

Appendices

Appendix 1. The SHAC method with spatio-temporal data

We estimate a model in a semi-logarithmic functional form:

$$(1) \ln y = X\beta + \varepsilon$$

where $\ln y$ is the $(N, 1)$ vector of observations on rents, expressed as a logarithm and X is the (N, k) matrix of observations for the explanatory variables impacting the variable of interest. The vector of error terms is supposed to be generated by the following process:

$$(1) \varepsilon = R\xi$$

where ξ is a vector of errors and R is a non-stochastic matrix of dimension (N, N) of unknown terms. This process allows for very general schemes of autocorrelation and heteroscedasticity. Kelejian and Prucha (2007) suggest estimating the element located at the intersection of row s and column r of the asymptotic variance-covariance matrix of the parameter estimators, noted $\widehat{\varPsi}_{rs}$, in the following way:

$$(2) \widehat{\varPsi}_{rs} = N^{-1} \sum_{i=1}^N \sum_{i^*=1}^N x_{ir} x_{i^*s} \hat{\varepsilon}_i \hat{\varepsilon}_{i^*} K(d_{ii^*}/d)$$

where x_{ir} and x_{i^*s} are respectively the i^{th} and the i^{*th} element of the r^{th} and s^{th} vector of explanatory variables. $\hat{\varepsilon}$ is the vector of residuals estimated by OLS. K is the kernel function that allows different weights to be assigned to the elements of the variance-covariance matrix with the usual properties. d_{ii^*} represents the distance between observations i and i^* and d is the distance beyond which we consider that covariances are zero (*bandwidth*). Because our analysis covers several years, the distance matrix that we use is a spatio-temporal distance matrix. In order to construct such a spatio-temporal distance matrix, we follow the guidelines by Dubé and Legros (2013a, 2013b, 2014, 2015) who provide schematic representations that combine spatial relations with temporal relations.

Formally, the spatio-temporal matrix is given by the combination of a spatial matrix S and a temporal matrix T . The spatial matrix and temporal matrices can be written as:

$$S = \begin{bmatrix} 0 & s_{12} & s_{13} & \cdot & \cdot & s_{1N} \\ s_{21} & 0 & s_{23} & \cdot & \cdot & s_{2N} \\ s_{31} & s_{32} & 0 & \cdot & \cdot & s_{3N} \\ \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\ \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\ s_{N1} & s_{N2} & s_{N3} & \cdot & \cdot & 0 \end{bmatrix} \quad \text{and} \quad T = \begin{bmatrix} 0 & t_{12} & t_{13} & \cdot & \cdot & t_{1N} \\ t_{21} & 0 & t_{23} & \cdot & \cdot & t_{2N} \\ t_{31} & t_{32} & 0 & \cdot & \cdot & t_{3N} \\ \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\ \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\ t_{N1} & t_{N2} & t_{N3} & \cdot & \cdot & 0 \end{bmatrix}$$

s_{ij} indicates the way observations i and j are spatially connected. In our application $s_{ij} = f(d_{ij}) = d_{ij}$, with d_{ij} the Euclidian distance between observation i and observation j . Note also that:

$$(4) \quad t_{ij} = \begin{cases} |\nu_i - \nu_j|^{-\kappa} & \text{if } |\nu_i - \nu_j| \leq \bar{v} \\ 1 & \text{if } \nu_i = \nu_j \text{ and } \forall i \neq j \\ 0 & \text{otherwise} \end{cases} \quad (5) \quad \nu_i = 12 \times (yyyy_i - yyyy_{min})$$

and ν_i is given by the following expression: $\nu_i = 12 \times (yyyy_i - yyyy_{min})$ where $yyyy_i$ represents the year of observation i . $yyyy_{min}$ is the first year with observations. t_{ij} is therefore the time elapsed in month between observation i and observation j . \bar{v} is the threshold and κ is in the majority of applications considered as equal to 1 or 2.¹

This temporal matrix can also be expressed as a block of matrices as follows:

$$T = \begin{bmatrix} T_{11} & T_{12} & T_{13} & \cdot & \cdot & T_{1T} \\ T_{21} & T_{22} & T_{23} & \cdot & \cdot & T_{2T} \\ T_{31} & T_{32} & T_{33} & \cdot & \cdot & T_{3T} \\ \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\ \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\ T_{T1} & T_{T2} & T_{T3} & \cdot & \cdot & T_{TT} \end{bmatrix}$$

This matrix can be decomposed into three blocks named T_1 , T_2 , and T_3 . The first block T_1 is formed by the elements of the main block diagonal of T , which are equal to 1. It accounts for the fact that there might be correlations between error terms of observations in one period and the error terms of the neighboring observations for the same period. The second block T_2 is constituted by the elements of the lower diagonal. It expresses the fact that lagged error terms may impact current error terms. Finally, the third block T_3 is formed by the elements above the main diagonal and captures anticipation effects when error terms of future observations affect current error terms.

¹ In our estimation stage we construct the temporal matrix using $\kappa = 1$ and $\bar{v} = 12$, meaning that the temporal interaction between dwellings observed during the same year is stronger than the one between dwellings observed in different years and that there is no temporal interaction between dwellings separated by more than two years.

The spatio-temporal distance matrix W^{ST} is given by: $W^{ST} = S \odot T$ where \odot stands for the Hadamard product. This approach can be used to construct a single spatio-temporal matrix W^{ST} accounting for both the spatial and temporal dimensions. Several versions of this matrix can be constructed. If we expect only contemporaneous correlations between error terms, then the distance matrix will be $W_1 = S \odot T_1$. If we consider that lagged effects can occur, the matrix will be $W_2 = S \odot T_2$. Finally, in the case of anticipation effects, the matrix will be $W_3 = S \odot T_3$. In our empirical analysis, we use an interaction matrix W^{ST*} allowing for both past and current error terms to be correlated with current error terms:

$$(5) \quad W^{ST*} = S \odot T^*$$

where T^* is matrix T where we have set all the terms above the main diagonal to 0.

Finally, once the spatio-temporal distance matrix is constructed, it is possible to use it to estimate the variance-covariance matrix of the estimators that is robust to unknown forms of autocorrelation and heteroscedasticity.

