Supplementary Materials (Online Appendix)

S1: The Broader Legislative Context of the Reform

Above I argued that the reform of labor market regulation changed how politically responsible municipalities were for unemployment services. A concern one might have with this argument, is that the national government somehow undid the effects of the reform by introducing detailed legislation instructing municipalities on how they should administer unemployment services, leaving the municipalities with no real administrative discretion. If this is the case, then implementing the reform would simply have meant trading a clear limit to the municipalities' political responsibility for an opaque limit. However, if one studies the reform legislation (Order 1400, 2006), there is no sign of any such detailed regulation instructing municipalities on how to administer unemployment services. Further, if one explores the amount of enacted national legislation related to labor market regulation around the implementation of the reform, one does not find any marked increase. On the contrary, an examination of the legislation coming from the Ministry of Employment between 2005 and 2011 reveals that, while additional statutes and laws were being instated, fewer were instated in this period than between 1998 and 2004 and between 1991 and 1997 (to examine this, I used data from Jakobsen and Mortensen, 2014). As such, I find no evidence suggesting that the national government tried to take back some or all of the political responsibility for unemployment services delegated to the municipalities as part of the labor market reform.

S2: Variable Descriptions

Table S.1 presents a short description of the different survey items used in the analysis.

Table S.1: Description of survey items from the municipal election surveys

Variable name	Question	Coding
Reelect mayor	'Who did you vote for in the municipal election?'	1 is for mayoral party voters, 0 is for the other party's voters.
Reelect regional government	'Who did you vote for in the regional election?'	1 is for regional government party voters, 0 is for the other party's voters.
Reelect national government	'Who would you vote for if a national election was held tomorrow?'	1 is for national government party voters, 0 is for the other party's voters.
Treatment	'What municipality do you live in?'	1 indicates 14 treatment municipalities, 0 the 84 control municipalities.
Unemployment performance	'How satisfied or unsatisfied are you in general with your municipality's efforts towards the unemployed?'	Five point scale going from 0 "Very unsatisfied" to 1 "Very satisfied".
Elderly performance	'How satisfied or unsatisfied are you in general with your municipality's efforts towards the elderly?'	Five point scale going from 0 "Very unsatisfied" to 1 "Very satisfied".
Housing performance	'How satisfied or unsatisfied are you in general with your municipality's efforts towards private and public housing?'	Five point scale going from 0 "Very unsatisfied" to 1 "Very satisfied".
Administration controls municipality	'In reality, the administration controls the municipality, not the politicians'	Five point scale going from 0 "Completely disagree" to 1 "Completely agree".

Partisanship	'Who would you vote for if a national election was held tomorrow?'	1 if respondent voted for mayoral party, 0 otherwise.
Mayoral party in government	Indicator variable of whether the mayor's party is in government	1 for mayors from the two governing parties in 2009, 0 for other mayors.
Ideology	Measures congruence between respondent's ideology (left or right-wing) and the ideology of the mayor. Mayoral ideology determined based on party (Conservative and Liberal party as right wing), respondent's ideology based on question about self-reported ideology.	Coded 1 if respondent shares ideology with mayor, coded 0 if respondent does not.
News consumption - local	'Thinking back, how important was local media as a source of knowledge about the municipal election campaign?'	Four point scale going from 1 "Not at all" to 5 "Very important".
Age	'How old are you?'	Measured in years.
Employment status	'Where are you currently employed?'	11 different categories including student, unemployed and retiree.
Knowledge about municipal powers	Five different questions about who has responsibility for various policy areas.	Proportion of correct answers.
Interest	'How interested would you say you are in politics?'	Four point scale going from 0 "Not at all" to 1 "Very".
Informed	'How informed would you say you are about municipal politics in your own municipality?'	Five point scale going from 0 "Not at all informed" to 1 "Very informed".

Influence	'The mayor has a great deal of influence on how the municipality develops'	Five point scale going from 0 "Completely disagree" to 1 "Completely agree".
Responsible	'Who do you think has the main responsibility for things going as they have in the past four years in your municipality?'	Respondents answering "Local politicians" or "The Mayor" coded 1. Respondents answering "National politicians" coded 0.
Apathy	'I cannot be bothered with the municipal election'	Five point scale going from 0 "Completely disagree" to 1 "Completely agree".
Obligated	'I feel obligated to vote at the municipal election'	Five point scale going from 0 "Completely disagree" to 1 "Completely agree".
Satisfied with democracy	'How satisfied are you with the local democracy?'	Four point scale going from 0 "Not at all satisfied" to 1 "Very satisfied'
Pivotality	'How likely is it that your vote will be pivotal?'	Five point scale going from 0 "Basically zero" to 1 "Very probable'

S3: Descriptive statistics

Tables S.2, S.3 and S.4 present descriptive statistics on the survey items used in the analysis of the 2005, 2009 and 2013 municipal election surveys.

