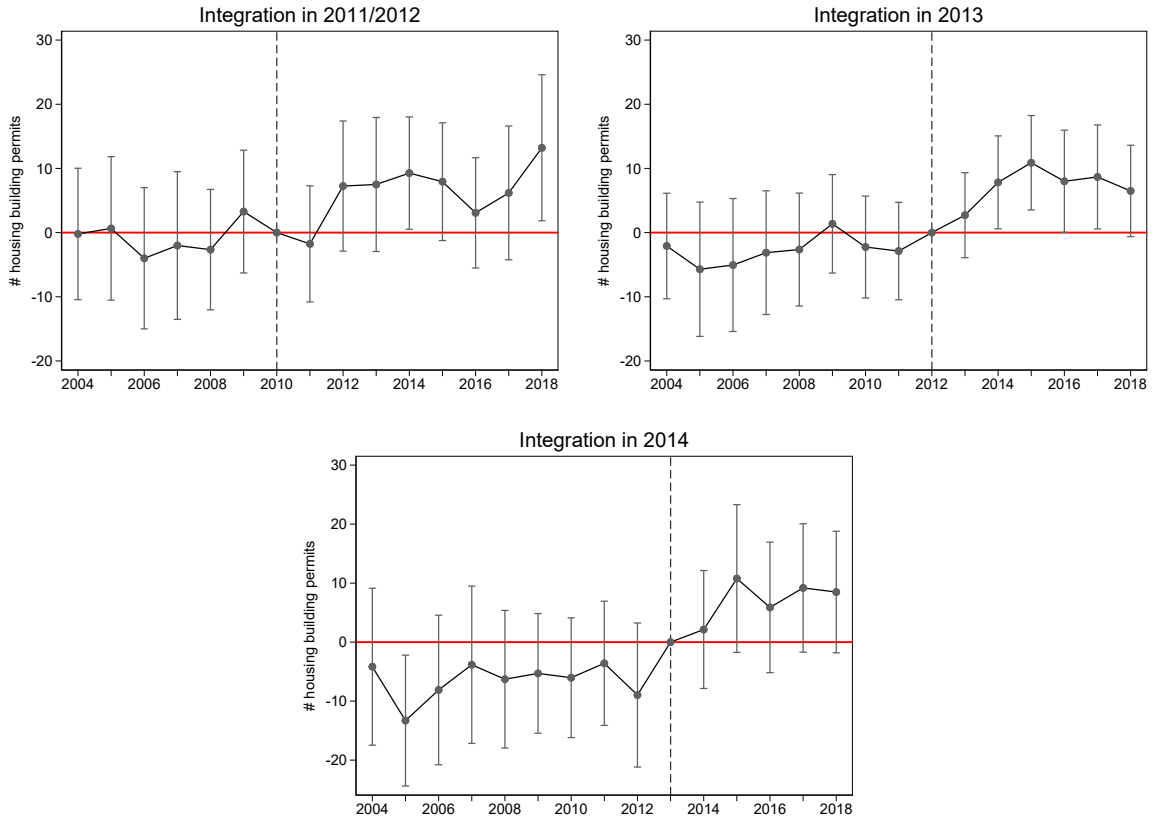
Online Appendix to "Better Alone? Evidence on the Costs of Intermunicipal Cooperation"

Clemence Tricaud

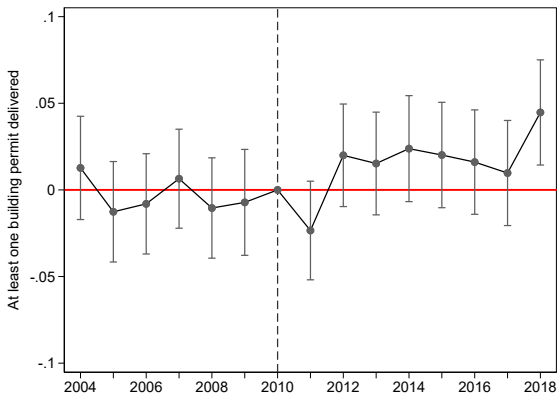
A. Additional figures and tables

Figure A1: Impact on housing depending on the exact year of integration



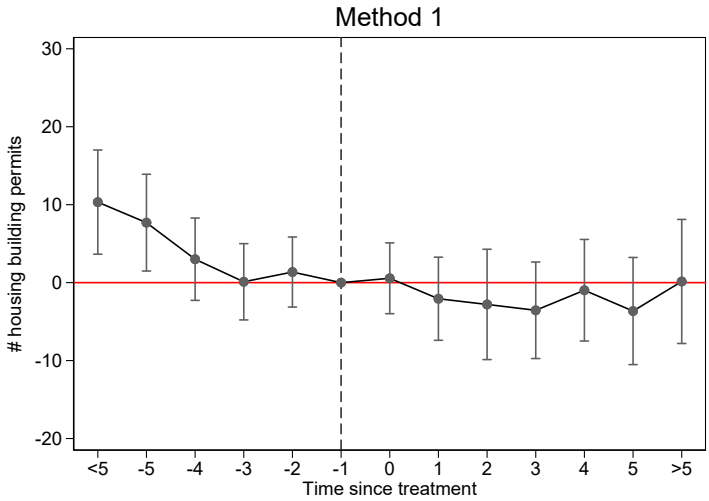
Notes: These graphs plot the estimates and 95-percent-confidence intervals from the leads-and-lags regression, using as outcome the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). The first graph includes only treated municipalities that entered an IC in 2011 or 2012. The second (resp. third) graph includes only treated municipalities that entered an IC in 2013 (resp. 2014).

Figure A2: Impact on the probability to deliver at least one building permit



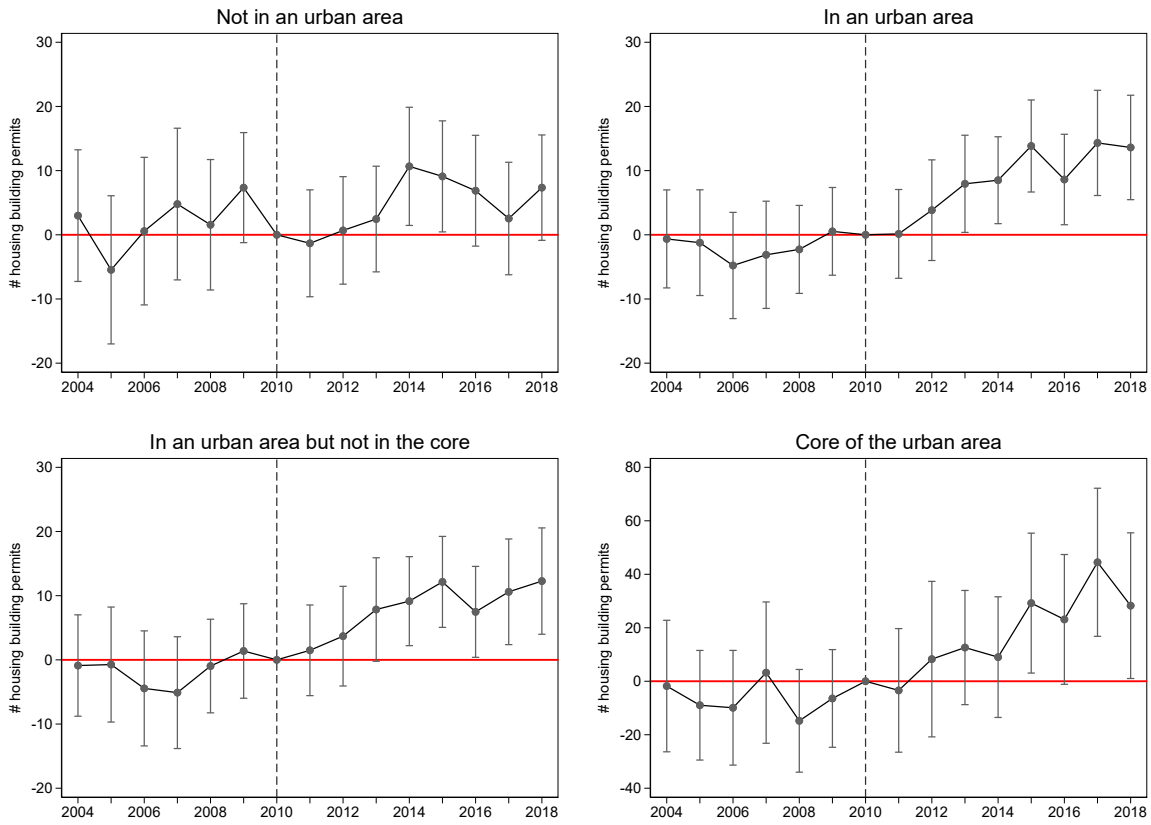
Notes: This graph plots the estimates and 95-percent-confidence intervals from the leads-and-lags regression, using as outcome an indicator variable equal to 1 if the municipality delivers at least one building permit.

Figure A3: Impact on housing for municipalities that voluntarily integrated between 2004 and 2010



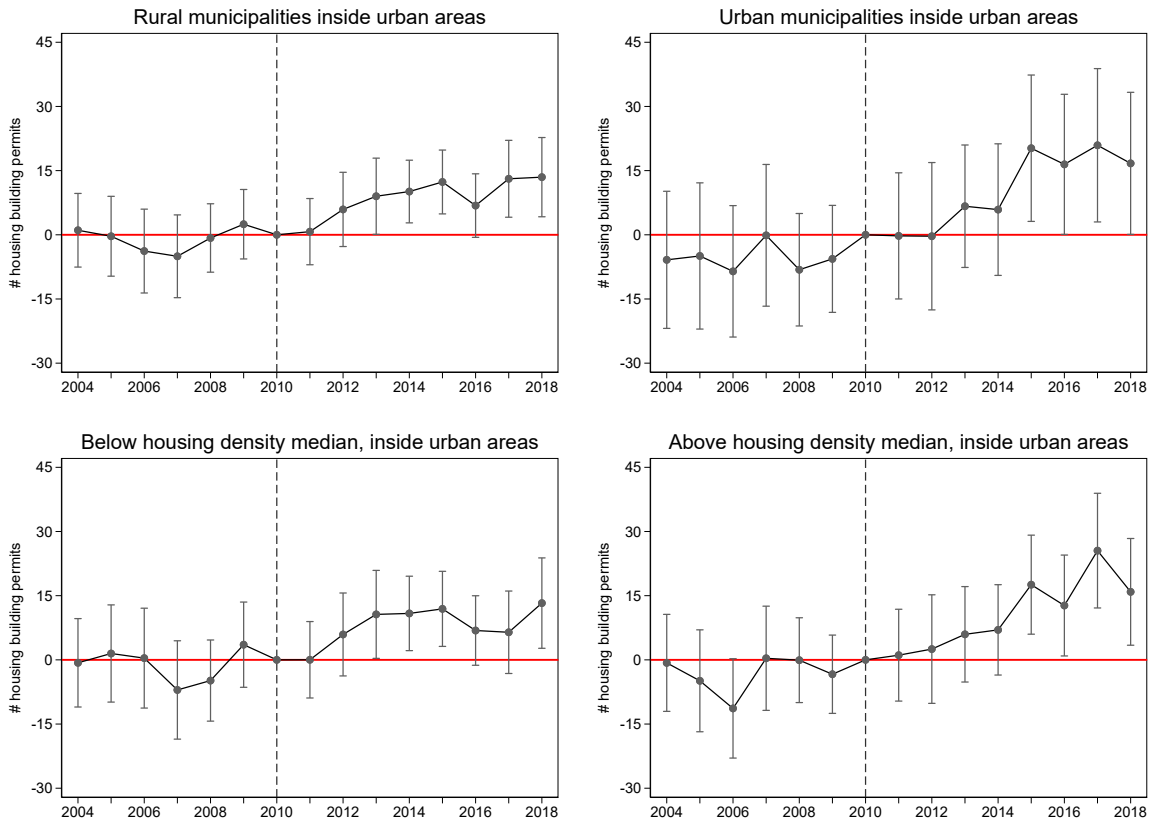
Notes: The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). The sample is made up of municipalities that voluntarily integrated between 2004 and 2010. The graph plots the estimates and 95-percent-confidence intervals from a regular staggered adoption design (method 1). The period of analysis goes from 1999 to 2018. More information in Section III.B.

Figure A4: Impact on housing: Urban area



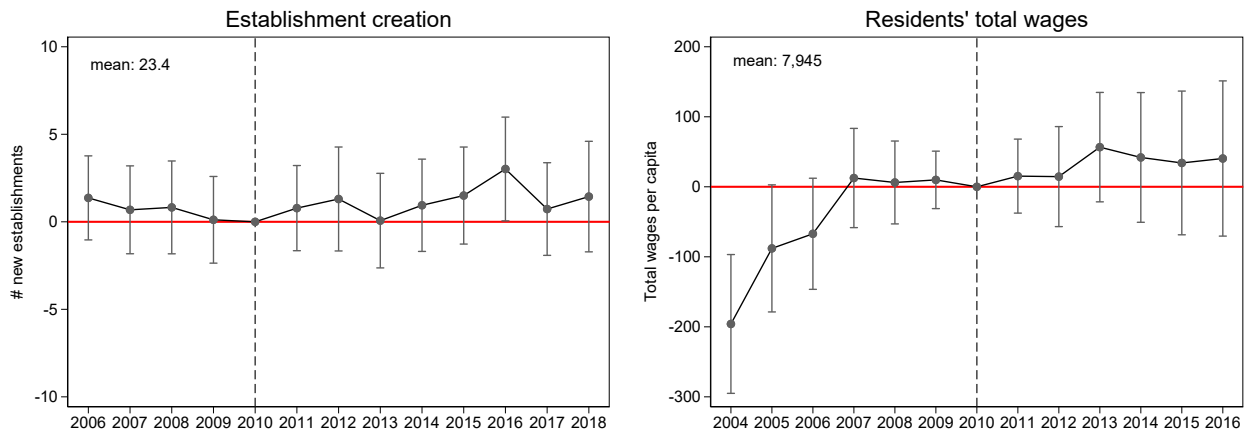
Notes: These graphs plot the estimates and 95-percent-confidence intervals from the leads-and-lags regression, using as outcome the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). The first graph includes only municipalities that are not part of an urban area. The second graph includes only municipalities that are part of an urban area. The third graph includes only municipalities that are part of an urban area but not part of the core of the urban area. The forth graph includes only municipalities in the core of the urban area (using a different scale given the magnitude of the results).

Figure A5: Impact on housing inside urban areas: Housing density



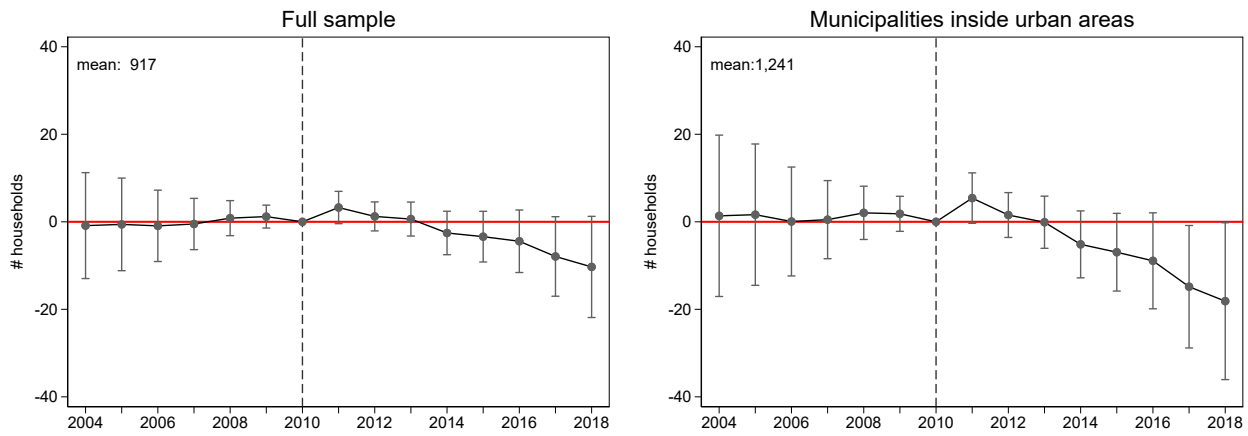
Notes: All graphs focus on municipalities inside an urban area. These graphs plot the estimates and 95-percent-confidence intervals from the leads-and-lags regression, using as outcome the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). The first (resp. second) graph includes only rural (resp. urban) municipalities. The third (resp. fourth) graph includes only municipalities with a housing density in 2010 below (resp. above) the median.