Appendix 2. Additional tables and figures

A1. Thresholds for defining professional dwellings in 2014

City	Weights (in number of days)
Bayonne	22.5
Lyon	50
Marseille	29.8
Montpellier	34.8
Nantes	47.6
Nice	21
Paris (2014)	34
Paris (2016)	75
Toulouse	45.6

Note: Since for Paris, the ads have not been collected beyond September 2016, we also compute a weighted threshold for 2016 using data in 2015 for this city

A2. Pairwise correlations between the density Airbnb variables

City	D_AIRBNB and D_AIRBNBPRO
Bayonne	0.8878
Lyon	0.8793
Marseille	0.9213
Montpellier	0.9224
Nantes	0.8238
Nice	0.9633
Paris	0.8801
Toulouse	0.8868

A3a. Descriptive statistics for quantitative structural variables

City	RENT	SURFACE	TIMESPENT	AVSUROOM
Bayonne	539.6351 (29.8971)	50.6693 (39.8757)	5.8517 (126.5144)	22.8541 (24.0442)
Lyon	685.222 (45.8801)	60.8618 (50.0377)	4.2653 (129.4777)	26.1885 (27.3796)
Marseille	606.7168 (38.9192)	55.2077 (45.3915)	6.943 (122.9929)	23.2236 (25.4567)
Montpellier	561.6664 (30.8158)	46.6875 (45.424)	4.2524 (98.2127)	22.6293 (21.5287)
Nantes	545.6289 (33.8518)	50.6717 (43.2316)	3.9679 (102.9264)	23.5941 (22.0264)
Nice	655.6389 (35.2688)	49.5172 (44.6178)	6.3558 (98.4359)	23.7603 (21.6028)
Paris	1330.1107 (70.5718)	58.0149 (66.7438)	8.1829 (104.1406)	23.0068 (26.5594)
Toulouse	539.309 (29.9649)	51.9166 (38.9501)	4.1229 (125.0797)	23.1189 (21.4889)

Note: Mean values. Standard errors in brackets

A3b. Descriptive statistics for building period and type of management (in %)

City	Building period (BUILDPER)					Type of management (MANAGTYPE)	
	Bef. 1946	1946-1970	1971-1990	1991-2005	Aft. 2005	Delegated	Direct
Bayonne	37.684	12.76	14.2318	18.4406	16.8836	52.6943	47.3057
Lyon	52.9321	18.3496	12.1926	11.1866	5.3391	93.1299	6.8701
Marseille	55.9346	21.6037	7.512	7.3093	7.6403	90.2182	9.7818
Montpellier	19.0892	13.1977	22.4605	24.7209	20.5317	94.7717	5.2283
Nantes	12.6075	10.4913	10.8104	26.0061	40.0847	93.3805	6.6195
Nice	31.9563	30.3734	22.1058	9.5803	5.9842	90.861	9.139
Paris	68.402	13.1264	11.547	6.0954	0.8291	90.0602	9.9398
Toulouse	11.1758	13.1161	22.6295	24.2875	28.791	94.7123	5.2877

A3c. Descriptive statistics for the number of rooms (%)

City	Number of rooms					
	1	2	3	4	5	6
Bayonne	21.2261	39.8735	26.8824	10.1448	1.7273	0.146
Lyon	22.9647	32.9022	29.0499	10.4681	3.5207	1.0943
Marseille	18.2598	35.682	32.3516	11.0248	2.2631	0.4188
Montpellier	28.3077	41.102	22.9247	6.3999	1.1551	0.1105
Nantes	23.751	40.501	28.1848	5.9326	1.6306	0
Nice	28.4265	39.0436	23.3192	6.9218	2.2834	0.0055
Paris	25.1135	32.075	21.3942	12.2974	6.4057	2.7142
Toulouse	21.5272	35.1093	33.2094	8.8233	1.2189	0.112

A3d. Descriptive statistics for additional variables available for Paris (in %)

	0	1	2	3	4	5
FLOOR %	5.8979	14.9833	16.5308	15.669	15.4235	13.2552
NBBATH %	0 0.1436	1 93.1014	2 6.0461	3 0.6301	4 0.0649	5 0.0139
NBTOIL %	0 0.227	1 94.1067	2 5.1334	3 0.4633	4 0.0695	
TYP_PROP %	1 46.5159	2 53.4841				
ASCENSEUR %	1 67.9438	2 32.0562				
GARDIEN %	1 60.4429	2 39.5571				
PARKING %	1 13.3154	2 86.6846				

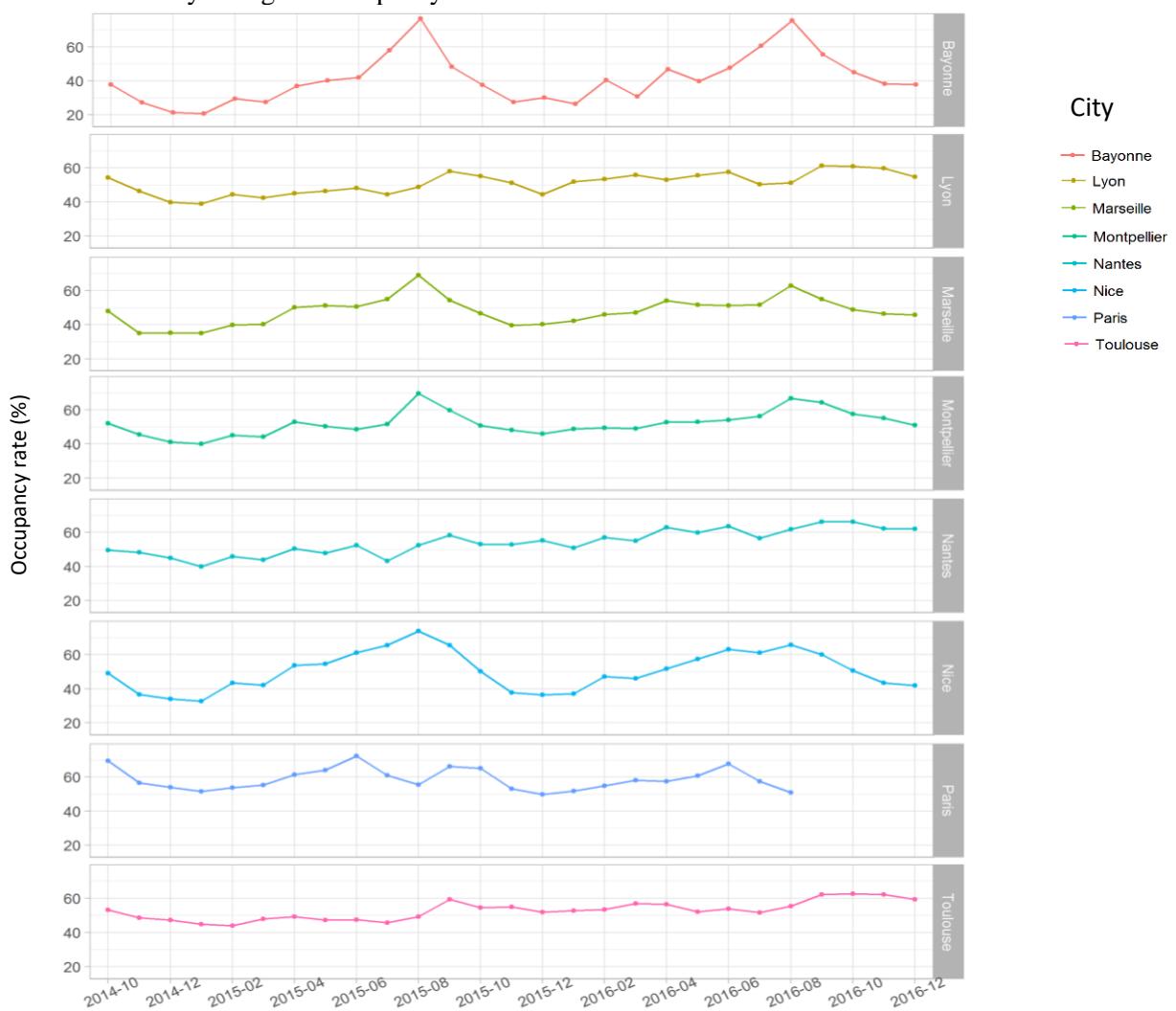
A4. Mean of additional control variables

