Landlords Avoid Tenants Who Pay with Vouchers *

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Abstract

This paper uses a correspondence experiment with fictional housing applicants to test how landlords respond to tenants paying with a subsidized voucher. Landlords respond positively to those wishing to pay by voucher only half as often as to those indicating no such desire. Within the set of apartments eligible for voucher rent limits, the voucher penalty increases with monthly rent. Landlord behavior places quantitatively important restrictions on the quantity and type of apartments available to voucher recipients.

Key Words: housing choice voucher; section 8; correspondence experiment
JEL Codes: R31; R38

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1 Introduction

The Section 8 Housing Choice Voucher program has become the most significant housing subsidy program in the United States. In 2015, the Department of Housing and Urban Development provided vouchers for 2.4 million households, roughly double those supported by traditional public housing (HUD, 2015). Proponents of vouchers hope to improve efficiency and disperse public housing tenants into market rentals. However, many voucher holders cannot successfully lease an apartment before the voucher expires; 3 out of 10 people offered vouchers do not successfully redeem them (Finkel and Buron, 2001). Imperfect take-up can affect the composition of voucher users and thus the average effectiveness of vouchers (Chyn, et. al. 2016). Vouchers also only imperfectly disperse residents throughout a city. Voucher holders experience roughly similar levels of neighborhood poverty as other poor households (Devine, et. al. 2003; Galvez, 2010), tend to be concentrated in particular neighborhoods (Galvez, 2010), and actually tend to live in worse performing school districts than other poor households (Horn, Ellen, and Schwartz, 2014). In the Moving to Opportunity (MTO) experiment (Quigley and Raphael, 2008; Aliprantis and Richter, 2016) and other voucher experiments (Eriksen and Ross, 2012; Jacob and Ludwig, 2012) recipients tend to move to neighborhoods of only marginally better quality.

Search frictions could explain these challenges with housing vouchers. In a frictionless market all tenants receiving a voucher would use it, and increasing the value of the voucher would improve neighborhood quality options. However, search frictions prevent some voucher recipients from actually leasing an apartment. Tenants may use more generous vouchers to improve the odds of finding any unit rather than a better unit, allowing landlords to capture most voucher benefits (Collinson and Ganong, 2016).

Landlord preferences over payment type could make housing search particularly difficult for voucher recipients. Descriptive accounts indicate that landlords deny applications of tenants attempting to pay with a voucher (Beck, 1996; Daniel, 2009; Popkin and Cunningham, 2002), and sometimes these rejections explicitly aim to drive voucher tenants toward lower quality units or neighborhoods (Desmond, 2016). Such landlord behavior could explain why voucher take-up rates dropped when the MTO experiment restricted vouchers to low-poverty neighborhoods (Shroder, 2002; Galiani, et. al. 2015). Landlords could drive low voucher take-up rates and reinforce neighborhood sorting.

However, it is difficult to assess the importance of landlord resistance to vouchers. Housing search outcomes for voucher recipients combine the causal effect of paying with a voucher with other differences between voucher holders and other applicants. Audit and correspondence experiments have been employed to address similar concerns in measuring racial discrimination in rental housing. Researchers compare landlords' treatment of fictional rental housing applicants who are similar on all observable dimensions other than race (Yinger, 1995; Hanson and Hawley, 2011; Ewens, et. al. 2014). To the best of my knowledge, no large sample academic studies use these methods to measure landlords' preference

regarding payment by voucher.[1]

In the present study, I contact online listings for rental housing in Washington, DC with inquiries from fictional potential tenants. I randomly assign a subset of these e-mails to include a sentence indicating a desire to pay with a housing voucher. Given that all other characteristics of the e-mail are assigned randomly and independently of the voucher signal, differences in landlord responses to e-mails with and without the voucher message measure the extent of landlords' preference against payment by voucher. Landlords contact half of non-voucher applicants with a positive e-mail response but only 23 percent of those indicating use of a voucher. The voucher penalty of 27 percentage points is 4 to 5 times larger than the penalty for listing a black-sounding name. While large voucher penalties are evident in all subgroups, the voucher penalty increases with the monthly rent of the apartment (despite the fact that the high end of the rent range meets voucher rent guidelines). Thus, I find evidence that landlord resistance to payment by voucher creates an important search friction, particularly for higher rent apartments.

