

SUPPLEMENT TO “DEMOCRACY, REDISTRIBUTION, AND
POLITICAL PARTICIPATION: EVIDENCE FROM SWEDEN 1919–1938”
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BY BJÖRN TYREFORS HINNERICH AND PER PETTERSSON-LIDBOM

IN THIS SUPPLEMENT, we present the results from a number of specification checks regarding bandwidths and order of polynomial (Section A.1), imposing the same slope on both sides of the RD threshold (Section A.2), expressing the outcome (welfare spending per capita in logarithmic form) in levels (Section A.3) and as a total (Section A.4), using collapsed data (Section A.5), graphical evidence of any discontinuities in pre-treatment characteristics at the threshold (Section A.6), and histograms over the forcing variables (Section A.7).

A.1. BANDWIDTHS AND THE ORDER OF THE POLYNOMIAL

In this section, we show the results for bandwidths in the range 20–300 and for a different order of the polynomial of the forcing variable (first–third). Table A.I shows the results for the forcing variable population in year $t - 1$, while Table A.II displays the results for the forcing variable population in 1918. The results from these tables should be compared to the corresponding tables in the published article, namely, Table III and Table V, respectively.

Starting with population in year $t - 1$ as the forcing variable, Table A.I reveals that most of the reduced-form estimates in Panel A are of similar magnitudes to those estimates in Panel A of Table III, that is, 8–10 percent. However, some of the estimates in Table A.I are rather imprecisely measured due to sampling uncertainty and overparameterization of the forcing variable. Importantly, the estimates from local linear regression with smaller bandwidths (<100) are almost identical to the estimates allowing for more flexible polynomial specifications and with larger bandwidths (>120). Very similar conclusions can also be made about the other results in Table A.I, that is, the first-stage specifications in Panel B and the IV specifications in Panel C, and the corresponding results in Table III. For example, the IV estimates in Panel C from local linear regression with smaller bandwidths (<100) are in the same range, that is, $[-0.8, -0.5]$, as the IV estimates with larger bandwidths (>120) and more flexible polynomial specifications. Turning to the results from the other forcing variable, population size in 1918, we can also note that the results published in the article (Table V) are broadly similar to the results in Table A.II where we allow for more flexible polynomial specifications and larger bandwidths. Thus, we can conclude that the results in the published article are robust to issues about bandwidths and the order of the polynomial.

TABLE A.I
 LOCAL ESTIMATES FROM THE REGRESSION-DISCONTINUITY DESIGN WHEN THE FORCING VARIABLE IS POPULATION IN YEAR $t - 1$ ^a

Order of the Polynomial	Bandwidths:	20	40	60	80	100	120	150	200	250	300
Panel A: Reduced-form relationship											
Linear		-0.092** (0.037)	-0.093*** (0.028)	-0.101*** (0.031)	-0.114*** (0.029)	-0.089*** (0.027)	-0.083*** (0.025)	-0.072*** (0.025)	-0.078*** (0.029)	-0.064** (0.028)	-0.076*** (0.027)
Quadratic		-0.024 (0.024)	-0.037 (0.024)	-0.078** (0.034)	-0.087** (0.039)	-0.112*** (0.036)	-0.106*** (0.036)	-0.096*** (0.032)	-0.079** (0.032)	-0.087*** (0.030)	-0.074** (0.031)
Cubic		-0.066 (0.059)	-0.050*** (0.015)	-0.048* (0.025)	-0.064 (0.042)	-0.064 (0.044)	-0.089** (0.040)	-0.098** (0.042)	-0.095** (0.039)	-0.093** (0.038)	-0.098*** (0.033)
Panel B: First-stage relationship											
Linear		0.161*** (0.038)	0.183*** (0.039)	0.167*** (0.038)	0.148*** (0.034)	0.155*** (0.034)	0.168*** (0.035)	0.195*** (0.036)	0.223*** (0.038)	0.274*** (0.039)	0.328*** (0.039)
Quadratic		0.103** (0.046)	0.134*** (0.043)	0.172*** (0.043)	0.172*** (0.044)	0.150*** (0.041)	0.130*** (0.040)	0.137*** (0.039)	0.152*** (0.039)	0.142*** (0.039)	0.149*** (0.040)
Cubic		0.014 (0.030)	0.087** (0.043)	0.138*** (0.043)	0.170*** (0.048)	0.188*** (0.053)	0.186*** (0.049)	0.139*** (0.044)	0.121*** (0.041)	0.137*** (0.041)	0.130*** (0.041)
Panel C: Wald or IV estimates											
Linear		-0.574** (0.230)	-0.511*** (0.173)	-0.604*** (0.207)	-0.771*** (0.241)	-0.572*** (0.191)	-0.492*** (0.165)	-0.370*** (0.134)	-0.348*** (0.135)	-0.233** (0.101)	-0.230** (0.083)
Quadratic		-0.234 (0.157)	-0.277 (0.169)	-0.454** (0.196)	-0.504** (0.224)	-0.748*** (0.274)	-0.815** (0.337)	-0.703*** (0.273)	-0.521** (0.227)	-0.610** (0.253)	-0.497** (0.228)
Cubic		-4.565 (10.346)	-0.571*** (0.204)	-0.345** (0.134)	-0.377 (0.240)	-0.340 (0.225)	-0.479** (0.207)	-0.701** (0.320)	-0.781** (0.371)	-0.681** (0.313)	-0.752** (0.322)
Number of municipalities		158	193	232	252	274	296	344	419	483	557
Number of observations		520	1,021	1,535	2,074	2,608	3,113	3,893	5,331	6,790	8,120

^aEach entry is a separate local regression with a uniform kernel. All specifications allow for the RD slope to differ across the threshold, and include a full set of pre-treatment covariates and a full set of time fixed effects. The dependent variable in Panels A and C is per capita welfare spending in logarithmic form. The dependent variable in Panel B is an indicator for having direct democracy rather than representative democracy. Panel C is the Wald estimator, the ratio between the reduced-form effect and the first-stage estimate. The forcing variable is population in year $t - 1$. See the text for a description of included pre-treatment covariates. Standard errors, clustered at both the municipality level and the running variable, are within parentheses (Cameron et al. (2011)). Coefficients significantly different from zero are denoted by the following system: *10%, **5%, and ***1%.