City	SOCIALHOUS	OWNERS	SECONDHOME	UNEMPLOY	STUDENT	OUV	CADRE	IMMIG
Bayonne	10.3135	41.3272	11.6493	14.9479	6.6508	9.6261	8.1996	6.7437
Lyon	9.8126	33.7541	3.5171	12.6841	17.4361	5.492	20.8289	10.9742
Marseille	9.3055	39.7154	2.7915	19.2542	8.5634	8.8673	11.3237	14.2913
Montpellier	12.4541	29.5422	2.9222	20.462	21.7778	7.2715	12.6924	13.5486
Nantes	10.3237	37.9341	3.5216	14.1663	17.702	7.3102	16.9961	6.5513
Nice	6.4633	46.6622	12.3428	15.302	8.1385	8.4369	8.8971	17.3704
Paris	9.9973	35.6181	8.4685	10.5815	11.3802	3.6739	31.7559	18.5248
Toulouse	10.8397	32.3191	2.4422	16.6	17.7443	8.7415	17.4991	13.259

City	INCOME	HONOURATE_PU	HONOURATE_PR	DIST_ZUSP	DIST_CENTER	DIST_TRAMETR	DIST_RAILWAY	NB_BUSSTOP
Bayonne	19.149	61.0911	59.3208	2.3997	2390.0024	n.c	1.0426	n.c
Lyon	24.0257	58.9176	76.1304	1.0146	2205.032	0.3482	0.7881	21.023
Marseille	17.1115	44.5417	59.2496	0.5419	3029.7017	0.6802	1.1159	24.0992
Montpellier	17.7018	50.8394	71.5153	0.6618	3034.6254	n.c	1.689	13.4169
Nantes	22.605	62.7167	65.4422	1.0004	2209.0961	0.4728	0.9775	12.9894
Nice	18.8305	49.6032	79.1196	0.8274	2136.3118	n.c	0.5954	n.c
Paris	31.7824	63.0488	83.9153	1.4889	3434.4195	0.2366	0.7381	24.208
Toulouse	20.2165	60.0024	76.6009	0.8552	2990.7941	0.7208	0.895	13.5297

City	SHOP_DENS	HOTEL_DENS	DIST_ROAD	DIST_BUSIPARK	DIST_WATER	DIST_COAST
Bayonne	0.2846	0.0313	0.207	0.8837	0.9326	0.7886
Lyon	0.9032	0.059	0.1581	1.5756	1.0226	n.c
Marseille	0.8744	0.039	0.2076	0.9265	2.2848	2.0044
Montpellier	0.4149	0.0224	0.1839	1.2651	1.5898	6.2004
Nantes	0.2873	0.0256	0.1711	1.347	0.8423	n.c
Nice	0.8194	0.1136	0.204	2.8582	5.0743	1.4629
Paris	1.7356	0.2713	0.2902	2.464	1.2884	n.c
Toulouse	0.2898	0.0266	0.2163	0.9133	3.5245	n.c

A5. Monthly change in occupancy rate



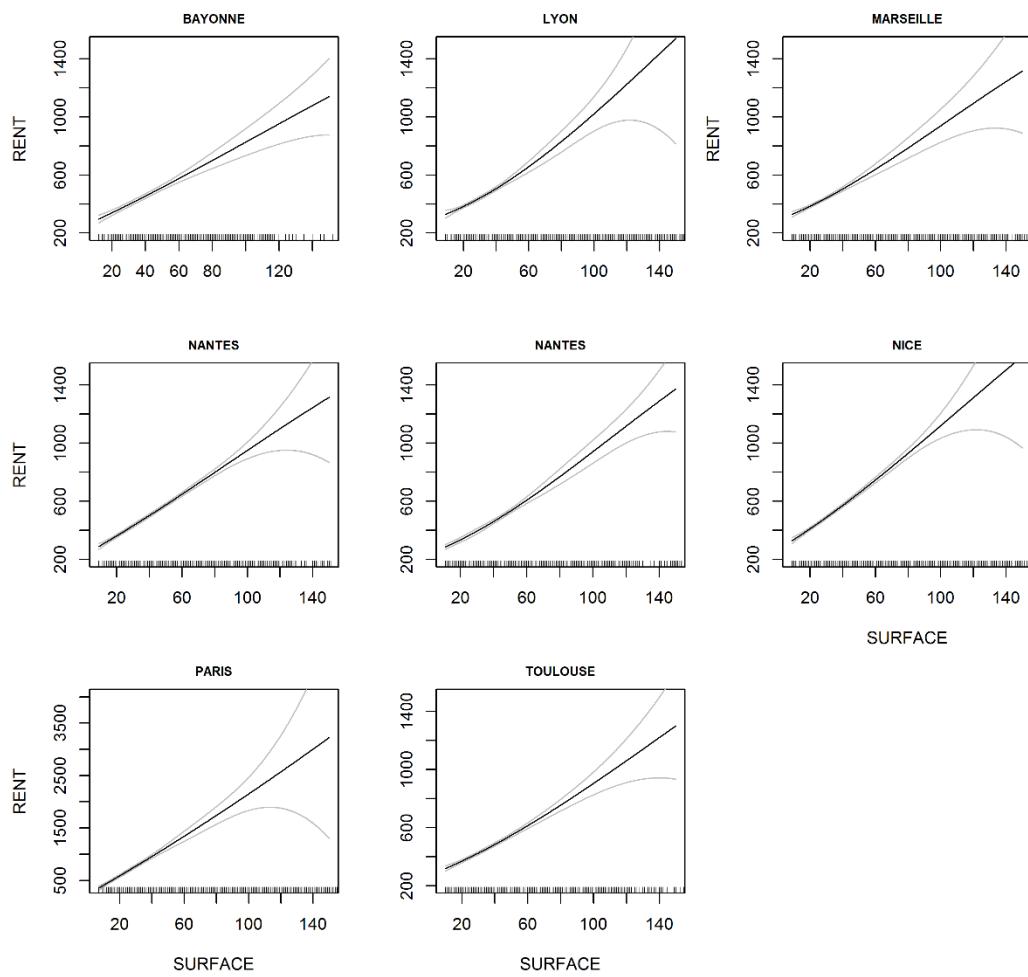
A6. Other statistics on professional and private individual hosts