2 Experimental Design

During May and June 2015, a research assistant applied to apartment vacancy listings from an online classified ad site. Apartments were randomly chosen out of those listed within the previous 24 hours in the District of Columbia to which the experiment had not applied previously, which were not obviously a scam, and which were monthly rentals. Apartments were restricted to those with rent below 1,500 USD per month [2] and those that provided the location of the apartment. During the first half of the experiment, apartments were randomly selected to receive 1 or 2 applications. During the second half, this increased to 2 or 4 applications. Altogether, the experimental sample includes 2,681 applications to 1,342 apartments.

An inquiry to a particular apartment begins with a randomly generated message based on Hanson and Hawley (2011) and Ewens, et. al. (2014). Figure 1 displays an example of such a message as well as the general template. Each e-mail includes a subject followed by a message consisting of a greeting, introductory statement including the applicant's name, a request regarding the availability of the apartment, and a valediction finishing with the applicant's name. Names are chosen at random from the same list as Bertrand and Mullainathan (2004). For the purposes of a separate study, I randomly choose some apartments to have equal number of names of each race (i.e. stratified randomization) and other apartments to have the race of each name drawn independently. As in Ewens, et. al. (2014) I

[1] One audit study in New Orleans suggests that landlords respond negatively to vouchers (Greater New Orleans Fair Housing Action Center, 2009), though a small sample and imperfect experimental control limit this study.

[2] Housing voucher values are capped by "'fair market rent"' limits which in DC during 2015 were 1,167 for a studio, 1,230 for a one-bedroom, and 1,458 for a two-bedroom. A study of section 8 voucher discrimination thus needs to exclude higher rent apartments.

also randomly and independently assign some applicants to include positive quality signals (professional employment, good references, and/or good credit) or negative signals (smoker and/or bad credit) and others to have no signal statement. To avoid sending the same exact wording of a particular component to the same apartment, I compose 4 possible versions of each element. During the first phase, up to 2 messages to each apartment were randomly chosen without replacement from one of the 2 possible versions of each element; during phase 2 they were randomly assigned from 4 possible versions. Once composed, a research assistant sends the messages from e-mail accounts matching the applicants name.

For the present study, I randomly add a statement to some e-mails indicating that payment would come through a Section 8 Housing Choice Voucher. I randomly and independently assign this treatment to one quarter of all e-mails. As with the positive and negative signals, I vary the actual text to avoid two applicants applying with identical text. Hence, this treatment results in landlords receiving one of the four following messages:

- 'I would also like to know if you accept Section 8 vouchers.'
- 'Also, I would plan to pay with a Section 8 voucher.'
- 'I plan to pay with Section 8.'
- 'I'm looking for a place that takes Section 8.'

As in other correspondence experiments, I measure whether receiving this treatment affects the likelihood that a landlord responds to the message. I follow Ewens et. al. (2014) in focusing primarily on positive responses, and I categorize a response as positive if the landlord invites the applicant to setup a showing of the apartment, explicitly provides a means for further contact (e.g. asks to call a particular phone number), or responds that the apartment is available while providing or requesting more information. I do not include negative responses, primarily those stating that the unit is no longer available or that some stated trait of the applicant is incompatible with the apartment ('no Section 8', 'no smokers', or 'no men'). Following Ewens et. al. (2014), I also do not include disinterested landlords who provide/request more information without answering whether the apartment is available and landlords who simply state that the apartment is available and nothing else. However, the qualitative results are robust to broadening the outcome to include all responses.

Table 1 provides some summary statistics and compares the experimental sample to nationally representative data. Moving from left to right, the first 3 columns of Table 1 show characteristics of all residents of the United States, all renters in the United States, and all Section 8 Housing Choice Voucher holders. The next 2 columns show characteristics of vacancies used in the experiment, split by whether the e-mail contained a Section 8 treatment. Throughout the US, the users of the vouchers are more likely to be

black, and housing vouchers tend to be used in lower income neighborhoods with fewer white residents. The apartments used for the experimental sample and the even split of black and white names in the experiment match this context. The apartments used in this experiment differ from nationally representative data on a couple dimensions. They come from neighborhoods with somewhat fewer other housing choice voucher and public housing tenants. Rent for the apartments in the experimental sample exceeds national average rent for all renters and for voucher users (inclusive of subsidies). This rent differential appears even though voucher holders nationally tend to lease apartments with more bedrooms than the apartments in the experiment. Hence, the present results will reflect the response of landlords to vouchers in a high rent market like Washington, DC. I explore later whether landlords respond heterogeneously on these dimensions.

