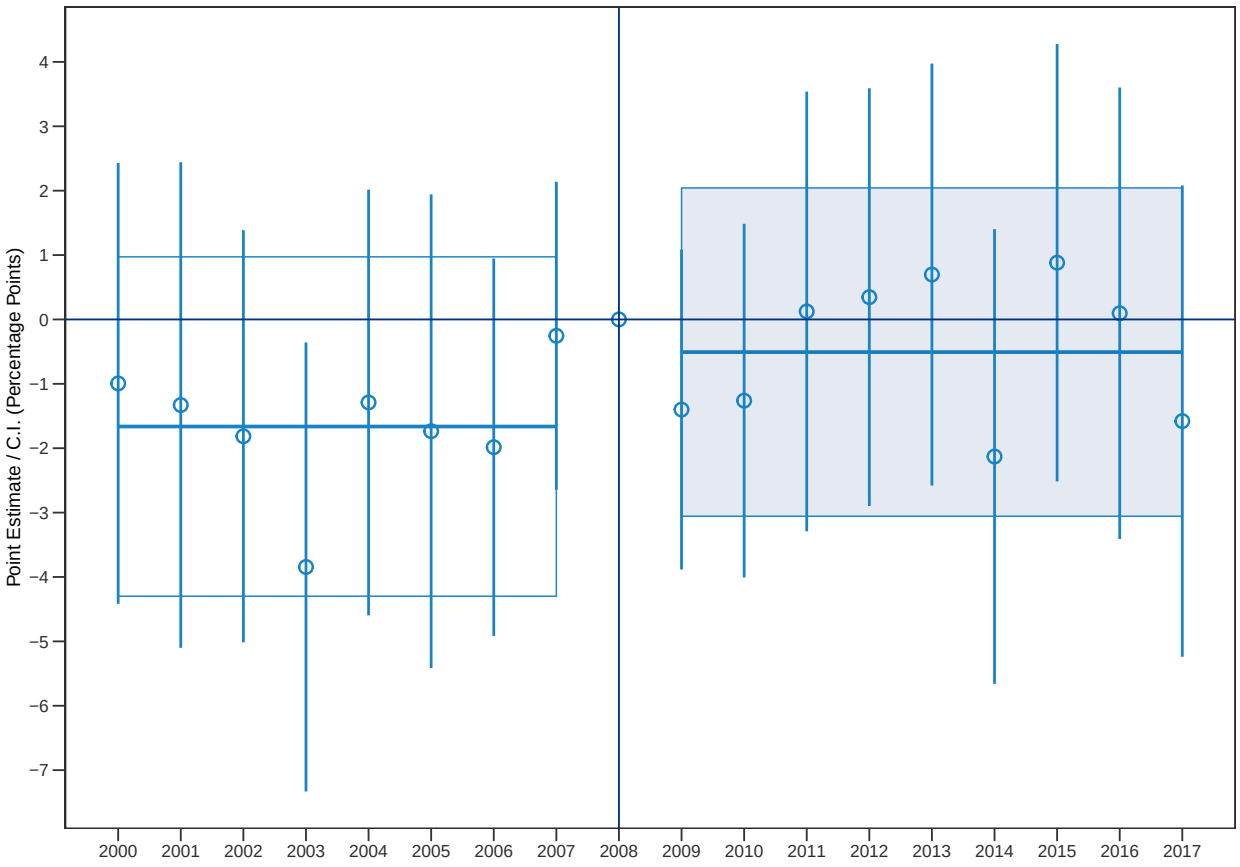
Notes: This table shows ... XXX.

Figure 5: Event Study Plot: Populist Party - Cutoff Median (with individual FE)



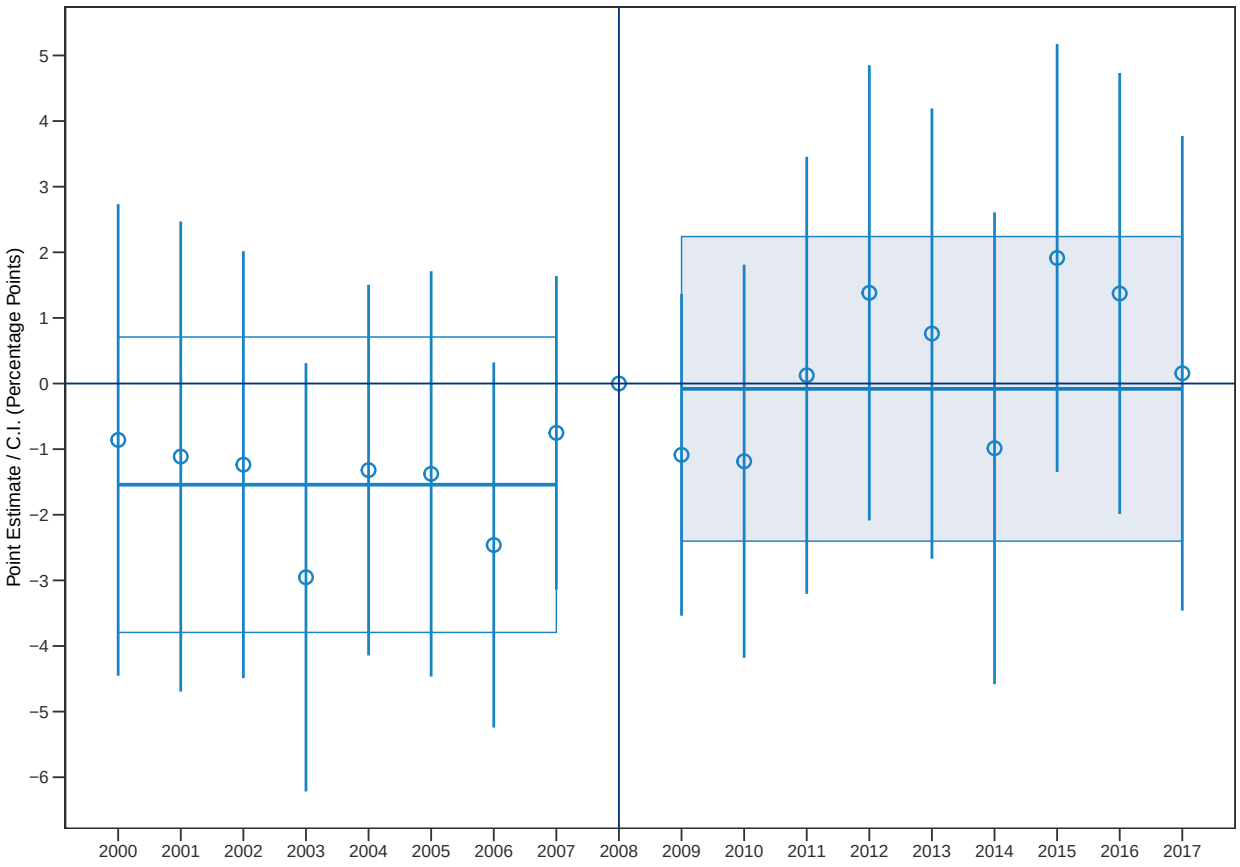
Notes: This table shows ... XXX.

Figure 6: Event Study Plot: Political Support - Cutoff 75^{th} Percentile (without individual FE)



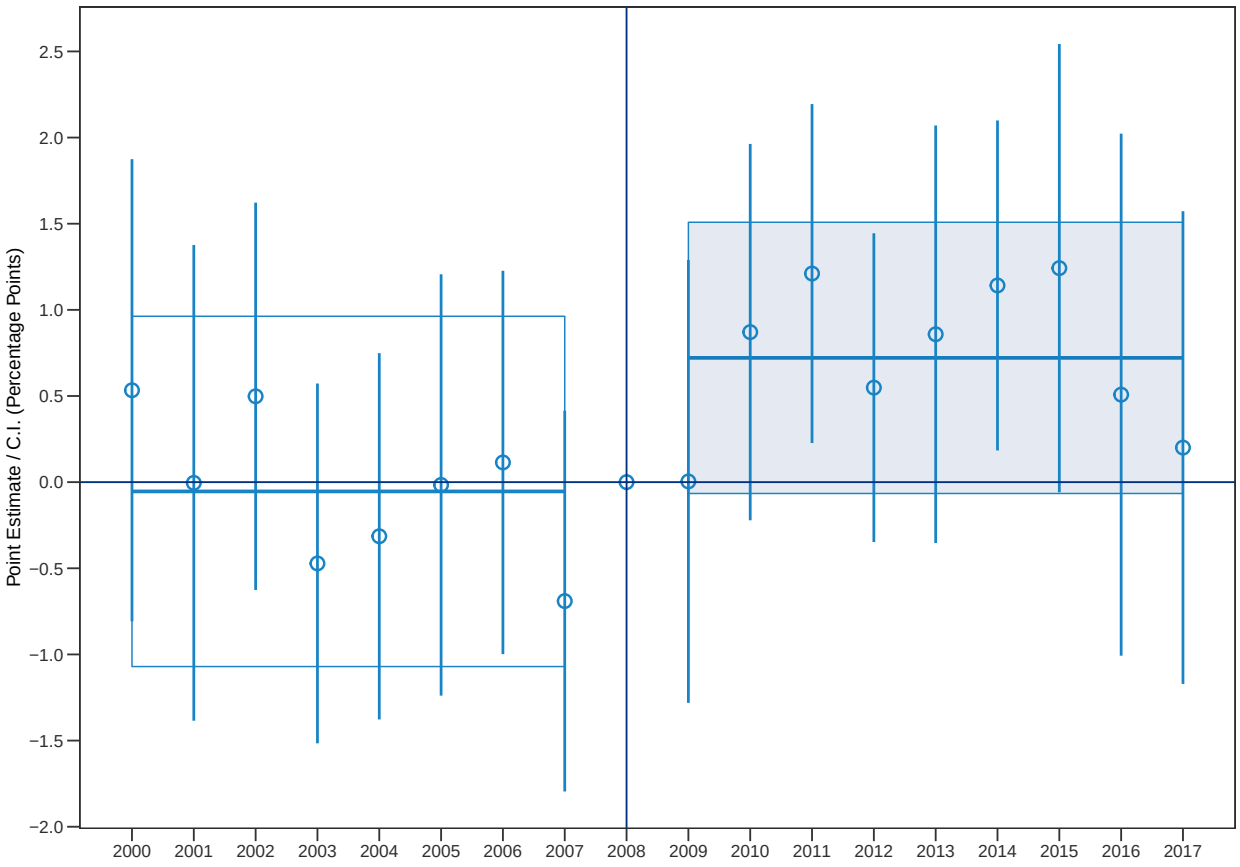
Notes: This table shows ... XXX.

Figure 7: Event Study Plot: Political Support - Cutoff 75^{th} Percentile (with individual FE)



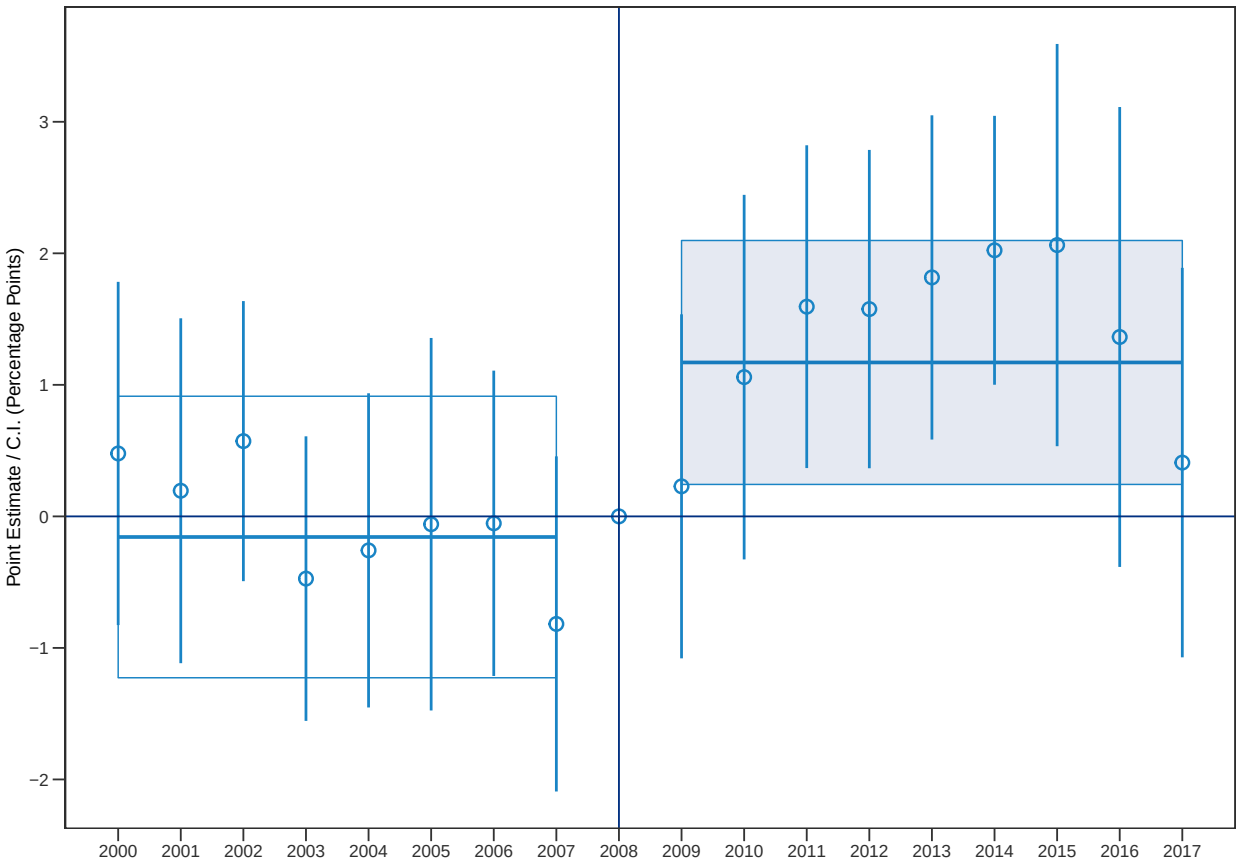
Notes: This table shows ... XXX.