Figure A6: Impact on economic activity: Urban area



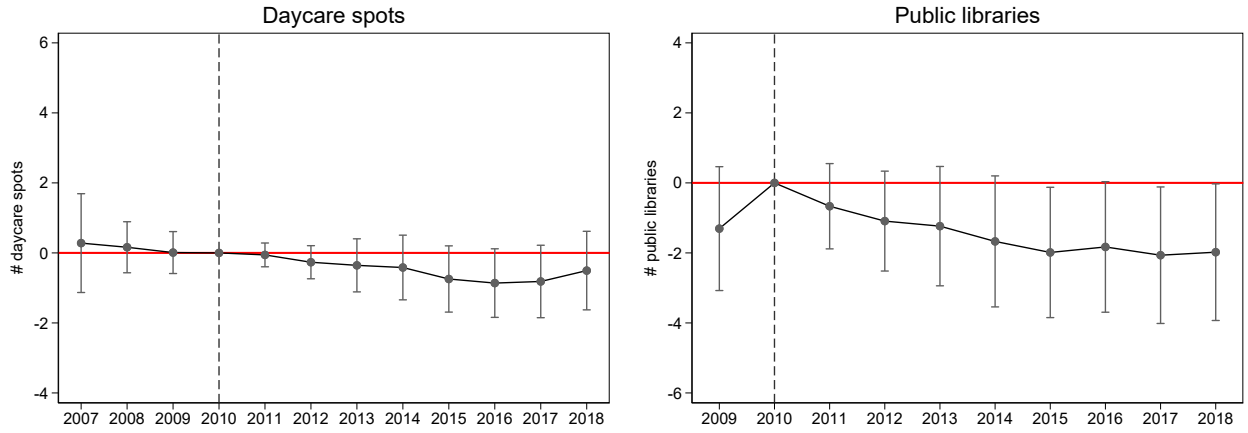
Notes: These graphs plot the estimates and 95-percent-confidence intervals from the leads-and-lags regression. The two graphs focus on municipalities inside an urban area. On the left-hand graph, the outcome is the number of establishments created in a given year, per 10,000 inhabitants (using the 2010 population). The agricultural sector and establishments created by individual entrepreneurs are excluded. On the right-hand graph, the outcome is the yearly total wages received by residents, divided by the 2010 population. The total wage computation includes only full-time employed residents. It excludes self-employed workers as well as the agricultural and public sectors. It is missing for the 311 smallest municipalities (2 percent). On both graphs, the average value of the outcome in the treatment group before 2010 is displayed on the top left corner.

Figure A7: Impact on population size



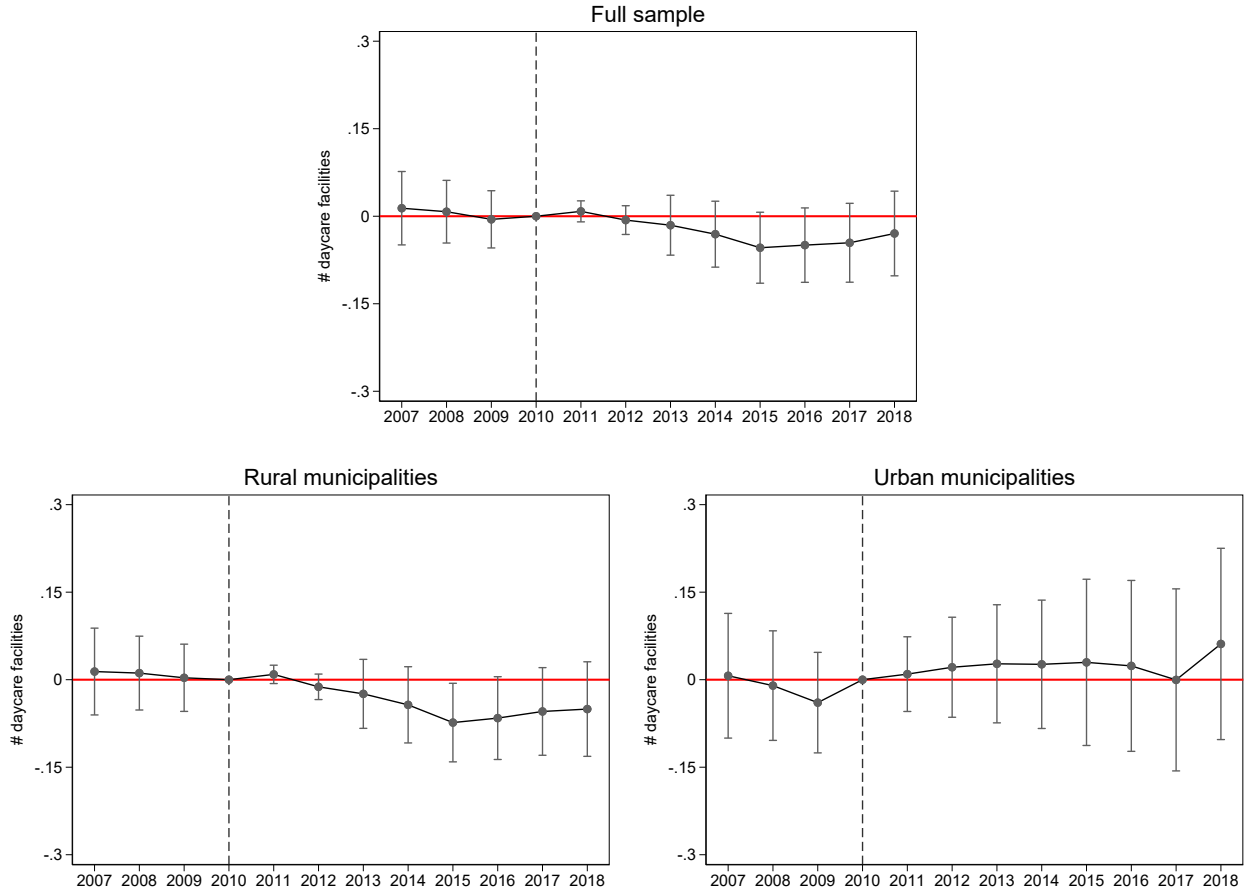
Notes: These graphs plot the estimates and 95-percent-confidence intervals from the leads-and-lags regression. The outcome is the number of household in the municipality on a given year, obtained from income tax declaration data. I exclude from the analysis the few municipalities for which the data are missing for at least one year over the period 2004–2018 (0.8 percent of the sample). On the right-hand graph, the sample is restricted to municipalities part of an urban area. On both graphs, the average value of the outcome in the treatment group before 2010 is displayed on the top left corner.

Figure A8: Impact on public services: Full sample



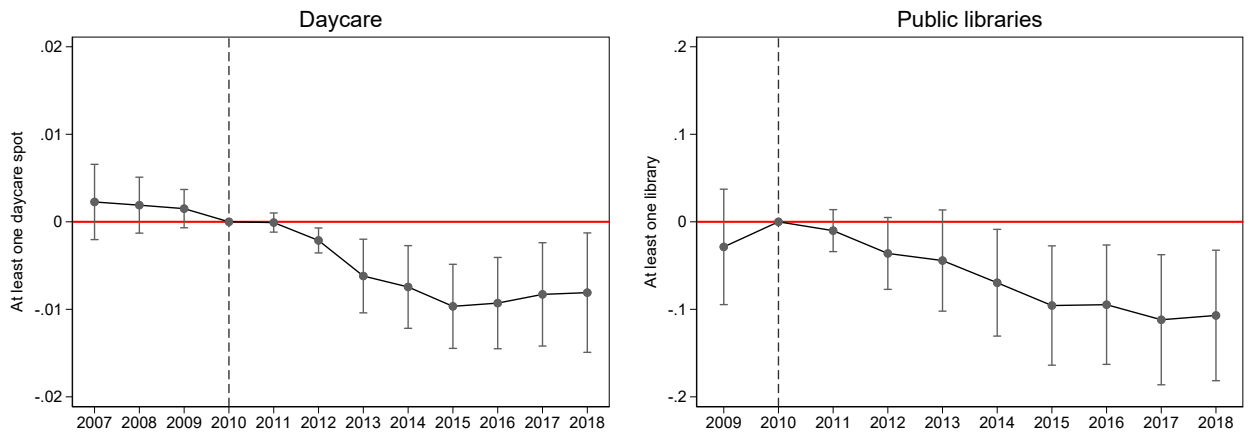
Notes: These graphs plot the estimates and 95-percent-confidence intervals from the leads-and-lags regression. In the left-hand graph, the outcome is the number of child daycare spots in the municipality per 10,000 inhabitants (using the 2010 population). In the right-hand graph, the outcome is the number of public libraries in the municipality per 10,000 inhabitants (using the 2010 population), and the sample is restricted to the 7 départements for which data are available starting in 2009.

Figure A9: Impact on the number of daycare facilities



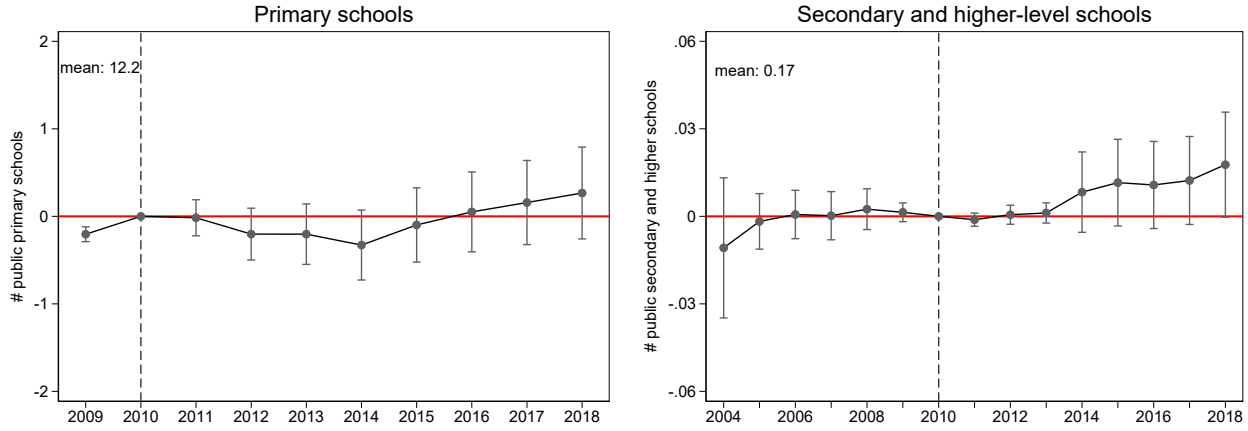
Notes: These graphs plot the estimates and 95-percent-confidence intervals from the leads-and-lags regression. The outcome is the number of daycare facilities in the municipality per 10,000 inhabitants (using the 2010 population). The graph on the bottom left-hand side includes only rural municipalities, while the graph on the bottom right-hand side includes only urban municipalities.

Figure A10: Impact on public services: Extensive margin



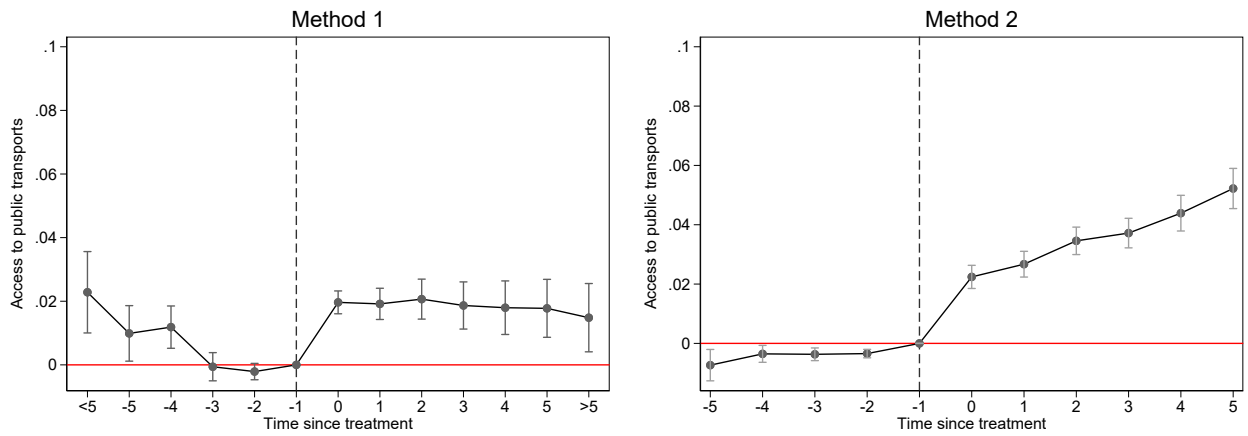
Notes: These graphs plot the estimates and 95-percent-confidence intervals from the leads-and-lags regression. The sample includes only rural municipalities. On the left-hand graph, the outcome is an indicator variable equal to 1 if the municipality has at least one daycare spot. On the right-hand graph, the outcome is an indicator variable equal to 1 if the municipality has at least one public library, and the sample is restricted to the 7 départements for which data are available starting in 2009.

Figure A11: Impact on public schools: Rural municipalities



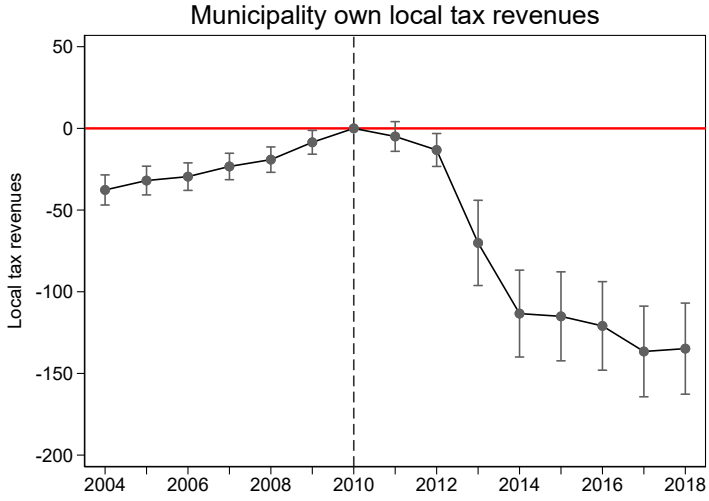
Notes: These graphs plot the estimates and 95-percent-confidence intervals from the leads-and-lags regression. The sample includes only rural municipalities. On the left-hand graph, the outcome is the number of public preschools and primary schools in the municipality, per 10,000 inhabitants (using the 2010 population). On the right-hand graph, the outcome is the number of secondary schools, high schools, and universities in the municipality, per 10,000 inhabitants (using the 2010 population). It includes both fully public schools and private but publicly subsidized schools. On both graphs, the average value of the outcome in the treatment group before 2010 is displayed on the top left corner.

