Supporting Information for "Inclusion and Public Policy: Evidence from Sweden's Introduction of Noncitizen Suffrage"

The descriptive statistics for all variables used in the sections "Empirical Analysis" and "Robustness Checks" as well as this Supporting Information are in Table 1. Variables without subscripts are averages for the term of office that lasted 1976–1979. Variables with the subscript 1973 are averages for the term of office that lasted 1973–1976. The matrix in Table 2 shows correlations between the variables used in the main analysis. The first-stage results for the instrumental variables analysis in the section on "Robustness Checks", can be found in Table 3. The alternative instrumental variables analysis, in which I use one immigration wave at a time as the instrument, are in Table 4. The results for the analysis in which I replace the share of noncitizens in the electorate with an estimate of the share of noncitizens among those who actually voted can be found in Table 5. The results for the analyses where I replace my dependent variables with municipal investment in waste handling facilities—which is a type of spending that is unlikely to have been affected by the Voting Rights Reform of 1975—are shown in Table 6. The results for the analyses where I have added additional political controls are shown in Table 7. Finally, in Table 8, I show the results for the analyses where I have added dummy variables for the municipalities whose inclusion in the analysis change one or more coefficient estimates by more than one standard deviation.

Table 1: Descriptive Statistics

Variable	Mean	Std Dev.	Min.	Max.
Education Services	6.00	1.28	3.89	10.21
Education Services$_{1973}$	5.14	1.25	2.97	9.66
ΔEducation Services	0.85	0.62	-0.86	4.39
Social and Family Services	3.40	1.44	1.15	8.33
Social and Family Services$_{1973}$	2.52	1.23	0.55	7.70
ΔSocial and Family Services	0.87	0.58	-0.90	3.97
Noncitizens in Electorate	0.03	0.03	0.00	0.13
Taxbase/capita	0.97	0.13	0.85	1.53
Taxbase/capita$_{1973}$	0.86	0.13	0.52	1.37
Population (in 100 000s)	0.29	0.54	0.04	6.57
Population$_{1973}$ (in 100 000s)	0.28	0.55	0.04	6.73
Population in Manufacturing	0.13	0.06	0.02	0.33
Population in Manufacturing$_{1973}$	0.14	0.07	0.01	0.35
School-Aged Noncitizens	0.21	0.03	0.12	0.37
Preschool-Aged Noncitizens	0.11	0.02	0.04	.19
Immigration Inflow 1940–1950	0.03	0.01	0.01	0.06
Immigration Inflow 1960–1967	0.03	0.01	0.01	0.06
Noncitizens in VAP$_{1973}$	0.04	0.03	0.00	0.15
Noncitizens among Voters	0.02	0.02	0.00	0.15
Investment in Waste Handling	0.03	0.05	0.00	0.32
Investment in Waste Handling$_{1973}$	0.02	0.04	0.00	0.32
ΔInvestment in Waste Handling	0.01	0.06	-0.24	0.29
Left Majority	0.41	0.49	0.00	1.00
Left Majority$_{1973}$	0.43	0.50	0.00	1.00
Education Grants	4.33	0.81	2.70	8.08
Education Grants$_{1973}$	3.61	0.76	2.21	7.01
Social Grants	1.02	0.47	0.31	2.64
Social Grants$_{1973}$	0.65	0.32	0.16	1.71

Table 2: Correlations Between Variables Used in Main Analysis

	ΔEducation Services	ΔSocial and Family Services	Noncitizens in Electorate	Taxbase/ capita	Taxbase/ capita$_{1973}$	Population	Population$_{1973}$	Population in Manufacturing
ΔEducation Services	1							
ΔSocial and Family Services	0.469***	1						
Noncitizens in Electorate	0.287***	0.469***	1					
Taxbase/capita	-0.0771	0.0444	0.0579	1				
Taxbase/capita$_{1973}$	-0.154*	-0.0101	0.103	0.934***	1			
Population	-0.0627	0.102	0.148*	0.261***	0.304***	1		
Population$_{1973}$	-0.0647	0.0946	0.145	0.263***	0.305***	1.000***	1	
Population in Manufacturing	0.0592	-0.0625	0.214**	-0.296***	-0.331***	-0.0570	-0.0504	1
Population in Manufacturing$_{1973}$	0.0575	-0.0216	0.252***	-0.329***	-0.364***	-0.0471	-0.0409	0.977***