Figure S.1 presents the distribution of the key unemployment performance variable across treatment and control.

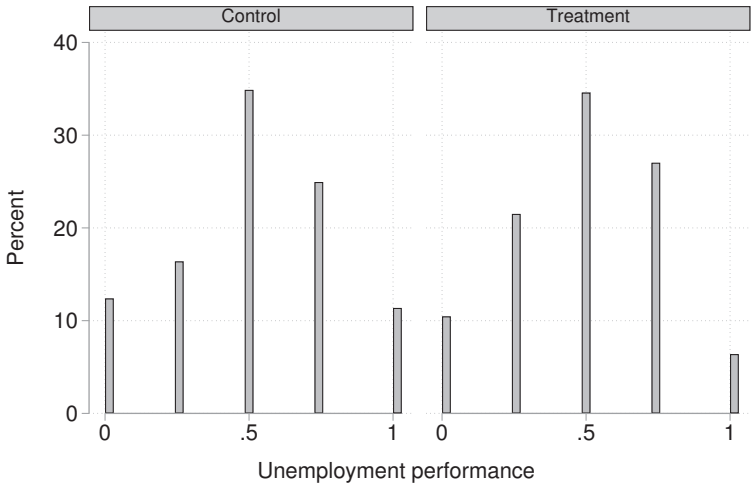

Figure S.1: Distribution of variable unemployment performance.

Table S.2: Descriptive statistics 2005

	Mean	SD	Min	Median	Max	n
Informed	0.56	0.23	0.00	0.50	1.00	1996
Interested	0.64	0.26	0.00	0.67	1.00	2009
Unemployment performance	0.59	0.31	0.00	0.75	1.00	1454
Knowledge about municipal powers	0.71	0.28	0.00	0.80	1.00	2011
Elderly performance	0.66	0.31	0.00	0.75	1.00	1534
Housing performance	0.75	0.26	0.00	0.75	1.00	1944
Ideology	0.70	0.46	0.00	1.00	1.00	2011
Apathy	0.15	0.27	0.00	0.00	1.00	1988
Obligation	0.96	0.16	0.00	1.00	1.00	2000
Satisfaction with municipal democracy	0.69	0.23	0.00	0.67	1.00	1975
Pivotality	0.45	0.28	0.00	0.50	1.00	1875

Table S.3: Descriptive statistics 2009

	Mean	SD	Min	Median	Max	n
Vote for mayoral party	0.31	0.46	0.00	0.00	1.00	2742
Vote for mayoral party at national elections	0.23	0.42	0.00	0.00	1.00	3199
Voted for mayoral party at regional election	0.25	0.43	0.00	0.00	1.00	3199
Voted for mayoral party at last municipal election	0.36	0.48	0.00	0.00	1.00	2642
Voted for mayoral party at last national election	0.26	0.44	0.00	0.00	1.00	3199
Influence	0.74	0.25	0.00	0.75	1.00	3175
Responsibility	0.67	0.47	0.00	1.00	1.00	2998
Unemployment performance	0.51	0.29	0.00	0.50	1.00	2296
treatment	0.15	0.36	0.00	0.00	1.00	3336
Housing performance	0.71	0.23	0.25	0.75	1.00	2920
Elderly performance	0.57	0.31	0.00	0.50	1.00	2771
Administration controls municipality	0.50	0.31	0.00	0.50	1.00	2895
Local media consumption	3.14	0.92	1.00	3.00	5.00	3336
National media consumption	2.33	1.06	1.00	2.00	5.00	3336
Age	54.53	13.79	18.00	55.50	91.00	3272
Shares ideology with mayoral party	0.44	0.50	0.00	0.00	1.00	3336
Mayor is from the same party as national government	0.49	0.50	0.00	0.00	1.00	3199
Elementary school	0.18	0.38	0.00	0.00	1.00	3336
High school	0.07	0.26	0.00	0.00	1.00	3336
Vocational high school	0.04	0.19	0.00	0.00	1.00	3336
Vocational school	0.25	0.44	0.00	0.00	1.00	3336
Shorter tertiary education	0.08	0.27	0.00	0.00	1.00	3336
Tertiary education	0.23	0.42	0.00	0.00	1.00	3336
Graduate degree	0.03	0.17	0.00	0.00	1.00	3336
Postgraduate degree	0.12	0.33	0.00	0.00	1.00	3336
Untrained worker	0.05	0.21	0.00	0.00	1.00	3336
Skilled worker	0.11	0.31	0.00	0.00	1.00	3336
Blue collar worker	0.13	0.34	0.00	0.00	1.00	3336
White collar worker	0.20	0.40	0.00	0.00	1.00	3336
Self employed	0.06	0.24	0.00	0.00	1.00	3336
Home maker	0.00	0.05	0.00	0.00	1.00	3336
Student	0.03	0.16	0.00	0.00	1.00	3336
Not looking for work	0.00	0.06	0.00	0.00	1.00	3336
Unemployed	0.04	0.19	0.00	0.00	1.00	3336
Retiree	0.34	0.47	0.00	0.00	1.00	3336
Will not say	0.01	0.10	0.00	0.00	1.00	3336
Other	0.03	0.18	0.00	0.00	1.00	3336