		Instant booking available (%)		Mean max guests allowed		Response rate (%)		Response time (Min)	
City	Year	Priv.	Pro.	Priv.	Pro.	Priv.	Pro.	Priv.	Pro.
Bayonne	2014	0.09	0.15	3.78	3.72	95.83	97.21	287.34	240.53
	2015	0.25	0.42	3.70	3.92	95.20	96.52	345.20	255.25
	2016	0.85	1.05	3.82	4.06	95.17	96.65	350.51	262.01
Lyon	2014	0.11	0.16	3.32	3.44	93.91	97.57	339.66	156.63
	2015	0.20	0.43	3.24	3.51	93.11	95.98	336.45	185.64
	2016	0.58	1.51	3.12	3.63	92.95	96.41	350.85	193.12
Marseille	2014	0.11	0.24	3.54	3.70	96.72	95.87	285.23	224.41
	2015	0.30	0.57	3.34	3.85	95.30	95.09	334.39	238.92
	2016	0.93	1.70	3.39	3.78	94.68	96.11	330.08	204.77
Montpellier	2014	0.14	0.15	3.24	3.22	95.26	96.97	275.31	196.40
	2015	0.32	0.52	3.08	3.44	94.09	96.48	302.48	176.46
	2016	0.70	1.72	3.04	3.49	93.29	95.71	336.57	159.43
Nantes	2014	0.10	0.12	3.28	3.06	94.01	95.41	284.89	179.06
	2015	0.27	0.32	3.08	3.18	92.88	95.58	313.90	191.40
	2016	0.69	1.17	2.98	3.50	93.73	96.18	307.18	202.08
Nice	2014	0.21	0.42	3.47	3.62	97.24	97.76	210.84	149.90
	2015	0.63	1.03	3.26	3.65	95.82	97.48	287.21	155.31
	2016	1.33	2.13	3.23	3.65	94.99	97.44	307.07	166.11
Paris	2014	0.22	0.57	3.08	3.33	89.96	93.46	343.06	206.42
	2015	0.41	0.93	2.97	3.45	88.70	93.53	366.97	199.36
	2016	0.44	1.28	1.93	2.25	58.84	62.22	247.49	145.68
Strasbourg	2014	0.39	0.01	3.48	5.00	94.85	100.00	238.80	2.27
	2015	0.31	0.75	3.04	3.99	94.54	95.80	276.90	156.37
	2016	0.70	2.07	2.94	3.75	94.16	96.75	291.80	152.97
Toulouse	2014	0.12	0.20	3.19	3.05	95.20	98.09	272.47	155.65
	2015	0.24	0.50	3.00	3.32	94.24	97.13	304.55	183.45
	2016	0.77	1.50	2.89	3.37	93.86	96.88	318.82	175.01

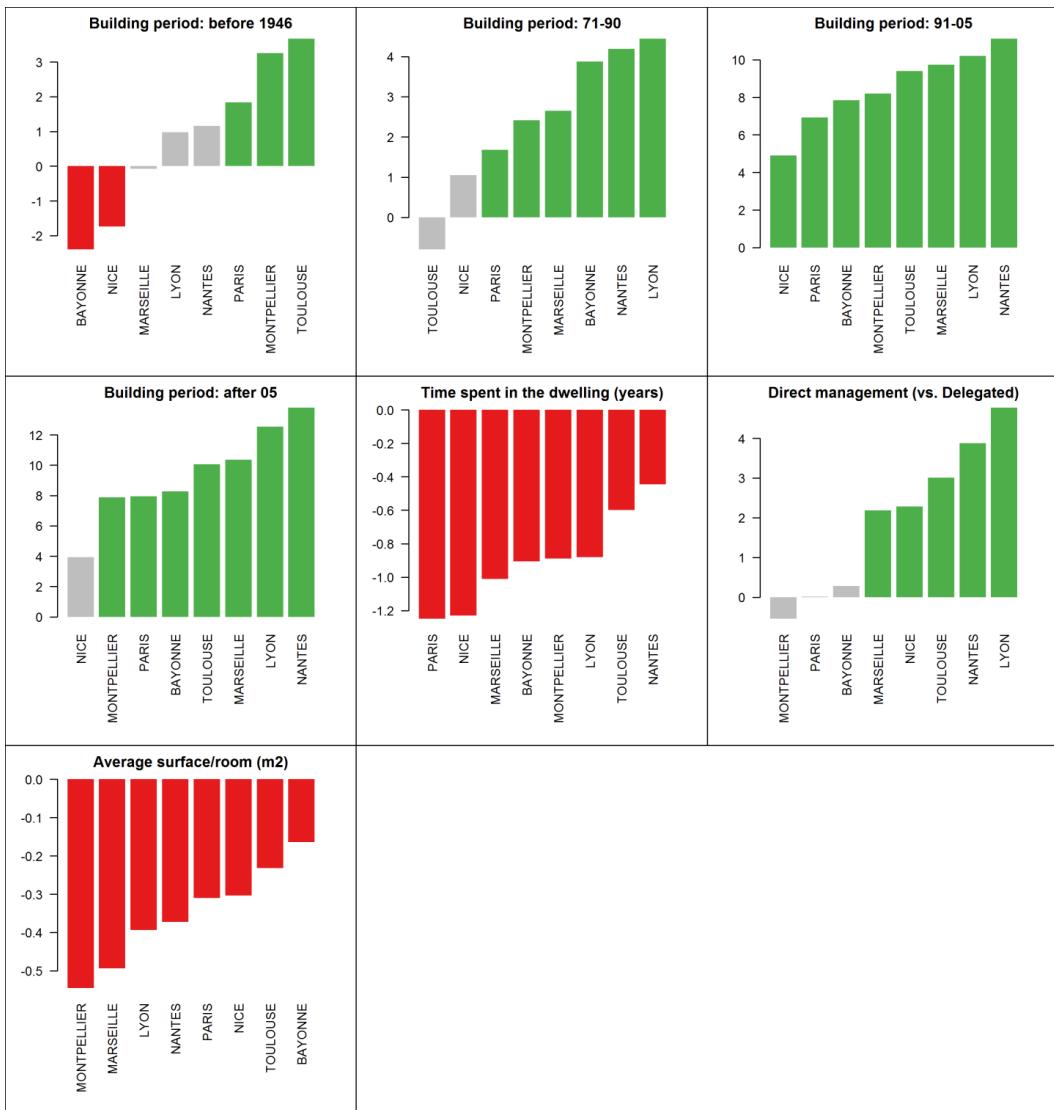
A7. Results of Moran's *I* and Breusch-Pagan tests