Figure 8: Event Study Plot: Populist Party - Cutoff 75^{th} Percentile (without individual FE)



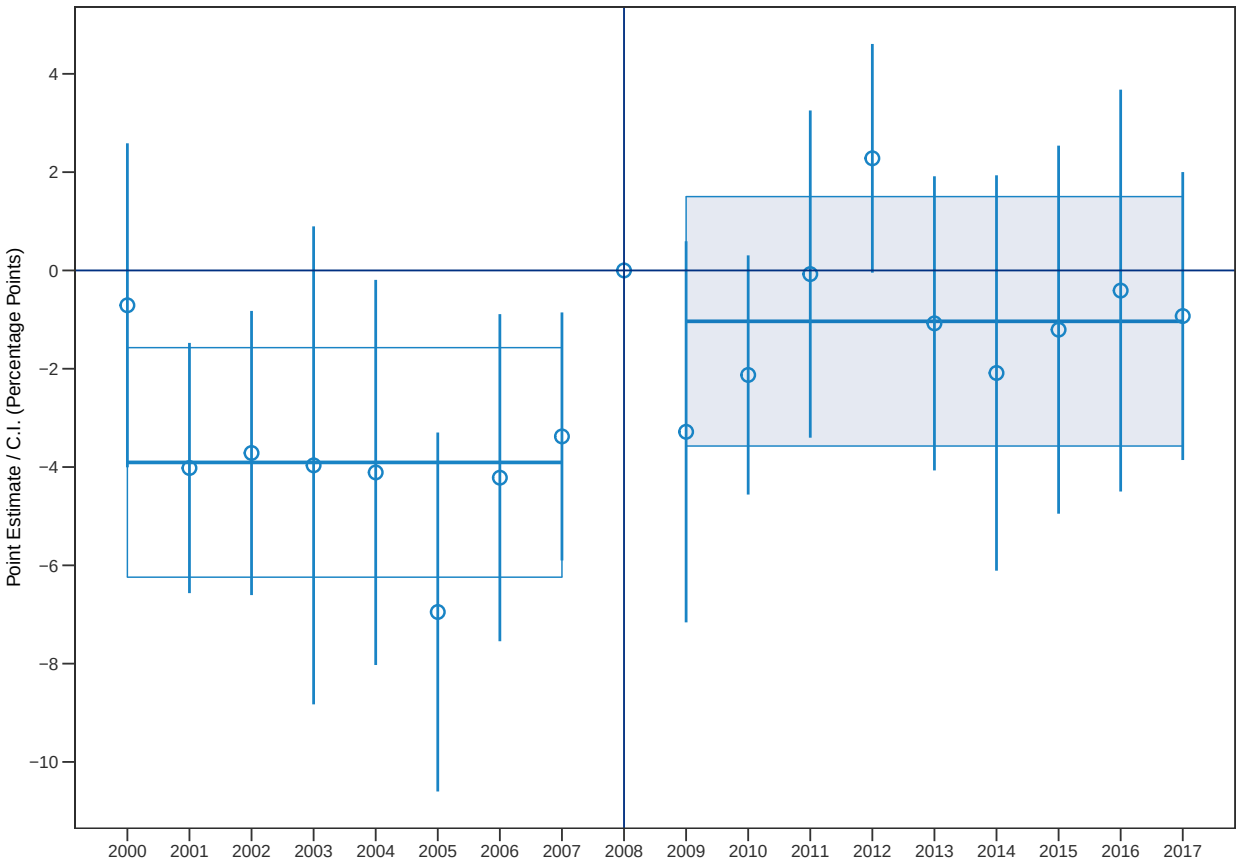
Notes: This table shows ... XXX.

Figure 9: Event Study Plot: Populist Party - Cutoff 75^{th} Percentile (with individual FE)



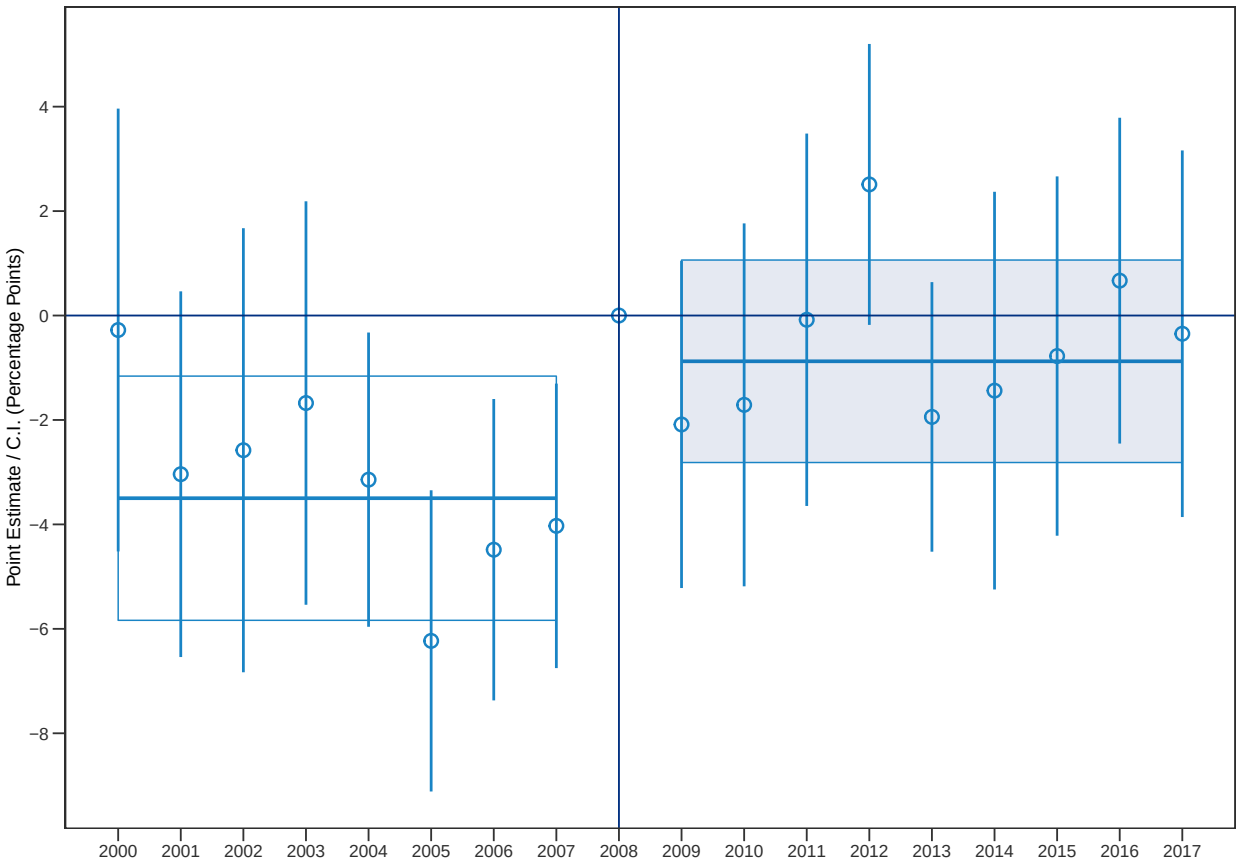
Notes: This table shows ... XXX.

Figure 10: Event Study Plot: Political Support - Cutoff 90^{th} Percentile (without individual FE)



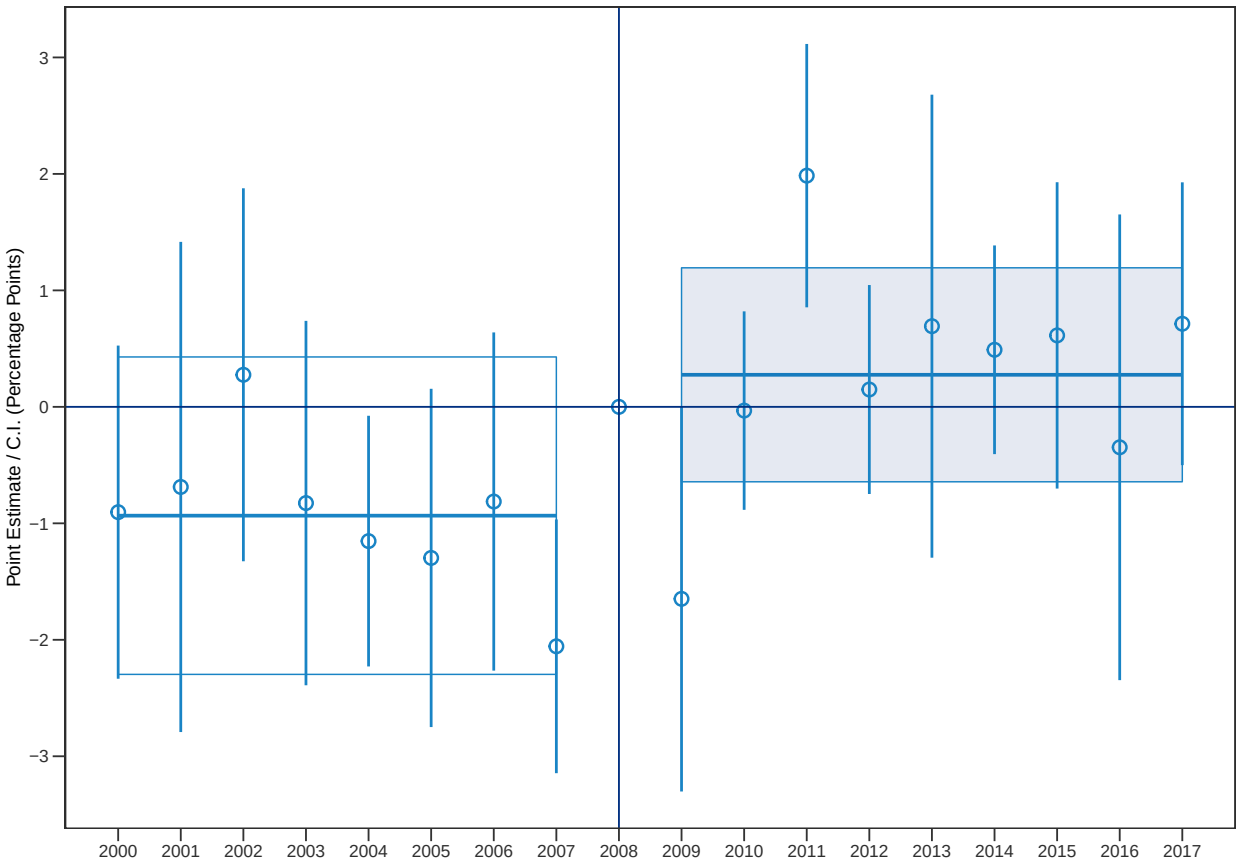
Notes: This table shows ... XXX.

Figure 11: Event Study Plot: Political Support - Cutoff 90^{th} Percentile (with individual FE)



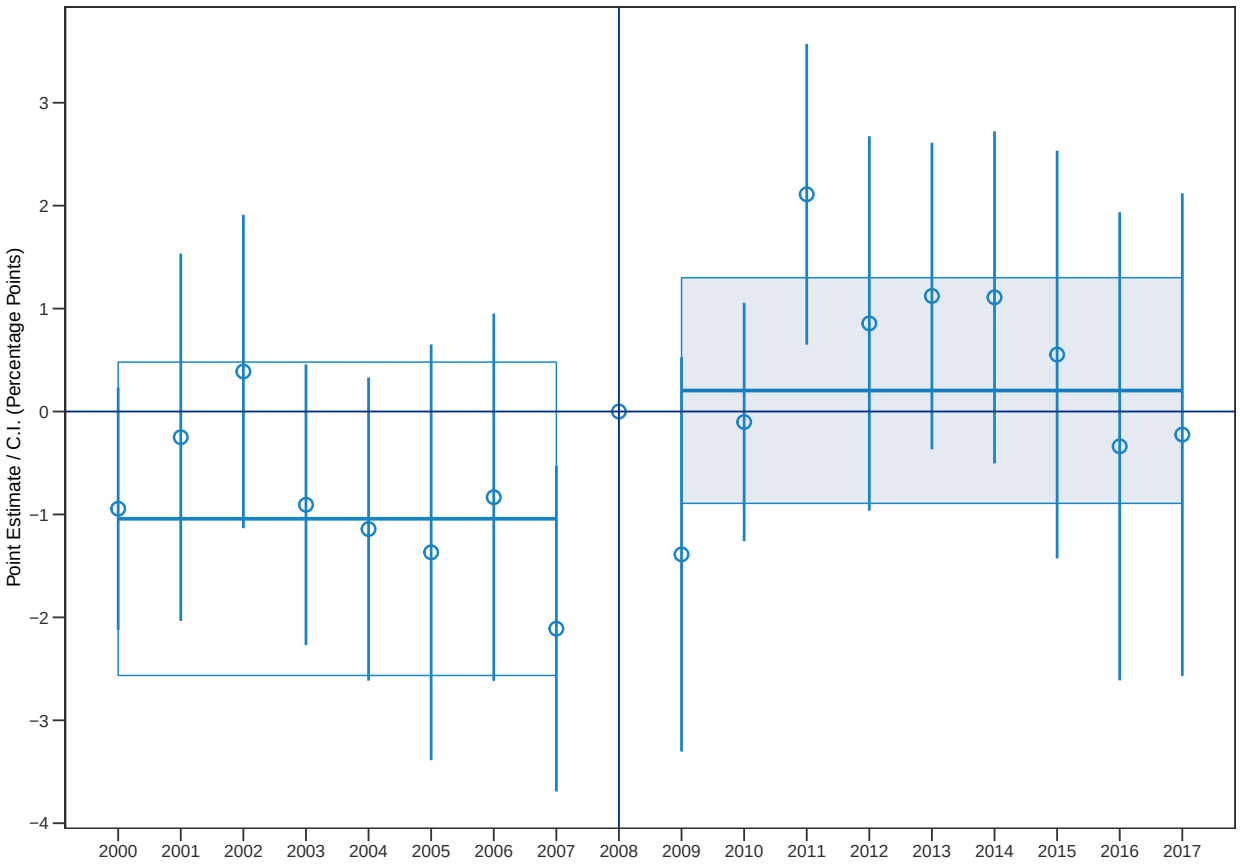
Notes: This table shows ... XXX.