Table S.4: Descriptive statistics 2013

	Mean	SD	Min	Median	Max	n
Responsibility	0.78	0.41	0.00	1.00	1.00	3968
Influence	0.72	0.22	0.00	0.75	1.00	4254

S4: A Manipulation check

Mean responses for the two manipulation check questions are presented in the two left-most columns of Table S.5. It is important to note that while the differences between treatment and control are not very large, these questions are about conditions in the municipality in general, not just unemployment services. While I would expect that voters in the treatment municipalities believe the mayor is substantially more responsible for unemployment services, I would only expect that voters believe the mayor is slightly more responsible for the overall conditions in the municipality.

Table S.5: Manipulation check

	2009		2013	
	Responsible	Influence	Responsible	Influence
Control	0.66	0.74	0.78	0.72
	(0.01)	(0.01)	(0.01)	(0.00)
Treatment	0.71	0.76	0.77	0.72
	(0.02)	(0.02)	(0.01)	(0.01)
p-value	0.03	0.04	0.29	0.34
Observations	2998	3175	3968	4254

Standard errors in parentheses, one-sided p-value from difference in means test.

Was the 2009 difference due to pre-treatment differences in voters' beliefs? This seems unlikely given the extensive balance test presented in Table 1, but we cannot be sure because these questions were not posed in the 2005 survey. However, these questions were part of the 2013 municipal election survey and we can utilize the 2013 data to conduct a post-treatment balance test. Recall that, when the 2013 election came about, the reform was implemented in all municipalities. As such, if the differences in the 2009 survey were due to the asymmetry in political responsibility caused by the reform, these differences should have disappeared in 2013. The two right-most columns of table S.5 report means across the treatment and control municipalities from the 2013 survey. As expected, once all of the municipalities had implemented the reform, there was no longer any difference in the mean responses to the two manipulation check questions.

S5: Alternative estimation methods

In the analyses conducted below, I show that the key findings presented in Table 2 are robust to employing two alternative estimation methods. These methods relax some of the assumptions made in order to estimate the models in Table 2, and accordingly, they provide a more complete picture of the statistical evidence for the key conjecture of the analysis: that voters in the treatment municipalities held their mayoral party more electorally accountable for unemployment services than voters in the control municipalities.

The models estimated above did not take the hierarchical structure of the data – individual voters nested within municipalities – fully into account. In order to do this, I estimate a set of mixed effects multilevel logit models with the same configuration of variables used in Table 2. Estimates from these models are presented in Table S.6. The important estimates remain practically unchanged, although the standard error of the estimates increase slightly. Most importantly, the difference in AMEs remains statistically significant in three out of four models ($p \approx 0.05$). The logit interaction coefficients also remain statistically significant, although only at the ten percent level.

The tests used to asses the statistical significance of the interaction terms and differences in AMEs in Table 2 rely on a number of parametric assumptions. To get around these assumptions, I tried to derive the statistical significance using a form of randomization inference; a non-parametric method (cf. Gerber and Green, 2012). In particular, I used the following procedure:

1. Draw a random sample of 14 municipalities, and create a dummy which was equal to one if the respondent lived in one of these randomly drawn municipalities.

