

Table 1: Pooling OLS Estimator

	<i>Dependent variable:</i>
	Y
Xlog_MHI	1.166** (0.524)
Xpercent_airbnb_all_rentals	0.500*** (0.028)
Xpercent_bachelors_degree	−0.182*** (0.033)
Xpercent_foreign_born	0.197*** (0.037)
Xpercent_unempl	−0.556*** (0.132)
Constant	16.528*** (5.061)
Observations	784
R <sup>2</sup>	0.404
Adjusted R <sup>2</sup>	0.400
F Statistic	105.592*** (df = 5; 778)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 2: Panel Data - Between Estimator

	<i>Dependent variable:</i>
	Y
Xlog_MHI	3.195*** (0.788)
Xpercent_airbnb_all_rentals	−0.298** (0.115)
Xpercent_bachelors_degree	−0.235*** (0.046)
Xpercent_foreign_born	0.089* (0.048)
Xpercent_unempl	−0.343* (0.190)
Constant	4.059 (6.833)
Observations	196
R <sup>2</sup>	0.423
Adjusted R <sup>2</sup>	0.408
F Statistic	27.856*** (df = 5; 190)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 3: Panel Data - First difference estimator

	<i>Dependent variable:</i>
	Y
Xlog_MHI	−0.210 (0.786)
Xpercent_airbnb_all_rentals	0.497*** (0.026)
Xpercent_bachelors_degree	0.140 (0.114)
Xpercent_foreign_born	0.058 (0.158)
Xpercent_unempl	−1.812*** (0.161)
Observations	588
R <sup>2</sup>	0.468
Adjusted R <sup>2</sup>	0.464
F Statistic	106.342*** (df = 4; 583)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 4: Panel Data - Fixed effects or within estimator

	<i>Dependent variable:</i>
	Y
Xlog_MHI	−0.220 (0.809)
Xpercent_airbnb_all_rentals	0.534*** (0.026)
Xpercent_bachelors_degree	0.321*** (0.123)
Xpercent_foreign_born	0.222 (0.158)
Xpercent_unempl	−1.402*** (0.205)
Observations	784
R <sup>2</sup>	0.513
Adjusted R <sup>2</sup>	0.346
F Statistic	122.948*** (df = 5; 583)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 5: Random effects estimator

	<i>Dependent variable:</i>
	Y
Xlog_MHI	0.837 (0.567)
Xpercent_airbnb_all_rentals	0.529*** (0.026)
Xpercent_bachelors_degree	-0.172*** (0.037)
Xpercent_foreign_born	0.212*** (0.044)
Xpercent_unempl	-0.685*** (0.143)
Constant	19.722*** (5.740)
Observations	784
R <sup>2</sup>	0.434
Adjusted R <sup>2</sup>	0.431
F Statistic	119.513*** (df = 5; 778)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Balanced Panel: n = 196, T = 4, N = 784

Effects:

var std.dev share

idiosyncratic 71.881 8.478 0.811

individual 16.783 4.097 0.189

theta: 0.2809

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LM test for random effects vs OLS

Lagrange Multiplier Test - (Honda) for balanced panels

data: Y ~ X

normal = 8.132, p-value < 2.2e-16

alternative hypothesis: significant effects

LM Test for fixed effects vs OLS  
F test for individual effects

data: Y ~ X  
F = 2.6149, df1 = 195, df2 = 583, p-value < 2.2e-16  
alternative hypothesis: significant effects

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Hausman test for fixed vs random effects model  
Hausman Test

data: Y ~ X  
chisq = 4.4972, df = 5, p-value = 0.4803  
alternative hypothesis: one model is inconsistent  
Since p-value shows insignificance, random effects model is chosen over fixed effects.

Table 6: Pooling OLS Estimator - rent\_overburdened

	<i>Dependent variable:</i>
	Y
Xlog_MHI	1.039** (0.419)
Xpercent_airbnb_all_rentals	0.008 (0.023)
Xpercent_bachelors_degree	-0.150*** (0.027)
Xpercent_foreign_born	0.171*** (0.030)
Xpercent_unempl	0.582*** (0.106)
Constant	8.963** (4.050)
Observations	784
R <sup>2</sup>	0.363
Adjusted R <sup>2</sup>	0.359
F Statistic	88.532*** (df = 5; 778)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 7: Between Estimator - rent\_overburdened

	<i>Dependent variable:</i>
	Y
Xlog_MHI	1.377 (1.000)
Xpercent_airbnb_all_rentals	−0.008 (0.146)
Xpercent_bachelors_degree	−0.143** (0.059)
Xpercent_foreign_born	0.176*** (0.061)
Xpercent_unempl	0.755*** (0.242)
Constant	3.748 (8.670)
Observations	196
R <sup>2</sup>	0.410
Adjusted R <sup>2</sup>	0.394
F Statistic	26.399*** (df = 5; 190)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01



Table 8: First differences estimator - rent\_overburdened

	<i>Dependent variable:</i>
	Y
Xlog_MHI	−0.364 (0.313)
Xpercent_airbnb_all_rentals	−0.002 (0.010)
Xpercent_bachelors_degree	−0.082* (0.045)
Xpercent_foreign_born	−0.024 (0.063)
Xpercent_unempl	−0.001 (0.064)
Observations	588
R <sup>2</sup>	0.007
Adjusted R <sup>2</sup>	−0.0002
F Statistic	0.651 (df = 4; 583)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 9: Fixed effects or within estimator - rent\_overburdened