Figure 12: Event Study Plot: Populist Party - Cutoff 90^{th} Percentile (without individual FE)



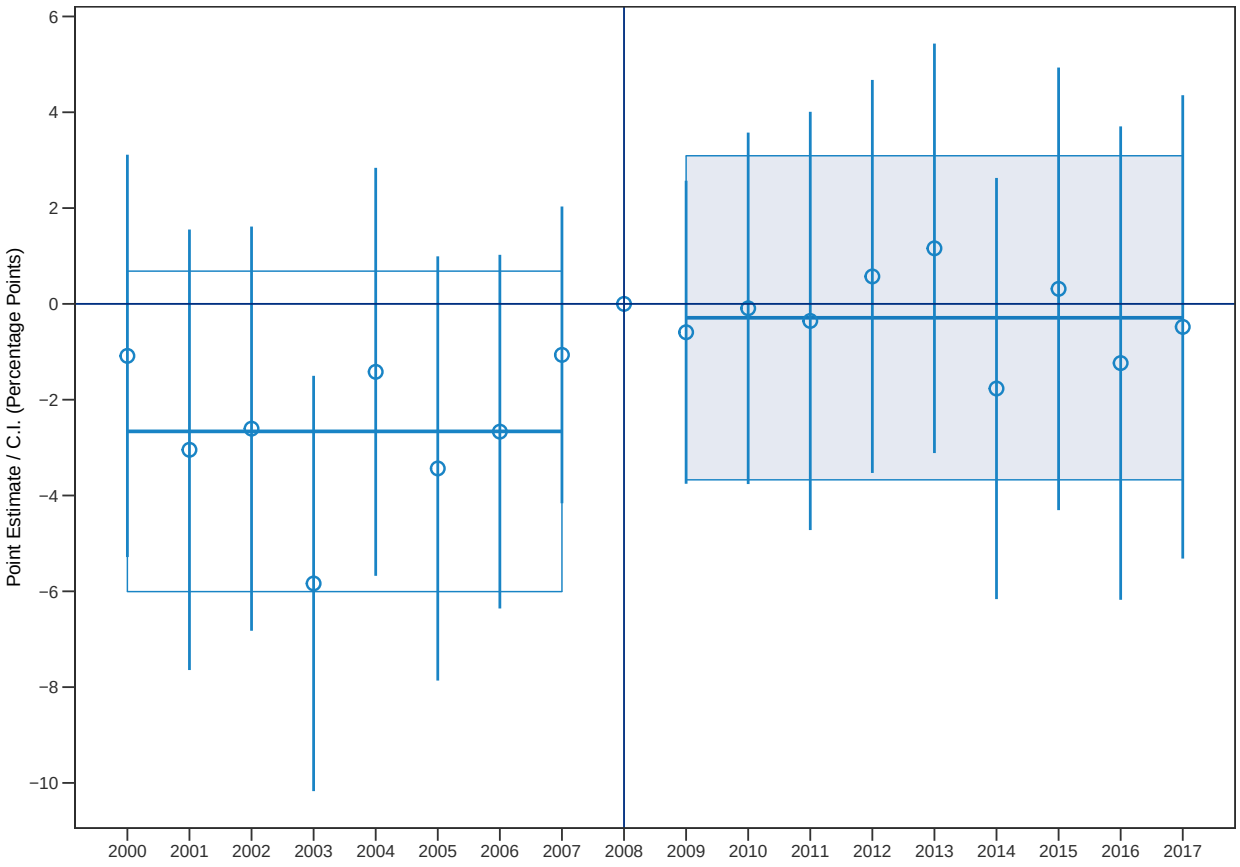
Notes: This table shows ... XXX.

Figure 13: Event Study Plot: Populist Party - Cutoff 90^{th} Percentile (with individual FE)



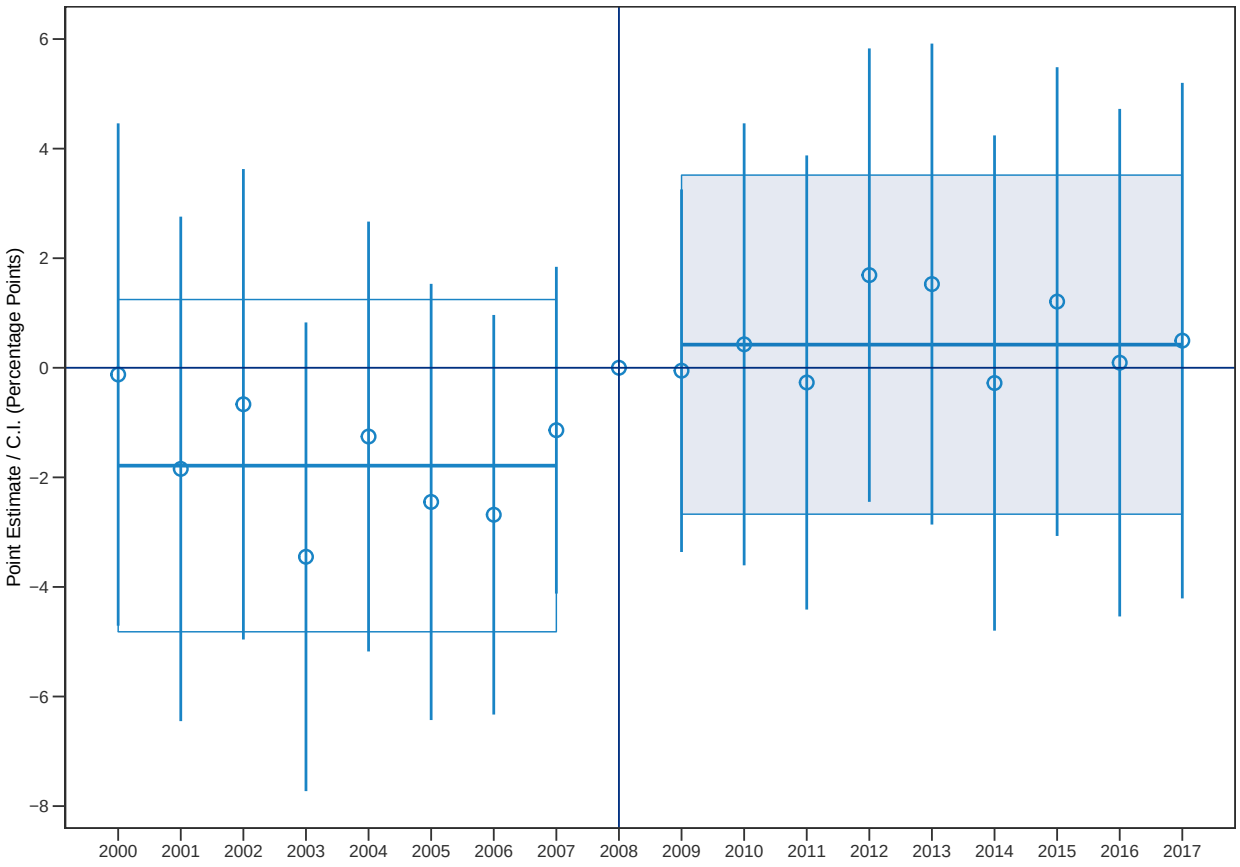
Notes: This table shows ... XXX.

Figure 14: Event Study Plot: Political Support - Cutoff IQR (without individual FE)



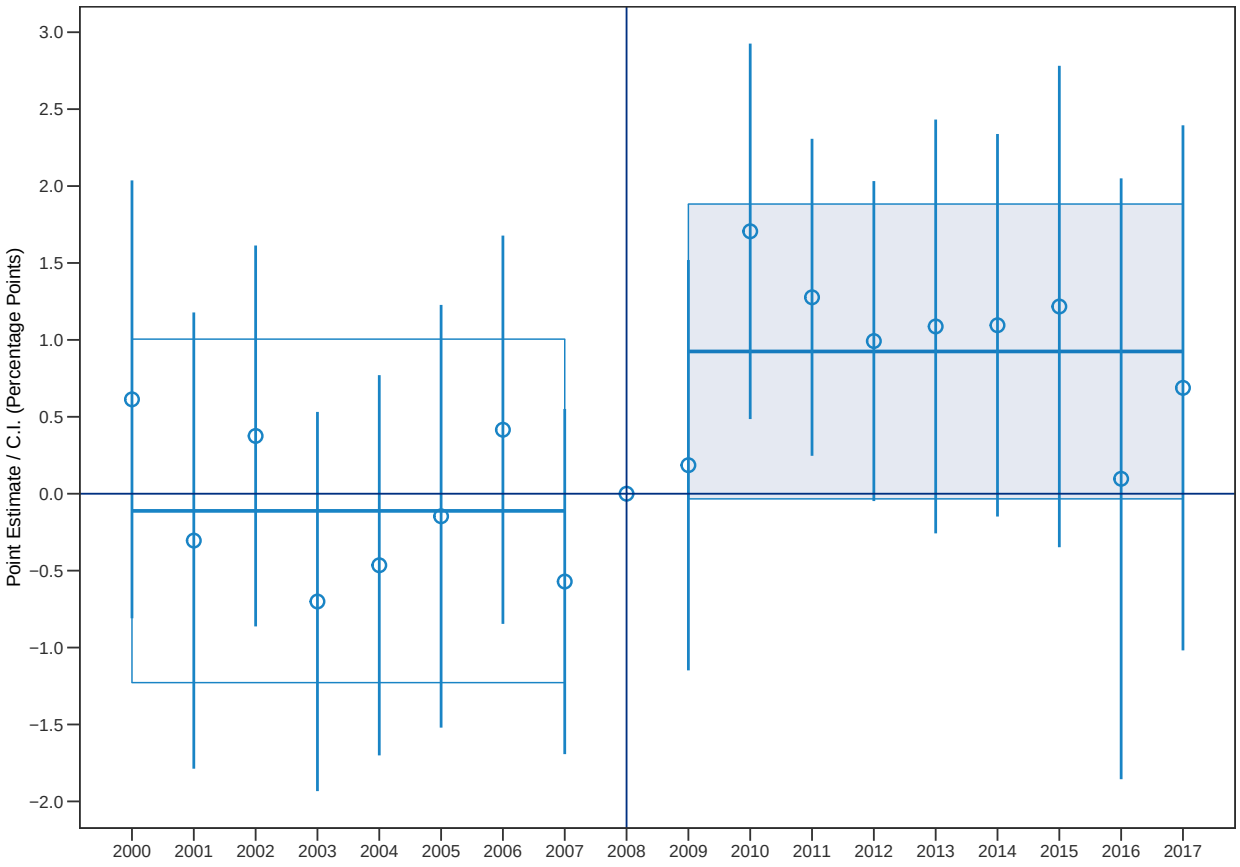
Notes: This table shows ... XXX.

Figure 15: Event Study Plot: Political Support - Cutoff IQR (with individual FE)



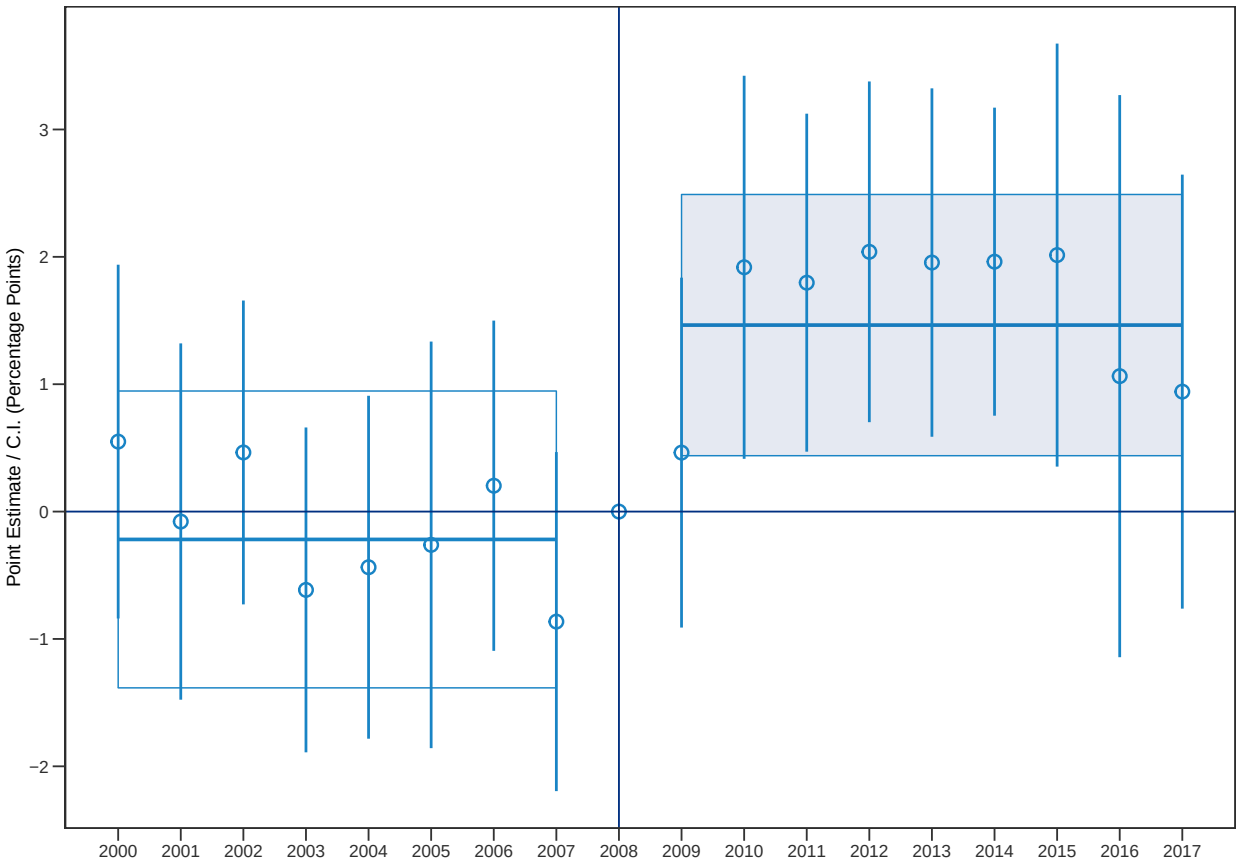
Notes: This table shows ... XXX.