2. Estimate the models reported in column 1-4 of Table 2, but substituting the actual treatment variable for the dummy variable created in (1).

3. Store the estimated interaction effect between the simulated treatment dummy and unemployment performance obtained for each logit model estimated in (2).

4. Derive the the average marginal effect (AME) of unemployment performance in the simulated treatment and control municipalities for each of the models estimated in (2) and store the difference in AMEs.

Table S.6: Multi-level logistic regression of probability of voting for the mayoral party

	(1)	(2)	(3)	(4)
Unemployment performance	0.84*	0.84*	0.92*	0.88*
	(0.24)	(0.25)	(0.37)	(0.36)
Treatment	-0.60	-0.58	-0.49	-0.64
	(0.41)	(0.44)	(0.45)	(0.43)
Treatment * Unemployment performance	1.02+	1.02+	1.28+	1.36*
	(0.55)	(0.59)	(0.66)	(0.61)
Administration controls municipality	-0.31	-0.42+	-0.44+	-0.41+
	(0.21)	(0.21)	(0.24)	(0.24)
Housing performance	0.54+	0.53+	-0.01	0.07
	(0.30)	(0.32)	(0.40)	(0.40)
Elderly performance	0.83*	0.92*	1.06*	1.05*
	(0.23)	(0.25)	(0.31)	(0.30)
AME (Control)	0.17	0.17	0.10	0.09
	(0.05)	(0.05)	(0.04)	(0.04)
AME (Treatment)	0.36	0.35	0.23	0.24
	(0.08)	(0.09)	(0.06)	(0.05)
Difference (T-C)	0.18	0.18	0.14	0.15
p-value of difference	0.05	0.07	0.05	0.02
Sociodemographic controls		✓	✓	✓
Political controls			✓	✓
Municipal level variables				✓
Log likelihood	-911.88	-881.73	-553.65	-550.06
Observations	1522	1500	1500	1500

Robust standard errors clustered on municipality in parentheses.
$^{+}$ $p < 0.10$, * $p < 0.05$

5. Repeat (1)-(4) 10,000 times resulting in 10,000 unique interaction coefficients and AME-differences for each model.

6. Calculate *p-values* for each model by looking at the proportion of simulated logit coefficients and AME estimates which are *larger* than the ones estimated for the actual treatment and control municipalities.

A random sample of the 10,000 simulations is plotted in Figure S.2 along with the calculated p-values. These p-values signify how likely it is to get an interaction or difference in AMEs of the size estimated in Table 2 or larger *if* there was no effect of being assigned to implement the labor market reform for any of the municipalities (a sharp null). The p-values do become slightly larger using this method, however, the p-values are still below 0.1 and thus reflect that the observed difference in the weight voters put on unemployment service between treatment and control municipalities is unlikely to have occurred by chance.

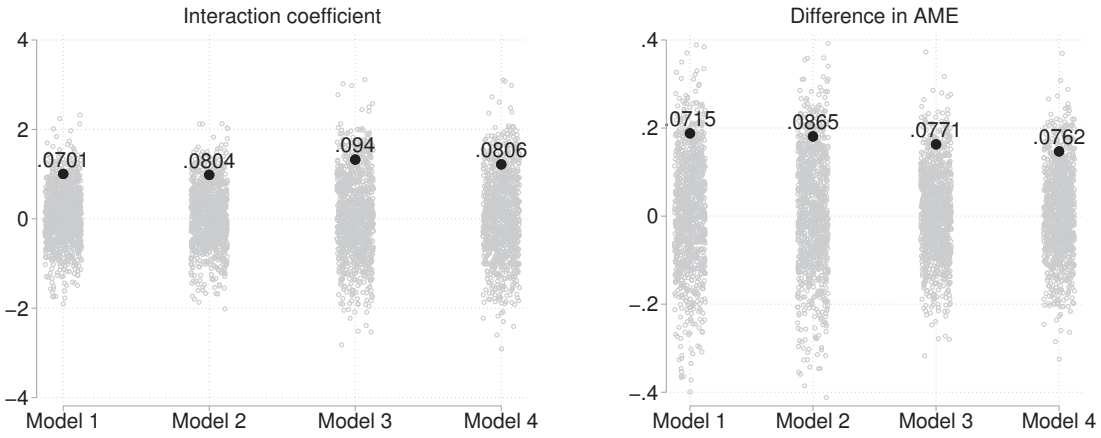

Figure S.2: A sample (n=1,000) of the simulated differences in AMEs and interaction effects from each of the four different logit models estimated in Table 2. These are computed using randomization inference (RI). The black dot signifies realized outcome, taken from Table 2, and the number attached to it is the RI p-value.