TABLE A.II
 LOCAL ESTIMATES FROM THE REGRESSION-DISCONTINUITY DESIGN WHEN THE FORCING VARIABLE IS POPULATION IN 1918^a

Order of the Polynomial	Bandwidths:	20	30	40	50	60	100	150	200	250	300
Panel A: Reduced-form relationship											
Linear		-0.461** (0.216)	-0.412*** (0.145)	-0.422*** (0.109)	-0.379*** (0.102)	-0.272*** (0.097)	-0.101 (0.089)	-0.117* (0.069)	-0.132** (0.061)	-0.144*** (0.055)	-0.131** (0.053)
Quadratic		-1.442*** (0.309)	-0.582** (0.278)	-0.406* (0.211)	-0.415** (0.172)	-0.276* (0.150)	-0.192 (0.123)	-0.184* (0.102)	-0.167* (0.094)	-0.176** (0.082)	-0.172** (0.074)
Cubic		-0.381 (0.333)	-0.842** (0.356)	-0.875*** (0.298)	-0.483* (0.279)	-0.242 (0.242)	-0.198 (0.183)	-0.215* (0.130)	-0.217* (0.120)	-0.210* (0.109)	-0.206** (0.101)
Panel B: First-stage relationship											
Linear		0.453*** (0.130)	0.430*** (0.099)	0.427*** (0.102)	0.427*** (0.102)	0.472*** (0.094)	0.527*** (0.094)	0.580*** (0.083)	0.579*** (0.071)	0.538*** (0.060)	0.585*** (0.057)
Quadratic		0.337* (0.184)	0.530*** (0.181)	0.327* (0.172)	0.310** (0.142)	0.303** (0.119)	0.422*** (0.113)	0.446*** (0.111)	0.530*** (0.101)	0.583*** (0.097)	0.516*** (0.088)
Cubic		0.445 (0.394)	0.602*** (0.205)	0.315 (0.239)	0.526** (0.247)	0.332* (0.179)	0.265** (0.133)	0.384*** (0.132)	0.432*** (0.121)	0.460*** (0.112)	0.553*** (0.114)
Panel C: Wald or IV estimates											
Linear		-1.017 (0.630)	-0.958** (0.453)	-1.000*** (0.370)	-0.886*** (0.315)	-0.577** (0.233)	-0.191 (0.167)	-0.202* (0.122)	-0.228** (0.109)	-0.267** (0.106)	-0.224** (0.092)
Quadratic		-4.282 (2.676)	-1.099 (0.691)	-1.241 (0.968)	-1.336 (0.853)	-0.912 (0.601)	-0.455 (0.291)	-0.413* (0.236)	-0.315* (0.179)	-0.302** (0.147)	-0.333** (0.154)
Cubic		-0.855 (0.817)	-1.398* (0.818)	-2.777 (2.385)	-0.918 (0.768)	-0.729 (0.821)	-0.749 (0.730)	-0.560 (0.364)	-0.504* (0.287)	-0.457* (0.252)	-0.372* (0.191)
Number of municipalities		35	43	54	64	79	131	194	278	352	415
Number of observations		239	295	372	439	544	907	1,347	1,934	2,451	2,890

^aEach entry is a separate local regression with a uniform kernel. All specifications allow for the RD slope to differ across the threshold, and include a full set of pre-treatment covariates and a full set of time fixed effects. The dependent variable in Panels A and C is per capita welfare spending in logarithmic form. The dependent variable in Panel B is an indicator for having direct democracy rather than representative democracy. Panel C is the Wald estimator, the ratio between the reduced-form effect and the first-stage estimate. The forcing variable is population in 1918. See the text for a description of included pre-treatment covariates. Standard errors, clustered at both the municipality level and the running variable, are within parentheses (Cameron et al. (2011)). Coefficients significantly different from zero are denoted by the following system: *10%, **5%, and ***1%.

A.2. IMPOSING THE SAME SLOPE ON BOTH SIDES OF THE RD THRESHOLD

In this section, we show results from specifications where we impose the restriction of the same slope on both sides of the RD threshold. Table [A.III](#) shows the results for the forcing variable population size in $t - 1$, while Table [A.IV](#) displays the results for the forcing variable population in 1918. Once again, the published results in Tables III and V are similar to the corresponding results in Tables [A.III](#) and [A.IV](#). As a result, the published results are insensitive to this type of specification of the forcing variable.

TABLE A.III
 LOCAL ESTIMATES FROM THE REGRESSION-DISCONTINUITY DESIGN WHEN THE FORCING VARIABLE IS POPULATION IN YEAR $t - 1$ ^a

Order of the Polynomial	Bandwidths:	20	40	60	80	100	120	150	200	250	300
Panel A: Reduced-form relationship											
Linear		-0.089** (0.038)	-0.094*** (0.030)	-0.101*** (0.032)	-0.113*** (0.030)	-0.087*** (0.028)	-0.084*** (0.026)	-0.072*** (0.025)	-0.077*** (0.029)	-0.063** (0.028)	-0.075*** (0.027)
Quadratic		-0.087** (0.034)	-0.092*** (0.028)	-0.101*** (0.031)	-0.114*** (0.030)	-0.089*** (0.027)	-0.083*** (0.025)	-0.073*** (0.025)	-0.078*** (0.029)	-0.064** (0.028)	-0.075*** (0.027)
Cubic		-0.040 (0.027)	-0.041 (0.026)	-0.083** (0.034)	-0.093** (0.036)	-0.113*** (0.033)	-0.101*** (0.033)	-0.088*** (0.029)	-0.078*** (0.029)	-0.079*** (0.030)	-0.070** (0.030)
Panel B: First-stage relationship											
Linear		0.159*** (0.039)	0.183*** (0.042)	0.169*** (0.040)	0.141*** (0.039)	0.148*** (0.040)	0.172*** (0.041)	0.195*** (0.042)	0.219*** (0.045)	0.260*** (0.046)	0.304*** (0.045)
Quadratic		0.158*** (0.039)	0.180*** (0.041)	0.164*** (0.039)	0.147*** (0.035)	0.156*** (0.035)	0.168*** (0.036)	0.198*** (0.037)	0.228*** (0.039)	0.279*** (0.040)	0.332*** (0.040)
Cubic		0.111** (0.054)	0.144*** (0.046)	0.171*** (0.043)	0.164*** (0.042)	0.143*** (0.040)	0.128*** (0.039)	0.142*** (0.039)	0.169*** (0.040)	0.168*** (0.042)	0.181*** (0.044)
Panel C: Wald or IV estimates											
Linear		-0.560** (0.234)	-0.511*** (0.172)	-0.598*** (0.199)	-0.797*** (0.252)	-0.588*** (0.199)	-0.485*** (0.160)	-0.370*** (0.134)	-0.352** (0.137)	-0.243** (0.107)	-0.248*** (0.091)
Quadratic		-0.548** (0.216)	-0.512*** (0.176)	-0.612*** (0.212)	-0.772*** (0.240)	-0.572*** (0.189)	-0.493*** (0.164)	-0.366*** (0.131)	-0.344*** (0.132)	-0.229** (0.099)	-0.225*** (0.082)
Cubic		-0.364* (0.209)	-0.287* (0.163)	-0.482** (0.197)	-0.570** (0.227)	-0.791*** (0.272)	-0.790*** (0.304)	-0.622*** (0.226)	-0.460** (0.180)	-0.474** (0.190)	-0.384** (0.169)
Number of municipalities		158	193	232	252	274	296	344	419	483	557
Number of observations		520	1,021	1,535	2,074	2,608	3,113	3,893	5,331	6,790	8,120

^aEach entry is a separate local regression with a uniform kernel. All specifications constrain the RD slope to be the same across the threshold, and include a full set of pre-treatment covariates and a full set of time fixed effects. The dependent variable in Panels A and C is per capita welfare spending in logarithmic form. The dependent variable in Panel B is an indicator for having direct democracy rather than representative democracy. Panel C is the Wald estimator, the ratio between the reduced-form effect and the first-stage estimate. The forcing variable is population in year $t - 1$. See the text for a description of included pre-treatment covariates. Standard errors, clustered at both the municipality level and the running variable, are within parentheses (Cameron et al. (2011)). Coefficients significantly different from zero are denoted by the following system: *10%, **5%, and ***1%.