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3: First-stage Results for Instrumental Variables Regression in Table 3 of the Main Text

	Noncitizens in Electorate	
	(1)	(2)
Immigration Inflow 1940–1950	0.581	0.723**
	(0.407)	(0.344)
Immigration Inflow 1960–1967	0.644*	0.466
	(0.369)	(0.298)
Taxbase/capita		-0.0299*
		(0.0147)
$\text{Taxbase/capita}_{1973}$		0.0699**
		(0.0317)
Population		0.322*
		(0.181)
Population_{1973}		-0.316*
		(0.176)
Population in Manufacturing		-0.0538
		(0.0687)
$\text{Population in Manufacturing}_{1973}$		0.227***
		(0.0716)
Constant	-0.00470	-0.0614***
	(0.00280)	(0.0165)
Observations	183	183
R-squared	0.409	0.558
Joint F of Instruments	63.02***	79.64***

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4: Differences-in-Differences Estimates of the Effect of the Voting Rights Reform on Municipal Education and Social Spending Using an Instrumental Variables Approach with one Instrument at a Time

	1^{st} Stage	2^{nd} Stage		1^{st} Stage	2^{nd} Stage	
	Noncitizens in Electorate	ΔEducation Services	ΔSocial and Family Services	Noncitizens in Electorate	ΔEducation Services	ΔSocial and Family Services
	(1)	(2)	(3)	(4)	(5)	(6)
Noncitizens in Electorate		10.27***	14.29***		11.09***	12.50***
		(3.019)	(2.128)		(2.715)	(2.555)
Immigration Inflow 1940–1950	1.158***					
	(0.108)					
Immigration Inflow 1960–1967				1.109***		
				(0.123)		
Taxbase/capita	-0.0300*	3.185**	3.372***	-0.0312*	3.222**	3.293***
	(0.0154)	(1.522)	(0.952)	(0.0165)	(1.540)	(0.983)
$\text{Taxbase/capita}_{1973}$	0.0649**	-4.037***	-3.608***	0.0798**	-4.114***	-3.440***
	(0.0300)	(1.566)	(1.067)	(0.0289)	(1.587)	(1.121)
Population	0.308	0.471	12.96***	0.379	-0.0794	14.16***
	(0.181)	(5.000)	(3.167)	(0.225)	(4.802)	(3.293)
Population_{1973}	-0.302*	-0.505	-12.65***	-0.373	0.0313	-13.82***
	(0.176)	(4.887)	(3.111)	(0.220)	(4.697)	(3.238)
Population in Manufacturing	-0.0449	4.820	-2.662	-0.0933	5.063	-3.194
	(0.0686)	(4.255)	(2.558)	(0.0725)	(4.340)	(2.676)
$\text{Population in Manufacturing}_{1973}$	0.225***	-5.804	0.918	0.254***	-6.172	1.722
	(0.0718)	(3.733)	(2.282)	(0.0725)	(3.822)	(2.449)
Constant	-0.0564***	1.111*	0.362	-0.0663***	1.142*	0.294
	(0.0142)	(0.670)	(0.314)	(0.0135)	(0.656)	(0.327)
	115.18					
Observations	183	183	183	183	183	183
R-squared	0.549	0.185	0.359	0.536	0.181	0.379
F of Instrument	115.18***			81.24***		

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 5: Differences-in-Differences Estimates of the Effect of the Voting Rights Reform on Municipal Education and Social Spending Using an Alternative Specification of the Main Independent Variable