S6: Difference-in-difference

Conducting a difference-in-difference analysis is complicated by a few factors. Even though the key unemployment performance and vote intention questions were asked in both surveys, there is not a large overlap between the datasets when it comes to the control variables used in Table 2. As such, I cannot estimate a model with as large a number of controls, however, this problem is somewhat offset by the difference-in-difference approach's ability to control for any pre-treatment differences between treatment and control municipalities. A more serious challenge to including the 2005 data relates to the fact that some municipalities were in the process of being amalgamated due to the large reform which was implemented in 2006 (cf. Figure 1). As a result, almost half of the respondents voted in an amalgamated municipality, which was different from the one where their incumbent mayor had been elected, blurring patterns of accountability. I deal with this problem by by defining the dependent variable in '05 as voting for the party which had the mayoralty in the voter's existing (old) municipality. Even so, these amalgamations impede the strength of the analysis.

In Figure S.3, I show the AMEs of unemployment performance on support for the mayoral party in treatment and control municipalities in both 2009 and 2005. The AMEs are derived

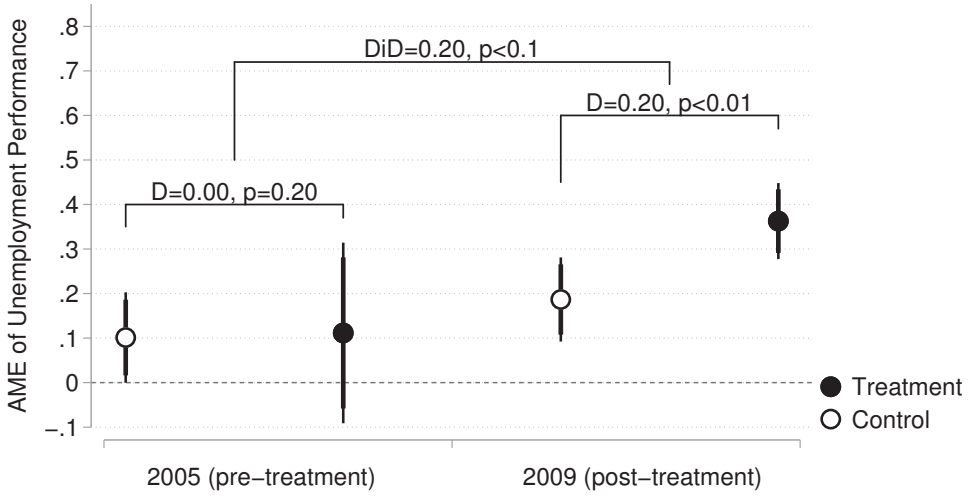

Figure S.3: Average Marginal Effects of unemployment performance on probability of voting for the mayoral party across treatment status and time period. Derived from logistic regression model described in the text; McFadden $R^2 = 0.032$, $n = 2,582$. Wald tests used to compare the different AMEs. The vertical lines are 90 pct. (thick) and 95 pct. (thin) confidence intervals.

from a logistic model estimated on a pooled dataset. This model sets voting for the mayoral party as a function of a three-way interaction between unemployment performance, treatment status and time period ('09 versus '05). The model also controls for housing and elderly care performance as well as for whether the mayor is of the same party as the national government. To take the different patterns of accountability across amalgamated and continuing municipalities into account (cf. above), I allow all performance variables to have different slopes depending on whether voters lived in a municipality which was amalgamated.

As can be seen from Figure S.3 there is no difference in the effect of voters evaluation of unemployment services on support for the mayoral party across treatment and control municipalities in 2005. Accordingly, before the reform of labor market regulation was implemented, there was no apparent difference in electoral accountability across treatment and control municipalities. In 2009, however, when the treatment municipalities had gotten more political responsibility for unemployment services, there is a statistically significant difference.The difference in difference estimate is only statistically significant at the ten percent level. The slight drop in statistical significance can be explained by the extra estimation error introduced by including the more noisy 2005 data.