TABLE A.IV
 LOCAL ESTIMATES FROM THE REGRESSION-DISCONTINUITY DESIGN WHEN THE FORCING VARIABLE IS POPULATION IN 1918^a

Order of the Polynomial	Bandwidths:	20	30	40	50	60	100	150	200	250	300
Panel A: Reduced-form relationship											
Linear		-0.457** (0.216)	-0.404*** (0.148)	-0.419*** (0.116)	-0.375*** (0.103)	-0.274*** (0.102)	-0.105 (0.091)	-0.106 (0.073)	-0.126** (0.063)	-0.137** (0.056)	-0.129** (0.053)
Quadratic		-0.450** (0.218)	-0.398*** (0.142)	-0.411*** (0.109)	-0.373*** (0.102)	-0.271*** (0.096)	-0.097 (0.089)	-0.117* (0.070)	-0.130** (0.062)	-0.141** (0.055)	-0.129** (0.053)
Cubic		-1.327*** (0.221)	-0.442* (0.227)	-0.379** (0.182)	-0.398*** (0.147)	-0.280** (0.126)	-0.171 (0.113)	-0.167* (0.093)	-0.152* (0.083)	-0.164** (0.074)	-0.153** (0.067)
Panel B: First-stage relationship											
Linear		0.438*** (0.134)	0.405*** (0.116)	0.420*** (0.105)	0.419*** (0.106)	0.490*** (0.091)	0.542*** (0.090)	0.593*** (0.074)	0.604*** (0.065)	0.569*** (0.059)	0.598*** (0.057)
Quadratic		0.416*** (0.138)	0.370*** (0.104)	0.415*** (0.107)	0.411*** (0.107)	0.473*** (0.098)	0.528*** (0.095)	0.585*** (0.081)	0.588*** (0.069)	0.550*** (0.058)	0.590*** (0.055)
Cubic		0.341* (0.182)	0.451*** (0.172)	0.333** (0.151)	0.322** (0.127)	0.323*** (0.117)	0.459*** (0.108)	0.485*** (0.101)	0.561*** (0.086)	0.595*** (0.079)	0.543*** (0.073)
Panel C: Wald or IV estimates											
Linear		-1.043 (0.662)	-0.999** (0.484)	-0.998*** (0.375)	-0.895*** (0.324)	-0.559** (0.228)	-0.194 (0.166)	-0.179 (0.124)	-0.208* (0.107)	-0.241** (0.102)	-0.216** (0.091)
Quadratic		-1.083 (0.733)	-1.051** (0.535)	-0.991*** (0.381)	-0.907*** (0.341)	-0.573** (0.232)	-0.184 (0.168)	-0.200 (0.122)	-0.221** (0.108)	-0.256** (0.104)	-0.215** (0.090)
Cubic		-3.892* (2.315)	-0.979 (0.680)	-1.139 (0.764)	-1.238* (0.670)	-0.866* (0.493)	-0.372 (0.248)	-0.344* (0.195)	-0.270* (0.151)	-0.275** (0.129)	-0.283** (0.129)
Number of municipalities		35	43	54	64	79	131	194	278	352	415
Number of observations		239	295	372	439	544	907	1,347	1,934	2,451	2,890

^aEach entry is a separate local regression with a uniform kernel. All specifications constrain the RD slope to be the same across the threshold, and include a full set of pre-treatment covariates and a full set of time fixed effects. The dependent variable in Panels A and C is per capita welfare spending in logarithmic form. The dependent variable in Panel B is an indicator for having direct democracy rather than representative democracy. Panel C is the Wald estimator, the ratio between the reduced-form effect and the first-stage estimate. The forcing variable is population in 1918. See the text for a description of included pre-treatment covariates. Standard errors, clustered at both the municipality level and the running variable, are within parentheses (Cameron et al. (2011)). Coefficients significantly different from zero are denoted by the following system: *10%, **5%, and ***1%.

A.3. PER CAPITA WELFARE SPENDING

In this section, we show the results when the dependent variable—per capita welfare spending—is expressed in levels rather than in logarithmic form. Table A.V shows the results for the forcing variable population size in $t - 1$, while Table A.VI displays the results for the forcing variable population in 1918. To interpret the estimates in the tables, note that the mean of per capita welfare spending is 6.31. Thus, to get the percentage change, we need to divide the estimates in the tables by 6.31. For example, many of the reduced-form estimates in Panel A of Table A.V are about -0.6 , which translates into an effect of about 10 percent ($-0.6/6.31$). This effect is of the same magnitude as the reduced-form effect in Panel A of Table III in the published article. Thus, the results in the article are robust to expressing per capita welfare spending in logarithmic form or in levels.

TABLE A.V
LOCAL LINEAR ESTIMATES FROM THE REGRESSION-DISCONTINUITY DESIGN WHEN THE FORCING VARIABLE IS POPULATION AT TIME $t - 1$ ^a

	Bandwidths:	20	40	60	80	100	120
Panel A: Reduced-form relationship							
Reduced-form effect (no covariates)		-0.595 (0.508)	-0.606 (0.449)	-0.584 (0.360)	-0.727** (0.316)	-0.451* (0.269)	-0.430* (0.246)
Reduced-form effect (including pre-treatment covariates)		-0.415** (0.197)	-0.622** (0.249)	-0.577** (0.259)	-0.667*** (0.242)	-0.505** (0.220)	-0.502** (0.198)
Panel B: First-stage relationship							
First-stage effect (no covariates)		0.140*** (0.030)	0.168*** (0.036)	0.165*** (0.037)	0.143*** (0.034)	0.154*** (0.034)	0.169*** (0.036)
First-stage effect (including pre-treatment covariates)		0.161*** (0.038)	0.183*** (0.039)	0.167*** (0.038)	0.148*** (0.034)	0.155*** (0.034)	0.168*** (0.035)
Panel C: Wald or IV estimates							
Treatment effect (no covariates)		-4.262 (3.823)	-3.612 (2.749)	-3.539 (2.227)	-5.069** (2.365)	-2.937 (1.801)	-2.544* (1.500)
Treatment effect (including pre-treatment covariates)		-2.584** (1.039)	-3.402** (1.419)	-3.463** (1.635)	-4.511** (1.795)	-3.246** (1.503)	-2.984** (1.293)
Number of local governments		158	193	232	252	274	296
Number of observations		520	1,021	1,535	2,074	2,608	3,113

^aEach entry is a separate local linear regression with a uniform kernel. All specifications allow for the RD slope to differ across the threshold, and include a full set of pre-treatment covariates and a full set of time fixed effects. The dependent variable in Panels A and C is per capita welfare spending. The dependent variable in Panel B is an indicator for having direct democracy rather than representative democracy. Panel C is the Wald estimator, the ratio between the reduced-form effect and the first-stage estimate. The forcing variable is population in year $t - 1$. See the text for a description of included pre-treatment covariates. Standard errors, clustered at both the municipality level and the running variable, are within parentheses (Cameron et al. (2011)). Coefficients significantly different from zero are denoted by the following system: *10%, **5%, and ***1%.

TABLE A.VI
 LOCAL LINEAR ESTIMATES FROM THE REGRESSION-DISCONTINUITY DESIGN WHEN THE
 FORCING VARIABLE IS POPULATION IN 1918^a

	Bandwidths:	20	30	40	50	60
Panel A: Reduced-form relationship						
Reduced-form effect (no covariates)		-1.961 (1.476)	-1.809 (1.209)	-1.502 (1.019)	-1.238 (0.957)	-1.239 (0.873)
Reduced-form effect (including pre-treatment covariates)		-1.315 (1.172)	-1.624** (0.773)	-1.818*** (0.583)	-1.469*** (0.558)	-1.083** (0.496)
Panel B: First-stage relationship						
First-stage effect (no covariates)		0.420*** (0.129)	0.319*** (0.114)	0.421*** (0.116)	0.392*** (0.108)	0.452*** (0.106)
First-stage effect (including pre-treatment covariates)		0.453*** (0.130)	0.430*** (0.099)	0.422*** (0.102)	0.427*** (0.102)	0.472*** (0.094)
Panel C: Wald or IV estimates						
Treatment effect (no covariates)		-4.665 (3.721)	-5.673 (3.769)	-3.568 (2.390)	-3.157 (2.395)	-2.739 (1.892)
Treatment effect (including pre-treatment covariates)		-2.902 (2.909)	-3.773* (2.171)	-4.304** (1.829)	-3.437** (1.536)	-2.297** (1.150)
Number of municipalities		35	43	54	64	79
Number of observations		239	295	372	439	544

^aEach entry is a separate local linear regression with a uniform kernel. All specifications allow for the RD slope to differ across the threshold, and include a full set of pre-treatment covariates and a full set of time fixed effects. The dependent variable in Panels A and C is per capita welfare spending. The dependent variable in Panel B is an indicator for having direct democracy rather than representative democracy. Panel C is the Wald estimator, the ratio between the reduced-form effect and the first-stage estimate. The forcing variable is population in 1918. See the text for a description of included pre-treatment covariates. Standard errors, clustered at both the municipality level and the running variable, are within parentheses (Cameron et al. (2011)). Coefficients significantly different from zero are denoted by the following system: *10%, **5%, and ***1%.