Figure 16: Event Study Plot: Populist Party - Cutoff IQR (without individual FE)



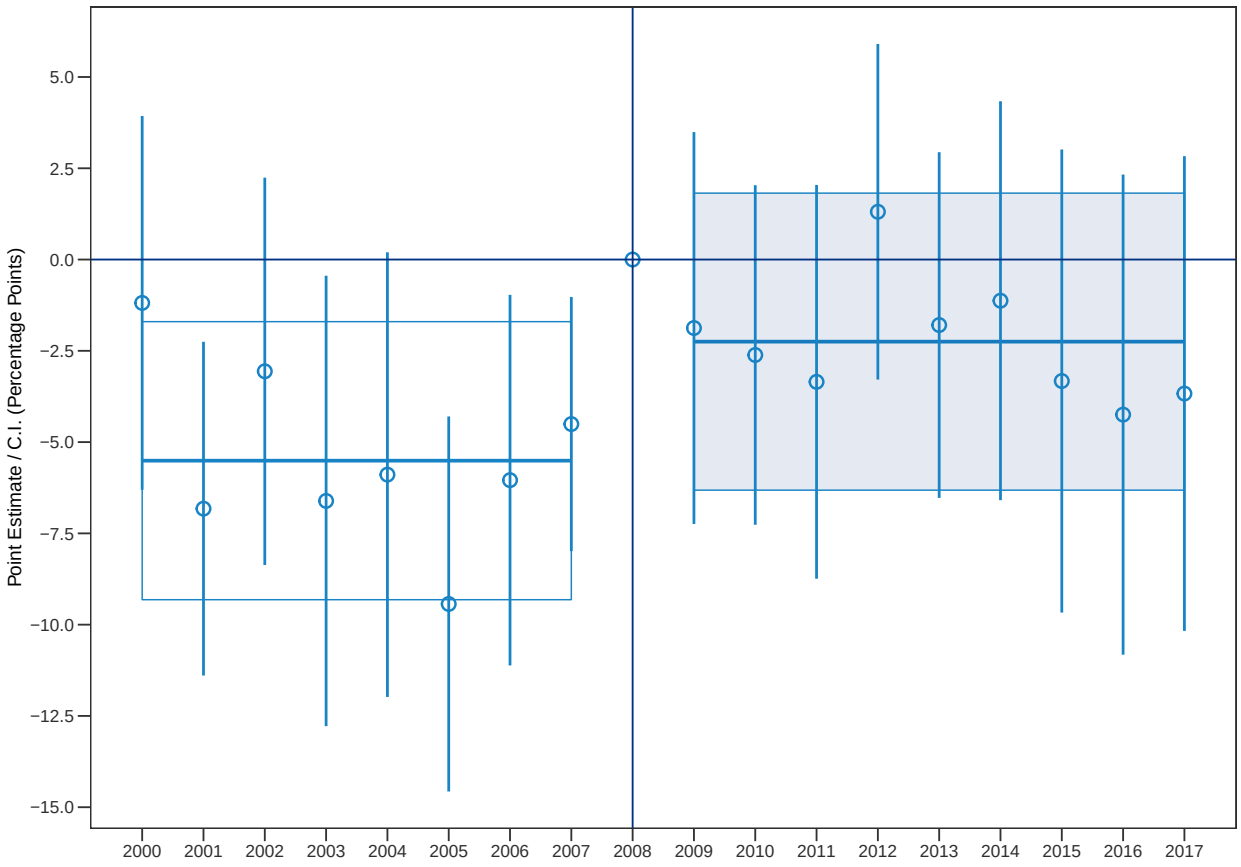
Notes: This table shows ... XXX.

Figure 17: Event Study Plot: Populist Party - Cutoff IQR (with individual FE)



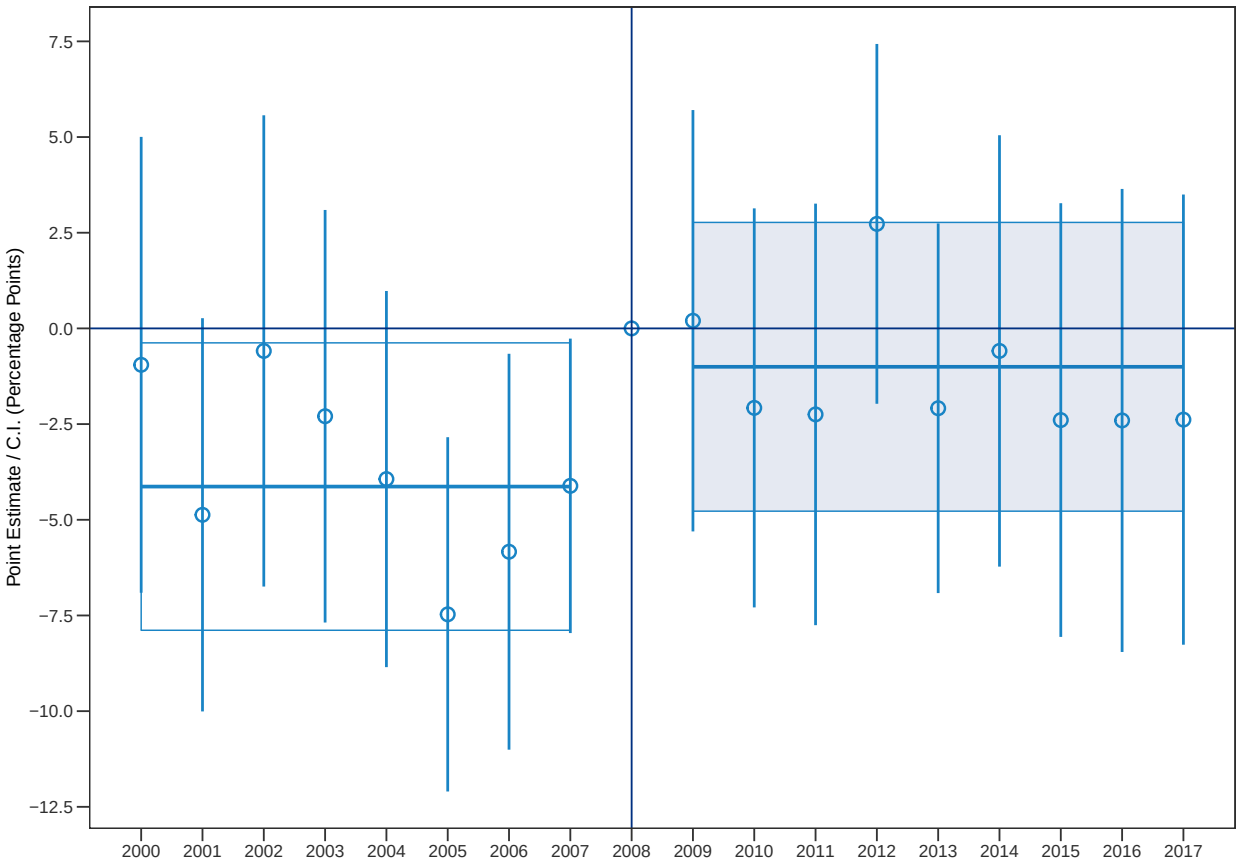
Notes: This table shows ... XXX.

Figure 18: Event Study Plot: Political Support - Cutoff 10^{th}–90^{th} Percentile (without individual FE)



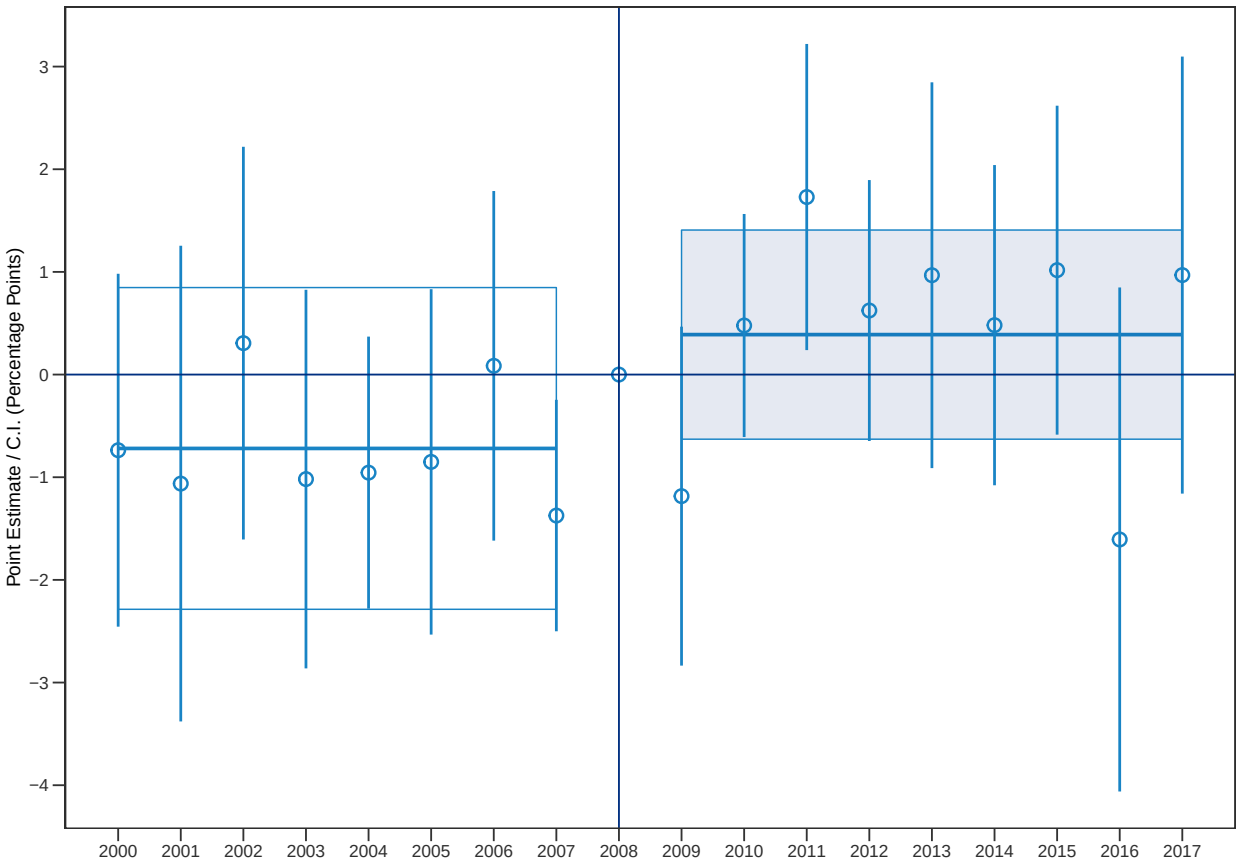
Notes: This table shows ... XXX.

Figure 19: Event Study Plot: Political Support - Cutoff 10^{th}–90^{th} Percentile (with individual FE)



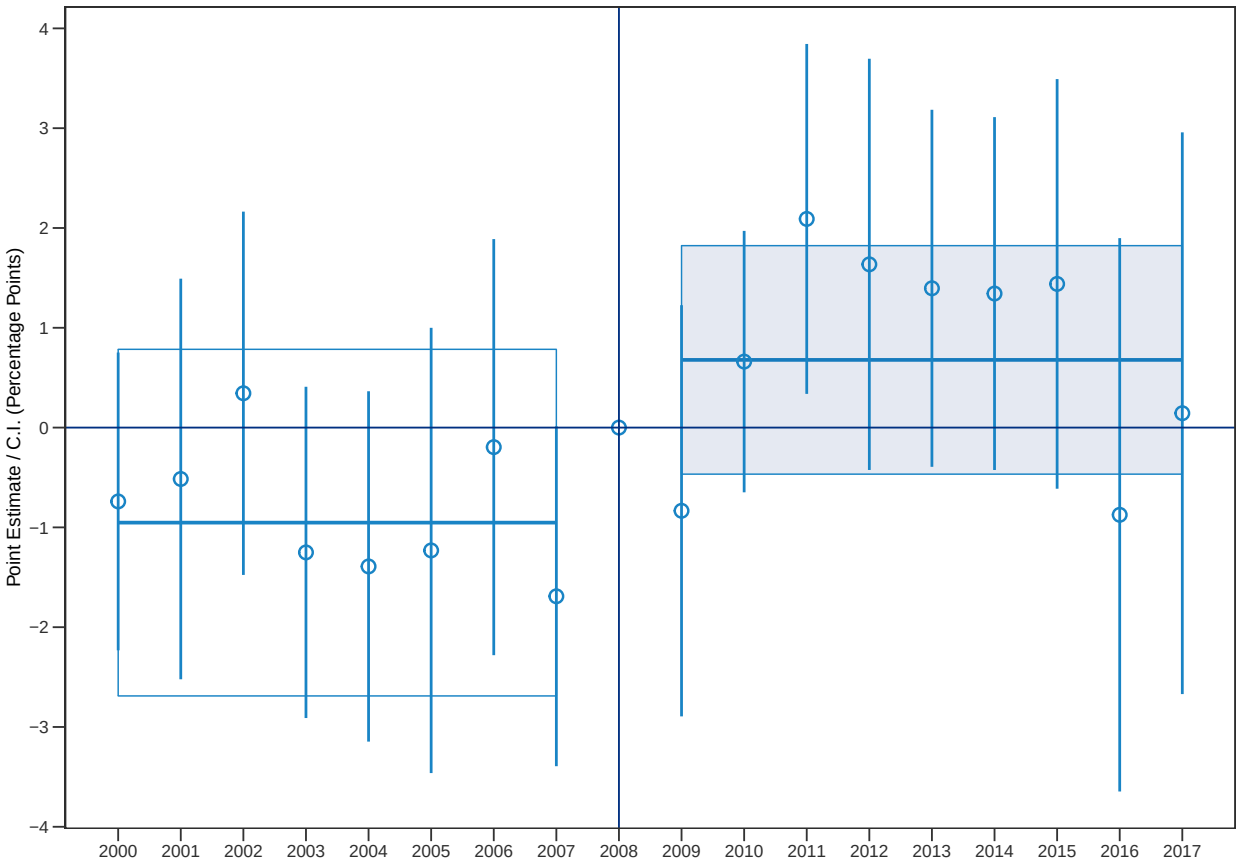
Notes: This table shows ... XXX.