	<i>Dependent variable:</i>
	Y
Xlog_MHI	−0.362 (0.326)
Xpercent_airbnb_all_rentals	−0.009 (0.010)
Xpercent_bachelors_degree	−0.097** (0.049)
Xpercent_foreign_born	−0.035 (0.064)
Xpercent_unempl	0.051 (0.083)
Observations	784
R <sup>2</sup>	0.012
Adjusted R <sup>2</sup>	−0.326
F Statistic	1.475 (df = 5; 583)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 10: Random effects Estimator - rent\_overburdened

	<i>Dependent variable:</i>
	Y
Xlog_MHI	−0.078 (0.308)
Xpercent_airbnb_all_rentals	−0.003 (0.010)
Xpercent_bachelors_degree	−0.164*** (0.029)
Xpercent_foreign_born	0.116*** (0.040)
Xpercent_unempl	0.176** (0.077)
Constant	26.414*** (3.993)
Observations	784
R <sup>2</sup>	0.126
Adjusted R <sup>2</sup>	0.120
F Statistic	22.455*** (df = 5; 778)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

LM test for random effects vs OLS  
Lagrange Multiplier Test - (Honda) for balanced panels

data: Y ~ X  
normal = 27.38, p-value < 2.2e-16  
alternative hypothesis: significant effects

LM Test for fixed effects vs OLS

F test for individual effects

data: Y ~ X  
F = 19.077, df1 = 195, df2 = 583, p-value < 2.2e-16  
alternative hypothesis: significant effects

Hausman test for fixed vs random effects model

data: Y ~ X  
chisq = 26.656, df = 5, p-value = 6.654e-05  
alternative hypothesis: one model is inconsistent

Table 11: Pooling OLS estimator - log\_median\_rent

	<i>Dependent variable:</i>
	Y
Xlog_MHI	0.122*** (0.016)
Xpercent_airbnb_all_rentals	0.001 (0.001)
Xpercent_bachelors_degree	0.004*** (0.001)
Xpercent_foreign_born	-0.004*** (0.001)
Xpercent_unempl	-0.003 (0.004)
Constant	5.851*** (0.151)
Observations	784
R <sup>2</sup>	0.363
Adjusted R <sup>2</sup>	0.359
F Statistic	88.713*** (df = 5; 778)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 12: Between estimator - log\_median\_rent

	<i>Dependent variable:</i>
	Y
Xlog_MHI	0.151*** (0.033)
Xpercent_airbnb_all_rentals	0.010** (0.005)
Xpercent_bachelors_degree	0.003 (0.002)
Xpercent_foreign_born	−0.004** (0.002)
Xpercent_unempl	−0.010 (0.008)
Constant	5.602*** (0.282)
Observations	196
R <sup>2</sup>	0.481
Adjusted R <sup>2</sup>	0.468
F Statistic	35.280*** (df = 5; 190)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 13: First difference estimator - log\_median\_rent

	<i>Dependent variable:</i>
	Y
Xlog_MHI	0.004 (0.016)
Xpercent_airbnb_all_rentals	0.0004 (0.001)
Xpercent_bachelors_degree	0.004* (0.002)
Xpercent_foreign_born	-0.009*** (0.003)
Xpercent_unempl	0.004 (0.003)
Observations	588
R <sup>2</sup>	0.023
Adjusted R <sup>2</sup>	0.017
F Statistic	3.424*** (df = 4; 583)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 14: Fixed effects or within estimator - log\_median\_rent

	<i>Dependent variable:</i>
	Y
Xlog_MHI	0.028 (0.018)
Xpercent_airbnb_all_rentals	0.001 (0.001)
Xpercent_bachelors_degree	0.003 (0.003)
Xpercent_foreign_born	-0.010*** (0.004)
Xpercent_unempl	0.005 (0.005)
Observations	784
R <sup>2</sup>	0.026
Adjusted R <sup>2</sup>	-0.308
F Statistic	3.157*** (df = 5; 583)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01



Table 15: Random effects estimator - log\_median\_rent

	<i>Dependent variable:</i>
	Y
Xlog_MHI	0.067*** (0.016)
Xpercent_airbnb_all_rentals	0.001 (0.001)
Xpercent_bachelors_degree	0.006*** (0.001)
Xpercent_foreign_born	−0.004*** (0.002)
Xpercent_unempl	0.003 (0.004)
Constant	6.360*** (0.179)
Observations	784
R <sup>2</sup>	0.174
Adjusted R <sup>2</sup>	0.169
F Statistic	32.752*** (df = 5; 778)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

LM test for random effects vs OLS  
Lagrange Multiplier Test - (Honda) for balanced panels

data:  $Y \sim X$   
normal = 19.035, p-value < 2.2e-16  
alternative hypothesis: significant effects

LM Test for fixed effects vs OLS  
F test for individual effects

data:  $Y \sim X$   
F = 6.5155, df1 = 195, df2 = 583, p-value < 2.2e-16  
alternative hypothesis: significant effects

Hausman test for fixed vs random effects model

data:  $Y \sim X$   
chisq = 16.876, df = 5, p-value = 0.004742  
alternative hypothesis: one model is inconsistent