A.4. TOTAL WELFARE SPENDING

In this section, we show the results when the dependent variable is expressed as total spending rather than in per capita terms. The outcome variable is still expressed in logarithmic form, however. Table A.VII shows the results for the forcing variable population size in $t - 1$, while Table A.VIII displays the results for the forcing variable population in 1918. The results from these tables should be compared to the corresponding tables in the published article, namely, Table III and Table V, respectively. Again, there is little difference between the published results where the outcome variable is expressed in per capita terms and the results presented here.

TABLE A.VII
LOCAL LINEAR ESTIMATES FROM THE REGRESSION-DISCONTINUITY DESIGN WHEN THE FORCING VARIABLE IS POPULATION IN YEAR $t - 1$ ^a

	Bandwidths:	20	40	60	80	100	120
Panel A: Reduced-form relationship							
Reduced-form effect (no covariates)		-0.104*	-0.074	-0.094**	-0.118***	-0.084**	-0.077**
		(0.058)	(0.046)	(0.042)	(0.037)	(0.034)	(0.034)
Reduced-form effect (including pre-treatment covariates)		-0.088**	-0.092***	-0.101***	-0.114***	-0.089***	-0.089***
		(0.037)	(0.029)	(0.031)	(0.029)	(0.027)	(0.027)
Panel B: First-stage relationship							
First-stage effect (no covariates)		0.140***	0.168***	0.165***	0.143***	0.154***	0.169***
		(0.030)	(0.036)	(0.037)	(0.034)	(0.034)	(0.036)
First-stage effect (including pre-treatment covariates)		0.161***	0.183***	0.167***	0.148***	0.155***	0.168***
		(0.038)	(0.039)	(0.038)	(0.034)	(0.034)	(0.035)
Panel C: Wald or IV estimates							
Treatment effect (no covariates)		-0.745*	-0.441	-0.568**	-0.822***	-0.549**	-0.455**
		(0.449)	(0.285)	(0.262)	(0.293)	(0.230)	(0.209)
Treatment effect (including pre-treatment covariates)		-0.548**	-0.505***	-0.607***	-0.773***	-0.571***	-0.488***
		(0.234)	(0.176)	(0.208)	(0.242)	(0.192)	(0.165)
Number of local governments		158	193	232	252	274	296
Number of observations		520	1,021	1,535	2,074	2,608	3,113

^aEach entry is a separate local linear regression with a uniform kernel. All specifications allow for the RD slope to differ across the threshold, and include a full set of pre-treatment covariates and a full set of time fixed effects. The dependent variable in Panels A and C is total welfare spending in logarithmic form. The dependent variable in Panel B is an indicator for having direct democracy rather than representative democracy. Panel C is the Wald estimator, the ratio between the reduced-form effect and the first-stage estimate. The forcing variable is population in year $t - 1$. See the text for a description of included pre-treatment covariates. Standard errors, clustered at both the municipality level and the running variable, are within parentheses (Cameron et al. (2011)). Coefficients significantly different from zero are denoted by the following system: *10%, **5%, and ***1%.

TABLE A.VIII
 LOCAL LINEAR ESTIMATES FROM THE REGRESSION-DISCONTINUITY DESIGN WHEN THE
 FORCING VARIABLE IS POPULATION IN 1918^a

	Bandwidths:	20	30	40	50	60
Panel A: Reduced-form relationship						
Reduced-form effect (no covariates)		-0.498 (0.338)	-0.404 (0.262)	-0.329 (0.222)	-0.274 (0.209)	-0.293 (0.194)
Reduced-form effect (including pre-treatment covariates)		-0.396* (0.218)	-0.353** (0.146)	-0.392*** (0.110)	-0.357*** (0.101)	-0.275*** (0.096)
Panel B: First-stage relationship						
First-stage effect (no covariates)		0.420*** (0.129)	0.319*** (0.114)	0.421*** (0.116)	0.392*** (0.108)	0.452*** (0.106)
First-stage effect (including pre-treatment covariates)		0.453*** (0.130)	0.430*** (0.099)	0.422*** (0.102)	0.427*** (0.102)	0.472*** (0.094)
Panel C: Wald or IV estimates						
Treatment effect (no covariates)		-1.184 (0.864)	-1.265 (0.802)	-0.783 (0.517)	-0.700 (0.519)	-0.649 (0.419)
Treatment effect (including pre-treatment covariates)		-0.874 (0.598)	-0.821* (0.426)	-0.928*** (0.350)	-0.834*** (0.297)	-0.582** (0.227)
Number of municipalities		35	43	54	64	79
Number of observations		239	295	372	439	544

^a Each entry is a separate local linear regression with a uniform kernel. All specifications allow for the RD slope to differ across the threshold, and include a full set of pre-treatment covariates and a full set of time fixed effects. The dependent variable in Panels A and C is total welfare spending in logarithmic form. The dependent variable in Panel B is an indicator for having direct democracy rather than representative democracy. Panel C is the Wald estimator, the ratio between the reduced-form effect and the first-stage estimate. The forcing variable is population in 1918. See the text for a description of included pre-treatment covariates. Standard errors, clustered at both the municipality level and the running variable, are within parentheses (Cameron et al. (2011)). Coefficients significantly different from zero are denoted by the following system: *10%, **5%, and ***1%.

A.5. COLLAPSED DATA

In this section, we show the results when the data are collapsed at the local government level when the forcing variable is population size in 1918. The results, displayed in Table A.IX, should be compared to the corresponding results from Table V in the published article. There is almost no difference between the two tables.

TABLE A.IX
LOCAL LINEAR ESTIMATES FROM THE REGRESSION-DISCONTINUITY DESIGN WHEN THE FORCING VARIABLE IS POPULATION IN 1918^a

	Bandwidths:	20	30	40	50	60
Panel A: Reduced-form relationship						
Reduced-form effect (no covariates)		-0.568* (0.337)	-0.449* (0.258)	-0.355 (0.219)	-0.308 (0.207)	-0.297 (0.190)
Reduced-form effect (including pre-treatment covariates)		-0.550** (0.226)	-0.400*** (0.148)	-0.407*** (0.108)	-0.381*** (0.101)	-0.274*** (0.096)
Panel B: First-stage relationship						
First-stage effect (no covariates)		0.417*** (0.129)	0.316*** (0.114)	0.418*** (0.116)	0.391*** (0.108)	0.450*** (0.106)
First-stage effect (including pre-treatment covariates)		0.440*** (0.125)	0.420*** (0.097)	0.404*** (0.101)	0.409*** (0.101)	0.462*** (0.094)
Panel C: Wald or IV estimates						
Treatment effect (no covariates)		-1.362 (0.895)	-1.423* (0.823)	-0.849 (0.520)	-0.789 (0.524)	-0.659 (0.416)
Treatment effect (including pre-treatment covariates)		-1.249* (0.703)	-0.952** (0.469)	-1.008*** (0.381)	-0.931*** (0.334)	-0.593** (0.239)
Number of municipalities		35	43	54	64	79
Number of observations		35	43	54	64	79

^aEach entry is a separate local linear regression with a uniform kernel. All specifications allow for the RD slope to differ across the threshold and include a full set of pre-treatment covariates. The dependent variable in Panels A and C is per capita welfare spending in logarithmic form. The dependent variable in Panel B is an indicator for having direct democracy rather than representative democracy. Panel C is the Wald estimator, the ratio between the reduced-form effect and the first-stage estimate. The forcing variable is population in 1918. See the text for a description of included pre-treatment covariates. Standard errors, clustered at both the municipality level and the running variable, are within parentheses (Cameron et al. (2011)). Coefficients significantly different from zero are denoted by the following system: *10%, **5%, and ***1%.