Figure 20: Event Study Plot: Populist Party - Cutoff 10^{th}–90^{th} Percentile (without individual FE)



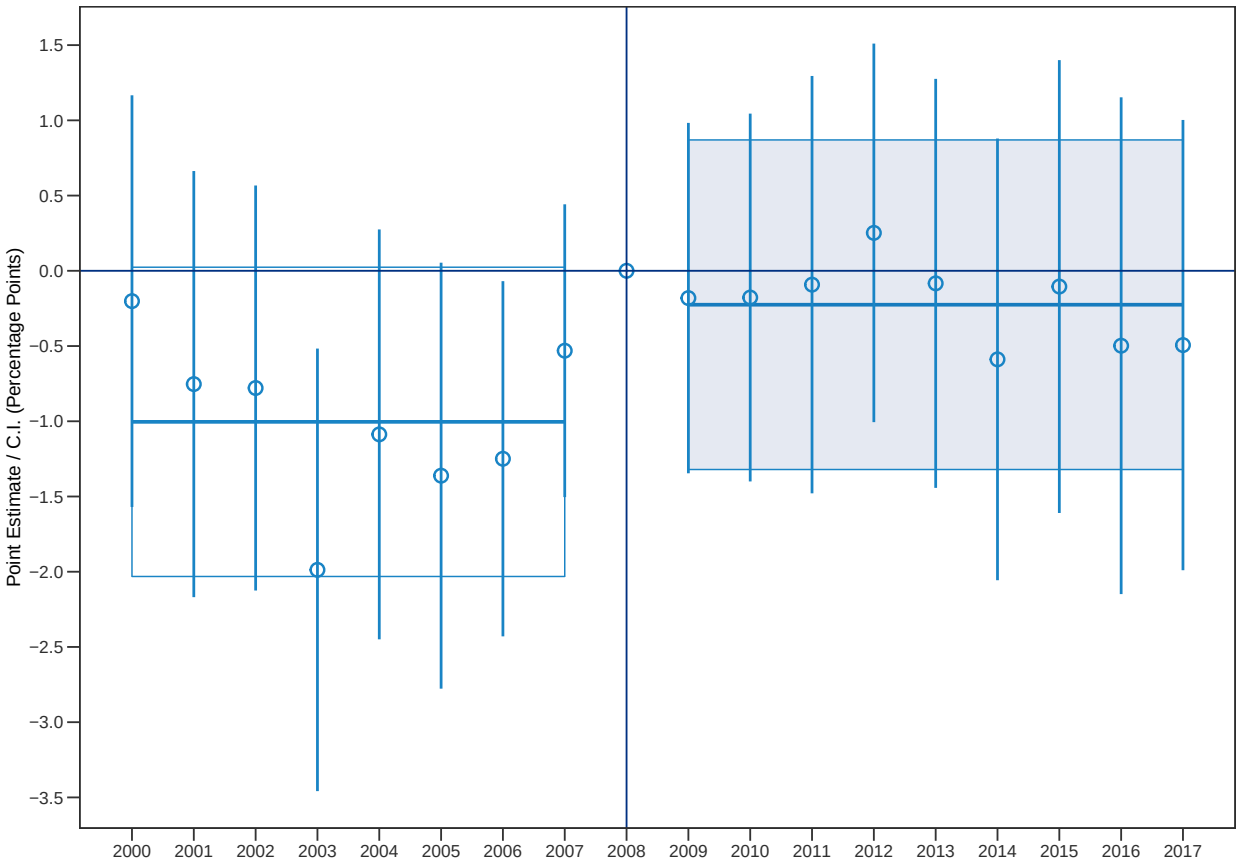
Notes: This table shows ... XXX.

Figure 21: Event Study Plot: Populist Party - Cutoff 10^{th}–90^{th} Percentile (with individual FE)



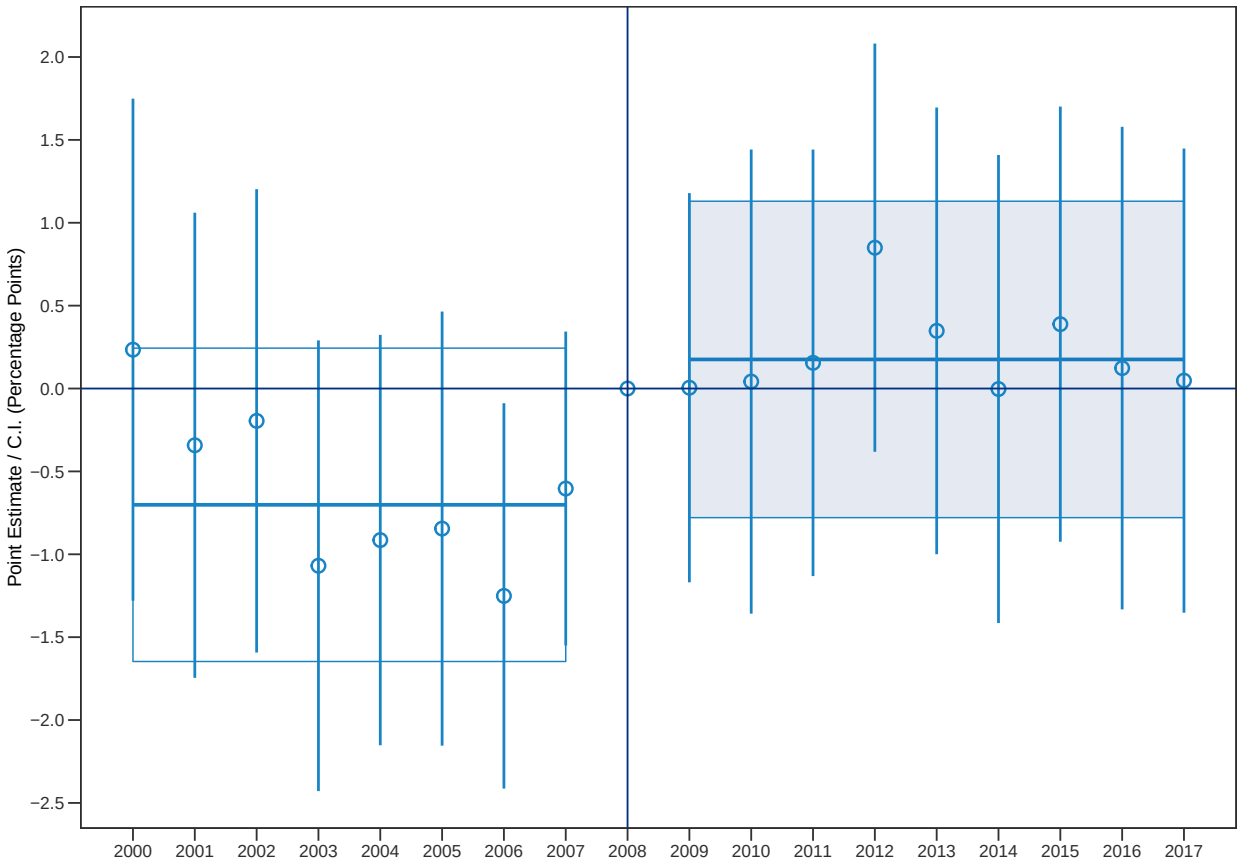
Notes: This table shows ... XXX.

Figure 22: Event Study Plot: Political Support - Continuous Treatment (without individual FE)



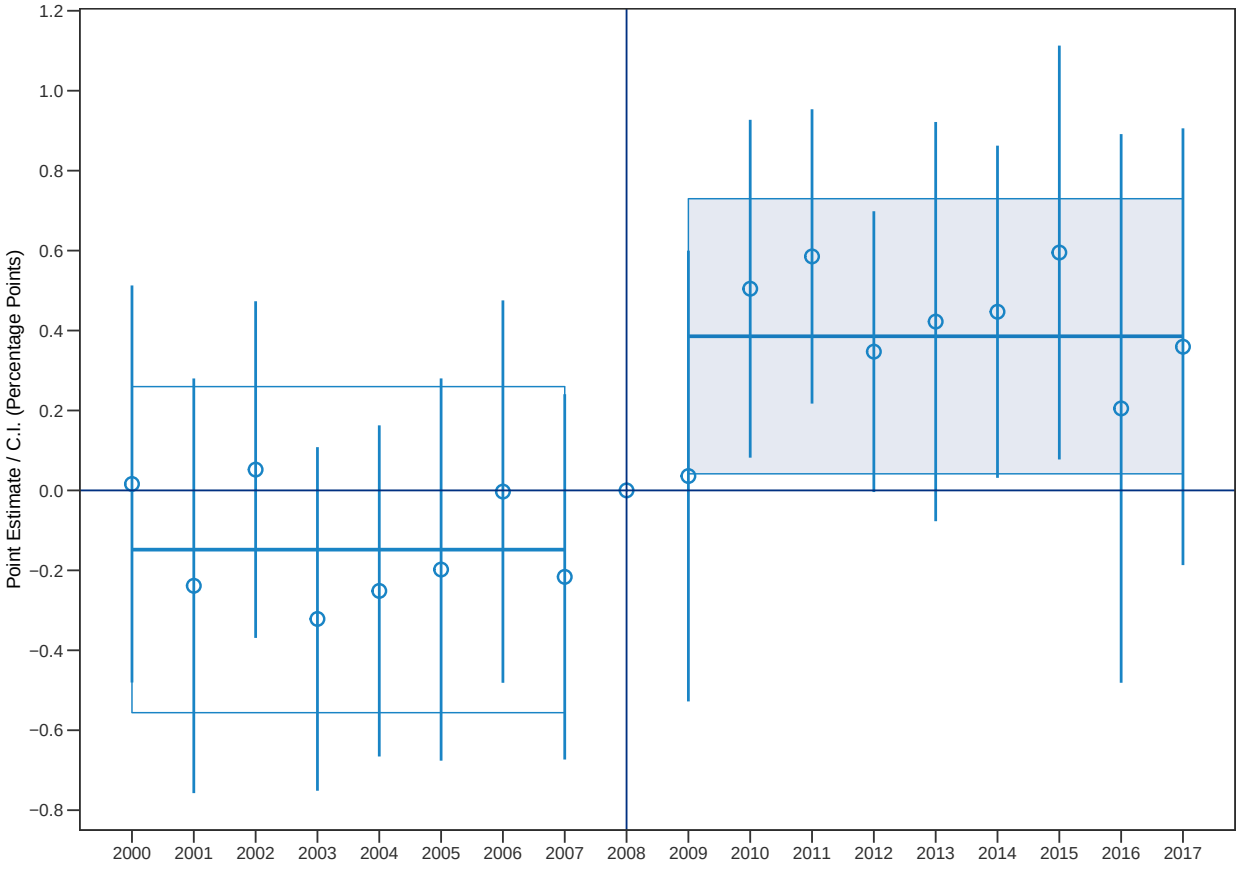
Notes: This table shows ... XXX.

Figure 23: Event Study Plot: Political Support - Continuous Treatment (with individual FE)



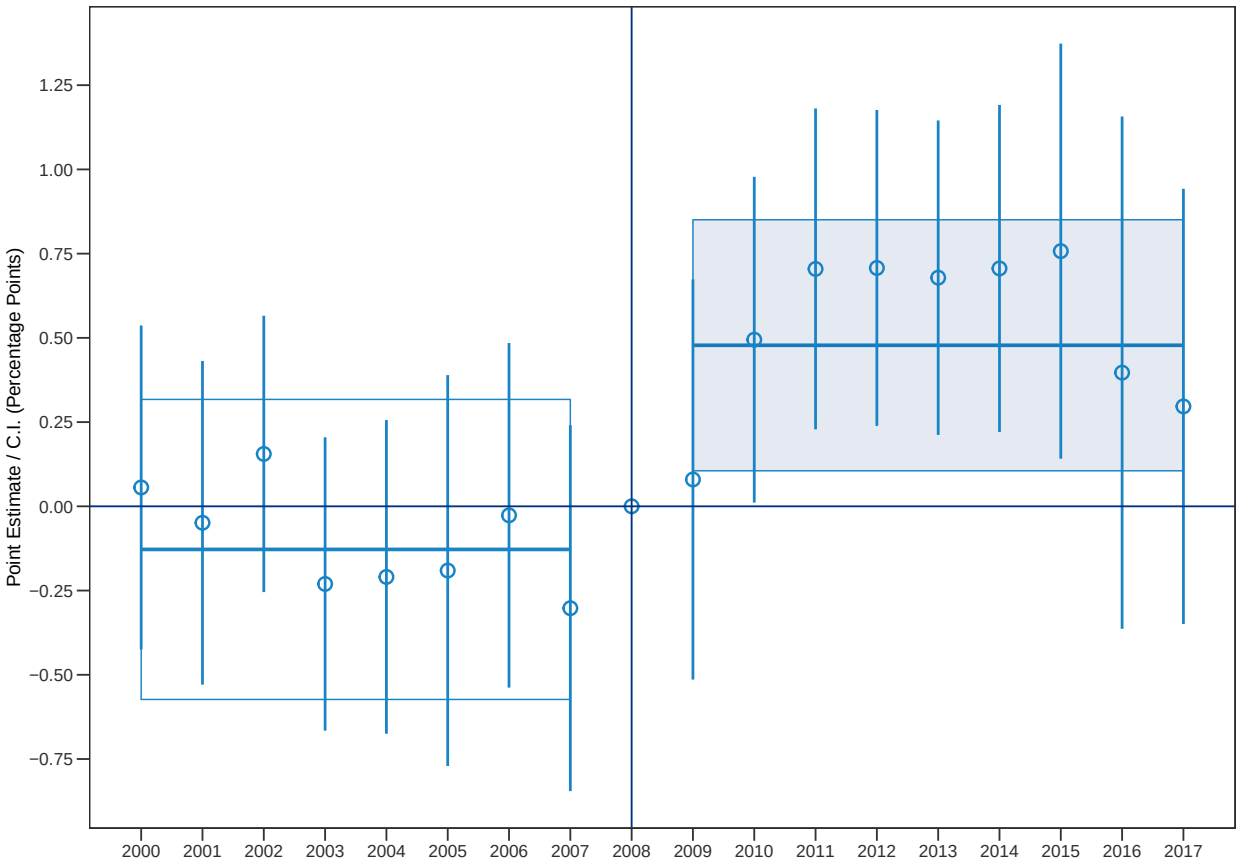
Notes: This table shows ... XXX.

