

## **How does air pollution affect housing rental prices in Chile?**

### **An economic assessment of PM<sub>2.5</sub> concentration across Chilean communes**

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## **ONLINE APPENDIX**

**Table A1.** The effect of PM<sub>2.5</sub> concentration on housing rental prices. Dependent variable: log of monthly housing rental price. Full estimates

Attributes	OLS	2SLS	GMM
PM <sub>2.5</sub>	-0.010** (0.0052)	-0.056*** (0.0174)	-0.040*** (0.0076)
Index materials	0.135*** (0.0138)	0.192*** (0.0405)	0.152*** (0.0174)
Index sanitation	0.036 (0.0300)	0.074 (0.0460)	0.034 (0.0259)
Square meters			
2: between 41 and 100 m <sup>2</sup>	0.170*** (0.0124)	0.179*** (0.0136)	0.178*** (0.0119)
3: ≥100 m <sup>2</sup>	0.401*** (0.0190)	0.375*** (0.0259)	0.382*** (0.0212)
Bathrooms	0.255*** (0.0174)	0.245*** (0.0216)	0.249*** (0.0184)
Bedrooms	0.030*** (0.0031)	0.022*** (0.0057)	0.026*** (0.0036)
Housing	-0.088** (0.0349)	-0.039 (0.0502)	-0.076** (0.0337)
Public transport	0.023 (0.0236)	-0.019 (0.0364)	-0.008 (0.0295)
Education center	0.038 (0.0240)	0.040 (0.0317)	0.024 (0.0237)
Health center	-0.041** (0.0183)	0.009 (0.0282)	-0.006 (0.0189)
Supermarket	-0.003 (0.0276)	-0.012 (0.0610)	0.046 (0.0294)
Green areas	0.108*** (0.0355)	0.172*** (0.0508)	0.134*** (0.0344)
Danger	-0.060*** (0.0118)	-0.113*** (0.0336)	-0.081*** (0.0142)
Visual pollution	-0.036*** (0.0139)	-0.024 (0.0253)	-0.045*** (0.0138)
Noise pollution	0.047*** (0.0086)	0.025** (0.0103)	0.030*** (0.0078)
Population density	0.056* (0.0336)	0.005 (0.0635)	0.035 (0.0418)
Natural sanctuaries	0.116* (0.0591)	0.068 (0.1529)	0.136 (0.0942)

<b>Attributes</b>	<b>OLS</b>	<b>2SLS</b>	<b>GMM</b>
Typical places	0.135*** (0.0466)	0.022 (0.1441)	0.135* (0.0729)
Cultural supply	0.003 (0.0024)	0.000 (0.0029)	-0.001 (0.0020)
Homicide rate	-0.004 (0.0043)	0.003 (0.0091)	-0.005 (0.0062)
Light intensity	0.006*** (0.0015)	0.011*** (0.0022)	0.011*** (0.0018)
Cons	11.056*** (0.3084)	12.420*** (0.7167)	11.849*** (0.3898)
<i>N</i>	49,649	49,649	49,649
<i>R</i> <sup>2</sup>	0.42	0.08	0.26

*Notes:* Robust cluster standard errors by commune are shown in parentheses. Instrument 1 corresponds to the weighted sum of emissions from communes farther than 100 km away but nearer than 500 km. Instrument 2 corresponds to the weighted sum of emissions beyond 500 km.

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

### Northern communes



### Central communes



### Southern communes

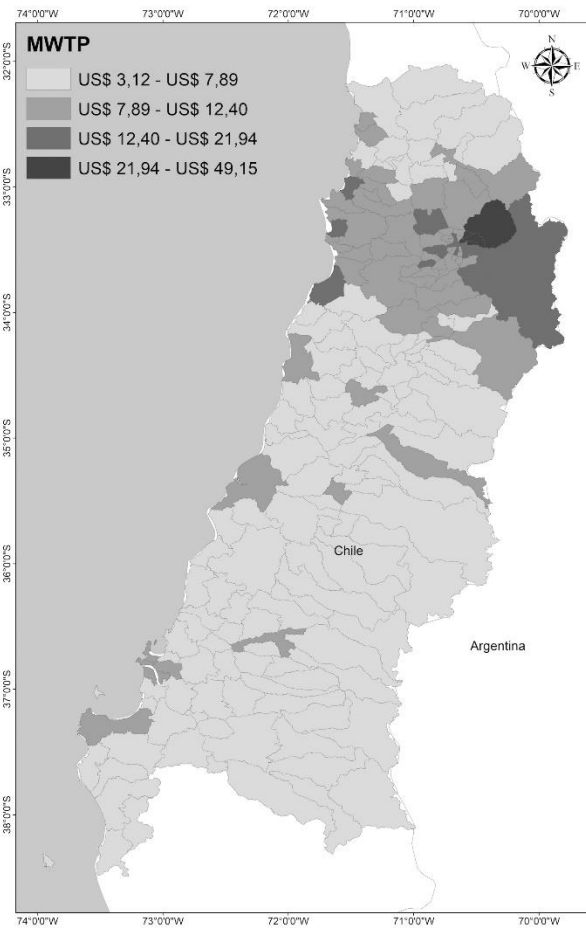


**Figure A1.** Monitoring stations across Chilean communes.

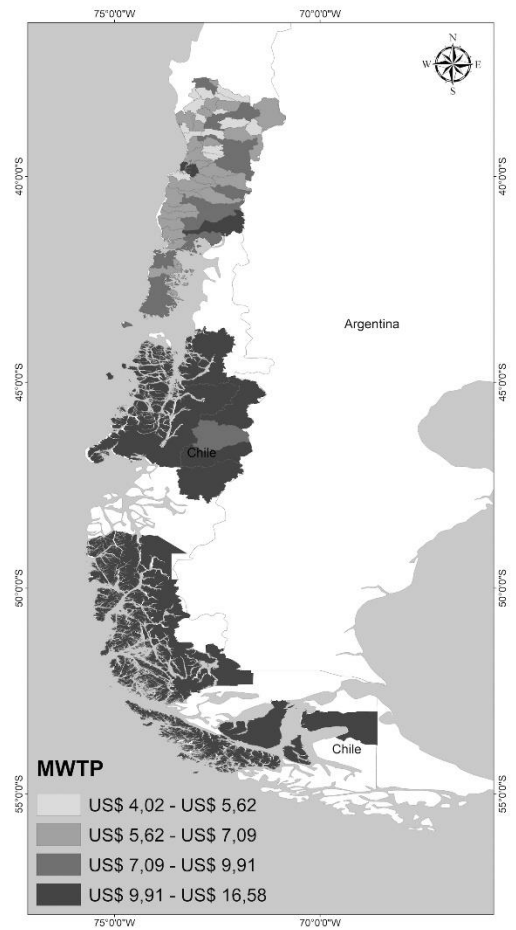
### Northern communes



### Central communes



### Southern communes



**Figure A2.** MWTP for  $1\mu\text{g}/\text{m}^3$  reduction in  $\text{PM}_{2.5}$  across Chilean communes.