The final column of Table 1 tests whether the voucher and control groups differ on these characteristics. Randomization effectively balances baseline characteristics. Applicants and apartments receiving the Section 8 e-mail treatment appear similar except for the presence of a sentence asking about vouchers.

3 Results

Table 2 displays the effect of housing voucher and racial name treatments on callback rates by landlords. The first four columns show how landlords respond when an applicant indicates payment by voucher. The first two columns show callback rates for the voucher treatment group and the control group not receiving the voucher message, respectively. Landlords respond positively to the control group 49 percent of the time, but this rate drops to 23 percent when applicants indicate payment through a voucher. The third and fourth columns document that this difference is large, 27 percentage points, and statistically significant. For context, the latter columns of Table 2 repeat this analysis for the black name treatment used in prior studies. Black-sounding names receive 6 percentage points fewer callbacks, a difference similar to prior studies.[3] Thus, the penalty assigned by landlords to applicants indicating a desire to pay with a housing voucher is 4 to 5 times larger than the penalty for a black name.

Table 3 demonstrates that this large, negative penalty for voucher users persists across various specifications. Each column shows the results of a separate OLS regression with a landlord response dummy as the outcome (i.e. a linear probability model). The first column includes only dummies for the voucher and black name treatments as independent variables. The coefficients measure the simple difference in callback rates generated by the voucher message and listing a black name. As expected, the voucher effect is 27 percentage points. Columns (2), (3), and (4) cumulatively add controls for other signals in the e-mail message, apartment characteristics, and apartment fixed effects. As expected from random assignment, the measured voucher penalty does not change significantly. Finally, columns (5) and (6)

[3]Ewens, et. al. (2014) find a somewhat large 9 percentage point penalty for a black name.

provide results with different measures of landlord response. The probability of a positive response, any response, and a response specifically indicating a showing fall by 26, 15, and 18 percentage points, respectively. The magnitude of the effect differs somewhat depending on the outcome; however, the sign, statistical significance, and economic significance remain.[4] Landlords assign a large negative penalty to those wishing to use vouchers.

I also test for heterogeneous effects. From the second to the last row, Table 2 tests for voucher penalties in various sub-samples of the data. While many facts can be gleaned from these comparisons, a few are worth noting in the limited space available. First, the large voucher penalty persists in all sub-samples. Different experiments using different criteria for selecting the sample would have obtained similar qualitative results. This is particularly important since the the present sample differs from a representative group of apartments, e.g. regarding the number of bedrooms and the concentration of voucher holders in the neighborhood.

Second, stronger voucher effects appear for high rent apartments. Table 4 tests for interactions with the voucher treatment. Column (1) includes an interaction of the voucher treatment with rent (in hundreds of dollars, difference from mean). The coefficient on the section 8 dummy indicates as before that the average landlord assigns a 26 percentage point penalty to applicants with a voucher. The negative interaction with monthly rent indicates that for every additional 100 dollars of rent, the voucher penalty increases in magnitude by 4.5 percentage points. Column (2) decomposes rent into neighborhood quality, measured by mean rent for other apartments in the same tract, and characteristics specific to the individual apartment, measured by the difference between actual rent and the neighborhood mean. The section 8 penalty increases for both high rent neighborhoods and apartments with rent high for their neighborhood. The interaction with mean neighborhood rents is more noisily measured ($p = 0.07$) because rent varies less across neighborhoods than across apartments. Similarly, column (3) suggests that the section 8 penalty is larger for high income neighborhoods, again noisily measured and not statistically significant.[5] Column (4) indicates a smaller voucher penalty for apartments with more bedrooms.