Figure 24: Event Study Plot: Populist Party - Continuous Treatment (without individual FE)



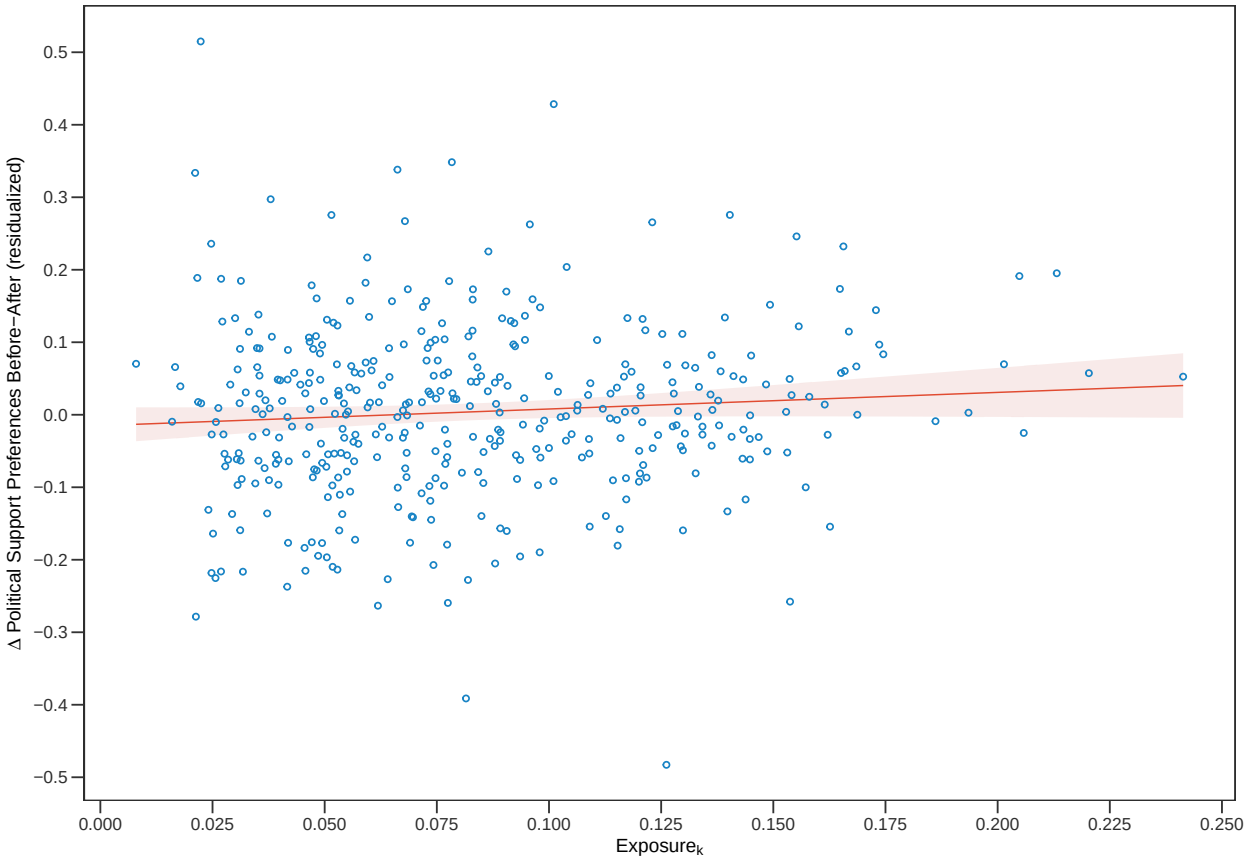
Notes: This table shows ... XXX.

Figure 25: Event Study Plot: Populist Party - Continuous Treatment (with individual FE)



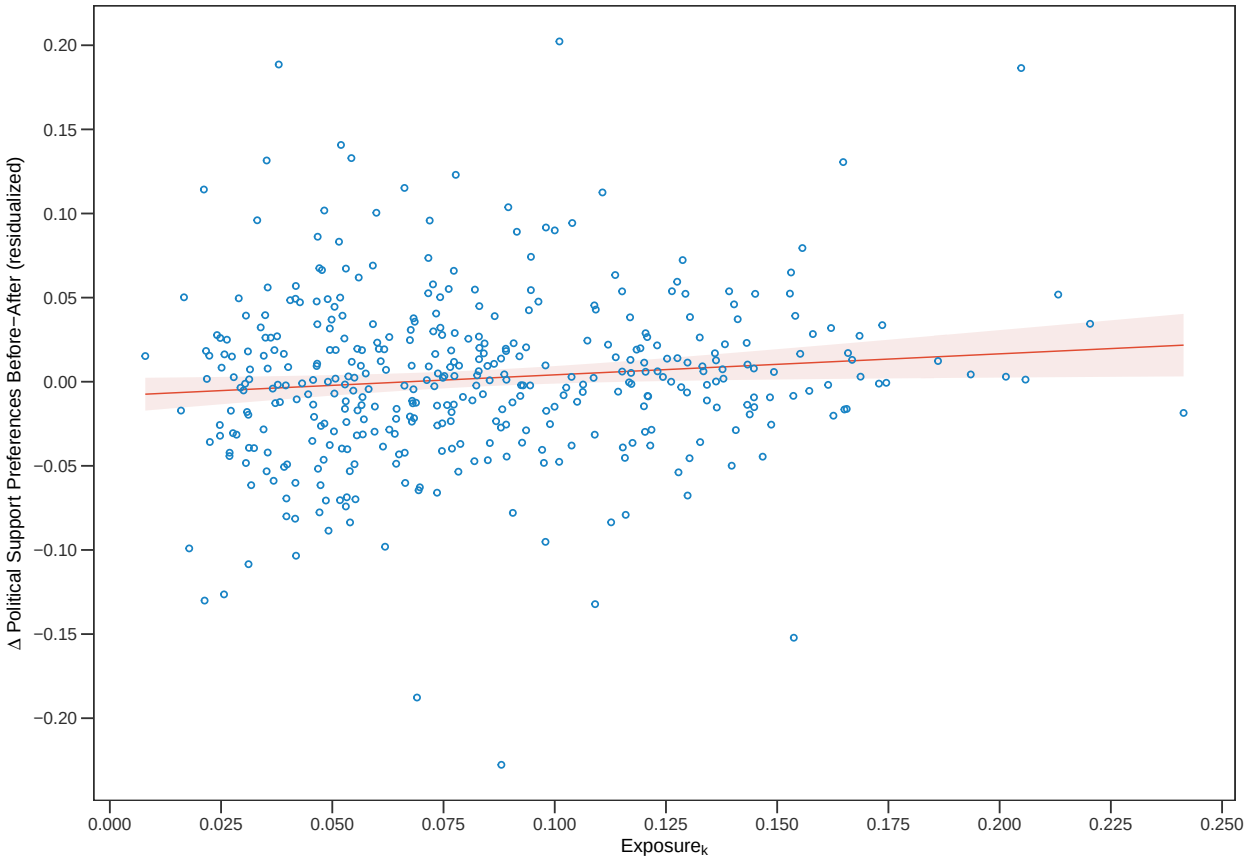
Notes: This table shows ... XXX.

Figure 26: Heterogeneity on Political Support: Continuous Treatment Functional Form (without individual FE) Level-Level



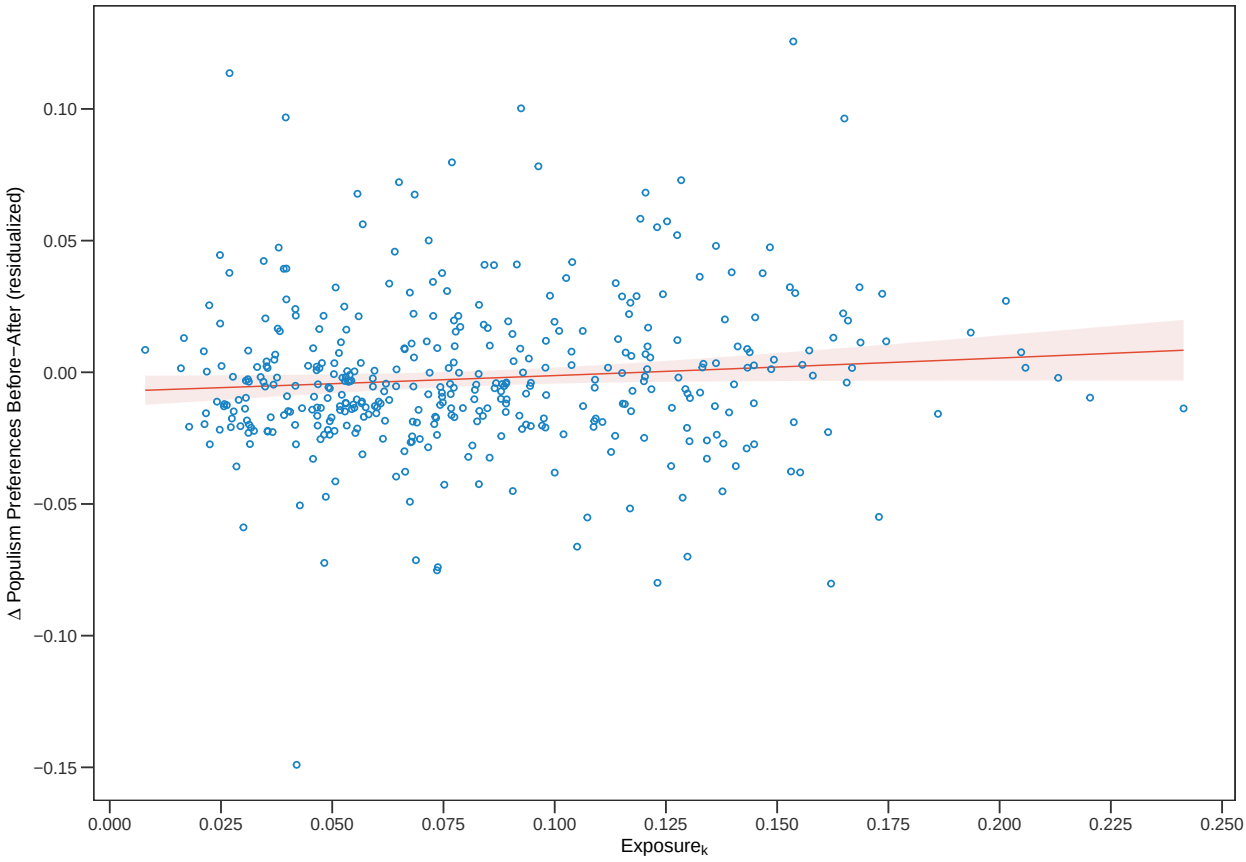
Notes: This table shows ... XXX.

Figure 27: Heterogeneity on Political Support: Continuous Treatment Functional Form (with individual FE) Level-Level



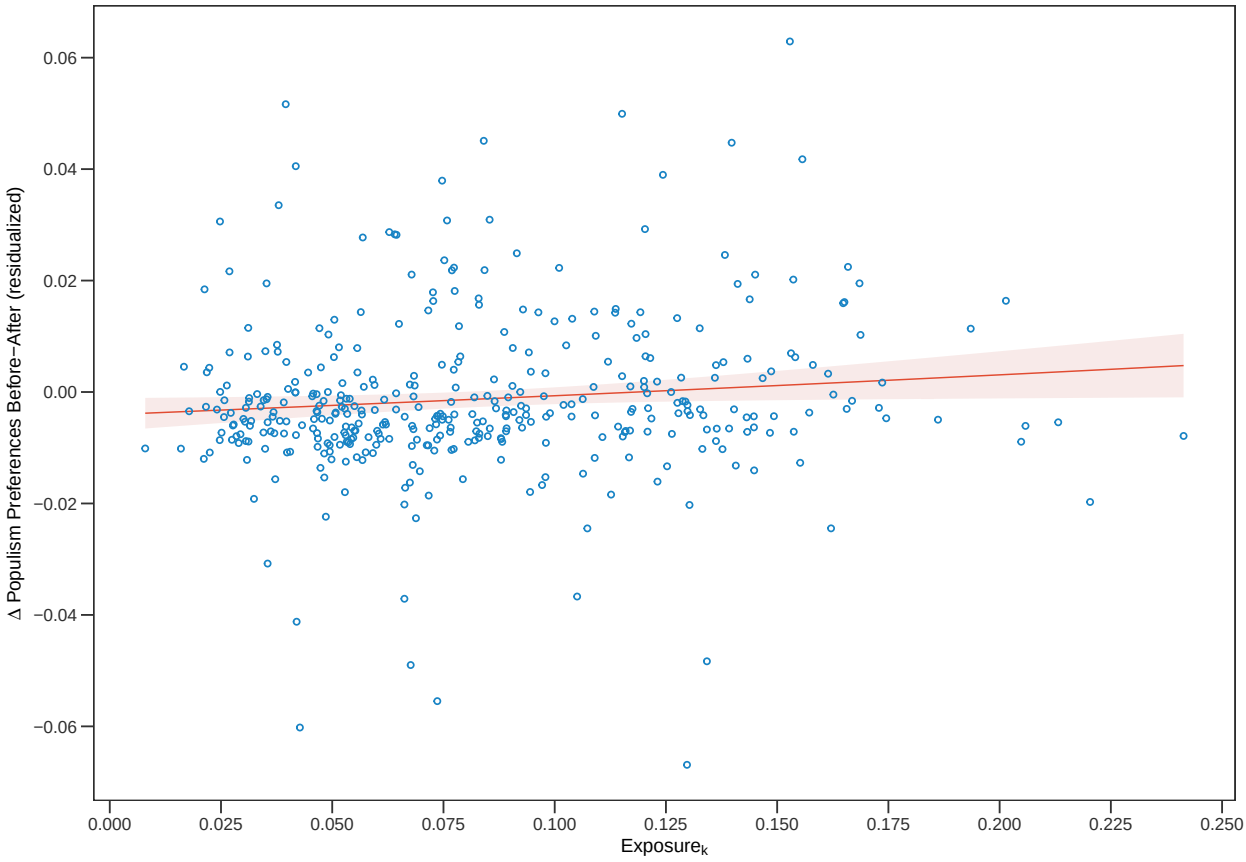
Notes: This table shows ... XXX.