City	Moran's <i>I</i> test			Breusch-Pagan test		
	Statistic	Standard errors	P-value	Statistic	P-value	
Bayonne	0.3972	61.4067	< 2,2e-16	599.5314	< 2.2e-16	
Lyon	0.3156	81.7050	< 2,2e-16	564.4111	< 2.2e-16	
Marseille	0.2662	50.8462	< 2,2e-16	900.5678	< 2.2e-16	
Montpellier	0.3321	91.2455	< 2,2e-16	807.779	< 2.2e-16	
Nantes	0.4287	103.1342	< 2,2e-16	780.9336	< 2.2e-16	
Nice	0.2886	71.8063	< 2,2e-16	996.6812	< 2.2e-16	
Paris	0.4658	92.0062	< 2,2e-16	763.6845	< 2.2e-16	
Toulouse	0.4476	138.5374	< 2,2e-16	1186.527	< 2.2e-16	

A8. Marginal effect of the variable “surface area” on rents

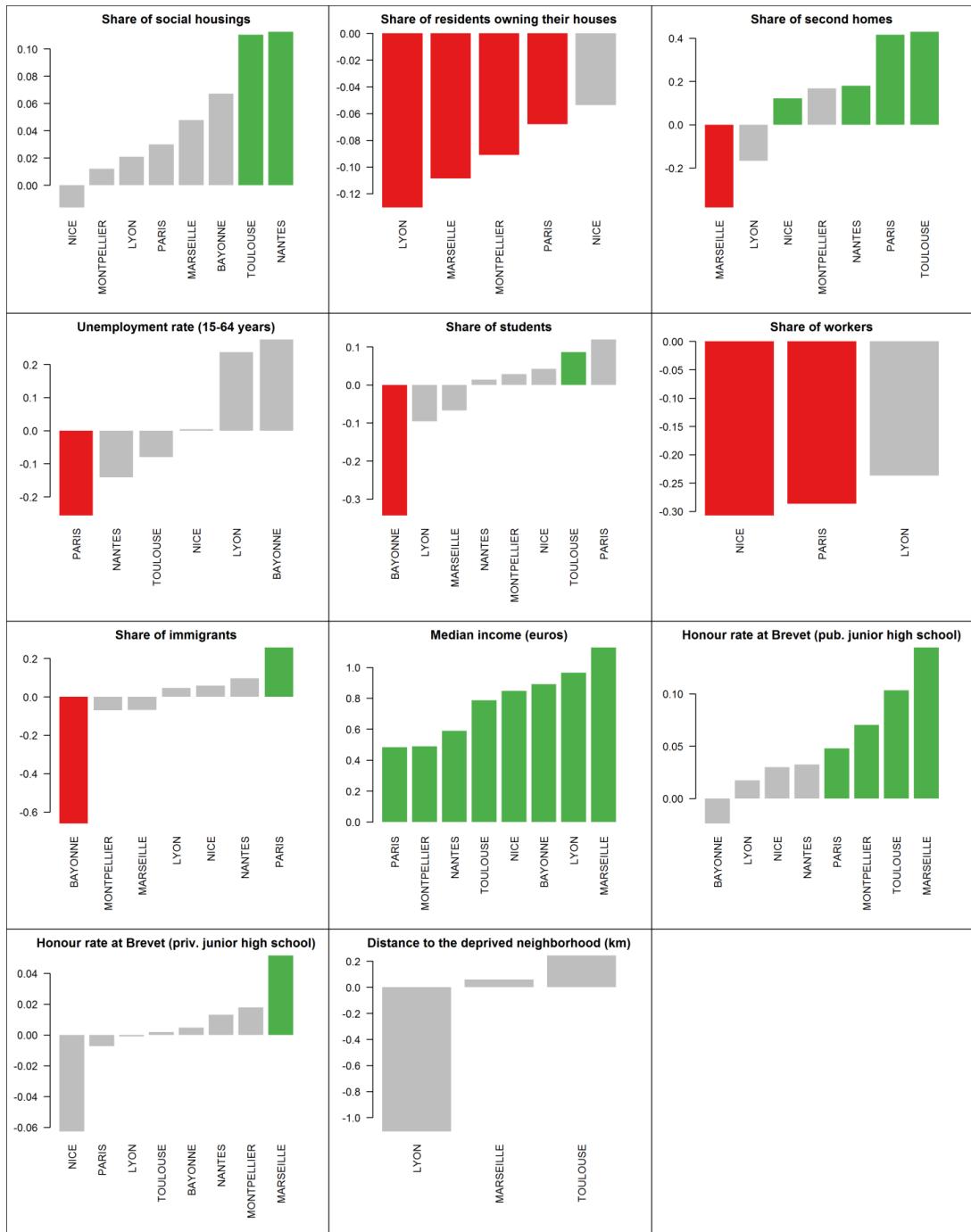


A9. Marginal effect of structural characteristics on rents by city (%)