Finally, landlord preferences may affect who can redeem a voucher. Columns (5) and (6) test for interaction of the voucher treatment with tenant characteristics previously studied in the literature. Column (5) shows no signs of interaction between the penalties for black-sounding names and vouchers. Column (6) indicates some interaction between voucher usage and other strong negative signals regarding smoking and credit. In a statistical discrimination model, the positive interaction between negative signals would suggest that landlords glean similar information from these separate signals, making their response to both less than the sum of their response to the components.[6]

[4]The sign and statistical significance of other results in the paper likewise do not change using the 'showing' outcome. For the 'any response' outcome, one result changes in Table 4, which is discussed in a footnote below.

[5]Mean tract rents correlate positively with tract log median income ($\rho = 0.35$).

[6]The interaction between section 8 and the negative signal is similar using 'showing' as the outcome but loses statistical

4 Conclusion

Landlords of relevant apartments avoid renting to tenants who will pay by Section 8 Housing Choice Voucher. When faced with otherwise comparable candidates, landlords respond to those using a voucher less often and less positively. Owners of higher rent (but eligible) apartments are particularly likely to avoid Section 8 applicants. Landlords respond less strongly to negative signals about smoking and credit when working with voucher recipients. These results have at least four important implications for policy and future research. First, landlord behavior can explain why tenants who are offered a voucher are sometimes not successful in leasing an apartment before the voucher expires. Second, landlords preferences can change the composition of people actually redeeming vouchers, which may matter in an environment with heterogeneous voucher effects. Third, landlord behavior plays some role in directing voucher tenants away from higher rent housing, which could lead to neighborhood sorting. Finally, voucher holders face particularly pronounced search frictions, which can skew the incidence of voucher benefits toward landlords.

significance using 'any response' as the outcome. One simple explanation: negative signals reduce positive responses but also increase negative responses which dulls the measured effect.

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5 Tables

Table 1: Comparing Neighborhood and Resident Characteristics

	National Data			Experiment		
	All	Renters	Voucher	Voucher	Control	p-value
Resident Black?	0.13	0.20	0.49	0.50	0.49	0.63
Nbd. Median Household Income	57616	50751	43214	44480	44045	0.64
Nbd. Percent White	0.75	0.68	0.57	0.48	0.49	0.29
Nbd. HCV Units	–	–	135	46	47	0.78
Nbd. Other HUD Units	–	–	90	66	67	0.91
Monthly Rent	–	937	1082	1255	1252	0.82
0-1 Bedrooms	–	–	0.28	0.80	0.81	0.47
2-3 Bedrooms	–	–	0.66	0.19	0.18	0.68
Num. Bathrooms	–	–	–	1.12	1.11	0.36
Multi-Unit Building?	–	–	–	0.63	0.63	0.94
Sample Size				662	2019	

All values are means. Neighborhood refers to census tracts. The first and second columns display data from the 2014 ACS 5-Year estimates with the first column representing all people and the second showing only those reporting a value for contract rent. The third column displays data for all housing choice voucher recipients in HUD (2015). The final two columns display data from the present experiment. 'Resident Black?' is a dummy indicating the resident is black. I measure tract median income and percent white using ACS data and the number of housing choice voucher tenants and other HUD subsidized tenants in a tract using HUD (2015). For voucher users, monthly rent includes the housing assistance payment. P-values are from simple two-sample t-tests of the null hypothesis that voucher and control groups have the same mean characteristics.

Table 2: Effects of Section 8 Voucher and Racial Name Treatments on Probability of Positive Response

	(1) Section 8 Treatment				(2) Black Name Treatment			
	Treat	Control	Diff.	p-value	Treat	Control	Diff.	p-value
Full Sample	0.23	0.49	-0.27	0.000	0.40	0.46	-0.06	0.001
Above Median Rent	0.21	0.55	-0.34	0.000	0.44	0.49	-0.04	0.090
Below Median Rent	0.25	0.43	-0.18	0.000	0.34	0.43	-0.09	0.002
No Bedrooms	0.27	0.53	-0.26	0.000	0.44	0.50	-0.06	0.092
1 Bedroom	0.22	0.52	-0.30	0.000	0.41	0.48	-0.07	0.008
2+ Bedrooms	0.19	0.37	-0.18	0.000	0.30	0.34	-0.04	0.275
Above Median Nbd. Income	0.19	0.48	-0.29	0.000	0.37	0.45	-0.08	0.002
Below Median Nbd. Income	0.26	0.51	-0.24	0.000	0.42	0.47	-0.04	0.121
Above Median Nbd. Vouchers	0.24	0.53	-0.29	0.000	0.43	0.47	-0.04	0.173
Below Median Nbd. Vouchers	0.22	0.47	-0.25	0.000	0.36	0.45	-0.08	0.001
No Signal Message	0.24	0.56	-0.32	0.000	0.44	0.53	-0.09	0.007
Positive Signal	0.29	0.57	-0.27	0.000	0.48	0.53	-0.05	0.126
Negative Signal	0.16	0.36	-0.20	0.000	0.28	0.33	-0.05	0.091
Sample Size	662	2019			1327	1354		