A.6. BASELINE GRAPHS

In this section, we show the graphical evidence of any discontinuities in pre-treatment characteristics at the threshold. Few of these graphs show any discontinuities at the treatment threshold.

A.6.1. *Graphs When the Forcing Variable Is Population in Year $t - 1$*

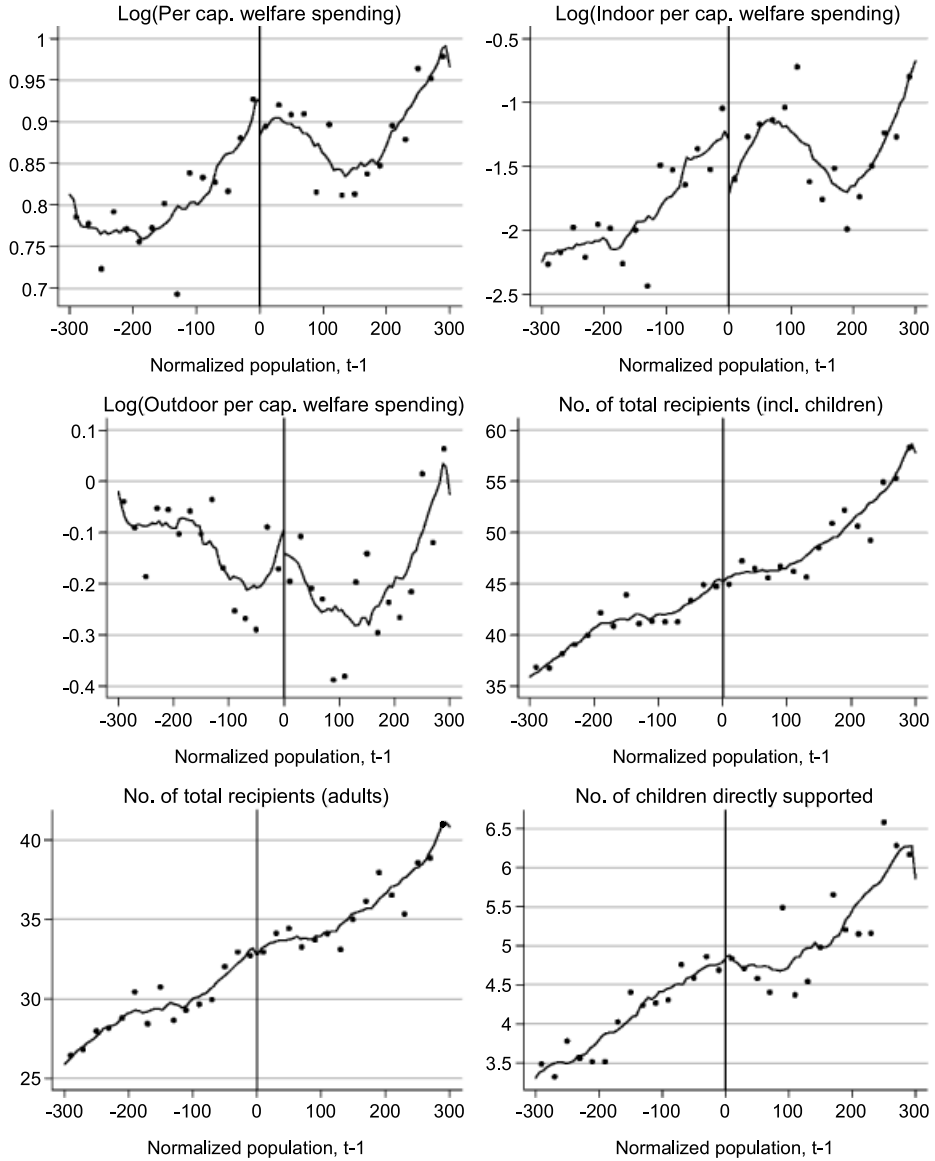


FIGURE A.1.—Baseline graph when the forcing variable is population in year $t - 1$.

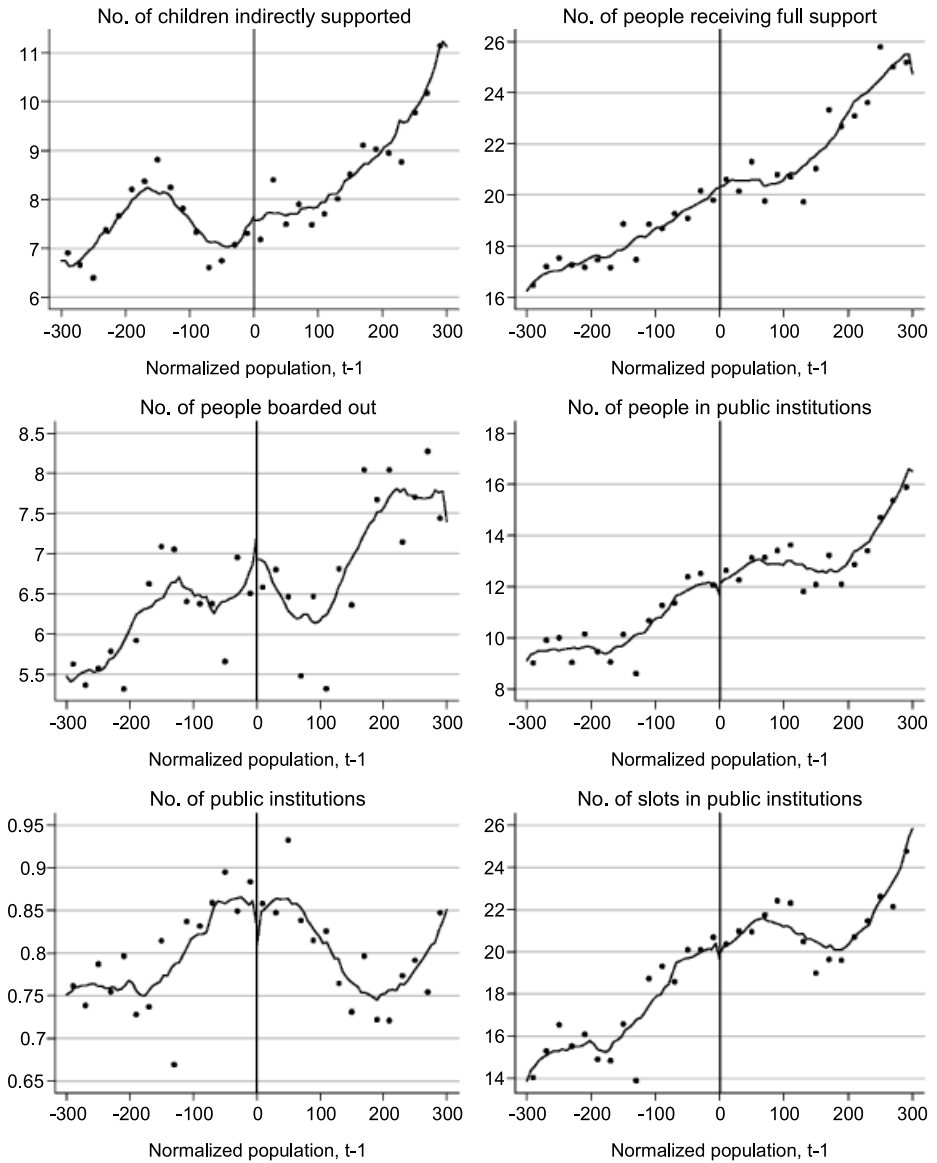


FIGURE A.2.—Baseline graph when the forcing variable is population in year $t - 1$.