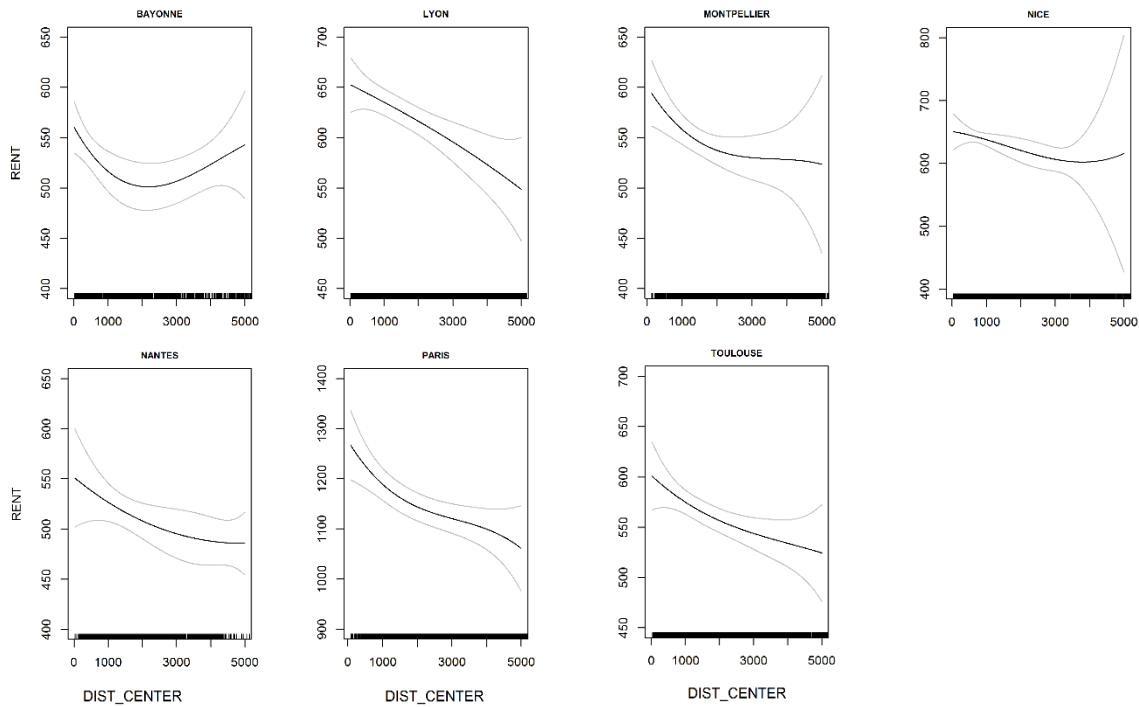
Note: Significant and positive effect (green); significant and negative effect (red); non-significant effect (gray). The values on the Y axis correspond to the percentage variation of the rent due to an increase of one unit of the explanatory variable for quantitative variables or in relation to the reference modality for qualitative variables.

A10. Marginal effect of socio-economic variables on rents by city (%)



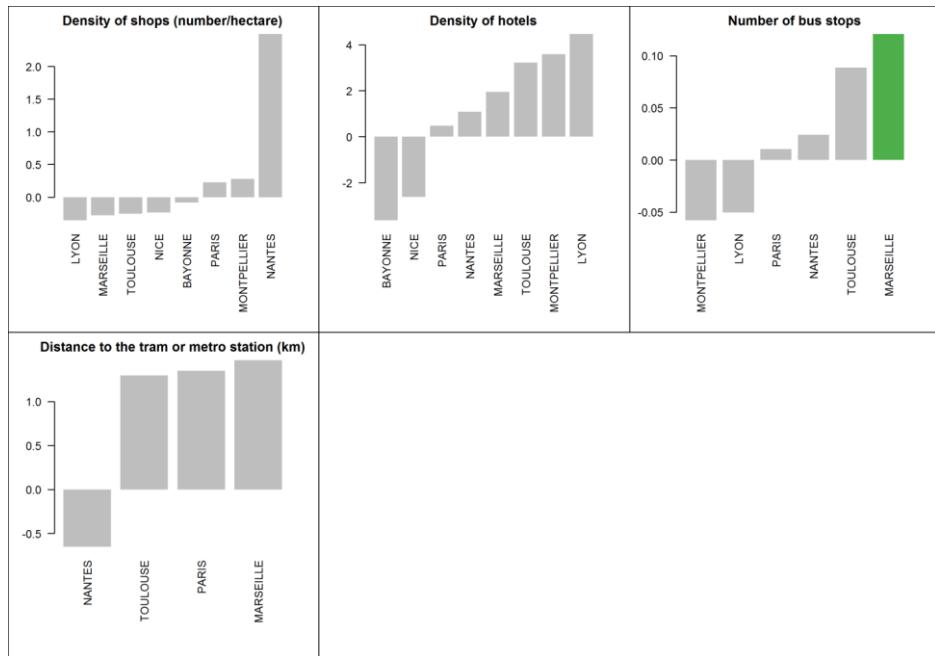
Note: Significant and positive effect (green); significant and negative effect (red); non-significant effect (gray).
The values on the Y axis correspond to the percentage variation of the rent due to an increase of one unit of the explanatory variable.

A11a. Marginal effect of the distance to the city center on rents



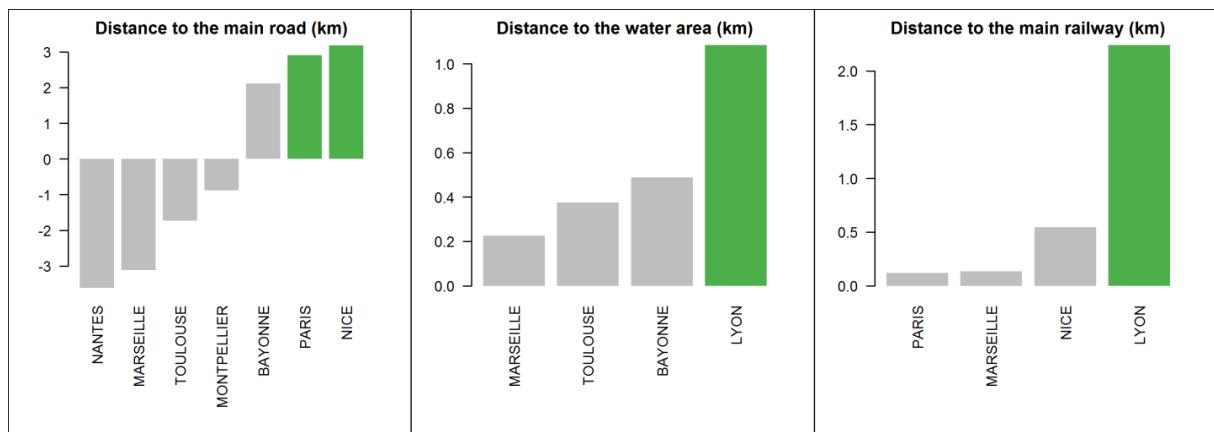
Note: The black curve represents the effect of the distance to the city center (X axis) on the rent (Y axis) when the distance is varied. The gray curves represent the confidence intervals of the estimate at 5%. The rents are expressed in euros/m² and the distance to the city center in km.