Figure A12: Comparison with municipalities that voluntarily integrated: Transport



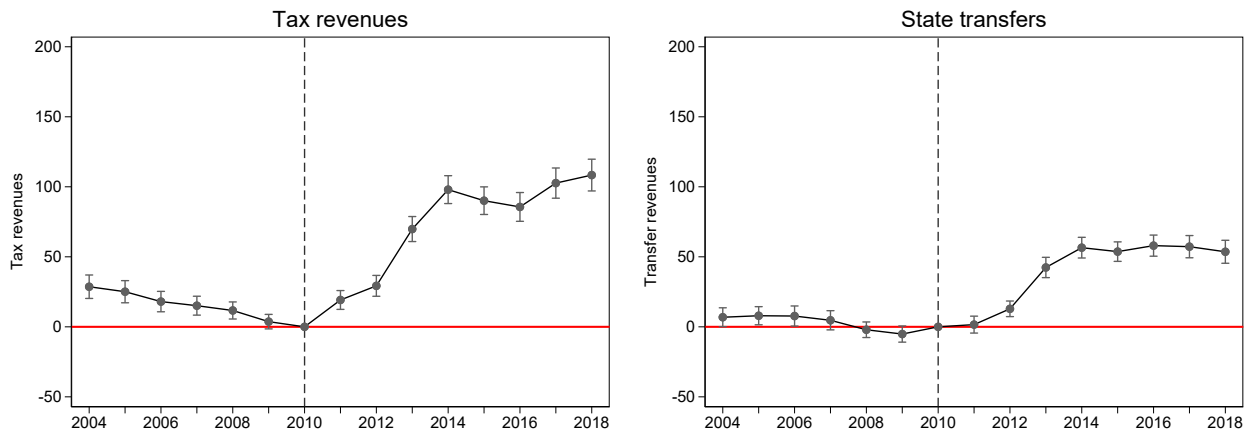
Notes: The outcome is an indicator variable equal to 1 if the municipality has access to public transport. The sample includes only municipalities that voluntarily integrated between 2000 and 2010 and excludes municipalities in the Parisian region of Île-de-France, for which the data are not available. The left-hand graph plot the estimates and 95-percent-confidence intervals from a regular staggered adoption design (method 1). The right-hand graph uses de Chaisemartin and D'Haultfoeuille (2020)'s method, implemented using the Stata command did_multiplegt, available on SSC repository (method 2). In method 1, the period of analysis goes from 1999 to 2017, whereas, in method 2, it goes from 1999 to 2009. More information on the two methods in Section III.B.

Figure A13: Impact on municipalities' own local tax revenues



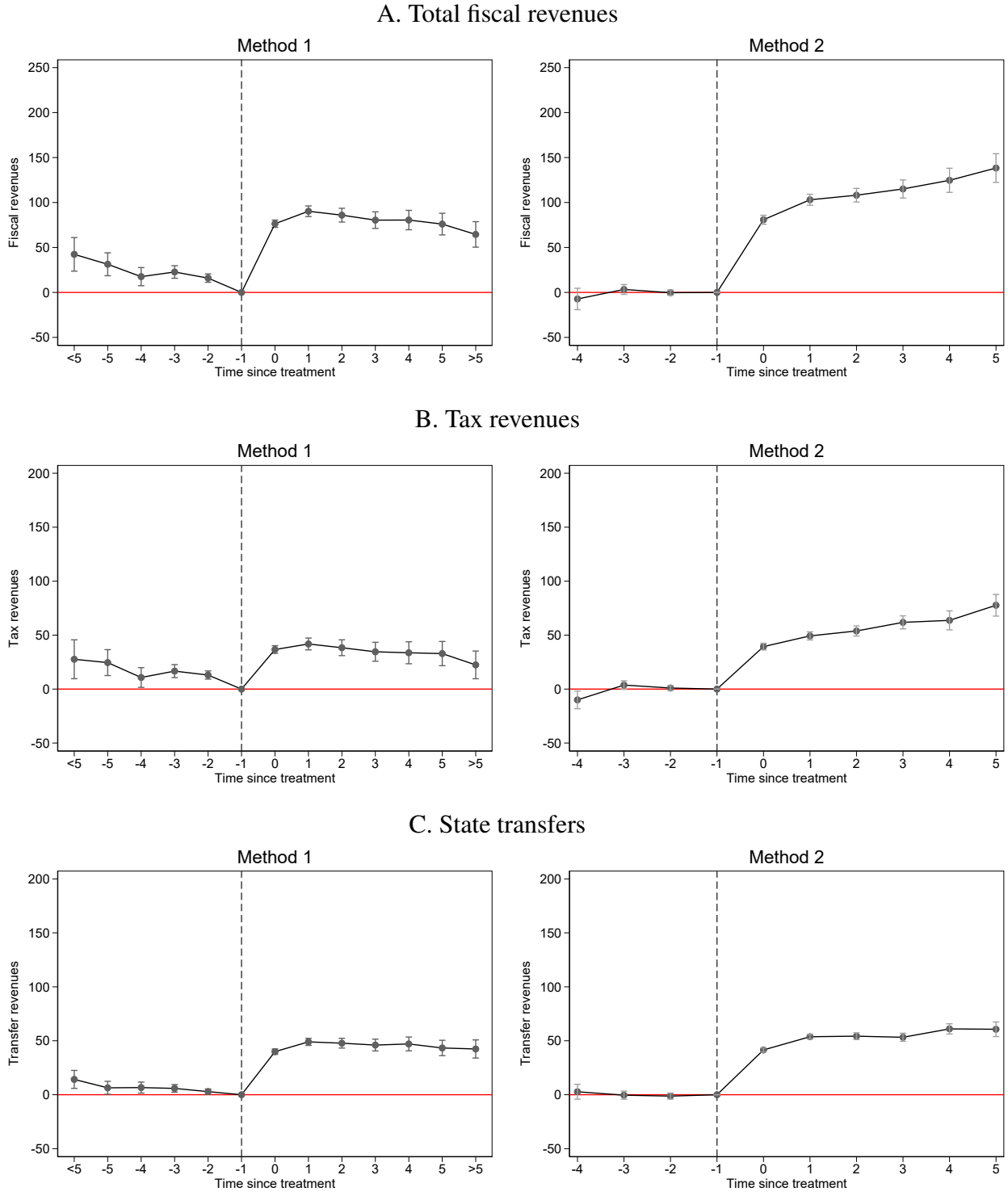
Notes: This graph plots the estimates and 95-percent-confidence intervals from the leads-and-lags regression. The outcome is the municipality's own local tax revenues per capita (using the 2010 population). I exclude from the analysis the few municipalities for which the data are missing for at least one year over the period 2004–2018 (0.2 percent of the sample).

Figure A14: Impact on tax revenues and state transfers



Notes: These graphs plot the estimates and 95-percent-confidence intervals from the leads-and-lags regression. On the left-hand (resp. right-hand) side graph, the outcome is the municipality's tax revenues (resp. state transfers) per capita (using the 2010 population). The outcome construction is described in Section III.B. I exclude from the analysis the few municipalities for which the data are missing for at least one year over the period 2004–2018 (0.4 percent of the sample).

Figure A15: Comparison with municipalities that voluntarily integrated: Fiscal revenues



Notes: The sample is made up of municipalities that voluntarily integrated between 2000 and 2010. The outcome in panel A (resp. B, C) is the municipality's total fiscal revenue (resp. tax revenue, state transfers) per capita, as described in Section V.B. Data on fiscal revenues are only available starting in 2002. The analysis is thus restricted to municipalities integrating between 2003 and 2010. I exclude from the analysis a few municipalities for which the data are missing for at least one year over the period 2002–2018 (3.5 percent of the sample). Left-hand graphs plot the estimates and 95-percent-confidence intervals from a regular staggered adoption design (method 1). Right-hand graphs use de Chaisemartin and D'Haultfoeuille (2020)'s method (method 2). In method 1, the period of analysis goes from 2002 to 2018, whereas, in method 2, it goes from 2002 to 2009. The second method goes only back to year -4 for fiscal outcomes. To compute the impact in year -5, we would need to observe some municipalities both 4 years before and after treatment, which is not possible given the lack of data prior to 2002.

Table A1: Descriptive statistics using the control group only – 2010 (Panels A and B)

	Treated municipalities (N=1,299)				Control municipalities (N=15,097)			
	mean	sd	min	max	**mean**	sd	min	max
Panel A	*Socio-demographic characteristics*							
population	**1,640**	4,692	16	72,939	**1,959**	11,686	7	851,420
w/out largest	**1,640**	4,692	16	72,939	**1,574**	4,139	7	66,095
Δ population	**0.102**	0.160	-0.397	1.385	**0.100**	0.149	-0.500	2.692
density	**162.1**	541.6	2.11	6,884	**156.3**	450.1	0.60	9,976
urban	**0.204**	0.403	0.000	1.000	**0.223**	0.416	0.000	1.000
urban area	**0.637**	0.481	0.000	1.000	**0.614**	0.487	0.000	1.000
core urban area	**0.091**	0.287	0.000	1.000	**0.119**	0.324	0.000	1.000
immigrants	**0.044**	0.040	0.000	0.333	**0.036**	0.039	0.000	0.665
unemployed	**0.082**	0.039	0.000	0.571	**0.088**	0.040	0.000	0.417
below 5 y/o	**0.060**	0.020	0.000	0.172	**0.062**	0.020	0.000	0.206
above 65 y/o	**0.170**	0.066	0.000	0.522	**0.176**	0.063	0.000	0.666
av. # children	**0.907**	0.245	0.000	2.000	**0.904**	0.220	0.000	2.500
farmers	**0.036**	0.053	0.000	0.444	**0.038**	0.050	0.000	0.600
executives	**0.070**	0.065	0.000	0.429	**0.052**	0.043	0.000	0.563
workers	**0.152**	0.080	0.000	1.000	**0.169**	0.069	0.000	0.667
retired	**0.280**	0.101	0.000	0.800	**0.286**	0.095	0.000	1.000
no diploma	**0.172**	0.069	0.000	0.463	**0.185**	0.067	0.000	0.614
baccalaureate	**0.156**	0.039	0.000	0.324	**0.153**	0.036	0.000	0.557
high education	**0.088**	0.071	0.000	0.507	**0.072**	0.045	0.000	0.542
residents' income	**14,064**	4,362	5,495	59,093	**12,488**	2,863	3,273	65,758
Panel B	*Land-use characteristics*							
share built land (%)	**0.742**	1.416	0.024	15.882	**0.791**	1.411	0.006	21.892
average height	**1.561**	0.216	1.048	4.727	**1.569**	0.191	1.000	4.391
FAR (p30)	**0.110**	0.076	0.001	0.901	**0.109**	0.080	0.001	0.895
FAR (p50)	**0.171**	0.116	0.003	1.812	**0.173**	0.121	0.004	1.901

Notes: Socio-demographic variables come from the 2008 census, which applies to the year 2010. Line 2 removes the 31 municipalities with a population higher than that of the largest treated municipality from the control group. The variation in the population (line 3) is computed by comparing the 1999 and 2008 censuses. Indicator variables for whether the municipality is urban, part of an urban area, or in the urban core are based on the INSEE 2010 classification. Land-use characteristics come from Combes et al. (2021) and each variable is built considering only construction before 2010. The share of built land is computed considering all construction, whereas the average height and floor-to-area ratio (FAR) are computed considering only housing construction. The average height gives the average number of housing stories. To measure the FAR stringency, I follow Combes et al. (2021) and take the 30th percentile of the distribution of realized floor-to-area ratios of all housing buildings in the municipality (FAR p(30)). I also show the statistics using the median (FAR p(50)).

Table A1 (continued): Descriptive statistics using the control group only – 2010 (Panel C)

	Treated municipalities (N=1,299)				Control municipalities (N=15,097)			
	mean	sd	min	max	**mean**	sd	min	max
Panel C	*Political characteristics*							
turnout municipal	**0.763**	0.096	0.431	1.000	**0.774**	0.090	0.367	1.000
turnout presidential	**0.874**	0.040	0.655	1.000	**0.872**	0.039	0.600	1.000
voteshare right	**0.602**	0.107	0.152	1.000	**0.563**	0.105	0.143	1.000
voteshare far-right	**0.138**	0.057	0.000	0.467	**0.128**	0.054	0.000	0.519
right-wing mayor	**0.620**	0.486	0.000	1.000	**0.568**	0.495	0.000	1.000
left-wing mayor	**0.267**	0.443	0.000	1.000	**0.336**	0.472	0.000	1.000
NC mayor	**0.112**	0.316	0.000	1.000	**0.094**	0.292	0.000	1.000
woman mayor	**0.161**	0.368	0.000	1.000	**0.138**	0.345	0.000	1.000
age mayor	**57.1**	9.1	25.0	87.0	**56.1**	8.6	18.0	85.0
incumbent mayor	**0.661**	0.474	0.000	1.000	**0.626**	0.484	0.000	1.000
change orientations	**0.210**	0.407	0.000	1.000	**0.212**	0.409	0.000	1.000

Notes: The municipal turnout rate and mayor's characteristics are based on the results of the 2008 municipal elections. The presidential turnout rate and far-right vote share come from the results of the first round of the 2007 presidential elections. The right-wing vote share comes from the results of the second round of the 2007 presidential elections. NC stands for "non classified".

Table A2: Descriptive statistics using municipalities' characteristics in 1999

	Treated municipalities (N=1,299)				Integrated municipalities (N=26,991)			
	mean	sd	min	max	**mean**	sd	min	max
population	**1,511**	4,427	18	67,406	**1,615**	9,170	2	797,491
density	**150.4**	518.9	1.20	6,629	**133.3**	413.1	0.17	10,153
urban	**0.179**	0.384	0.000	1.000	**0.174**	0.379	0.000	1.000
urban area	**0.574**	0.495	0.000	1.000	**0.542**	0.498	0.000	1.000
core urban area	**0.078**	0.268	0.000	1.000	**0.093**	0.291	0.000	1.000
unemployed	**0.101**	0.046	0.000	0.345	**0.105**	0.048	0.000	0.500
below 5 y/o	**0.048**	0.018	0.000	0.152	**0.049**	0.017	0.000	0.250
above 65 y/o	**0.180**	0.073	0.025	0.514	**0.189**	0.071	0.000	0.778
av. # children	**0.949**	0.308	0.000	3.500	**0.947**	0.286	0.000	5.000
farmers	**0.051**	0.062	0.000	0.500	**0.052**	0.059	0.000	1.000
executives	**0.053**	0.056	0.000	0.429	**0.038**	0.036	0.000	0.500
workers	**0.159**	0.072	0.000	0.600	**0.171**	0.066	0.000	0.667
retired	**0.250**	0.091	0.000	0.750	**0.258**	0.086	0.000	1.000
no diploma	**0.200**	0.080	0.029	0.682	**0.219**	0.078	0.000	0.692
baccalaureate	**0.115**	0.039	0.000	0.286	**0.110**	0.035	0.000	0.500
high education	**0.060**	0.057	0.000	0.413	**0.046**	0.035	0.000	0.518
residents' income	**8,434**	3,199	2,739	30,590	**7,252**	1,929	1,937	38,509

Notes: Data on the municipal population, age, education, and occupational composition come from the 1999 census. The share of immigrants is not available for this census year. Residents' income corresponds to the 2000 taxable income data.