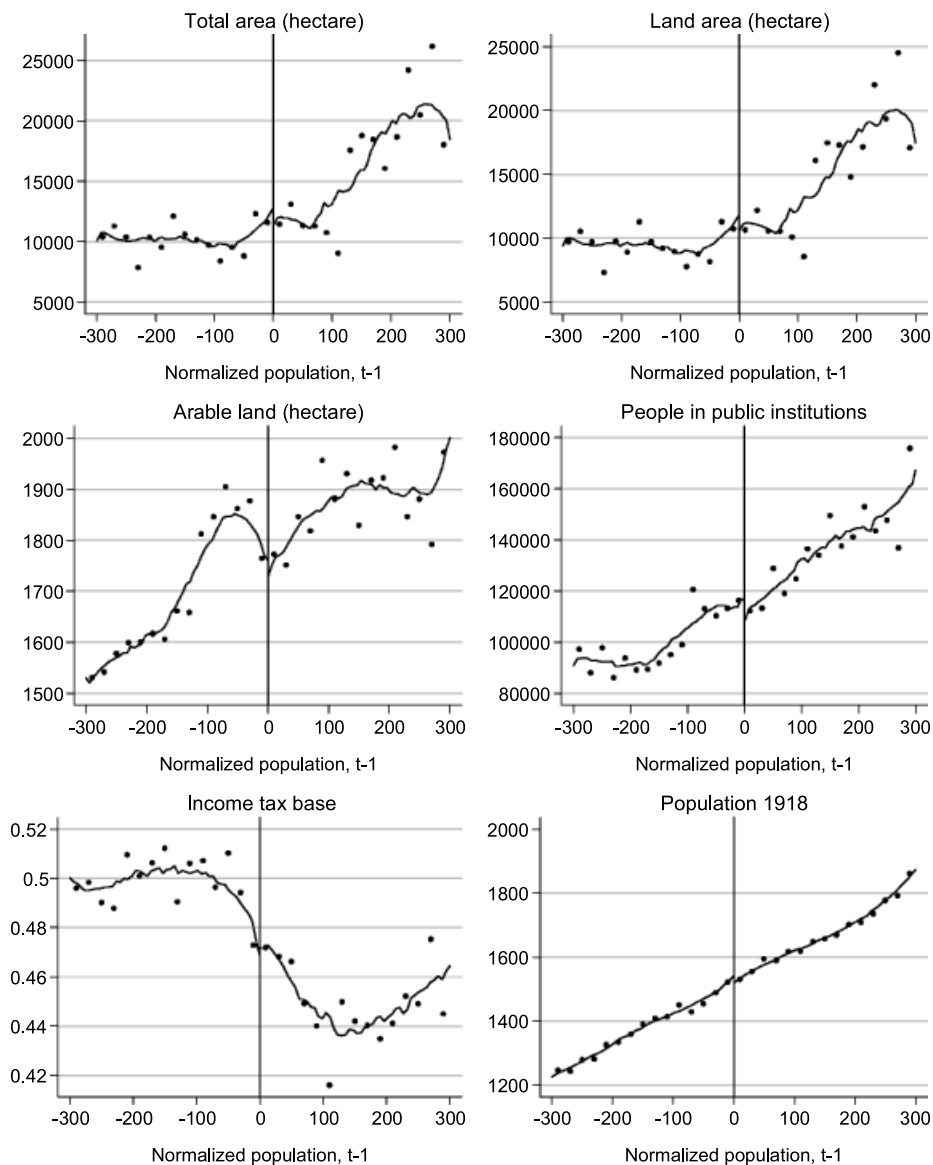


FIGURE A.3.—Baseline graph when the forcing variable is population in year $t - 1$.

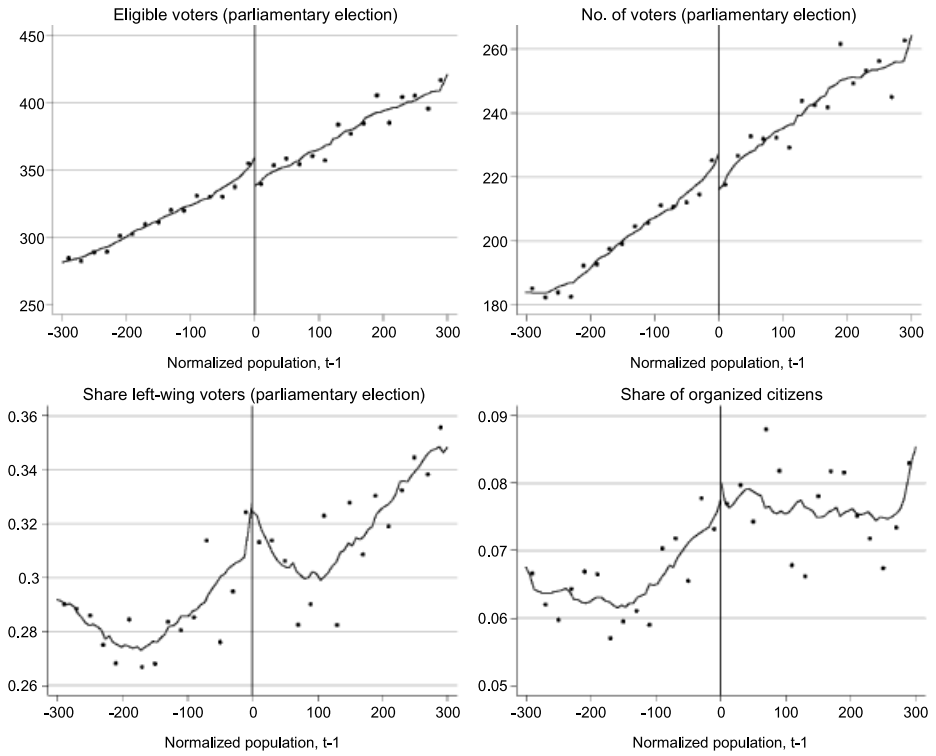


FIGURE A.4.—Baseline graph when the forcing variable is population in year $t - 1$.