S7: Analyzing additional policy areas

In this section, I examine differences in electoral accountability across the treatment and control municipalities for some additional policy areas. As such, I investigate whether voters in the treatment municipalities were more likely to electorally punish and reward the mayor for quality of services in nine different policy areas, which were not affected by the reform of labor market regulation (including the two examined in Figure 5). In particular, I use the logit model presented in column 4 of Table 2 as a template, swapping the unemployment performance variable for one of the alternative policy variables. I do this for all policy variables. For each of these nine new models, I then derive the AME of the policy variable on voters' propensity to vote for the mayoral party in both the treatment and in the control municipalities. Finally, I test the AME in the treatment municipalities against the AME in the control municipalities using a Wald test. The results of these analyses are reported in Table S.7.

Table S.7: Differences across treatment and control for other policy outcomes

Policy Area	Treatment	Control	Standard Error	p-value
Unemployment per	0.25	0.09	0.07	0.01
Housing	0.05	0.04	0.09	0.85
Daycare	0.08	0.08	0.10	0.94
Recreation	0.01	0.08	0.08	0.44
Schools	0.08	0.03	0.08	0.56
Library	0.04	0.09	0.07	0.47
Culture	0.19	0.09	0.09	0.28
Business	0.18	0.10	0.10	0.43
General services	0.21	0.08	0.09	0.16
Elderly Services	0.14	0.11	0.09	0.79
Health Services	0.17	0.08	0.09	0.29
Total	0.13	0.08	0.09	0.47

The models from which the average marginal effects are derived include the full set of controls.

As is revealed by looking at the right-most column of Table S.7, the AME of voters' assessment of the quality of the services provided in these nine different policy areas do not significantly differ across treatment and control municipalities.

S8: No Evidence of Increases in Partisan Motivated Reasoning

An alternative explanation for our findings is that there are voters in the municipalities who (dis)like the mayoral party, and when they find out that their mayor has become more responsible for unemployment services, they increase (or decrease) their estimate of service quality in this area accordingly. If this is the case, voters' satisfaction with unemployment services should be more strongly correlated with *past* support for the mayor in the municipalities where the mayor got more responsibility for unemployment services.

In order to examine this possibility, we re-estimate the four logistic regression models from Table 2 using self-reported support for the (current) mayoral party at the previous election as the dependent variable. (The models are thus only estimated using respondents who said that they could remember which party they voted for at the last election.) Table S.8 presents the results from these analyses. In these models, which predict past voting, the interaction effect between treatment status and unemployment performance is negligible and statistically insignificant. So is the difference in AMEs across treatment and control municipalities. From this, we can conclude that the increased correlation between satisfaction with unemployment services and support for the mayor is not be driven by voters who already supported the mayor at the last election becoming more satisfied with unemployment services, or by voters who did not support the mayor becoming less satisfied.

More broadly, these analyses show that there is no sign of increases in partisan motivated reasoning when it comes to how satisfied voters are with unemployment services in the treatment municipalities. This corroborates the initial conclusion that voters hold their mayor more electorally accountable for the quality of unemployment services.

Table S.8: Logistic regression of voting for the mayoral party at the *last* election

	(1)	(2)	(3)	(4)
Unemployment performance	0.53*	0.55*	0.45	0.43
	(0.21)	(0.23)	(0.32)	(0.32)
Treatment	-0.18	-0.20	-0.17	-0.14
	(0.28)	(0.28)	(0.34)	(0.34)
Treatment * Unemployment performance	0.02	0.05	0.00	-0.03
	(0.51)	(0.52)	(0.76)	(0.76)
Administration controls municipality	-0.18	-0.28	-0.09	-0.11
	(0.19)	(0.20)	(0.26)	(0.26)
Elderly performance	0.10	0.22	-0.03	-0.04
	(0.20)	(0.21)	(0.25)	(0.25)
Housing performance	0.86*	0.74*	0.84*	0.87*
	(0.28)	(0.28)	(0.35)	(0.36)
Sociodemographic controls		✓	✓	✓
Political controls			✓	✓
Municipal level variables				✓
AME (Control)	0.12	0.12	0.06	0.06
	(0.05)	(0.05)	(0.04)	(0.04)
AME (Treatment)	0.12	0.13	0.06	0.05
	(0.11)	(0.10)	(0.10)	(0.10)
Difference (T-C)	0.00	0.01	-0.00	-0.01
p-value of difference	1.00	0.96	0.98	0.95
Pseudo R^2	0.02	0.04	0.34	0.34
Log likelihood	-965	-937	-644	-642
Observations	1476	1461	1461	1461

Robust standard errors clustered on municipality in parentheses.
$^{+}$ $p < 0.10$, * $p < 0.05$