Table A3: Descriptive statistics – 2010: Urban municipalities (Panels A and B)

	Treated municipalities (N=265)				Integrated municipalities (N=5,628)			
	mean	sd	min	max	**mean**	sd	min	max
Panel A	*Socio-demographic characteristics*							
population	**6,199**	9,009	137	72,939	**6,302**	20,376	77	85,1420
Δ population	**0.106**	0.160	-0.167	1.385	**0.086**	0.129	-0.257	2.070
density	**617.9**	1,081.7	26.2	6,883.5	**496.5**	826.6	12.4	9,976.5
urban area	**0.838**	0.369	0.000	1.000	**0.852**	0.355	0.000	1.000
core urban area	**0.445**	0.498	0.000	1.000	**0.518**	0.500	0.000	1.000
immigrants	**0.070**	0.047	0.005	0.281	**0.050**	0.044	0.000	0.395
unemployed	**0.092**	0.036	0.013	0.237	**0.099**	0.041	0.000	0.296
below 5 y/o	**0.059**	0.013	0.030	0.091	**0.059**	0.013	0.014	0.132
above 65 y/o	**0.165**	0.063	0.037	0.406	**0.169**	0.054	0.021	0.431
av. # children	**0.954**	0.187	0.416	1.471	**0.924**	0.158	0.376	1.833
farmers	**0.007**	0.012	0.000	0.103	**0.009**	0.013	0.000	0.190
executives	**0.099**	0.069	0.000	0.319	**0.070**	0.044	0.000	0.340
workers	**0.125**	0.057	0.016	0.305	**0.148**	0.052	0.000	0.400
retired	**0.265**	0.081	0.070	0.578	**0.274**	0.069	0.029	0.617
no diploma	**0.163**	0.064	0.018	0.359	**0.176**	0.064	0.025	0.557
baccalaureate	**0.164**	0.027	0.090	0.251	**0.155**	0.026	0.032	0.362
high education	**0.125**	0.092	0.025	0.507	**0.093**	0.055	0.000	0.542
residents' income	**16,197**	4,867	8,963	40,218	**13,792**	3,229	6,164	57,126
Panel B	*Land-use characteristics*							
share built land (%)	**2.377**	2.474	0.247	15.882	**2.183**	2.274	0.122	23.943
average height	**1.678**	0.317	1.135	4.727	**1.635**	0.233	1.061	4.391
FAR (p30)	**0.170**	0.085	0.030	0.493	**0.170**	0.089	0.008	1.465
FAR (p50)	**0.245**	0.146	0.061	1.812	**0.244**	0.126	0.027	1.901

Notes: The sample includes only urban municipalities. Socio-demographic variables come from the 2008 census, which applies to the year 2010. The variation in the population (line 2) is computed by comparing the 1999 and 2008 censuses. Indicator variables for whether the municipality is part of an urban area, or in the urban core are based on the INSEE 2010 classification. Land-use characteristics come from Combes et al. (2021) and each variable is built considering only construction before 2010. The share of built land is computed considering all construction, whereas the average height and floor-to-area ratio (FAR) are computed considering only housing construction. The average height gives the average number of housing stories. To measure the FAR stringency, I follow Combes et al. (2021) and take the 30th percentile of the distribution of realized floor-to-area ratios of all housing buildings in the municipality (FAR p(30)). I also show the statistics using the median (FAR p(50)).

Table A3 (continued): Descriptive statistics – 2010: Urban municipalities (Panel C)

	Treated municipalities (N=265)				Integrated municipalities (N=5,628)			
	mean	sd	min	max	**mean**	sd	min	max
Panel C	*Political characteristics*							
turnout municipal	**0.677**	0.086	0.431	0.883	**0.696**	0.084	0.367	0.985
turnout presidential	**0.869**	0.032	0.761	0.943	**0.863**	0.036	0.724	0.993
voteshare right	**0.592**	0.093	0.340	0.828	**0.541**	0.089	0.276	0.924
voteshare far-right	**0.115**	0.039	0.034	0.224	**0.119**	0.043	0.020	0.380
right-wing mayor	**0.589**	0.493	0.000	1.000	**0.492**	0.500	0.000	1.000
left-wing mayor	**0.343**	0.476	0.000	1.000	**0.444**	0.497	0.000	1.000
NC mayor	**0.068**	0.252	0.000	1.000	**0.063**	0.243	0.000	1.000
woman mayor	**0.140**	0.347	0.000	1.000	**0.109**	0.312	0.000	1.000
age mayor	**57.6**	9.0	30.0	81.0	**56.4**	8.6	23.0	83.0
incumbent mayor	**0.701**	0.459	0.000	1.000	**0.623**	0.485	0.000	1.000
change orientations	**0.170**	0.377	0.000	1.000	**0.203**	0.403	0.000	1.000

Notes: The sample includes only urban municipalities. The municipal turnout rate and mayor's characteristics are based on the results of the 2008 municipal elections. The presidential turnout rate and far-right vote share come from the results of the first round of the 2007 presidential elections. The right-wing vote share comes from the results of the second round of the 2007 presidential elections. NC stands for "non classified".

Table A4: Descriptive statistics – 2010: Rural municipalities (Panels A and B)

	Treated municipalities (N=1,034)				Integrated municipalities (N=21,363)			
	mean	sd	min	max	**mean**	sd	min	max
Panel A	*Socio-demographic characteristics*							
population	**472**	469	16	3,391	**501**	491	3	5,438
Δ population	**0.101**	0.160	-0.397	1.279	**0.104**	0.157	-0.500	2.692
density	**45.2**	50.3	2.1	525.1	**47.3**	57.8	0.2	2,750
urban area	**0.585**	0.493	0.000	1.000	**0.546**	0.498	0.000	1.000
immigrants	**0.038**	0.034	0.000	0.333	**0.034**	0.036	0.000	0.667
unemployed	**0.080**	0.040	0.000	0.571	**0.084**	0.040	0.000	0.429
below 5 y/o	**0.061**	0.022	0.000	0.172	**0.062**	0.022	0.000	0.206
above 65 y/o	**0.171**	0.067	0.000	0.522	**0.180**	0.067	0.000	0.667
av. # children	**0.895**	0.257	0.000	2.000	**0.884**	0.242	0.000	3.000
farmers	**0.044**	0.057	0.000	0.444	**0.046**	0.055	0.000	1.000
executives	**0.063**	0.062	0.000	0.429	**0.048**	0.044	0.000	0.563
workers	**0.159**	0.083	0.000	1.000	**0.170**	0.074	0.000	1.000
retired	**0.283**	0.106	0.000	0.800	**0.291**	0.104	0.000	1.000
no diploma	**0.175**	0.071	0.000	0.463	**0.184**	0.068	0.000	0.674
baccalaureate	**0.154**	0.042	0.000	0.324	**0.152**	0.039	0.000	0.557
high education	**0.079**	0.061	0.000	0.500	**0.068**	0.041	0.000	0.435
residents' income	**13,515**	4,048	5,495	59,093	**12,312**	2,735	3,273	65,758
Panel B	*Land-use characteristics*							
share built land (%)	**0.323**	0.308	0.024	3.631	**0.341**	0.408	0.004	25.987
average height	**1.531**	0.169	1.048	2.325	**1.540**	0.168	1.000	3.000
FAR (p30)	**0.095**	0.065	0.001	0.901	**0.090**	0.065	0.000	0.965
FAR (p50)	**0.152**	0.099	0.003	1.614	**0.150**	0.108	0.003	1.790

Notes: The sample includes only rural municipalities. Socio-demographic variables come from the 2008 census, which applies to the year 2010. The variation in the population (line 2) is computed by comparing the 1999 and 2008 censuses. The indicator variable for whether the municipality is part of an urban area is based on the INSEE 2010 classification. Land-use characteristics come from Combes et al. (2021) and each variable is built considering only construction before 2010. The share of built land is computed considering all construction, whereas the average height and floor-to-area ratio (FAR) are computed considering only housing construction. The average height gives the average number of housing stories. To measure the FAR stringency, I follow Combes et al. (2021) and take the 30th percentile of the distribution of realized floor-to-area ratios of all housing buildings in the municipality (FAR p(30)). I also show the statistics using the median (FAR p(50)).

Table A4 (continued): Descriptive statistics – 2010: Rural municipalities (Panel C)

	Treated municipalities (N=1,034)				Integrated municipalities (N=21,363)			
	mean	sd	min	max	**mean**	sd	min	max
Panel C	*Political characteristics*							
turnout municipal	**0.785**	0.086	0.499	1.000	**0.800**	0.078	0.464	1.000
turnout presidential	**0.876**	0.042	0.655	1.000	**0.876**	0.040	0.000	1.000
voteshare right	**0.604**	0.111	0.152	1.000	**0.569**	0.108	0.106	1.000
voteshare far-right	**0.144**	0.059	0.000	0.467	**0.133**	0.056	0.000	0.556
right-wing mayor	**0.628**	0.484	0.000	1.000	**0.577**	0.494	0.000	1.000
left-wing mayor	**0.248**	0.432	0.000	1.000	**0.308**	0.462	0.000	1.000
NC mayor	**0.124**	0.330	0.000	1.000	**0.113**	0.317	0.000	1.000
woman mayor	**0.166**	0.373	0.000	1.000	**0.151**	0.358	0.000	1.000
age mayor	**57.0**	9.1	25.0	87.0	**56.0**	8.8	18.0	88.0
incumbent mayor	**0.651**	0.477	0.000	1.000	**0.624**	0.484	0.000	1.000
change orientations	**0.221**	0.415	0.000	1.000	**0.226**	0.418	0.000	1.000

Notes: The sample includes only rural municipalities. The municipal turnout rate and mayor's characteristics are based on the results of the 2008 municipal elections. The presidential turnout rate and far-right vote share come from the results of the first round of the 2007 presidential elections. The right-wing vote share comes from the results of the second round of the 2007 presidential elections. NC stands for "non classified".

Table A5: Impact on housing: Alternative estimation strategies

	(1)	(2)	(3)
Outcome	Number of housing building permits		
	Log(y+1)	Asinh(y)	Poisson
Treatment	0.118	0.138	0.187
	(0.015)	(0.018)	(0.050)
Exp(β)	1.126	1.148	1.205
Municipality FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
Observations	245,940	245,940	243,510

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The outcome, denoted y, is the number of housing building permits delivered in the municipality per year. Column 1 takes as outcome the log transformation $ln(y+1)$, while Column 2 takes as outcome the inverse hyperbolic sine transformation $log(y+(y^2+1)^{1/2})$. Column 3 estimates a Poisson regression model, using the ppmlhdfe stata package (Correia et al., 2020). As explained in Correia et al. (2020), the ppmlhdfe command may drop "separated observations", that do not convey relevant information for the estimation process.

Table A6: Impact on housing: Dividing by current population and adding controls

	(1)	(2)	(3)	(4)
Outcome	Number of housing building permits			
	2010 population		Current population	
Treatment	8.141	8.172	16.953	16.568
	(1.517)	(1.515)	(2.878)	(2.884)
Municipality FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Controls	No	Yes	No	Yes
Observations	245,940	243,360	243,930	243,360
Mean DepVar	64.836	65.088	121.994	122.420
Sd DepVar	90.844	89.481	175.066	175.163

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants. In Columns 1 and 2 (resp. 3 and 4), the outcome is normalized by dividing by the 2010 population (resp. by the number of households in the municipality at year t). The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010) and should be used to compare the magnitude of the effect across the two measures. Controls included in Columns 2 and 4 are the number of households in the municipality and the average household's annual taxable income in year t. When using the number of households (resp. household's annual taxable income), the sample is restricted to a balanced panel of municipalities for which fiscal data are not missing during the period of analysis, excluding 134 (resp. 172) municipalities.

Table A7: Impact on housing: Characteristics of the building permits

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Outcome	Number of housing building permits per 10,000 inhabitants									
		Type of housing		Residence		Usage			Empty land	
	All	House	Apartment	Primary	Secondary	Self	Renting	Selling	Yes	No
Treatment	8.141	6.435	1.705	7.208	0.510	4.684	2.137	1.717	6.810	1.331
	(1.517)	(1.268)	(0.661)	(1.395)	(0.246)	(0.942)	(0.479)	(0.656)	(1.391)	(0.496)
Mun FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	245,940	245,940	245,940	245,940	245,940	245,940	245,940	245,940	245,940	245,940
Mean	64.836	56.081	8.755	58.479	2.526	36.554	9.236	7.540	53.922	10.914
Sd	90.844	78.198	41.721	84.826	15.593	64.329	32.912	38.170	82.793	35.660

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants. Columns 2 and 3 distinguish between building permits delivered for the construction of a house or an apartment. Columns 4 and 5 distinguish between building permits delivered for the construction of a primary or a secondary residence. Columns 6, 7 and 8 distinguish between three types of building permits depending on the use of the construction: if the home being built is intended to be used by the person receiving the permit, intended to be rented or to be sold. Columns 9 and 10 distinguish between building permits delivered for the construction of a new unit on empty land or for the extension of an existing housing building. Note that 9% of the entries did not specify whether the home was a primary or secondary residence and 31% did not specify the usage. In both cases, the impact on the number of building permits with missing information is small and not significant.

Table A8: Impact on housing: Comparison with municipalities that voluntarily integrated

	(1)
Outcome	Number of housing building permits
Integration	2.730
	(0.886)
IntegrationForced	5.612
	(1.728)
Municipality FE	Yes
Time FE	Yes
Observations	263,860
Mean DepVar	67.549
Sd DepVar	93.550

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable during the year preceding the integration. The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 1999 population). The treatment variable is an indicator variable equal to 1 if the municipality is integrated. The regression also includes the interaction between the treatment variable and an indicator variable equal to 1 if the municipality was forced to integrate following the 2010 law.

Table A9: Impact on housing: Residents' income

	(1)	(2)	(3)
Outcome	Number of housing building permits		
	All	Residents' income median	
		Below	Above
Treatment	8.141	4.518	8.114
	(1.517)	(2.173)	(2.024)
Municipality FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
Observations	245,940	122,850	122,850
Mean DepVar	64.836	66.216	81.021
Sd DepVar	90.844	87.332	102.097

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). Column 2 (resp. 3) includes only municipalities below (resp. above) the median of the per capita residents' annual taxable income in 2010. Data on taxable income in 2010 are missing for the 16 smallest municipalities.

Table A10: Impact on housing inside urban areas: Residents' income

	(1)	(2)	(3)
Outcome	Number of housing building permits		
	All	Residents' income median	
		Below	Above
Treatment	10.494	5.265	9.418
	(1.812)	(2.907)	(2.333)
Municipality FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
Observations	151,500	75,735	75,720
Mean DepVar	63.660	70.743	80.285
Sd DepVar	85.197	83.777	102.510

Notes: The sample includes only municipalities inside an urban area. Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). Column 2 (resp. 3) includes only municipalities below (resp. above) the median of the per capita residents' annual taxable income in 2010. Data on taxable income in 2010 are missing for the 3 smallest municipalities.

Table A11: Impact on housing inside urban areas: Housing density

	(1)	(2)	(3)	(4)	(5)
Outcome	Number of housing building permits per 10,000 inhabitants				
	All	Rural	Urban	Housing density median	
				Below	Above
Treatment	10.494	9.852	15.538	9.258	13.895
	(1.812)	(1.967)	(3.755)	(2.230)	(2.759)
P-value (2)=(3), (4)=(5)		0.180		0.191	
Mun. FE	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes
Obs.	151,500	105,345	46,155	75,750	75,750
Mean	63.660	62.963	65.558	64.714	62.425
Sd	85.197	82.124	93.059	85.671	84.638

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). The sample includes only municipalities inside an urban area. Columns 2 to 5 add further restrictions: Column 2 (resp. 3) includes only rural (resp. urban) municipalities and Column 4 (resp. 5) includes only municipalities with a housing density in 2010 below (resp. above) the median.