A.6.2. *Graphs When the Forcing Variable Is Population in 1918*

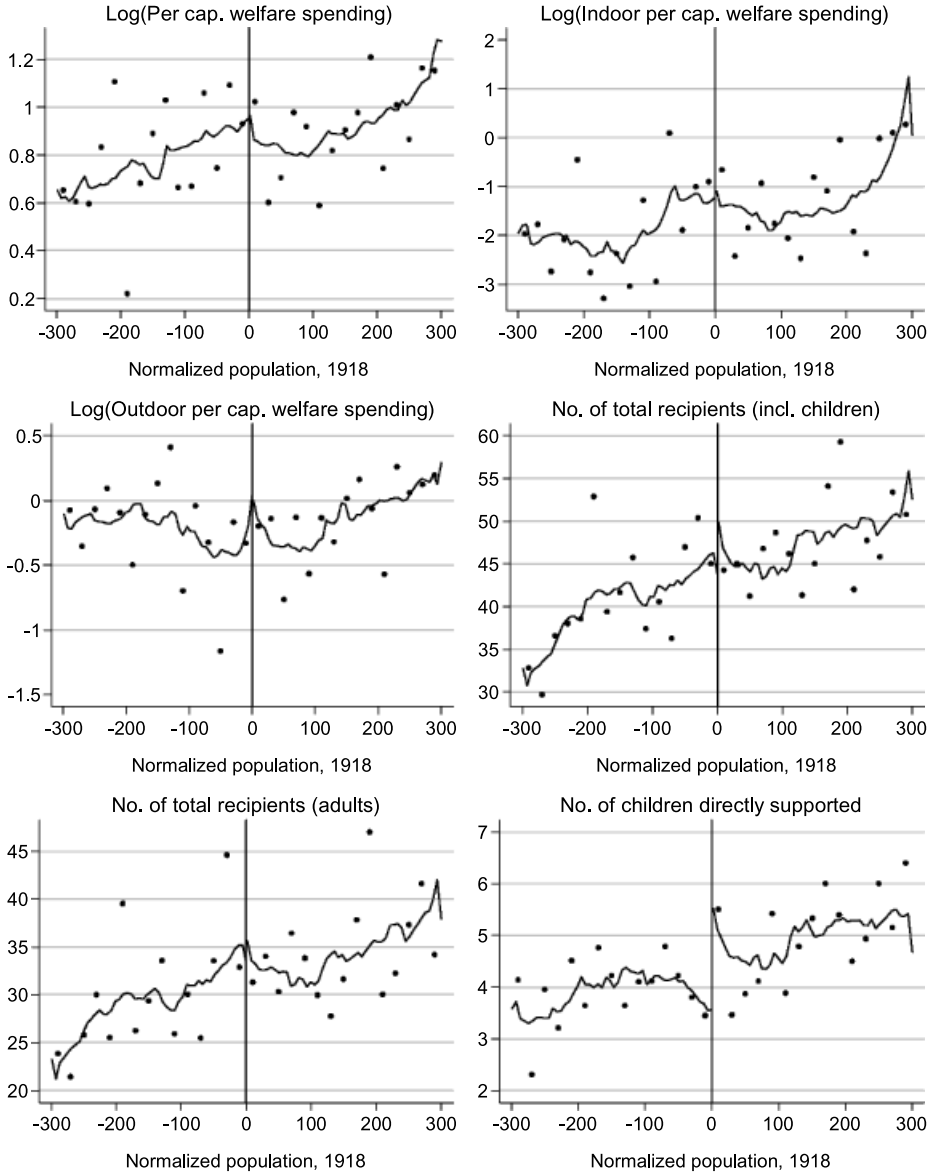


FIGURE A.5.—Baseline graph when the forcing variable is population in 1918.

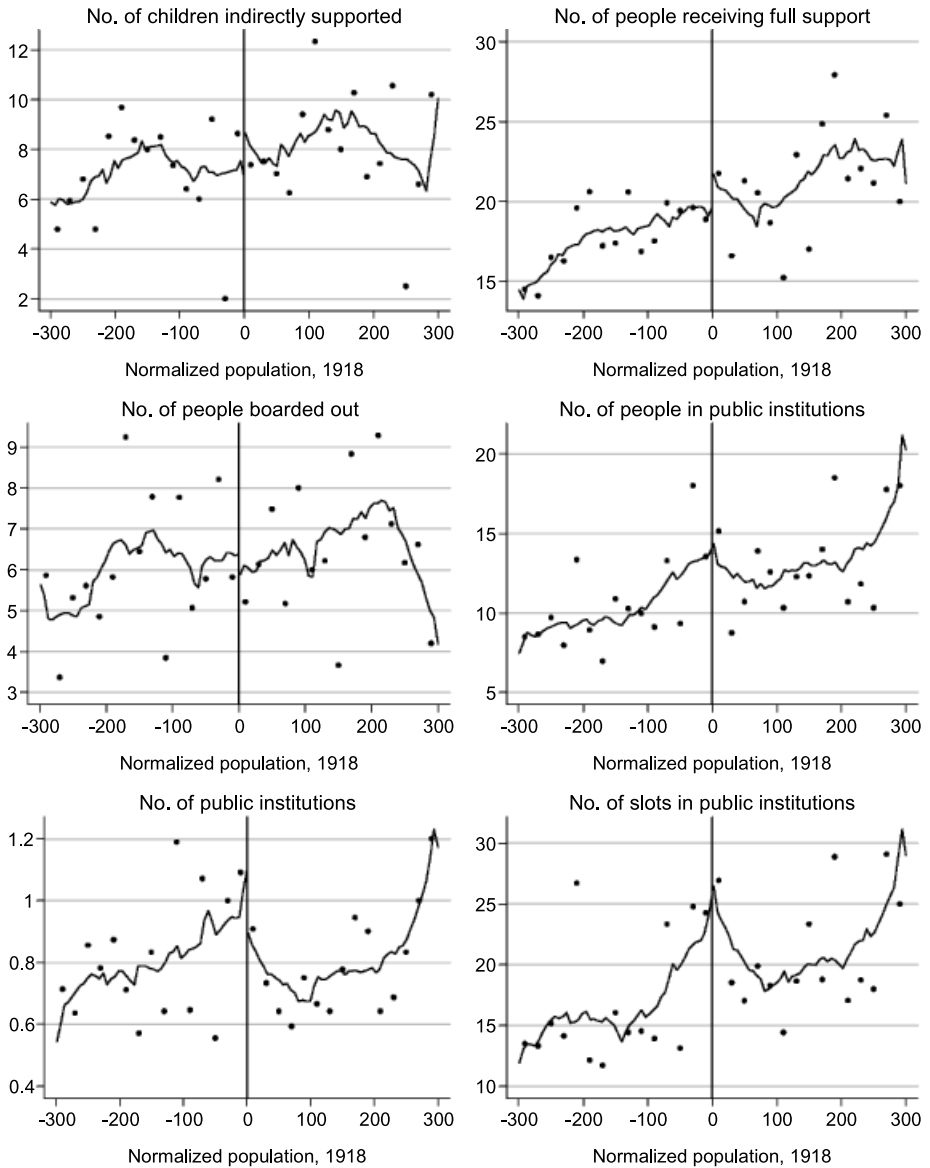


FIGURE A.6.—Baseline graph when the forcing variable is population in 1918.