A11b. Marginal effect of accessibility variables on rents by city (%)



Note: Significant and positive effect (green); significant and negative effect (red); non-significant effect (gray). The values on the Y axis correspond to the percentage variation of the rent due to an increase of one unit of the explanatory variable.

A12. Marginal effect of (dis)amenity variables on rents by city (%)



Note: Significant and positive effect (green); significant and negative effect (red); non-significant effect (gray). The values on the Y axis correspond to the percentage variation of the rent due to an increase of one unit of the explanatory variable.

A13. Estimation results for structural, socio-economic, accessibility, and (dis)amenity variables

	Bayonne	Lyon	Marseille	Montpellier	Nantes	Nice	Paris	Toulouse
(Intercept)	5.6977*** (0.0793)	5.752*** (0.0591)	5.6326*** (0.0707)	5.7343*** (0.0677)	5.5475*** (0.0647)	5.8502*** (0.0818)	5.9534*** (0.0482)	5.454*** (0.0787)
bs(SURFACE)1	1.2589*** (0.0874)	1.8681*** (0.06)	1.7382*** (0.0767)	1.3614*** (0.0688)	1.7306*** (0.0559)	1.6275*** (0.0692)	3.6699*** (0.0481)	1.4635*** (0.0838)
bs(SURFACE)2	1.1986*** (0.1251)	2.0048*** (0.1076)	1.6259*** (0.1667)	1.2527*** (0.1085)	1.6147*** (0.1188)	1.2138*** (0.1567)	1.2191*** (0.1437)	1.3849*** (0.1273)
bs(SURFACE)3	1.8213*** (0.1339)	2.3149*** (0.1487)	1.9563*** (0.3492)	1.9119*** (0.2245)	2.2362*** (0.1201)	2.5212*** (0.3663)	3.865*** (0.2875)	2.0918*** (0.2011)
BUILDPER1	-0.0243* (0.0147)	0.0097 (0.0066)	-0.0007 (0.0086)	0.0321*** (0.0083)	0.0115 (0.0214)	-0.0175*** (0.0062)	0.0182*** (0.0071)	0.0361*** (0.0103)
BUILDPER3	0.038*** (0.0149)	0.0435*** (0.0096)	0.0261*** (0.009)	0.0239*** (0.0074)	0.041*** (0.0107)	0.0104 (0.0105)	0.0167** (0.0073)	-0.008 (0.0148)
BUILDPER4	0.0756*** (0.0153)	0.0972*** (0.0113)	0.093*** (0.0173)	0.0789*** (0.008)	0.1056*** (0.0106)	0.0479*** (0.007)	0.067*** (0.0123)	0.0898*** (0.0114)
BUILDPER5	0.0794*** (0.0154)	0.1181*** (0.0238)	0.0986*** (0.023)	0.0759*** (0.0125)	0.1291*** (0.0085)	0.0386 (0.0301)	0.0764*** (0.0164)	0.0959*** (0.0112)
DUMMY2	0.0007 (0.0053)	-0.0091** (0.0042)	-0.0304*** (0.0065)	-0.0058* (0.0033)	-0.0045 (0.0026)	0.0157*** (0.0045)	0.0014 (0.0022)	0.0027 (0.004)
TIMESPENT	-0.0091*** (0.0007)	-0.0089*** (0.0006)	-0.0102*** (0.0006)	-0.0089*** (0.0006)	-0.0045*** (0.0007)	-0.0124*** (0.0004)	-0.0126*** (0.0003)	-0.006*** (0.0007)
MANAGTYPE	0.0028 (0.0076)	0.0466*** (0.0071)	0.0216*** (0.0073)	-0.0055 (0.0077)	0.038*** (0.0076)	0.0226*** (0.0056)	0.0001 (0.0081)	0.0296*** (0.0075)
AVSUROOM	-0.0016*** (0.0006)	-0.0039*** (0.0003)	-0.005*** (0.0005)	-0.0055*** (0.0004)	-0.0037*** (0.0004)	-0.003*** (0.0004)	-0.0031*** (0.0005)	-0.0023*** (0.0004)
TYP_PROP2							0.022*** (0.0052)	
FLOOR 1							0.0377*** (0.0048)	
FLOOR 2							0.0494*** (0.0079)	
FLOOR 3							0.0494*** (0.0078)	
FLOOR 4							0.0454*** (0.0079)	
FLOOR 5							0.059*** (0.0078)	
FLOOR 6							0.0493*** (0.0081)	
ELEVATOR1							0.0279*** (0.008)	
PARKING1							0.0317*** (0.0055)	
NBTOIL							0.0576*** (0.0066)	
NBBATH							0.0009 (0.0115)	
BUILDMANAG 1							-0.0168*** (0.0102)	
SOCIALHOUS	0.0007 (0.0005)	0.0002 (0.0005)	0.0005 (0.0004)	0.0001 (0.0004)	0.0011*** (0.0004)	-0.0002 (0.0003)	0.0003 (0.0002)	0.0011** (0.0005)
OWNERS		-0.0013** (0.0006)	-0.0011** (0.0005)	-0.0009** (0.0004)		-0.0005 (0.0005)	-0.0007** (0.0003)	
SECONDHOME		-0.0017 (0.0015)	-0.0038*** (0.0015)	0.0017 (0.0015)	0.0018** (0.0008)	0.0012** (0.0005)	0.0042*** (0.0006)	0.0043*** (0.001)
UNEMPLOY	0.0027 (0.0017)	0.0024 (0.0015)			-0.0014 (0.0017)	0 (0.001)	-0.0026** (0.001)	-0.0008 (0.0016)
STUDENT	-0.0034** (0.0016)	-0.001 (0.0006)	-0.0007 (0.0011)	0.0003 (0.0004)	0.0001 (0.0005)	0.0004 (0.0005)	0.0012 (0.0008)	0.0009* (0.0005)
WORKERS		-0.0024 (0.002)				-0.0031** (0.0015)	-0.0029* (0.0017)	
IMMIG	-0.0066*** (0.0025)	0.0005 (0.0013)	-0.0007 (0.001)	-0.0007 (0.0011)	0.001 (0.0021)	0.0006 (0.0006)	0.0026*** (0.0007)	
INCOME	0.0089*** (0.0022)	0.0096*** (0.0014)	0.0112*** (0.0011)	0.0049*** (0.0013)	0.0059*** (0.0018)	0.0084*** (0.0018)	0.0048*** (0.0006)	0.0078*** (0.0015)