Table A12: Impact on housing inside urban areas: CA and CU ICs

	(1)	(2)	(3)	(4)	(5)
Outcome	Number of housing building permits per 10,000 inhabitants				
	All	Rural	Urban	Housing density median	
				Below	Above
Treatment	8.853	7.831	16.928	7.552	18.047
	(4.171)	(5.371)	(6.146)	(5.033)	(6.655)
P-value (2)=(3), (4)=(5)		0.265		0.208	
Mun. FE	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes
Obs.	39,180	16,260	22,920	19,590	19,590
Mean	66.201	67.800	64.264	66.069	66.415
Sd	89.274	80.366	99.046	78.057	105.004

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). The sample includes only municipalities inside an urban area and that are part of a "CA" or "CU" IC in 2014 (standing for *Communauté d'Agglomération* and *Communauté Urbaine*). Columns 2 to 5 add further restrictions: Column 2 (resp. 3) includes only rural (resp. urban) municipalities and Column 4 (resp. 5) includes only municipalities with a housing density in 2010 below (resp. above) the median.

Table A13: Impact on housing by municipality size

	(1)	(2)	(3)	(4)
Outcome	Number of housing building permits			
	All	$< 3,500$	$< 1,000$	< 500
Treatment	8.141	7.280	6.774	6.819
	(1.517)	(1.531)	(1.687)	(1.964)
Mun. FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Obs.	245,940	223,380	174,030	123,555
Mean	64.836	64.256	62.557	61.712
Sd	90.844	90.398	91.500	95.589

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). Column 2 (resp. 3, 4) includes only municipalities with less than 3,500 (resp. 1,000, 500) inhabitants in 2010.

Table A14: Impact on housing: Direct neighbors' characteristics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Outcome	Number of housing building permits per 10,000 inhabitants						
	All	Median income ratio		Median immigrants ratio		Median unemployed ratio	
		Below	Above	Below	Above	Below	Above
Treatment	8.141	7.249	9.348	6.893	9.224	4.362	12.079
	(1.517)	(2.126)	(2.128)	(2.118)	(2.171)	(2.174)	(2.103)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	245,940	122,850	122,850	122,970	122,970	122,970	122,970
Mean DepVar	64.836	60.737	68.200	63.472	66.330	67.458	61.938
Sd DepVar	90.844	84.897	94.558	87.958	93.890	95.820	84.922

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). For each municipality, the ratio divides the value of the heterogeneity variable in the municipality by the average value for the neighboring municipalities—defined as municipalities sharing a common border—weighted by their population. Column 2 (resp. 3) includes only municipalities below (resp. above) the median value of the ratio using the per capita residents' annual taxable income. Data on taxable income in 2010 are missing for the 16 smallest municipalities. Column 4 (resp. 5) includes only municipalities below (resp. above) the median value of the ratio using the share of immigrants in 2010. Columns 6 and 7 repeat the same exercise using the share of unemployed workers in 2010.

Table A15: Impact on housing: Neighbors' share of non-European immigrants

	(1)	(2)	(3)	(4)	(5)
Outcome	Number of housing building permits				
	All	Median non-European immigrants ratio			
		Département		Direct neighbors	
		Below	Above	Below	Above
Treatment	8.141	8.359	8.159	4.898	11.150
	(1.517)	(1.778)	(2.531)	(2.062)	(2.260)
Municipality FE	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes
Observations	245,940	122,970	122,970	121,440	121,425
Mean DepVar	64.836	58.932	71.609	63.189	67.397
Sd DepVar	90.844	84.465	97.219	88.437	92.985

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). For each municipality, the ratio divides the share of non-European immigrants in the municipality by the average share in surrounding municipalities, weighted by their population. Surrounding municipalities are defined either as all the other municipalities from the same département (Columns 2 and 3) or as municipalities sharing a border (Columns 4 and 5). Columns 2 and 4 (resp. 3 and 5) includes only municipalities below (resp. above) the median value of the ratio. The ratio considering direct neighbors (Columns 4 and 5) is missing for 205 municipalities whose neighboring municipalities had zero non-European immigrants.

Table A16: Impact on housing: Political alignment

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Outcome	Number of housing building permits per 10,000 inhabitants						
	All	Same orientation as district official		Vote-share-distance median			
				Département		Direct neighbors	
		Yes	No	Below	Above	Below	Above
Treatment	8.141	8.703	7.234	5.962	9.951	7.936	8.331
	(1.517)	(1.964)	(2.380)	(2.195)	(2.092)	(2.203)	(2.093)
Mun. FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	245,940	141,885	103,110	122,970	122,970	122,970	122,970
Mean	64.836	64.925	64.685	69.661	60.908	69.458	60.524
Sd	90.844	91.436	89.837	94.704	87.388	94.093	87.494

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). Column 2 (resp. 3) includes only municipalities whose mayor had the same orientation (resp. a different orientation) as the member of parliament of their district in 2010. Column 4 (resp. 5) includes only municipalities below (resp. above) the median value of the absolute difference in the right-wing vote share in the 2007 presidential election between the municipality and the other municipalities from the same département. In Columns 6 and 7, surrounding municipalities are defined as direct neighbors.

Table A17: Impact on housing: Share of homeowners: Urban municipalities

	(1)	(2)	(3)
Outcome	Number of housing building permits		
	All	Median % homeowners	
		Below	Above
Treatment	13.774	13.139	14.364
	(3.691)	(5.548)	(4.883)
Municipality FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
Observations	54,420	27,210	27,210
Mean DepVar	69.875	74.602	65.253
Sd DepVar	93.921	100.447	86.876

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The sample includes only urban municipalities. The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). Column 4 (resp. 5) includes only municipalities below (resp. above) the median value of the share of homeowners in 2010.

Table A18: Impact on public services (rural municipalities): Alternative estimation strategies

Outcome	(1)	(2)	(3)	(4)	(5)	(6)
	Number of daycare spots			Number of public libraries		
	Log(y+1)	Asinh(y)	Poisson	Log(y+1)	Asinh(y)	Poisson
Treatment	-0.022	-0.027	-0.205	-0.042	-0.054	-0.228
	(0.005)	(0.007)	(0.064)	(0.016)	(0.020)	(0.083)
Exp(β)	0.978	0.973	0.814	0.959	0.948	0.796
Mun. FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	153,216	153,216	153,216	11,020	11,020	3,520

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The sample is restricted to rural municipalities. In Columns 1 to 3, the outcome, denoted y, is the number of child daycare spots in the municipality; the period of analysis is 2007-2018. In Columns 4 to 6, the outcome, denoted y, is the number of public libraries in the municipality; the period of analysis is 2009–2018 and the sample is restricted to the 7 départements for which data are available starting in 2009. Columns 1 and 4 take as outcome the log transformation $ln(y+1)$, while Columns 2 and 5 take as outcome the inverse hyperbolic sine transformation $log(y+(y^2+1)^{1/2})$. Columns 3 and 6 estimate a Poisson regression model, using the ppmlhdfe stata package (Correia et al., 2020). As explained in Correia et al. (2020), the ppmlhdfe command may drop "separated observations", that do not convey relevant information for the estimation process.

Table A19: Impact on the number of daycare facilities

	(1)	(2)	(3)
Outcome	Number of daycare facilities		
	All	Rural	Urban
Treatment	-0.032	-0.046	0.036
	(0.030)	(0.034)	(0.060)
P-value (2)=(3)		0.232	
Municipality FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
Observations	196,752	153,216	43,536
Mean DepVar	0.402	0.169	1.310
Sd DepVar	1.453	1.267	1.749

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of daycare facilities in the municipality per 10,000 inhabitants (using the 2010 population), and the period of analysis is 2007–2018. Column 2 (resp.3) include only rural (resp. urban) municipalities.

Table A20: Impact on local public services (rural municipalities): Extensive margin

	(1)	(2)
Outcome	At least one	
	Daycare spot	Public library
Treatment	-0.008	-0.057
	(0.002)	(0.021)
Municipality FE	Yes	Yes
Time FE	Yes	Yes
Observations	153,216	11,020
Mean DepVar	0.022	0.301
Sd DepVar	0.148	0.460

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The sample includes only rural municipalities. In Columns 1, the outcome is an indicator variable equal to 1 if the municipality has at least one daycare spot; the period of analysis is 2007-2018. In Column 2, the outcome is an indicator variable equal to 1 if the municipality has at least one public library; the period of analysis is 2009–2018 and the sample is restricted to the 7 départements for which data are available starting in 2009.

Table A21: Impact on local public services (rural municipalities): Heterogeneity analysis

Outcome	(1)	(2)	(3)	(4)	(5)	(6)
	Number of daycare spots			Number of public libraries		
	All rural	At least 1 in 2010		All rural	At least 1 in 2010	
		Yes	No		Yes	No
Treatment	-1.001	3.581	-1.032	-1.248	-3.361	-0.096
	(0.463)	(14.510)	(0.271)	(0.620)	(1.698)	(0.134)
P-value (2)=(3), (5)=(6)		0.750			0.055	
Mun FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	153,216	4,872	148,344	11,020	3,260	7,760
Mean	3.617	149.583	0.000	5.277	15.104	0.000
Sd	31.900	143.000	0.000	10.983	14.076	0.000

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). In Columns 1 to 3, the outcome is the number of child daycare spots in the municipality per 10,000 inhabitants (using the 2010 population); the period of analysis is 2007-2018. In Columns 4 to 6, the outcome is the number of public libraries in the municipality per 10,000 inhabitants (using the 2010 population); the period of analysis is 2009–2018 and the sample is restricted to the 7 départements for which data are available starting in 2009. The sample is restricted to rural municipalities. Column 2 (resp. 5) includes only rural municipalities that had at least one daycare spot (resp. public library) in 2010. Column 3 (resp. 6) includes only rural municipalities that did not have any daycare spots (resp. public libraries) in 2010.

Table A22: Impact on public services (rural municipalities): Dividing by current population and adding controls

Outcome	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Daycare spots				Public Libraries			
	2010 population		Current population		2010 population		Current population	
Treatment	-1.001	-0.963	-1.903	-1.875	-1.248	-1.329	-2.375	-2.416
	(0.463)	(0.467)	(0.780)	(0.782)	(0.620)	(0.649)	(1.145)	(1.175)
Mun. FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	No	Yes	No	Yes	No	Yes	No	Yes
Obs.	153,216	151,296	151,740	151,296	11,020	10,860	10,920	10,860
Mean	3.617	3.688	7.011	7.053	4.374	5.544	9.895	10.146
Sd	31.900	32.209	63.091	63.275	9.574	11.193	20.474	20.672

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The sample includes only rural municipalities. In Columns 1 to 4, the outcome is the number of child daycare spots in the municipality per 10,000 inhabitants (using the 2010 population) and the period of analysis is 2007–2018. In Columns 4 to 8, the outcome is the number of public libraries in the municipality per 10,000 inhabitants (using the 2010 population), the period of analysis is 2009–2018, and the sample is restricted to the 7 départements for which data are available starting in 2009. In Columns 1, 2, 5, and 6 (resp. 3, 4, 7, and 8) the outcome is normalized by dividing by the 2010 population (resp. by the number of households in the municipality at year t). The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010) and should be used to compare the magnitude of the effect across the two measures. Controls included in Columns 2, 4, 6, and 8 are the number of households in the municipality and the average household's annual taxable income in year t. When using the number of households (resp. household's annual taxable income), the sample is restricted to a balanced panel of municipalities for which fiscal data are not missing during the period of analysis, excluding 134 (resp. 172) municipalities.

Table A23: Impact on public transport: Adding controls

	(1)	(2)
Outcome	Public transport	
Treatment	0.032	0.033
	(0.007)	(0.007)
Municipality FE	Yes	Yes
Time FE	Yes	Yes
Controls	No	Yes
Observations	221,368	220,178
Mean DepVar	0.024	0.024
Sd DepVar	0.152	0.153

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is an indicator variable equal to 1 if the municipality has access to public transport. The sample excludes municipalities in the Parisian region of Île-de-France, for which the data are not available. Controls included in Column 2 are the number of households in the municipality and the average household's annual taxable income in year t. In Column 2, the sample is restricted to a balanced panel of municipalities for which fiscal data are not missing during the period of analysis, excluding 87 small municipalities.

Table A24: Impact on tax revenues and state transfers

Outcome	(1)	(2)	(3)
	Fiscal revenues		
	All	Tax	Transfer
Treatment	101.2	60.8	39.1
	(4.813)	(4.929)	(2.410)
Municipality FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
Observations	244,965	244,965	244,965
Mean DepVar	698.6	424.4	274.2
Sd DepVar	430.0	349.2	150.0

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). In Column 1, the outcome is the municipality's total fiscal revenues per capita. In Column 2 (resp. 3), the outcome is the municipality's tax revenues (resp. state transfers), per capita. The construction of the outcomes is described in Section V.B. I exclude from the analysis few municipalities for which the data are missing for at least one year over the period 2004–2018 (0.4 percent of the sample).

Table A25: Impact on fiscal revenues: Dividing by current population and adding controls

	(1)	(2)	(3)	(4)
Outcome	Fiscal revenues per capita			
	2010 population		Current population	
Treatment	101.2	100.5	198.6	193.5
	(4.813)	(4.766)	(8.313)	(8.085)
Municipality FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Controls	No	Yes	No	Yes
Observations	244,965	242,400	242,970	242,400
Mean DepVar	698.6	693.8	1282	1277
Sd DepVar	430.0	422.3	732.2	719.1

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The outcome is the municipality's total fiscal revenues per capita, as described in Section V.B. I exclude from the analysis the few municipalities for which the data are missing for at least one year over the period 2004–2018 (0.4 percent of the sample). In Columns 1 and 2 (resp. 3 and 4) the outcome is normalized by dividing by the 2010 population (resp. by the number of households in the municipality at year t). The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010) and should be used to compare the magnitude of the effect across the two measures. Controls included in Columns 2 and 4 are the number of households in the municipality and the average household's annual taxable income in year t. When using the number of households (resp. household's annual taxable income), the sample is restricted to a balanced panel of municipalities for which fiscal data are not missing during the period of analysis, excluding 134 (resp. 172) municipalities.

Table A26: Impact on public services depending on the integration process: Rural municipalities

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Outcome	Daycare spots					Public libraries				
	All	New IC	Existing IC			All	New IC	Existing IC		
			All	Recent	≥ 2 choices			All	Recent	≥ 2 choices
Treatment	-1.001	-1.265	-0.908	-0.394	-1.672	-1.248	-0.516	-1.349	-1.627	-2.273
	(0.463)	(0.341)	(0.569)	(0.887)	(0.514)	(0.620)	(0.366)	(0.698)	(0.968)	(1.064)
Mun FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	153,216	144,060	149,964	144,012	146,940	11,020	10,290	10,920	10,630	10,610
Mean	3.617	1.951	4.208	6.976	2.551	5.277	6.600	5.096	5.655	5.588
Sd	31.900	13.115	36.288	52.146	22.776	10.983	5.644	11.524	12.621	12.381

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The sample includes only rural municipalities. In Columns 1 to 5, the outcome is the number of child daycare spots in the municipality per 10,000 inhabitants (using the 2010 population) and the period of analysis is 2007–2018. In Columns 6 to 10, the outcome is the number of public libraries in the municipality per 10,000 inhabitants (using the 2010 population), the period of analysis is 2009–2018, and the sample is restricted to the 7 départements for which data are available starting in 2009. Columns 2 and 7 (resp. 3 and 8) include only treated municipalities that created a new IC (resp. that joined an existing IC) after the 2010 law. Results on public libraries should be interpreted with caution for this restriction, as it includes only 10 rural treated municipalities. Columns 4 and 9 include only treated municipalities that entered an existing IC which had recently been created (in which all other members integrated after 2000). Columns 5 and 10 include only treated municipalities that entered an existing IC and that had the choice between at least two of them in 2010.