All data are from the correspondence experiment. P-values are calculated as simple two-sample t-tests. Column (3) has a smaller sample size because of census tracts with missing ACS data.

Table 3: Effect of Voucher Message on the Probability of Response

	(1) Positive	(2) Positive	(3) Positive	(4) Positive	(5) Any	(6) Showing
Section 8	−0.27***	−0.26***	−0.26***	−0.26***	−0.15***	−0.18***
	(0.021)	(0.021)	(0.021)	(0.037)	(0.036)	(0.030)
Black Name	−0.061***	−0.062***	−0.062***	−0.060**	−0.085***	−0.051**
	(0.017)	(0.017)	(0.017)	(0.025)	(0.025)	(0.024)
Positive		0.017	0.019	0.035	0.024	0.057*
Signal		(0.023)	(0.023)	(0.035)	(0.035)	(0.032)
Negative		−0.17***	−0.17***	−0.16***	−0.066*	−0.088***
Signal		(0.023)	(0.023)	(0.037)	(0.035)	(0.032)
Apt. FE	N	N	N	Y	Y	Y
Apt. Characteristics	N	N	Y	N	N	N
Mean of Dep. Var.	0.43	0.43	0.43	0.43	0.59	0.26
R-Squared	0.057	0.088	0.12	0.73	0.74	0.73
No. Obs.	2681	2681	2655	2681	2681	2681

All estimates result from OLS esimation of a linear probability model. Standard errors clustered by apartment are in parentheses.
*, **, and *** indicate statistical significance at the 10, 5 and 1 percent levels.

Table 4: Heterogeneous Effects of Voucher Message on the Probability of Positive Response

	(1)	(2)	(3)	(4)	(5)	(6)
Section 8	−0.26***	−0.26***	−0.26***	−0.30***	−0.28***	−0.32***
	(0.021)	(0.021)	(0.021)	(0.029)	(0.030)	(0.037)
Rent X Section 8	−0.045***					
	(0.0098)					
Mean Rent X Section 8		−0.034*				
		(0.019)				
Rent Residual X Section 8		−0.049***				
		(0.011)				
Log Med. Inc. X Section 8			−0.063			
			(0.040)			
Studio X Section 8				0.033		
				(0.050)		
2+ BR X Section 8				0.12**		
				(0.055)		
Black X Section 8					0.036	
					(0.039)	
Pos. Signal X Section 8						0.051
						(0.050)
Neg. Signal X Section 8						0.11**
						(0.048)
Apartment Characteristics	Y	Y	Y	Y	Y	Y
Applicant Characteristics	Y	Y	Y	Y	Y	Y
Mean of Dep. Var.	0.43	0.43	0.43	0.43	0.43	0.43
R-Squared	0.12	0.12	0.12	0.12	0.12	0.12
No. Obs.	2657	2653	2657	2657	2657	2657

All estimates result from OLS esimation of a linear probability model. Standard errors clustered by apartment are in parentheses.

*, **, and *** indicate statistical significance at the 10, 5 and 1 percent levels.

6 Figures

Figure 1: Sample Text

Subject: Interested in Your Craigslist Ad
Dear Sir:
My name is Latoya Williams, and I saw the place on the internet for RENT AMOUNT/month. If you need them, I have good references and I could also send a recent credit report. I would also like to know if you accept Section 8 vouchers. Is the place still available?
Sincerely,
Latoya Williams

.....
.....

Subject: «Subject»
«Greeting»
«Introductorty Statement Including Name» «Quality Statement» «Section 8 Statement»
«Availability Question»
«Valediction»
«Name»