Figure 28: Heterogeneity on Populist Party: Continuous Treatment Functional Form (without individual FE) Level-Level



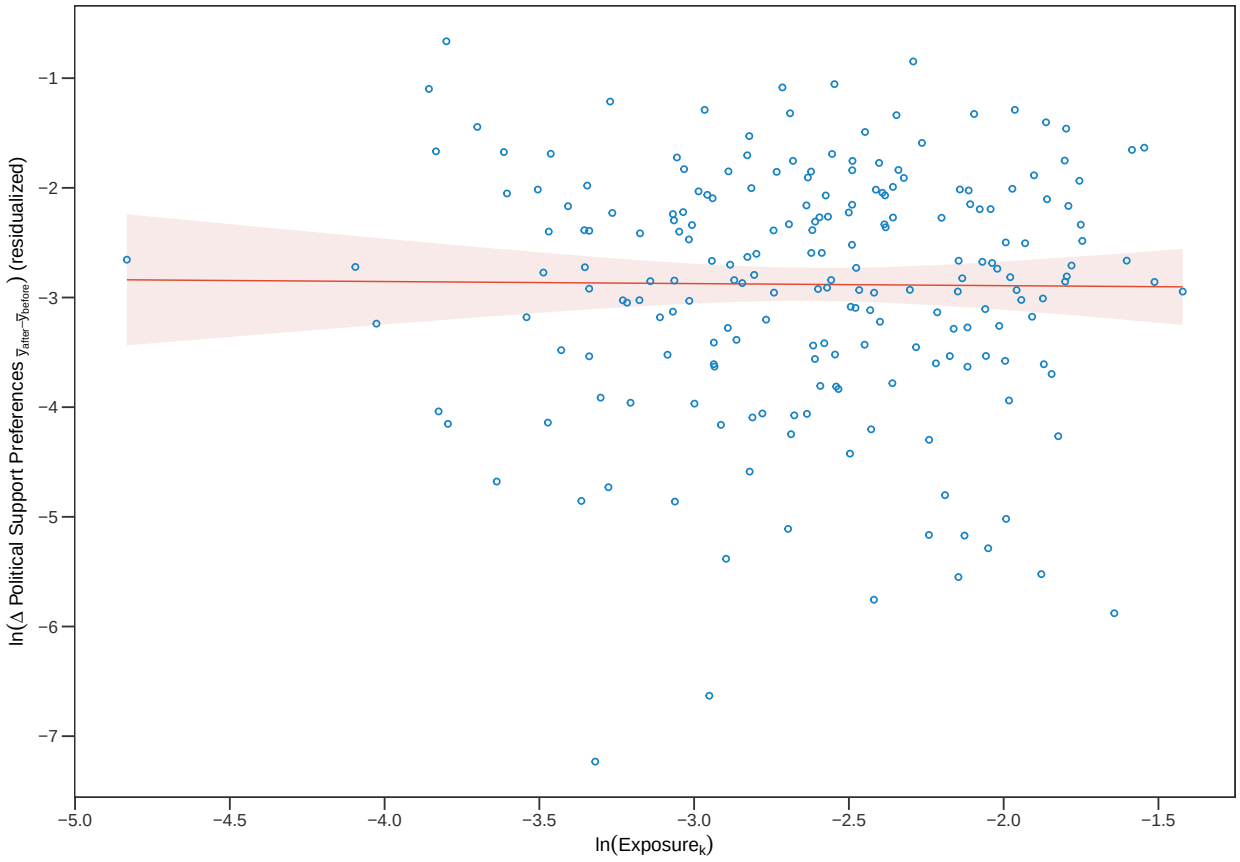
Notes: This table shows ... XXX.

Figure 29: Heterogeneity on Populist Party: Continuous Treatment Functional Form (with individual FE) Level-Level



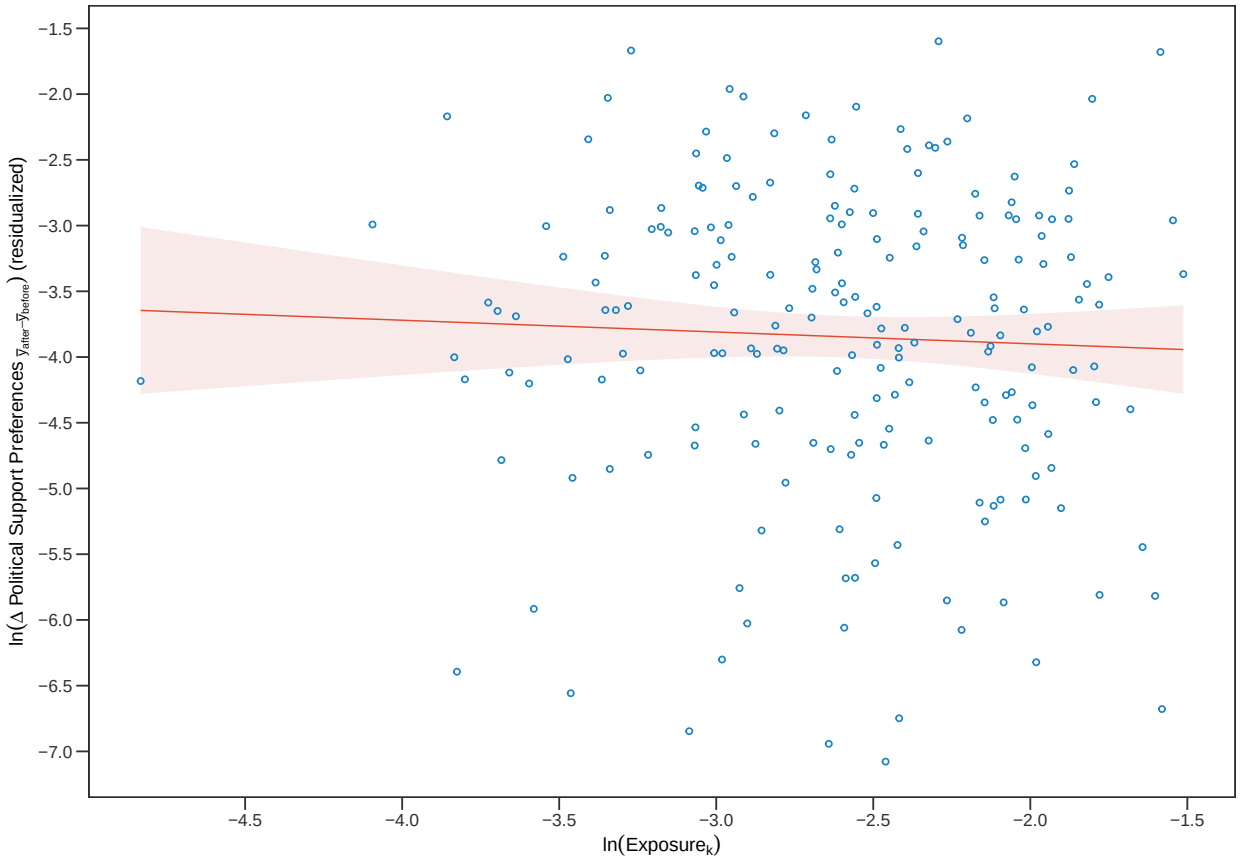
Notes: This table shows ... XXX.

Figure 30: Heterogeneity on Political Support: Continuous Treatment Functional Form (without individual FE) Log-Log



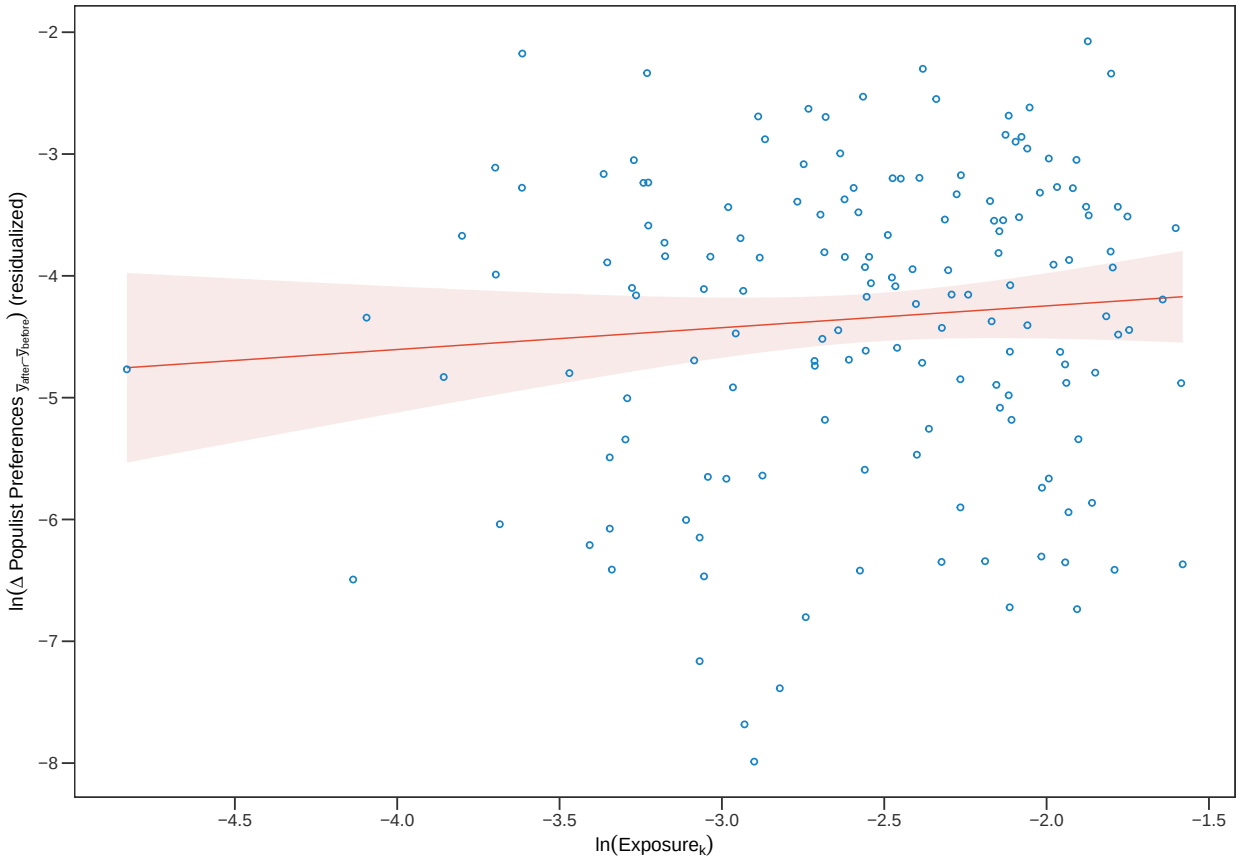
Notes: This table shows ... XXX.

Figure 31: Heterogeneity on Political Support: Continuous Treatment Functional Form (with individual FE) Log-Log



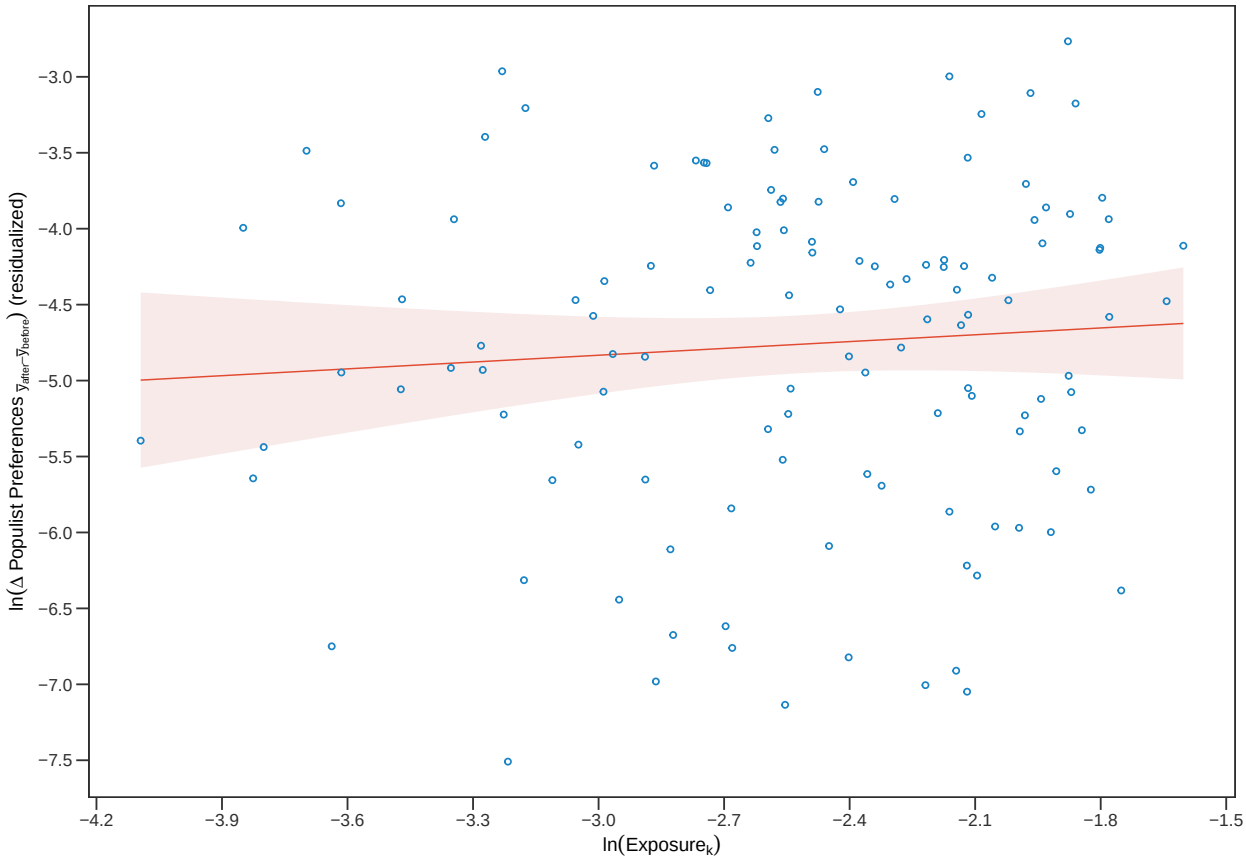
Notes: This table shows ... XXX.