Table A27: Impact on public services depending on whether the IC encompasses big cities: Rural municipalities

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome	Daycare spots			Public libraries		
	All	No big city	Big city	All	No big city	Big city
Treatment	-1.001	-1.315	-0.637	-1.248	-1.029	-1.474
	(0.463)	(0.394)	(0.934)	(0.620)	(0.831)	(0.890)
P-value (2)=(3), (5)=(6)		0.504			0.715	
Mun FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	153,216	97,884	55,308	11,020	6,850	4,170
Mean	3.617	2.200	5.502	5.277	4.857	5.615
Sd	31.900	22.126	41.391	10.983	10.747	11.216

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The sample includes only rural municipalities. In Columns 1 to 3, the outcome is the number of child daycare spots in the municipality per 10,000 inhabitants (using the 2010 population) and the period of analysis is 2007–2018. In Columns 4 to 6, the outcome is the number of public libraries in the municipality per 10,000 inhabitants (using the 2010 population), the period of analysis is 2009–2018, and the sample is restricted to the 7 départements for which data are available starting in 2009. Columns 2 and 5 (resp. 3 and 6) include only municipalities that, in 2014, are part of an IC in which all municipalities are below 5,000 inhabitants (resp. encompassing a municipalities above 5,000 inhabitants).

Table A28: Impact on housing depending on mayors' incumbency status: Urban areas

	(1)	(2)	(3)
Outcome	Number of building permits		
	All	Incumbent	Not incumbent
Treatment	10.494	10.883	10.622
	(1.812)	(2.347)	(2.851)
Municipality FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
Observations	151,500	93,300	55,620
Mean DepVar	63.660	64.866	61.206
Sd DepVar	85.197	84.970	85.156

Notes: The sample includes only municipalities part of an urban area. Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). Column 2 (resp. 3) includes only municipalities whose mayor was the incumbent in 2010 and had thus been in place since at least 2001 (resp. was not the incumbent and was thus newly elected in 2008).

Table A29: Impact on public services depending on mayors' incumbency status: Rural municipalities

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome	Daycare spots			Public libraries		
	All	Incumbent	Not incumbent	All	Incumbent	Not incumbent
Treatment	-1.001	-0.994	-0.893	-1.248	-1.582	-0.490
	(0.463)	(0.650)	(0.603)	(0.620)	(0.898)	(0.417)
Mun FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	153,216	94,524	55,812	11,020	6,750	4,060
Mean	3.617	4.183	2.713	5.277	5.381	4.147
Sd	31.900	35.382	24.956	10.983	11.754	7.704

Notes: The sample includes only rural municipalities. Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). In Columns 1 to 3, the outcome is the number of child daycare spots in the municipality per 10,000 inhabitants (using the 2010 population) and the period of analysis is 2007–2018. In Columns 4 to 6, the outcome is the number of public libraries in the municipality per 10,000 inhabitants (using the 2010 population), the period of analysis is 2009–2018, and the sample is restricted to the 7 départements for which data are available starting in 2009. Columns 2 and 5 (resp. 3 and 6) include only municipalities whose mayor was the incumbent in 2010 and had thus been in place since at least 2001 (resp. was not the incumbent and was thus newly elected in 2008).

B. Additional robustness checks

In this section, I describe and present additional robustness tests to support the identification strategy. As the negative impact on public services is significant only for rural municipalities, I present the robustness tests on public services for rural municipalities only.

B1. Impact depending on the latest date of integration of the control municipalities

For each outcome, I test the robustness of the results to varying the control group depending on the latest date of integration of the control municipalities. In each table below, the first column gives the baseline estimate restricting the control group to municipalities integrated since 1999. The next columns provide the estimates obtained by considering instead all municipalities integrated since 2002, 2004, 2006, 2008, and 2010, respectively. The last column includes all municipalities already integrated in 2010.

Table B1.1: Housing supply

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome	Number of building permits per 10,000 inhabitants					
Latest integration	1999	2002	2004	2006	2008	2010
Treatment	8.141	7.865	7.505	7.306	7.318	7.396
	(1.517)	(1.496)	(1.490)	(1.489)	(1.488)	(1.487)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	245,940	335,685	389,325	407,010	415,815	426,495
Mean DepVar	64.836	64.836	64.836	64.836	64.836	64.836
Sd DepVar	90.844	90.844	90.844	90.844	90.844	90.844

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). Column 1 reproduces the baseline estimate as reported in the paper, using as control group municipalities integrated since 1999. The next columns include in the control group all municipalities integrated since 2002, 2004, 2006, 2008, and 2010, respectively.

Table B1.2: Daycare: Rural municipalities

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome	Number of daycare spots per 10,000 inhabitants					
Latest integration	1999	2002	2004	2006	2008	2010
Treatment	-1.001	-0.969	-1.027	-1.091	-1.059	-1.019
	(0.463)	(0.437)	(0.437)	(0.434)	(0.431)	(0.430)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	153,216	210,816	245,412	256,680	262,704	270,180
Mean DepVar	3.617	3.617	3.617	3.617	3.617	3.617
Sd DepVar	31.900	31.900	31.900	31.900	31.900	31.900

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The sample includes only rural municipalities. The outcome is the number of daycare spots in the municipality per 10,000 inhabitants (using the 2010 population) and the period of analysis is 2007–2018. Column 1 reproduces the baseline estimate as reported in the paper, using as a control group municipalities integrated since 1999. The next columns include in the control group all municipalities integrated since 2002, 2004, 2006, 2008, and 2010, respectively.

Table B1.3: Public libraries: Rural municipalities

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome	Number of public libraries per 10,000 inhabitants					
Latest integration	1999	2002	2004	2006	2008	2010
Treatment	-1.248	-1.340	-1.475	-1.501	-1.500	-1.483
	(0.620)	(0.617)	(0.615)	(0.614)	(0.614)	(0.614)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11,020	14,820	18,170	18,960	19,030	19,580
Mean DepVar	5.277	5.277	5.277	5.277	5.277	5.277
Sd DepVar	10.983	10.983	10.983	10.983	10.983	10.983

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010) The sample includes only rural municipalities. The outcome is the number of public libraries in the municipality per 10,000 inhabitants (using the 2010 population). The period of analysis is 2009–2018 and the sample is restricted to the 7 départements for which data are available starting in 2009. Column 1 reproduces the baseline estimate as reported in the paper, using as a control group municipalities integrated since 1999. The next columns include in the control group all municipalities integrated since 2002, 2004, 2006, 2008, and 2010, respectively.

Table B1.4: Public transport

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome	Access to public transport					
Latest integration	1999	2002	2004	2006	2008	2010
Treatment	0.032	0.031	0.031	0.031	0.030	0.030
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	221,368	304,178	350,938	364,994	372,918	382,088
Mean DepVar	0.024	0.024	0.024	0.024	0.024	0.024
Sd DepVar	0.152	0.152	0.152	0.152	0.152	0.152

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010) The outcome is an indicator variable equal to one if the municipality has access to public transport. The sample excludes municipalities in the Parisian region of Île-de-France, for which the data are not available. Column 1 reproduces the baseline estimate as reported in the paper, using as a control group municipalities integrated since 1999. The next columns include in the control group all municipalities integrated since 2002, 2004, 2006, 2008, and 2010, respectively.

Table B1.5: Fiscal revenues

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome	Fiscal revenues per capita					
Latest integration	1999	2002	2004	2006	2008	2010
Treatment	101.2	102.6	101.0	101.1	100.0	98.2
	(4.8)	(4.8)	(4.7)	(4.7)	(4.7)	(4.7)
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	244,965	334,335	387,630	405,195	413,970	424,650
Mean DepVar	698.6	698.6	698.6	698.6	698.6	698.6
Sd DepVar	430.0	430.0	430.0	430.0	430.0	430.0

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010) The outcome is the municipality's total fiscal revenues per capita, as defined in Section V.B. I exclude from the analysis the few municipalities for which the data are missing for at least one year over the period 2004–2018 (0.4 percent of the sample). Column 1 reproduces the baseline estimate as reported in the paper, using as a control group municipalities integrated since 1999. The next columns include in the control group all municipalities integrated since 2002, 2004, 2006, 2008, and 2010, respectively.

B2. Clusters at the IC level

Table B2.1: Housing supply

	(1)	(2)	(3)
Outcome	Number of building permits		
Cluster	Municipality	IC 2014	IC 2018
Treatment	8.141	8.141	8.141
	(1.517)	(2.250)	(2.344)
Municipality FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
Observations	245,940	245,940	245,940
Mean DepVar	64.836	64.836	64.836
Sd DepVar	90.844	90.844	90.844

Notes: Standard errors are in parentheses. , , and indicate significance at 1%, 5%, and 10% respectively. In Column 1, standard errors are clustered at the municipality level. In Column 2 (resp. 3), standard errors are clustered at the IC level, considering the IC the municipality belongs to in 2014 (resp. 2018). The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population).

Table B2.2: Local public services: Rural municipalities

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome	Daycare spots			Public libraries		
Cluster	Municipality	IC 2014	IC 2018	Municipality	IC 2014	IC 2018
Treatment	-1.001	-1.001	-1.001	-1.248	-1.248	-1.248
	(0.463)	(0.531)	(0.533)	(0.620)	(0.474)	(0.478)
Mun FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	153,216	153,216	153,216	11,020	11,020	11,020
Mean	3.617	3.617	3.617	5.277	5.277	5.277
Sd	31.900	31.900	31.900	10.983	10.983	10.983

Notes: Standard errors are in parentheses. , , and indicate significance at 1%, 5%, and 10% respectively. In Column 1, standard errors are clustered at the municipality level. In Column 2 (resp. 3), standard errors are clustered at the IC level, considering the IC the municipality belongs to in 2014 (resp. 2018). The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). In Columns 1 to 3, the outcome is the number of daycare spots in the municipality per 10,000 inhabitants (using the 2010 population) and the period of analysis is 2007–2018. In Columns 4 to 6, the outcome is the number of public libraries in the municipality per 10,000 inhabitants (using the 2010 population), the period of analysis is 2009–2018, and the sample is restricted to the 7 départements for which data are available starting in 2009.

Table B2.3: Public transport and fiscal revenues

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome	Access to public transport			Fiscal revenues per capita		
Cluster	Municipality	IC 2014	IC 2018	Municipality	IC 2014	IC 2018
Treatment	0.032	0.032	0.032	101.2	101.2	101.2
	(0.007)	(0.013)	(0.012)	(4.813)	(9.073)	(9.027)
Mun FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	221,368	221,368	221,368	244,965	244,965	244,965
Mean	0.024	0.024	0.024	698.6	698.6	698.6
Sd	0.152	0.152	0.152	430.0	430.0	430.0

Notes: Standard errors are in parentheses. , , and indicate significance at 1%, 5%, and 10% respectively. In Column 1, standard errors are clustered at the municipality level. In Column 2 (resp. 3), standard errors are clustered at the IC level, considering the IC the municipality belongs to in 2014 (resp. 2018). The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). In Columns 1 to 3, the outcome is an indicator variable equal to 1 if the municipality has access to public transport and the sample excludes municipalities in the Parisian region of Île-de-France, for which the data are not available. In Columns 4 to 6, the outcome is the municipality's total fiscal revenues per capita, as defined in Section V.B, and I exclude from the analysis the few municipalities for which the data are missing for at least one year over the period 2004–2018 (0.4 percent of the sample).

B3. Matching

I test the robustness of the main results to using kernel-based propensity score matching. I use the Stata "diff" package to perform the matching (Villa, 2016) and I match control and treated municipalities based on the socio-demographic characteristics available in the 2008 census, which applies to the year 2010. The variables used are the following: the number of inhabitants; population growth since 1999; population density; whether the municipality is urban; whether it belongs to an urban area; whether it belongs to the core of the urban area; the share of immigrants; the share of unemployed workers; the share of students; the share of the population included in the labor force; the share of the population below 5 years old, between 15 and 64 years old, and above 65 years old; the average number of children per family; the share of the active population being farmers, craftsperson, executives, temporary employed, full-time employed, workers, retired, or others; the share of the population with no diploma, holding a primary school certificate (CEP), holding a secondary education diploma (BEPC), holding a certificate of vocational aptitude (CAP or BEP), holding the baccalaureate, who completed two years after the baccalaureate, or with higher education; and the per capita residents' annual taxable income.

In Tables B3.1 and B3.2, I report the differences between the control and treatment groups along with the t-tests for each variable, with and without using matching, respectively. The next tables provide the estimates. The first column gives the baseline estimate, the second column the estimate obtained using kernel-based propensity score matching, and the third column the estimate using matching on the common support of the propensity score. Given the very small sample for which library data are available, the analysis for public services is restricted to daycare.

Table B3.1: T-tests without matching

	Mean treatment	Mean control	Difference (T-C)	P-value
population	1,640	1,959	-319	0.048
Δ population	0.102	0.100	0.002	0.596
density	162.0	156.3	5.8	0.709
urban mun	0.204	0.223	-0.019	0.108
urban area	0.637	0.614	0.022	0.107
core urban area	0.091	0.119	-0.028	0.001
immigrants	0.044	0.036	0.008	0.000
unemployed	0.082	0.088	-0.005	0.000
students	0.077	0.078	-0.001	0.243
labor force	0.738	0.731	0.008	0.000
below 5 y/o	0.060	0.062	-0.002	0.001
15-64 y/o	0.639	0.633	0.006	0.000
above 65 y/o	0.170	0.176	-0.006	0.002
av. # children	0.904	0.907	0.003	0.685
farmers	0.036	0.038	-0.001	0.328
craftsperson	0.041	0.037	0.004	0.000
executives	0.070	0.052	0.019	0.000
part-time employed	0.133	0.125	0.008	0.000
full-time employed	0.153	0.155	-0.002	0.154
workers	0.152	0.169	-0.017	0.000
retired	0.280	0.286	-0.006	0.036
others	0.134	0.139	-0.004	0.010
no diploma	0.172	0.185	-0.013	0.000
CEP certificate	0.139	0.146	-0.007	0.000
BEPC	0.061	0.060	0.001	0.158
CAP or BEP	0.271	0.279	-0.007	0.000
baccalaureate	0.156	0.153	0.004	0.002
bac + 2 years	0.112	0.107	0.005	0.000
high education	0.088	0.072	0.017	0.000
residents' income	14,064	12,488	1,575	0.000

Notes: Data on the municipal population, age, education, and occupational composition come from the 2008 census, which applies to the year 2010. The variation in the population (line 2) is computed as the variation in the number of inhabitants between the 1999 and 2008 censuses. Indicator variables for whether the municipality is urban, part of an urban area, or located in the urban core are based on the INSEE 2010 classification. , , and indicate significance at 1%, 5%, and 10% respectively.