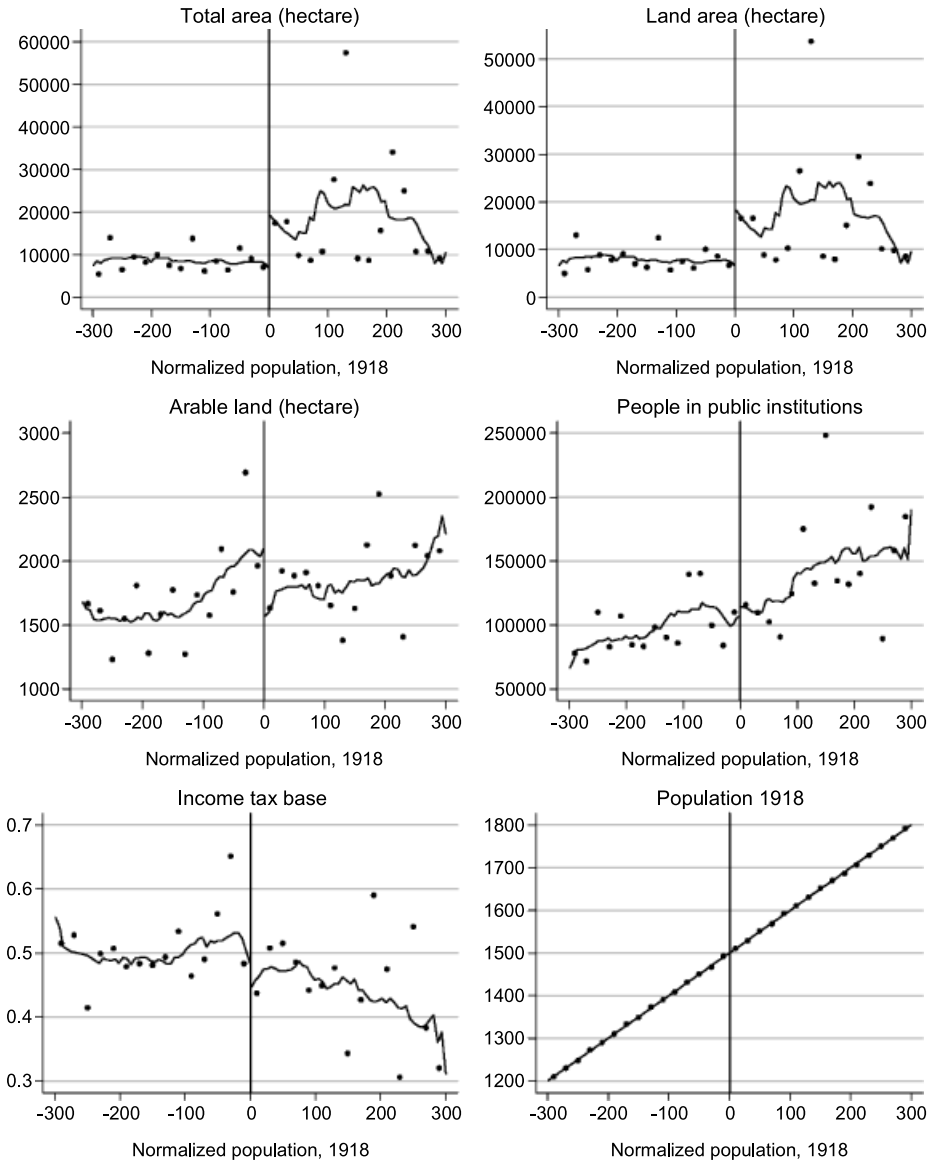


FIGURE A.7.—Baseline graph when the forcing variable is population in 1918.

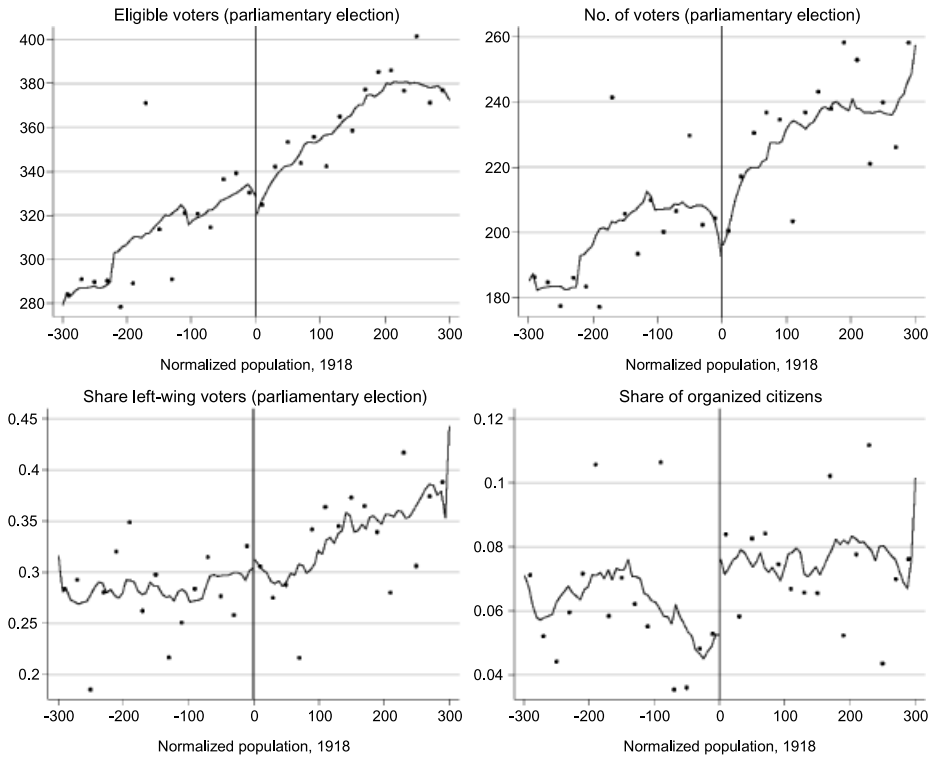


FIGURE A.8.—Baseline graph when the forcing variable is population in 1918.

A.7. HISTOGRAM OF THE FORCING VARIABLES

Here we display the histograms over the forcing variable population in $t - 1$ (Figure A.9) and the histograms over the forcing variable population in 1918 (Figure A.10).

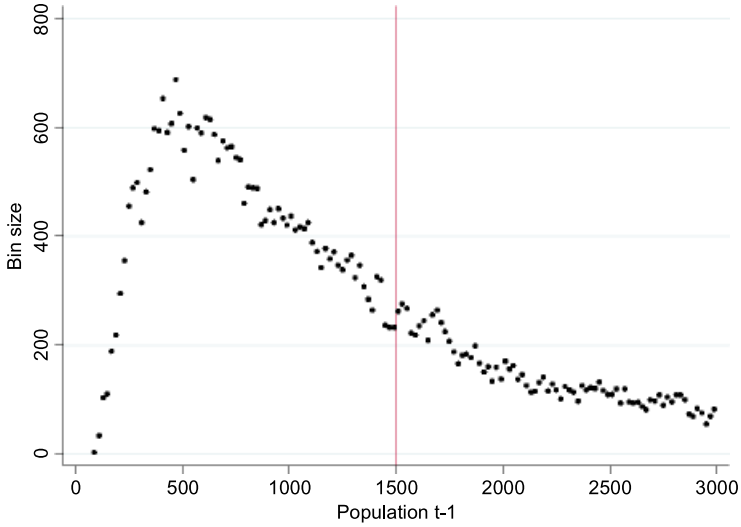


FIGURE A.9.—Histogram for population in year $t - 1$.

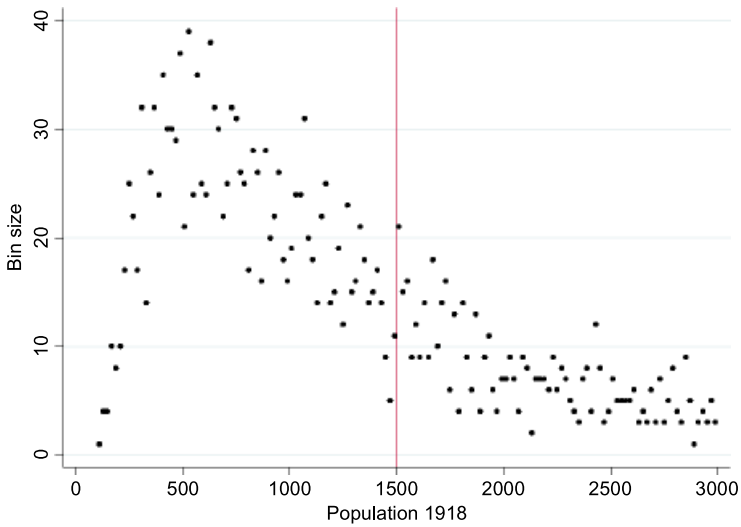


FIGURE A.10.—Histogram for population in 1918.

Dept. of Economics, Stockholm University, 106 91 Stockholm, Sweden;
bjorn.hinnerich@ne.su.se

and

Dept. of Economics, Stockholm University, 106 91 Stockholm, Sweden; pp@ne.su.se.

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