HONOURATE_PU	-0,0002 (0,0007)	0,0002 (0,0003)	0,0014*** (0,0005)	0,0007*** (0,0003)	0,0003 (0,0002)	0,0003 (0,0003)	0,0005** (0,0002)	0,001** (0,0004)
HONOURATE_PR	0 (0,0004)	0 (0,0003)	0,0005* (0,0003)	0,0002 (0,0005)	0,0001 (0,0001)	-0,0006 (0,0004)	-0,0001 (0,0001)	0,0000 (0,0003)
DIST_ZUSP	-0,0111 (0,0082)	0,0006 (0,0085)						0,0024 (0,0084)
bs(DIST_ZUSP)1			0,1093*** (0,028)	0,1076*** (0,0404)	-0,0496 (0,0371)	0,0368 (0,0311)		
bs(DIST_ZUSP)2			-0,1122*** (0,0411)	-0,0496 (0,0346)	0,0835** (0,0417)	0,1134*** (0,0356)		
bs(DIST_ZUSP)3			0,1571*** (0,0488)	0,0601* (0,031)	-0,0508 (0,0534)	0,1154*** (0,0331)		
bs(DIST_CENTER)1	-0,273*** (0,0783)	-0,0551 (0,047)		-0,2739*** (0,0704)	-0,1878*** (0,0599)	-0,0123 (0,0674)	-0,2638*** (0,0415)	-0,1259 (0,078)
bs(DIST_CENTER)2	0,2003*** (0,0574)	-0,0787* (0,0406)		0,0846 (0,0784)	-0,1403** (0,0655)	-0,2619*** (0,0818)	-0,029 (0,0253)	-0,0895** (0,0446)
bs(DIST_CENTER)3	-0,0862 (0,0612)	-0,2657*** (0,0468)		-0,3455*** (0,0891)	-0,1416*** (0,0438)	0,3804*** (0,1474)	-0,3188*** (0,0381)	-0,2256*** (0,0648)
DIST_CENTER		0,0000 (0,0000)						
SHOP_DENS	-0,0008 (0,0226)	-0,0036 (0,0043)	-0,0028 (0,0054)	0,0028 (0,0066)	0,0247 (0,0177)	-0,0024 (0,0044)	0,0023 (0,0021)	-0,0025 (0,0099)
HOTEL_DENS	-0,0371 (0,1081)	0,0438 (0,0302)	0,0194 (0,0663)	0,0352 (0,0554)	0,0108 (0,0553)	-0,0266 (0,0231)	0,0048 (0,0057)	0,0318 (0,0357)
NB_BUSSTOP_500	n.a.	-0,0005 (0,0005)	0,0012** (0,0006)	-0,0006 (0,0007)	0,0002 (0,0007)	n.a. (0,0007)	0,0001 (0,0003)	0,0009 (0,0009)
DIST_TRAMETR	n.a.		0,0146 (0,0141)	n.a. (0,0103)	-0,0065 (0,0103)	n.a. (0,0134)	0,0134 (0,0184)	0,0129 (0,0111)
bs(DIST_TRAMETR)1	n.a.	0,0417 (0,0415)		n.a.		n.a.		
bs(DIST_TRAMETR)2	n.a.	-0,1927*** (0,0641)		n.a.		n.a.		
bs(DIST_TRAMETR)3	n.a.	0,1599*** (0,0412)		n.a.		n.a.		
DIST_RAILWAY	n.a.	0,0221** (0,0088)	0,0013 (0,007)	n.a.		n.a.		
bs(DIST_RAILWAY)1	n.a.			n.a.	-0,0391 (0,0333)	0,0054 (0,0085)	0,0012 (0,0046)	0,1302** (0,0507)
bs(DIST_RAILWAY)2	n.a.			n.a.	0,1293*** (0,0379)			-0,1605*** (0,0609)
bs(DIST_RAILWAY)3	n.a.			n.a.	-0,0072 (0,0262)			0,1153** (0,0537)
DIST_WATER	0,0049 (0,0097)	0,0108* (0,0057)	0,0023 (0,0078)					0,0037 (0,0027)
bs(DIST_WATER)1				-0,0246 (0,0504)			0,0203 (0,0262)	
bs(DIST_WATER)2				0,0764** (0,0327)			0,0554** (0,0234)	
bs(DIST_WATER)3				-0,0264 (0,0495)			0,0276 (0,0246)	
bs(DIST_COAST)1	0,1336** (0,0549)	n.a.	-0,0507 (0,0634)	0,1193 (0,116)	n.a. (0,069)	-0,1195* (0,2712**)	n.a. (n.a.)	n.a. (n.a.)
bs(DIST_COAST)2	-0,2103*** (0,0606)	n.a.	-0,1403* (0,0802)	0,1165* (0,0632)	n.a. (0,1244)	0,2712** (0,1708)	n.a. (n.a.)	n.a. (n.a.)
bs(DIST_COAST)3	0,2338*** (0,0763)	n.a.	-0,0985 (0,079)	0,0959 (0,104)	n.a. (0,1708)	-0,4735*** (0,0287***)	n.a. (0,0144)	n.a. (0,0198)
DIST_ROAD	0,0209 (0,0232)		-0,0317 (0,0224)	-0,0088 (0,0183)	-0,0369 (0,0336)	0,0313** (0,0144)	0,0287*** (0,01)	-0,0174 (0,0198)
bs(DIST_ROAD)1			0,0622** (0,0268)					
bs(DIST_ROAD)2			-0,0867** (0,0392)					
bs(DIST_ROAD)3			0,0577* (0,0295)					
DIST_BUSIPARK							-0,0024 (0,0048)	
bs(DIST_BUSIPARK)1	-0,1596*** (0,0514)	0,1449* (0,0756)	-0,106*** (0,0404)	0,1238*** (0,044)				0,0785 (0,0612)
bs(DIST_BUSIPARK)2	0,17*** (0,037)	-0,1476*** (0,0443)	0,0346 (0,0323)	-0,1496*** (0,0457)				-0,0345 (0,0451)

bs(DIST_BUSIPARK)3	-0.1683*** (0.0486)	0.2514*** (0.094)	-0.0821** (0.0343)	0.0874* (0.046)	0.1587*** (0.0608)
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Note: robust standard errors in brackets. *** sign. at 1% ; ** sign. at 5 % ; * sign. at 10%

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