Figure 32: Heterogeneity on Populist Party: Continuous Treatment Functional Form (without individual FE) Log-Log



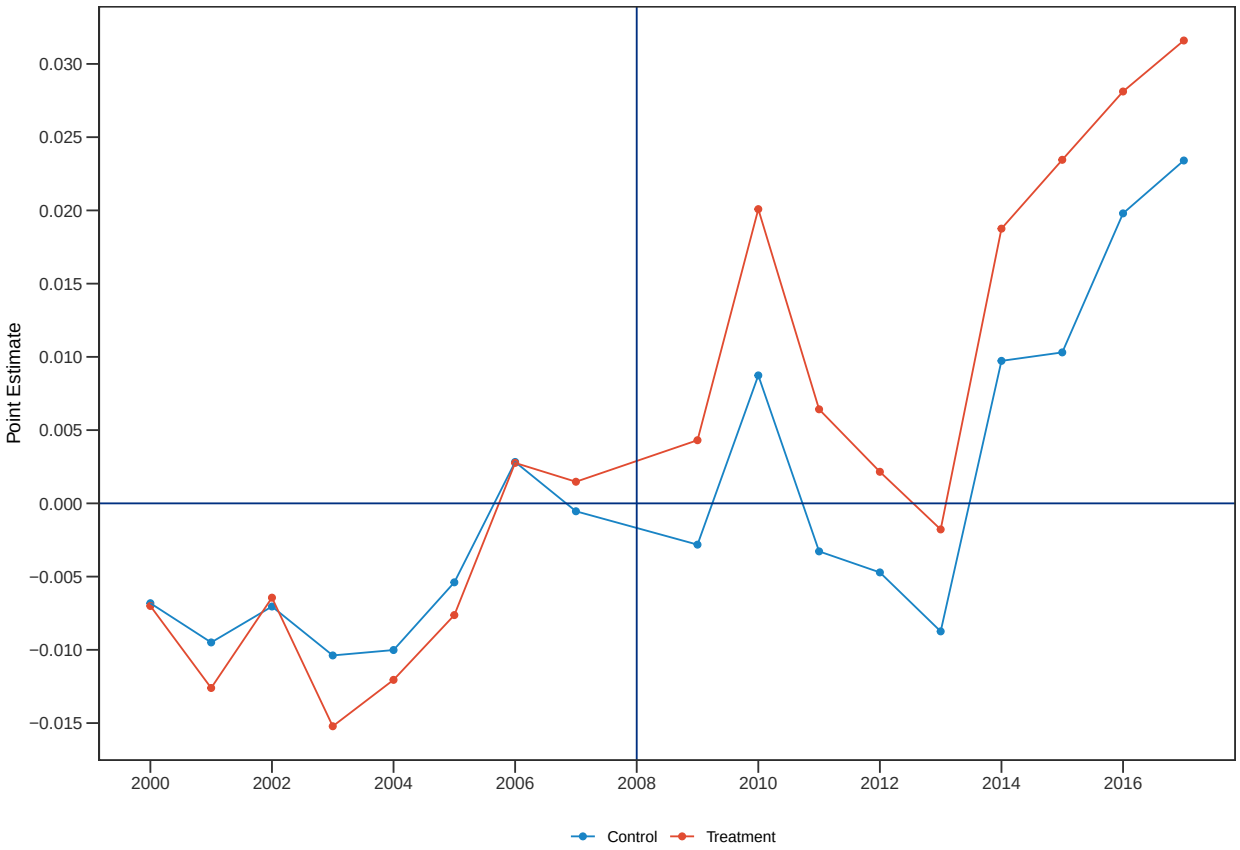
Notes: This table shows ... XXX.

Figure 33: Heterogeneity on Populist Party: Continuous Treatment Functional Form (with individual FE) Log-Log



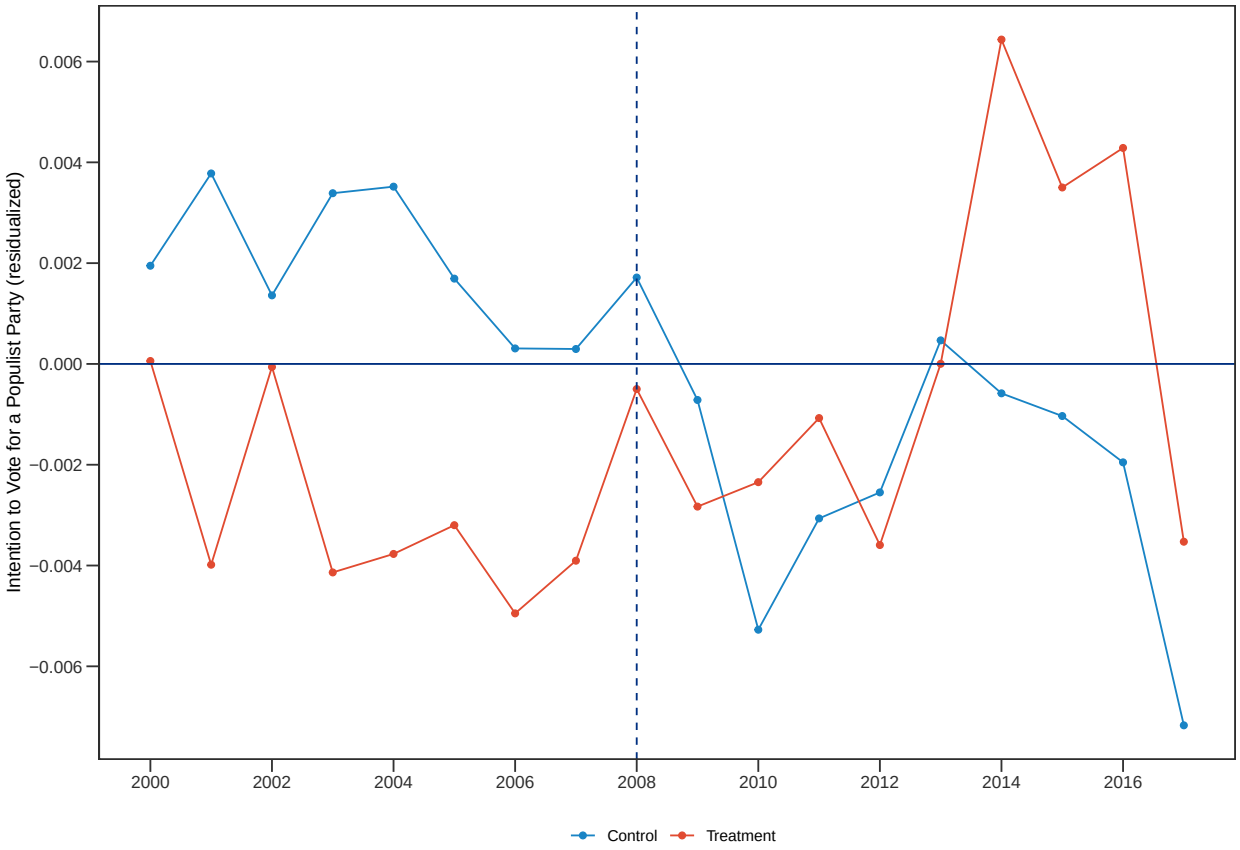
Notes: This table shows ... XXX.

Figure 34: Outcome Trajectories Using Wave Fixed Effects



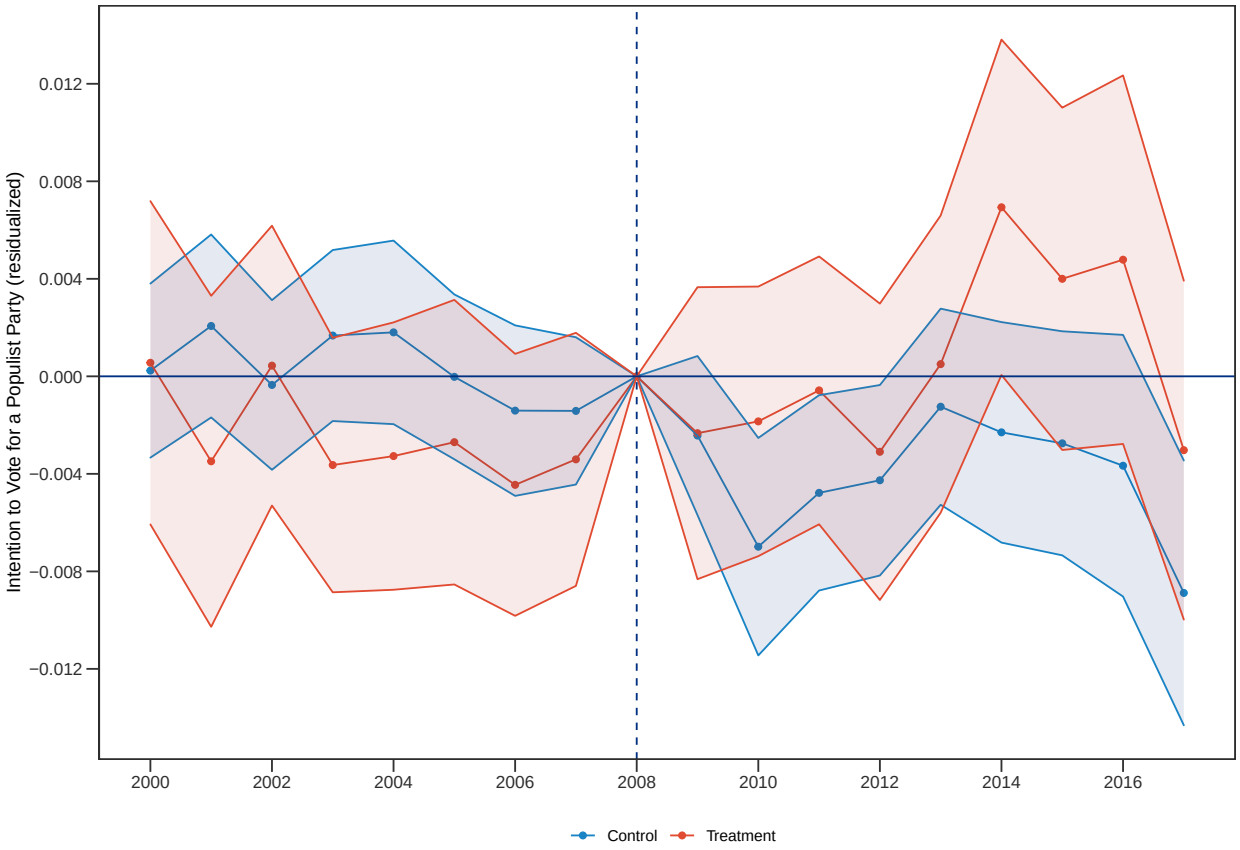
Notes: This table shows ... XXX.

Figure 35: Outcome Trajectories After Residualizing and running regression with dummy for years by treatment group



Notes: This table shows ... XXX.

Figure 36: Outcome Trajectories After Residualizing and running regression with dummy for years by treatment group, reference 2008



Notes: This table shows ... XXX.

Table 6: The Effect of the Credit Shock on Political Preferences: Outcome as Topic Model Scores

	Banking and Financial Crisis				**Populism**				**Combined**			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A: Parliamentary Debates												
$Exposure_k \times Post$	0.054***	-0.027**	0.046***	0.038**	0.131***	0.013	0.107***	0.115***	0.063***	-0.025*	0.054***	0.047***
	(0.018)	(0.014)	(0.017)	(0.017)	(0.023)	(0.011)	(0.024)	(0.024)	(0.019)	(0.014)	(0.018)	(0.017)
Number of Observations	135,547	135,547	125,914	125,914	135,547	135,547	125,914	125,914	135,547	135,547	125,914	125,914
Number of Counties	399	399	398	398	399	399	398	398	399	399	398	398
Outcome Mean (%)	1178.982	1178.982	1179.061	1178.699	373.28	373.28	372.382	372.334	1167.783	1167.783	1167.782	1167.429
$sd\,(Exposure_k)$ (%)	4.76	4.76	4.757	4.759	4.76	4.76	4.757	4.759	4.76	4.76	4.757	4.759
Within R^2	0.010	0.006	0.005	0.006	0.014	0.006	0.008	0.011	0.010	0.006	0.005	0.006
Panel B: Electoral Manifestos												
$Exposure_k \times Post$	-0.038**	0.081***	-0.011	-0.018	0.026	0.147***	0.037**	0.043**	-0.036**	0.091***	-0.009	-0.015
	(0.016)	(0.028)	(0.018)	(0.020)	(0.016)	(0.032)	(0.019)	(0.019)	(0.016)	(0.029)	(0.019)	(0.021)
Number of Observations	37,340	37,340	25,577	25,577	37,340	37,340	25,577	25,577	37,340	37,340	25,577	25,577
Number of Counties	398	398	392	392	398	398	392	392	398	398	392	392
Outcome Mean (%)	448.159	448.159	447.168	447	155.681	155.681	156.556	156.678	457.711	457.711	456.784	456.625
$sd\,(Exposure_k)$ (%)	4.756	4.756	4.751	4.753	4.756	4.756	4.751	4.753	4.756	4.756	4.751	4.753
Within R^2	0.049	0.046	0.002	0.004	0.041	0.042	0.002	0.002	0.052	0.049	0.001	0.004
County-Level FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual FE	No	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional Controls	Yes	No	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes
County Time Trends	No	Yes	No	No	No	Yes	No	No	No	Yes	No	No

Notes: This table shows ... XXX.

Table 7: The Effect of the Credit Shock on Political Preferences: Outcome as Dictionary Scores

	Banking and Financial Crisis				**Populism**				**Combined**			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A: Parliamentary Debates												
$Exposure_k \times Post$	0.039***	0.018***	0.027***	0.030***	0.130***	0.007	0.104***	0.111***	0.053***	0.019***	0.038***	0.042***
	(0.005)	(0.006)	(0.007)	(0.007)	(0.024)	(0.011)	(0.023)	(0.023)	(0.007)	(0.007)	(0.010)	(0.009)
Number of Observations	135,547	135,547	125,914	125,914	135,547	135,547	125,914	125,914	135,547	135,547	125,914	125,914
Number of Counties	399	399	398	398	399	399	398	398	399	399	398	398
Outcome Mean (%)	340.635	340.635	341.458	341.01	418.114	418.114	417.262	417.216	380.753	380.753	381.461	381.017
$sd\,(Exposure_k)$ (%)	4.76	4.76	4.757	4.759	4.76	4.76	4.757	4.759	4.76	4.76	4.757	4.759
Within R^2	0.037	0.033	0.003	0.004	0.015	0.007	0.008	0.011	0.032	0.027	0.004	0.006
Panel B: Electoral Manifestos												
$Exposure_k \times Post$	0.146***	0.214***	0.171***	0.171***	0.003	0.117***	0.029	0.032	0.145***	0.229***	0.173***	0.174***
	(0.028)	(0.041)	(0.035)	(0.036)	(0.016)	(0.034)	(0.020)	(0.020)	(0.029)	(0.044)	(0.036)	(0.037)
Number of Observations	37,340	37,340	25,577	25,577	37,340	37,340	25,577	25,577	37,340	37,340	25,577	25,577
Number of Counties	398	398	392	392	398	398	392	392	398	398	392	392
Outcome Mean (%)	269.169	269.169	269.812	269.671	156.516	156.516	157.233	157.347	289.319	289.319	290.059	289.936
$sd\,(Exposure_k)$ (%)	4.756	4.756	4.751	4.753	4.756	4.756	4.751	4.753	4.756	4.756	4.751	4.753
Within R^2	0.019	0.014	0.015	0.015	0.052	0.053	0.002	0.002	0.021	0.017	0.014	0.014
County-Level FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual FE	No	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional Controls	Yes	No	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes
County Time Trends	No	Yes	No	No	No	Yes	No	No	No	Yes	No	No

Notes: This table shows ... XXX.

References

Huber, Kilian. 2018. "Disentangling the Effects of a Banking Crisis: Evidence from German Firms and Counties." *American Economic Review*, 108(3): 868–898.