Replicating Christensen & Timmins (2022)

Emphasis on Table 5 (Column 2), p. 2135, as part of the Institute for Replication AI Games

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Table 1: Steering and Neighborhood Effects

	Dependent variable:				
	show		home_av		
Racial Minority	$-0.1282 \\ (0.1990) \\ p = 0.5196$	$ \begin{array}{c} -0.1419 \\ (0.1987) \\ p = 0.4753 \end{array} $	$0.0048 \\ (0.0183) \\ p = 0.7934$	$0.0057 \\ (0.0183) \\ p = 0.7542$	
ln(Price) Advert Home	N	Y	N	Y	
Racial Comp Advert Home	N	Y	N	Y	
Observations	6,580	6,555	$6,\!588$	$6,\!562$	
Adjusted R^2	-0.2196	-0.2348	-0.1670	-0.1774	

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 2: Steering and Neighborhood Effects

		Dependent variable:		
	Number of Recommendations	Home Availability		
African American	-0.1608	-0.1690	-0.0097	-0.0087
	(0.2713)	(0.2707)	(0.0220)	(0.0219)
	p = 0.5536	p = 0.5326	p = 0.6584	p = 0.6900
Hispanic	-0.1340	-0.1304	-0.0090	-0.0077
	(0.2465)	(0.2474)	(0.0255)	(0.0258)
	p = 0.5869	p = 0.5983	p = 0.7257	p = 0.7655
Asian	0.1231	0.0833	0.0174	0.0178
	(0.2477)	(0.2465)	(0.0227)	(0.0227)
	p = 0.6192	p = 0.7354	p = 0.4434	p = 0.4323
Other	1.7401**	1.6822**	-0.0893	-0.0921
	(0.8557)	(0.8525)	(0.0632)	(0.0633)
	p = 0.0422	p = 0.0487	p = 0.1582	p = 0.1459
ln(Price) Advert Home	N	Y	N	Y
Racial Comp Advert Home	N	Y	N	Y
Observations	6,580	$6,\!555$	6,588	$6,\!562$
Adjusted R ²	-0.2192	-0.2348	-0.1687	-0.1792

Note:

*p<0.1; **p<0.05; ***p<0.01

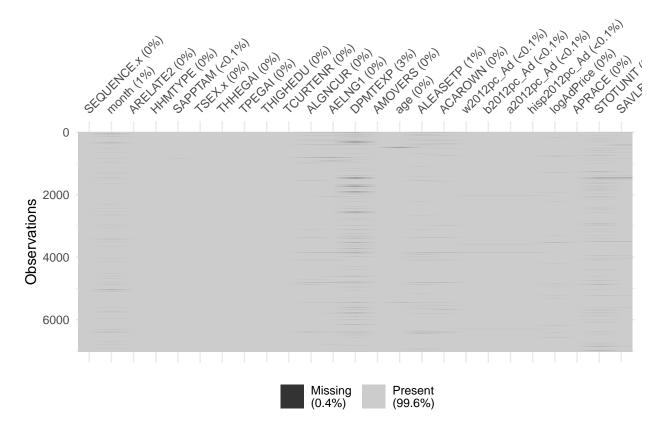
We note that in Table 5, the authors merge tables from two different models (here denoted as Table 1 and

Table 2), but only report the R2 for the second table (see next page for Table 2). Though it would have been transparent to report both, these differences do not alter the direction of the results.

Reference: Christensen, P., & Timmins, C. (2022). Sorting or steering: The effects of housing discrimination on neighborhood choice. *Journal of Political Economy*, 130(8), 2110-2163. https://doi.org/10.1086/720140

Robustness Check 1: Imputing Missing Data

Let's have a look at the missing data patterns.



There is not a ton of missing data, but still, after having imputed the data using *missForest* (Waljee et al., 2013), we can have a look at the updated estimates:

Table 3: Steering and Neighborhood Effects

	Dependent variable:				
	show		home_av		
Racial Minority	-0.2114 (0.1985) p = 0.2870	$ \begin{array}{c} -0.2092 \\ (0.1980) \\ p = 0.2908 \end{array} $	$-0.0004 \\ (0.0179) \\ p = 0.9810$	$-0.0005 \\ (0.0179) \\ p = 0.9799$	
ln(Price) Advert Home	N	Y	N	Y	
Racial Comp Advert Home	N	Y	N	Y	
Observations	7,025	7,025	6,953	6,953	
Adjusted R ²	-0.1619	-0.1626	-0.1466	-0.1500	

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 4: Steering and Neighborhood Effects

	Number of Recommendations	Dependent variable: Home Availability		
African American	-0.2009	-0.1972	-0.0105	-0.0106
	(0.2576)	(0.2565)	(0.0221)	(0.0221)
	p = 0.4356	p = 0.4422	p = 0.6334	p = 0.6310
Hispanic	-0.2361	-0.2186	-0.0126	-0.0121
	(0.2620)	(0.2632)	(0.0244)	(0.0246)
	p = 0.3678	p = 0.4065	p = 0.6060	p = 0.6238
Asian	-0.0287	-0.0440	0.0074	0.0067
	(0.2439)	(0.2433)	(0.0218)	(0.0217)
	p = 0.9063	p = 0.8566	p = 0.7346	p = 0.7575
Other	1.5771^*	1.5300^*	-0.0917	-0.0940
	(0.8495)	(0.8468)	(0.0620)	(0.0621)
	p = 0.0636	p = 0.0710	p = 0.1392	p = 0.1305
ln(Price) Advert Home	N	Y	N	Y
Racial Comp Advert Home	N	Y	N	Y
Observations	7,025	7,025	6,953	6,953
Adjusted R ²	-0.1621	-0.1630	-0.1483	-0.1518

Note:

*p<0.1; **p<0.05; ***p<0.01