Table B3.2: T-tests with matching

	Mean treatment	Mean control	Difference (T-C)	P-value
population	1,640	1,579	61	0.668
Δ population	0.102	0.104	-0.002	0.731
density	162.0	146.9	15.1	0.331
urban mun	0.204	0.200	0.004	0.748
urban area	0.637	0.625	0.011	0.426
core urban area	0.091	0.092	-0.001	0.913
immigrants	0.044	0.044	0.001	0.556
unemployed	0.082	0.084	-0.002	0.160
students	0.077	0.077	0.001	0.388
labor force	0.738	0.737	0.002	0.356
below 5 y/o	0.060	0.061	-0.000	0.506
15-64 y/o	0.639	0.638	0.001	0.326
above 65 y/o	0.170	0.172	-0.002	0.315
av. # children	0.900	0.907	0.007	0.341
farmers	0.036	0.037	-0.001	0.440
craftsperson	0.041	0.040	0.001	0.195
executives	0.070	0.064	0.006	0.001
part-time employed	0.133	0.131	0.002	0.231
full-time employed	0.153	0.154	-0.001	0.559
workers	0.152	0.157	-0.005	0.022
retired	0.280	0.281	-0.002	0.554
others	0.134	0.135	-0.001	0.686
no diploma	0.172	0.177	-0.004	0.041
CEP certificate	0.139	0.141	-0.002	0.176
BEPC	0.061	0.060	0.000	0.680
CAP or BEP	0.271	0.275	-0.003	0.070
baccalaureate	0.156	0.155	0.001	0.367
bac + 2 years	0.112	0.110	0.002	0.088
high education	0.088	0.082	0.006	0.004
residents' income	14,064	13,669	395	0.012

Notes: Data on the municipal population, age, education, and occupational composition come from the 2008 census, which applies to the year 2010. The variation in the population (line 2) is computed as the variation in the number of inhabitants between the 1999 and 2008 censuses. Indicator variables for whether the municipality is urban, part of an urban area, or located in the urban core are based on the INSEE 2010 classification. , , and indicate significance at 1%, 5%, and 10% respectively.

Table B3.3: Housing

	(1)	(2)	(3)
Outcome	Number of building permits		
Matching	No	Yes	Common support
Treatment	8.141	7.152	7.269
	(1.517)	(1.634)	(1.624)
Municipality FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
Observations	245,940	245,730	245,520
Mean DepVar	64.836	64.836	64.836
Sd DepVar	90.844	90.844	90.844

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the full treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). In Column 2, the analysis used propensity score matching. Column 3 repeats the same exercise on the common support of the propensity score.

Table B3.4: Daycare: Rural municipalities

	(1)	(2)	(3)
Outcome	Daycare spots		
Matching	No	Yes	Common support
Treatment	-1.001	-0.776	-0.777
	(0.463)	(0.490)	(0.491)
Mun FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
Obs.	153,216	153,024	152,772
Mean	3.617	3.617	3.617
Sd	31.900	31.900	31.900

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the full treatment group during the pre-reform period (before 2010). The sample includes only rural municipalities. The outcome is the number of daycare spots in the municipality per 10,000 inhabitants (using the 2010 population) and the period of analysis is 2007–2018. In Column 2, the analysis uses propensity score matching. Column 3 repeats the same exercise on the common support of the propensity score.

Table B3.5: Public transport and fiscal revenues

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome	Access to public transport			Fiscal revenues per capita		
Matching	No	Yes	+ common support	No	Yes	+ common support
Treatment	0.032	0.032	0.032	101.2	94.85	94.81
	(0.007)	(0.007)	(0.007)	(4.813)	(5.114)	(5.119)
Mun FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	221,368	221,088	220,612	244,965	244,755	244,530
Mean	0.024	0.024	0.024	698.6	698.6	698.6
Sd	0.152	0.152	0.152	430.0	430.0	430.0

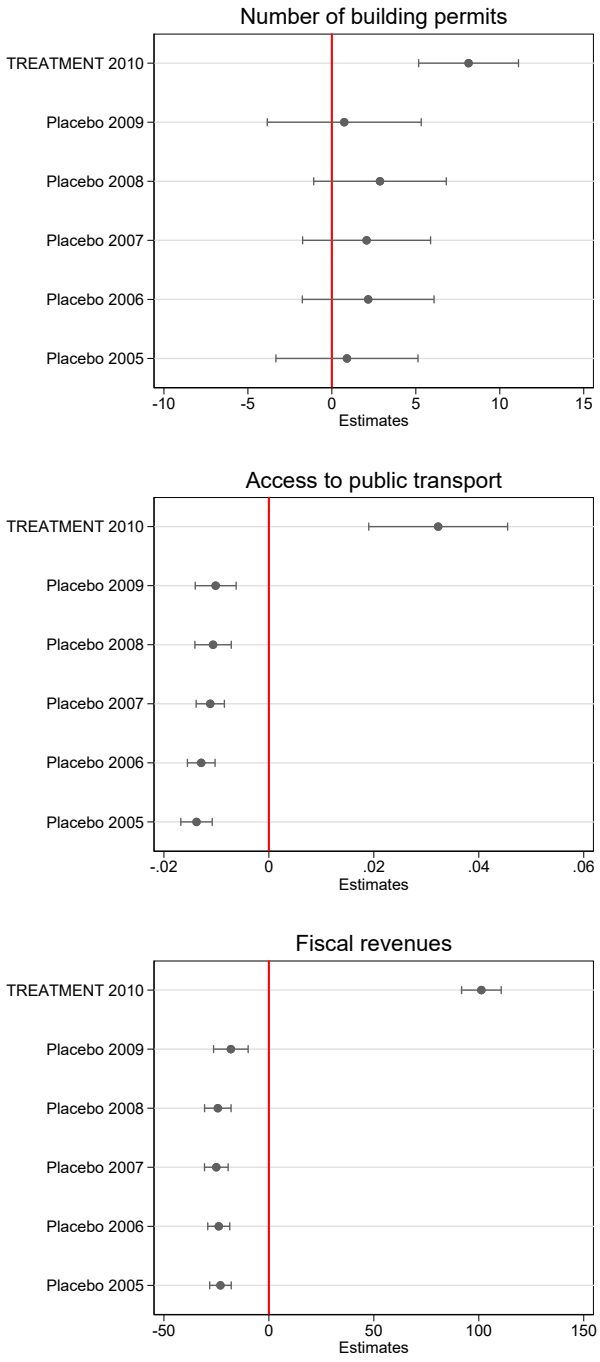
Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the full treatment group during the pre-reform period (before 2010). In Columns 1 to 3, the outcome is an indicator variable equal to 1 if the municipality has access to public transport and the sample excludes municipalities in the Parisian region of Île-de-France, for which the data are not available. In Columns 4 to 6, the outcome is the municipality's total fiscal revenues per capita, as defined in Section V.B, and I exclude from the analysis the few municipalities for which the data are missing for at least one year over the period 2004–2018 (0.4 percent of the sample). In Columns 2 and 4, the analysis uses propensity score matching. Columns 3 and 6 repeats the same exercise on the common support of the propensity score.

B4. Placebo tests

In this section, I test the impact of a series a placebo reforms. I consider only the pre-treatment period from 2004 to 2010 and I run the same specification as the one described in Section II.C, pretending that the law passed in 2005, 2006, 2007, 2008, or 2009. The graph below provides the estimates obtained for each placebo reform, along with the impact of the true reform (first coefficient on each graph). Unfortunately, I cannot run these placebo tests on daycare and public libraries, given the few pre-treatment periods I have in the data. This analysis is thus restricted to the number of building permits, access to public transport, and fiscal revenues.

As seen Figure B4, no coefficient associated with placebo reforms is significant at the standard level for the number of building permits. For public transport and fiscal revenues, consistent with the presence of decreasing pre-trends (see Section V), the placebo estimates are significant but negative, which contrasts with the positive effect of the true reform. All in all, these results support the fact that the main results are capturing the impact of the 2010 law rather than the impact of factors that systematically affect treated and control municipalities differently.

Figure B4: Placebo tests



Notes: The figure shows the impact of a series of placebo reforms on the number of building permits, the probability of access to public transport, and fiscal revenues. In each graph, the first coefficient refers to the impact of the 2010 law, while the other estimates give the impact of a placebo reform implemented in 2005, 2006, 2007, 2008, and 2009, respectively. When estimating the impact of the placebo reforms, I include only the pre-treatment period from 2004 to 2010. Horizontal lines are 95-percent-confidence intervals.

B5. Alternative control groups

Table B5.1: Housing supply

	(1)	(2)	(3)	(4)	(5)
Outcome	Number of building permits per 10,000 inhabitants				
Control group	Group 1	Group 2	Group 3	Group 4	Group 5
Treatment	8.141	8.547	11.249	8.511	11.557
	(1.517)	(1.537)	(1.637)	(1.524)	(1.638)
Municipality FE	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes
Observations	245,940	190,410	75,825	224,310	74,040
Mean DepVar	64.836	64.836	64.836	64.836	64.836
Sd DepVar	90.844	90.844	90.844	90.844	90.844

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). In Column 1, the control group is the one used in the baseline estimation, including all municipalities integrated since 1999 (Group 1). In Column 2, I exclude from the control group all municipalities that were part of an IC that received a treated municipality as a result of the 2010 law (Group 2). In Column 3, I exclude more generally all control municipalities whose IC had changed since 1999 and until 2014, as a result of the 2010 law (Group 3). In Column 4, I exclude control municipalities that share a border with a treated municipality (Group 4). In Column 5, I exclude both control municipalities whose ICs changed and neighbors (Group 5).

Table B5.2: Local public services: Rural municipalities

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Outcome	Daycare spots					Public libraries				
Control	Group 1	Group 2	Group 3	Group 4	Group 5	Group 1	Group 2	Group 3	Group 4	Group 5
Treat.	-1.001	-0.781	-1.048	-0.922	-1.127	-1.248	-1.418	-1.417	-1.276	-1.423
	(0.463)	(0.497)	(0.581)	(0.472)	(0.591)	(0.620)	(0.635)	(0.635)	(0.623)	(0.636)
Mun FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	153,216	117,996	49,200	139,788	48,132	11,020	7,970	4,100	10,140	4,030
Mean	3.617	3.617	3.617	3.617	3.617	5.277	5.277	5.277	5.277	5.277
Sd	31.900	31.900	31.900	31.900	31.900	10.983	10.983	10.983	10.983	10.983

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The sample includes only rural municipalities. In Columns 1 to 3, the outcome is the number of daycare spots in the municipality per 10,000 inhabitants (using the 2010 population) and the period of analysis is 2007–2018. In Columns 4 to 6, the outcome is the number of public libraries in the municipality per 10,000 inhabitants (using the 2010 population), the period of analysis is 2009-2018, and the sample is restricted to the 7 départements for which data are available starting in 2009. In Column 1, the control group is the one used in the baseline estimation, including all municipalities integrated since 1999 (Group 1). In Column 2, I exclude from the control group all municipalities that were part of an IC that received a treated municipality as a result of the 2010 law (Group 2). In Column 3, I exclude more generally all control municipalities whose IC had changed since 1999 and until 2014, as a result of the 2010 law (Group 3). In Column 4, I exclude control municipalities that share a border with a treated municipality (Group 4). In Column 5, I exclude both control municipalities whose ICs changed and neighbors (Group 5).

Table B5.3: Public transport and fiscal revenues

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Outcome	Access to public transport					Fiscal revenues per capita				
Control	Group 1	Group 2	Group 3	Group 4	Group 5	Group 1	Group 2	Group 3	Group 4	Group 5
Treat.	0.032	0.036	0.058	0.033	0.058	101.2	98.16	101.2	101.0	101.7
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(4.813)	(4.829)	(5.248)	(4.824)	(5.262)
Mun FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	221,368	171,276	66,304	202,552	64,848	244,965	189,975	75,510	223,440	73,740
Mean	0.024	0.024	0.024	0.024	0.024	698.6	698.6	698.6	698.6	698.6
Sd	0.152	0.152	0.152	0.152	0.152	430.0	430.0	430.0	430.0	430.0

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). In Columns 1 to 5, the outcome is an indicator variable equal to 1 if the municipality has access to public transport and the sample excludes municipalities in the Parisian region of Île-de-France, for which the data are not available. In Columns 6 to 10, the outcome is the municipality's total fiscal revenues per capita, as defined in Section V.B, and I exclude from the analysis the few municipalities for which the data are missing for at least one year over the period 2004–2018 (0.4 percent of the sample). In Column 1, the control group is the one used in the baseline estimation, including all municipalities integrated since 1999 (Group 1). In Column 2, I exclude from the control group all municipalities that were part of an IC that received a treated municipality as a result of the 2010 law (Group 2). In Column 3, I exclude more generally all control municipalities whose IC had changed since 1999 and until 2014, as a result of the 2010 law (Group 3). In Column 4, I exclude control municipalities that share a border with a treated municipality (Group 4). In Column 5, I exclude both control municipalities whose ICs changed and neighbors (Group 5).

C. Housing supply: Heterogeneity analysis

In the main text, I report the impact on housing supply obtained by splitting the full sample according to the median value of the heterogeneity variable I consider. In this section, I explore the heterogeneity of the treatment impact by estimating the following equation:

$$Y_{mt} = \alpha + \beta 1_{\{t>2010\}} 1_{\{treated_m=1\}} + \gamma Z_m 1_{\{treated_m=1\}} + \eta Z_m 1_{\{t>2010\}} + \psi Z_m 1_{\{t>2010\}} 1_{\{treated_m=1\}} + \delta_t + \theta_m + \varepsilon_{mt}, \quad (1)$$

where m stands for the municipality and t for the year. $1_{\{t>2010\}}$ is an indicator variable equal to 1 for years after the reform, starting in 2011. $1_{\{treated_m=1\}}$ is an indicator variable equal to 1 for municipalities that were isolated in 2010 and thus forced to join an IC (treatment group), and 0 for municipalities already integrated since 1999 (control group). δ_t and θ_m are time and municipality fixed effects, respectively. $Z_m$is the heterogeneity variable measured in 2010. I standardize each heterogeneity variable, subtracting its mean in the treatment group and dividing it by its standard error. As a result, in the tables below, the impact of the treatment β can be interpreted as the impact for a treated municipality with an average value of Z_m and ψ can be interpreted as the change in the treatment effect due to a one-standard-deviation increase in Z_m.

Table C1: Distance to the core of the urban area

	(1)	(2)
Outcome	Number of housing building permits	
Heterogeneity	Distance to urban core	
	Ratio	Log ratio
Treatment	9.473	10.434
	(1.913)	(1.918)
Interaction	-3.635	-6.663
	(1.906)	(2.011)
Municipality FE	Yes	Yes
Time FE	Yes	Yes
Observations	121,560	121,350
Mean DepVar	63.195	63.195
Sd DepVar	85.954	85.954

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). The sample includes only municipalities that are part of one urban area. It excludes municipalities outside of any urban areas or that are part of several urban areas, such that we cannot identify the core to which they are linked. The heterogeneity variable is the ratio between the municipality's Euclidean distance to the core divided by the average distance to the core of the other municipalities from the same urban area. The coordinates of the core are computed as the average coordinates of the different municipalities composing the core, weighted by their population. In Column 2, I consider the log of the ratio, thus excluding 14 municipalities in the control group that constitute the core of their urban area and for which the distance is thus 0.

Table C2: Residents' income

	(1)
Outcome	Number of housing building permits
Heterogeneity	Residents' income
Treatment	5.407
	(1.560)
Interaction	3.734
	(1.856)
Municipality FE	Yes
Time FE	Yes
Observations	245,700
Mean DepVar	64.780
Sd DepVar	90.330

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). The heterogeneity variable is the per capita residents' annual taxable income in 2010. Data on taxable income in 2010 are missing for the 16 municipalities with the smallest populations.