	ΔEducation Services		ΔSocial and Family Services	
	(1)	(2)	(3)	(4)
Noncitizens among Voters	7.598**	10.19**	12.12***	10.97***
	(3.504)	(3.929)	(3.581)	(3.733)
Taxbase/capita		3.272		3.324**
		(2.184)		(1.339)
$\text{Taxbase/capita}_{1973}$		-3.990*		-3.254**
		(2.203)		(1.428)
Population		0.985		15.68***
		(4.684)		(4.080)
Population_{1973}		-0.981		-15.27***
		(4.577)		(4.011)
Population in Manufacturing		3.653		-4.876
		(3.987)		(2.971)
$\text{Population in Manufacturing}_{1973}$		-4.151		4.144
		(3.628)		(2.867)
Constant	0.696***	0.996*	0.629***	0.115
	(0.0725)	(0.528)	(0.0688)	(0.382)
Observations	183	183	183	183
R-squared	0.063	0.162	0.180	0.344

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6: Differences-in-Differences Estimates of the Effect of the Voting Rights Reform on Municipal Public Spending Unlikely to Have Been Affected

	ΔInvestment in Waste Handling Facilities	
	(1)	(2)
Noncitizens in Electorate	0.0468	-0.0941
	(0.151)	(0.175)
Taxbase/capita		-0.0336
		(0.0765)
$\text{Taxbase/capita}_{1973}$		0.0507
		(0.0850)
Population		0.504
		(0.443)
Population_{1973}		-0.500
		(0.437)
Population in Manufacturing		-0.105
		(0.411)
$\text{Population in Manufacturing}_{1973}$		0.257
		(0.386)
Constant	0.00596	0.0177
	(0.00673)	(0.0330)
Observations	183	183
R-squared	0.000	0.028

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 7: Differences-in-Differences Estimates of the Effect of the Voting Rights Reform on Municipal Education and Social Spending Including Additional Controls

	ΔEducation Services	ΔSocial and Family Services
	(1)	(2)
Noncitizens in Electorate	3.674**	5.457***
	(1.604)	(1.570)
Taxbase/capita	0.964	2.251*
	(1.107)	(1.158)
$\text{Taxbase/capita}_{1973}$	-1.799	-2.398**
	(1.146)	(1.164)
Population	-8.783**	11.22***
	(3.869)	(4.017)
Population_{1973}	8.588**	-11.03***
	(3.790)	(3.918)
Population in Manufacturing	1.993	-2.392
	(2.671)	(2.523)
$\text{Population in Manufacturing}_{1973}$	-2.935	1.719
	(2.557)	(2.425)
Left Majority	-0.206**	-0.00713
	(0.104)	(0.0970)
$\text{Left Majority}_{1973}$	0.0862	-0.000767
	(0.0955)	(0.0927)
Education Grants	1.128***	
	(0.174)	
$\text{Education Grants}_{1973}$	-1.089***	
	(0.185)	
Social Grants		1.006***
		(0.214)
$\text{Social Grants}_{1973}$		-0.886***
		(0.271)
Constant	0.675*	0.125
	(0.385)	(0.452)
Observations	183	183
R-squared	0.521	0.539

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 8: Differences-in-Differences Estimates of the Effect of the Voting Rights Reform on Municipal Education and Social Spending Controlling for Influential Municipalities

	ΔEducation Services		ΔSocial and Family Services	
	(1)	(2)	(3)	(4)
Noncitizens in Electorate	4.934***	6.960***	8.809***	8.944***
	(1.435)	(1.684)	(1.602)	(1.584)
Taxbase/capita		0.924		2.809**
		(1.963)		(1.105)
$\text{Taxbase/capita}_{1973}$		-1.825		-2.856**
		(1.858)		(1.100)
Population		-1.054		15.47***
		(3.856)		(3.887)
Population_{1973}		0.998		-15.09***
		(3.762)		(3.816)
Population in Manufacturing		4.045		-2.248
		(2.923)		(2.700)
$\text{Population in Manufacturing}_{1973}$		-4.862*		1.376
		(2.775)		(2.613)
Influential municipalities:				
Värmdö	2.861***	2.386***	2.407***	1.489***
	(0.124)	(0.483)	(0.140)	(0.318)
Mellerud		-1.023**		-0.971***
		(0.490)		(0.300)
Stenungsund		3.360***		
		(0.326)		
Constant	0.687***	1.460***	0.597***	0.279
	(0.0594)	(0.472)	(0.0555)	(0.397)
Observations	183	183	183	183
R-squared	0.192	0.409	0.308	0.435

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1