Table C3: Housing density

For this heterogeneity test, in the second and forth columns, I also include the interaction between the treatment variable and the square value of the housing density. Indeed, even if we expect the impact on housing to be larger in denser municipalities, we might not expect the densest places to experience the largest increase, as they may be too dense for their housing supply to increase as much as elsewhere. As a result, the effect is likely to rise non monotonically with the housing density. The results confirm this hypothesis: while in the first column the interaction is close to zero and not significant, in the second column it is large and significant and the estimate associated to the interaction with the square value is negative and significant.

	(1)	(2)	(3)	(4)
Outcome	Number of housing building permits			
Heterogeneity	Housing density			
Sample	Urban area - All		Urban area - part of CA or CU ICs	
Treatment	10.395	12.126	8.964	15.219
	(1.787)	(1.838)	(4.129)	(4.582)
Interaction	-0.220	9.966	-1.109	21.191
	(1.896)	(3.636)	(2.988)	(8.912)
Interaction²		-1.435		-5.178
		(0.463)		(1.993)
Municipality FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Observations	151,500	151,500	39,180	39,180
Mean DepVar	63.660	63.660	66.201	66.201
Sd DepVar	85.197	85.197	89.274	89.274

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). The sample includes only municipalities inside an urban area. In columns 3 and 4 the sample is further restricted to municipalities that are part of a "CA" or "CU" IC in 2014 (standing for *Communauté d'Agglomération* and *Communauté Urbaine*). The heterogeneity variable is the number of housing units per square kilometer in 2010. In Columns 2 and 4, I also include the interaction between the treatment variable and the square of the housing density.

Table C4: Neighbors' characteristics: Département

	(1)	(2)	(3)	(4)	(5)
Outcome	Number of housing building permits				
Heterogeneity	Ratio revenues	Ratio immigrants	Ratio non-euro. imm.	Ratio unemployed	Vote-share distance
Treatment	7.466	7.850	8.404	7.993	8.184
	(1.517)	(1.513)	(1.514)	(1.518)	(1.517)
Interaction	1.836	-1.344	0.042	1.212	1.155
	(1.590)	(2.210)	(1.713)	(1.666)	(1.889)
Mun. FE	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes
Obs.	245,700	245,940	245,940	245,940	245,940
Mean	64.780	64.836	64.836	64.836	64.836
Sd	90.330	90.844	90.844	90.844	90.844

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). Each ratio (Columns 1 to 3) divides the value of the heterogeneity variable in the municipality by the average value in the other municipalities from the same département, weighted by their population. In Column 1, the heterogeneity variable used to compute the ratio is the residents' average annual taxable income. Data on taxable income in 2010 are missing for the 16 smallest municipalities. In Column 2 (resp. 3, 4), the heterogeneity variable is the share of all immigrants (resp. non-European immigrants, unemployed workers) in 2010. In Column 5, the heterogeneity variable is the absolute difference in the right-wing vote share in the 2007 presidential election, between the municipality and the other municipalities in the same département.

Table C5: Neighbors' characteristics: Direct neighbors

	(1)	(2)	(3)	(4)	(5)
Outcome	Number of housing building permits				
Heterogeneity	Ratio revenues	Ratio immigrants	Ratio non-Euro. imm.	Ratio unemployed	Vote share distance
Treatment	8.322	8.011	7.942	7.991	8.127
	(1.514)	(1.517)	(1.527)	(1.518)	(1.523)
Interaction	1.448	1.296	0.551	3.025	-0.640
	(1.646)	(1.705)	(1.502)	(1.590)	(2.030)
Mun. FE	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes
Obs.	245,700	245,940	242,865	245,940	245,940
Mean	64.780	64.836	65.219	64.836	64.836
Sd	90.330	90.844	90.679	90.844	90.844

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). Each ratio (Columns 1 to 3) divides the value of the heterogeneity variable in the municipality by the average value in neighboring municipalities (defined as sharing a border), weighted by their population. In Column 1, the heterogeneity variable used to compute the ratio is the residents' average annual taxable income. Data on taxable income in 2010 are missing for the 16 smallest municipalities. In Column 2 (resp. 3, 4), the heterogeneity variable is the share of all immigrants (resp. non-European immigrants, unemployed workers) in 2010. In Column 5, the heterogeneity variable is the absolute difference in the right-wing vote share in the 2007 presidential election, between the municipality and the other municipalities in the same département. The ratio considering the share of non-European immigrants (Column 3) is missing for 205 municipalities for which neighboring municipalities had zero non-European immigrants.

Table C6: Share of homeowners

	(1)
Outcome	Number of housing building permits
Heterogeneity	Share of homeowners
Treatment	8.789
	(1.509)
Interaction	-1.462
	(1.672)
Municipality FE	Yes
Time FE	Yes
Observations	245,940
Mean DepVar	64.836
Sd DepVar	90.844

Notes: Standard errors are in parentheses and are clustered at the municipality level. , , and indicate significance at 1%, 5%, and 10% respectively. The mean of the dependent variable gives the average of the outcome variable in the treatment group during the pre-reform period (before 2010). The outcome is the number of housing building permits delivered in the municipality per year per 10,000 inhabitants (using the 2010 population). The heterogeneity variable is the share of homeowners in the municipality in 2010.

D. Housing price indices

Description of the method

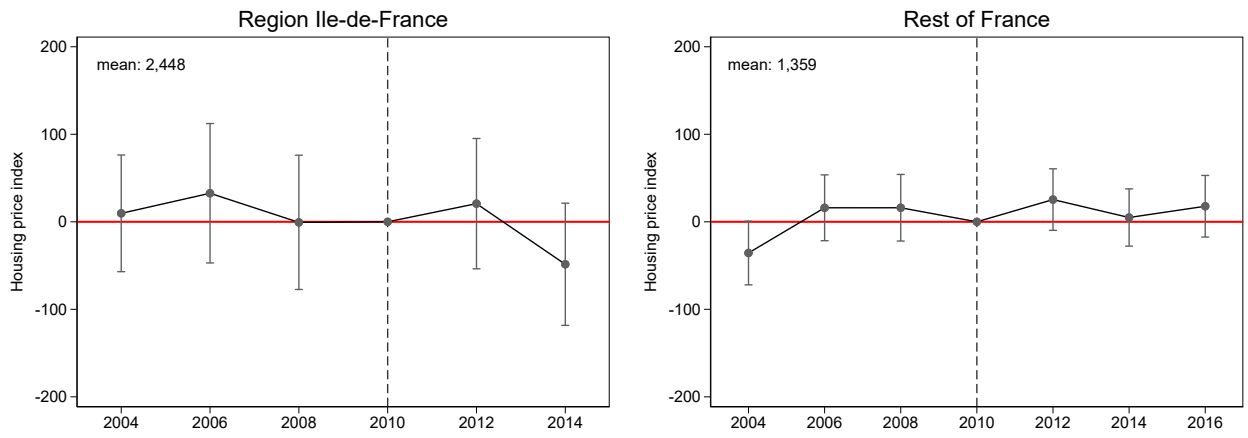
Following Combes et al. (2018), I built the housing price indices using official transaction records. These data come from an annual census conducted by the regional notary associations, which report the transactions of non-new dwellings. Although reporting is voluntary, it covers about 65 percent of all transactions. I built the indices separately for the Parisian region of Île-de-France and for the rest of France, as the two databases come from two distinct notary associations and do not use the same definitions for the dwellings' characteristics. The data are made available by the Ministry of Sustainable Development for every even year since 2000. They are available until 2014 for Île-de-France and 2016 for the rest of France.

I first run hedonic regressions, separately for houses and apartments. Following Gouriéroux and Laferrère (2009)'s and Musiedlak and Vignolles (2016)'s guidelines, I excluded some outliers from the transaction databases. Next, I regressed the log of the price per square meter of the dwelling on several characteristics. To build the baseline index, I regressed the log of the price per square meter on indicator variables for the quarter of the transaction and the construction period (Combes et al., 2018). I built a second index (which I refer to as the "augmented index") using additional characteristics. For houses, I added the floorspace, the size of the land, the number of rooms, bathrooms and floors; and whether the house has parking. For apartments, I added the floorspace, the floor on which it is located, the number of rooms and bathrooms, whether the building has an elevator, and whether the apartment has parking and a cellar.

While the price of the transaction is never missing, the floorspace is missing for 10 percent of the apartments and 36 percent of the houses. To compute the price per square meter, I replaced the missing floorspace by the average floorspace of an apartment or a house with the same number of rooms in the same département. Results are unchanged if I instead drop the transactions for which the floorspace is missing. Regarding the right-hand variables (the dwelling's characteristics), I replaced the missing values by the average of that variable and added an indicator variable equal to 1 if the variable was missing. I also centered all explanatory variables by subtracting the means and dividing by the standard errors.

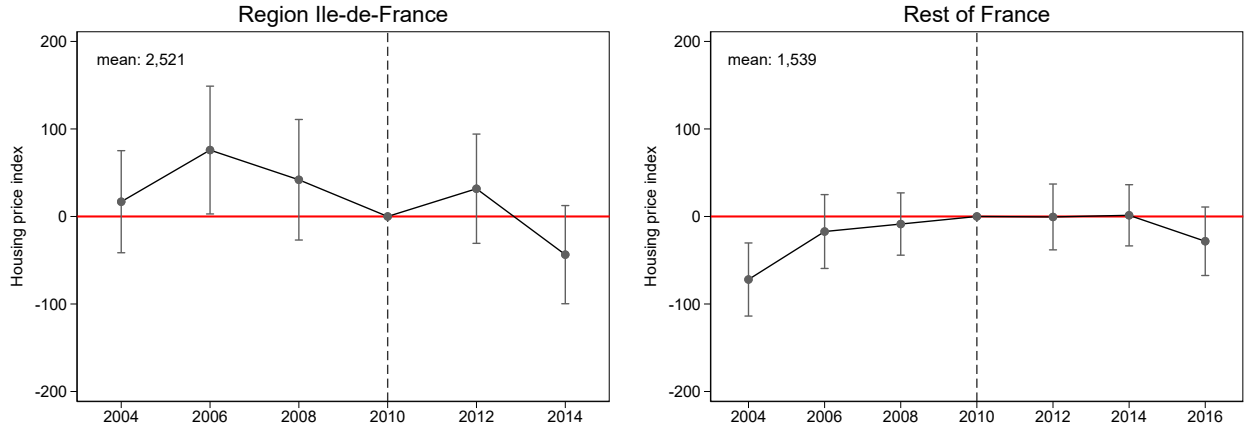
After running the hedonic regressions, I computed the mean of the residuals over both houses and apartments for each year and municipality separately, after having added the regression constant. Since the explanatory variables are centered, we can interpret the resulting indices as the price per square meter of a reference dwelling.

Figure D1: Impact on prices: Unbalanced panel



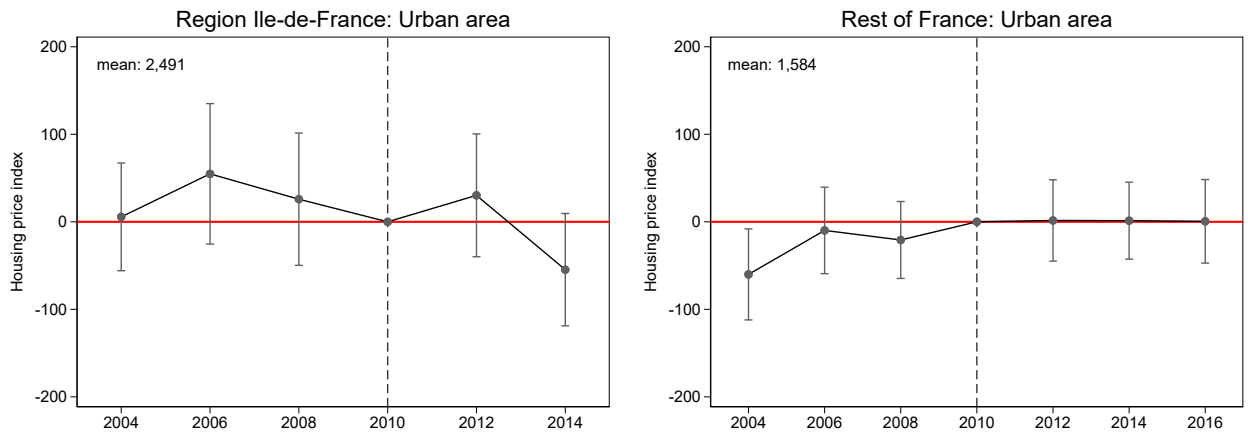
Notes: These graphs plot the estimates and 95-percent-confidence intervals from the leads-and-lags regression. The outcome is the municipality housing price index giving the price per square meter of a reference dwelling. The sample includes all municipalities in which at least one housing transaction took place during the period studied. The graph on the left-hand side includes only municipalities in the Parisian region of Île-de-France, while the graph on the right-hand side includes all the other municipalities. On each graph, the average value of the price index in the treatment group before 2010 is displayed on the top left corner.

Figure D2: Impact on prices: Augmented index



Notes: These graphs plot the estimates and 95-percent-confidence intervals from the leads-and-lags regression. The outcome is the municipality housing price index giving the price per square meter of a reference dwelling. For these graphs, I use an alternative version of the indices for which I include additional apartment and house characteristics in the hedonic regressions. The sample includes only municipalities in which at least one housing transaction took place each even year over the period studied. The graph on the left-hand side includes only municipalities in the Parisian region of Île-de-France, while the graph on the right-hand side includes all the other municipalities. On each graph, the average value of the price index in the treatment group before 2010 is displayed on the top left corner.

Figure D3: Impact on prices: Urban area



Notes: These graphs plot the estimates and 95-percent-confidence intervals from the leads-and-lags regression. The outcome is the municipality housing price index giving the price per square meter of a reference dwelling. The sample includes only municipalities that are part of an urban area and in which at least one housing transaction took place each even year over the period studied. The graph on the left-hand side includes only municipalities in the Parisian region of Île-de-France, while the graph on the right-hand side includes all the other municipalities. On each graph, the average value of the price index in the treatment group before 2010 is displayed on the top left corner.

References

Combes, Pierre-Philippe, Gilles Duranton, and Laurent Gobillon, "The Costs of Agglomeration : House and Land Prices in French Cities," *Review of Economic Studies*, 2018, *86* (4), 1556–1589.

Combes, Pierre Philippe, Gilles Duranton, and Laurent Gobillon, "The production function for housing: Evidence from France," *Journal of Political Economy*, 2021, *129* (10).

Correia, Sergio, Paulo Guimarães, and Tom Zylkin, "Fast Poisson estimation with high-dimensional fixed effects," *The Stata Journal*, 2020, *20* (1), 95–115.

de Chaisemartin, Clément and Xavier D'Haultfoeuille, "Two-way fixed effects estimators with heterogeneous treatment effects," *American Economic Review*, 2020, *110* (9), 2964–96.

Gouriéroux, Christian and Anne Laferrère, "Managing hedonic housing price indexes: The French experience," *Journal of Housing Economics*, 2009, *18* (3), 206–213.

Musiedlak, Yoann and Benjamin Vignolles, "Les mouvements des prix immobiliers dans l'ancien au cours des années 2000: des marchés locaux différenciées," *Document de travail du CGEDD*, 2016, (24), 1–40.

Villa, Juan M, "Simplifying the estimation of difference-in-differences treatment effects," *Stata Journal*, 2016, *16*, 52–71.