Do Source of Income (SOI) Anti-Discrimination Laws Facilitate Access to Better Neighborhoods?

by

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Introduction

Policy makers' preference for vouchers vis-à-vis other types of housing assistance is due in part to vouchers' ability to promote geographic mobility and economic and racial integration. The success of housing vouchers, however, is dependent upon recipients being able to locate a landlord who will accept the voucher. For a number of reasons, this is not always the case. Some landlords wish to avoid the administrative burden associated with the voucher program. Other landlords perceive voucher recipients to be undesirable tenants and/or fear their other tenants would object to voucher recipients as neighbors. State and local Source of Income (SOI) anti-discrimination laws (hereafter referred to as SOI laws) are one policy response to address landlord discrimination. SOI laws make it illegal for landlords to discriminate against voucher recipients solely on the basis of their having a voucher. By forbidding discrimination SOI laws might facilitate the movement of voucher recipients into better neighborhoods. The research presented in this paper tests whether SOI laws do indeed improve locational outcomes for voucher recipients.

Background

Since the mid-1970s, the U.S. federal housing policy has experienced a shift from project-based programs to tenant-based vouchers and certificates. The trend is clear in that for every new unit of project-based housing, only 0.6 vouchers or certificates were issued between 1976 and 1979, and this ratio jumped to 4.75 during the first four years of 1990s (Hartung and Henig 1997). By 1998, vouchers and certificates constituted the largest single housing assistance program for low-income population, with recipients of 1.4 million households (Pendall 2000). The new model, first embodied in Section 8 Certificate Program under the Housing Act of 1974, was initially championed because of its cost-benefit advantage. Economic theory suggests that voucher holders value each dollar of subsidy more than they would each dollar spent on a public-

subsidized housing unit (Struyk 1981). As early as in Nixon's second administration, tenant-based subsidies started to receive recognition with adoption of a new goal of "maximization of existing housing stock" (Danielson 1976, p. 236).

As a direct linkage between neighborhood conditions and residents' outcomes has been established by social scientists (Wilson 1987; Ellen and Turner 1997), housing vouchers have undergone a second wave of promotion for their potential to enhance geographic opportunity (Goering 2005; Newman and Schnare 1997; McClure 2010). Vouchers have come to be seen as a means to alleviate various problems associated with the concentrated poverty and social isolation typical of many public housing neighborhoods. Because voucher holders have more extensive housing choices and can, in theory, move anywhere to find a suitable unit, they are more likely to settle in neighborhoods supportive of upward social mobility. By 1998, 54 assisted mobility programs were enacted in 33 different metropolitan regions to supplement the voucher program, but the vast majority of housing voucher programs still had no explicit mobility component (Turner 1998).

The locational outcomes of tenant-based housing assistance, however, have fell short of its promise. Moreover, as the voucher program is administered by a fragmented network of approximately 2,500 local housing authorities (LHAs), the performance of tenant-based housing assistance varies considerably across housing markets. Two constructs, namely the utilization rate and locational outcome, are often used to evaluate the effectiveness of voucher programs (Galvez 2010). In an early evaluation of voucher programs, utilization rates were 72% for non-minorities and 52% among minorities (Housing 1982), which means voucher recipients are by no guaranteed to successfully find a unit. Outcomes by the second measure seem even less promising. Although certificate recipients are less likely to live in extremely poor neighborhoods than general low-income population and households in public housing (Newman and Schnare 1997; Pendall 2000; Turner 1998), they are nevertheless unlikely to end up in middle- and upper-income neighborhoods as voucher advocates hoped (Newman and Schnare 1997). Moreover, the voucher program hardly achieves the objective of minority deconcentration in that recipients are not less likely to live in minority-concentrated neighborhoods than other low-income renters (Turner 1998; Basolo and Nguyen 2005). As a result, voucher recipients, especially minorities, continue to live in neighborhoods with social and economic distress.

Reasons for these outcomes are various. Weicher (1990, p. 276) points to the difficulty of finding eligible units and housing discrimination against minorities as two major reasons for the weakness of vouchers' performance. On the side of voucher recipients, they are usually subject to tight time limits and insufficient information about housing units that meet the requirements of the program (DeLuca, Garboden, and Rosenblatt Forthcoming). One consequence is "leasing in place", or voucher recipients staying in the same neighborhoods as before, which hinders the use of vouchers to move to more desirable neighborhoods. On the other side, landlords' incentives for program participation are considerably restricted by the perceived administrative burden from dealing with LHAs or discrimination against voucher recipients who are deemed as undesirable tenants. These landlord-side factors are evident in existing studies that found the proportion of voucher recipients living in low-poverty neighborhoods was slightly lower than the proportion of units at or below Fair Market Rents (FMR) in such neighborhoods (Devine et al. 2003; McClure 2008). The extent to which discrimination occurs is unknown, but a survey by the National Low Income Housing Coalition finds 8% of Section 8 administrators citing discrimination against voucher recipients as a cause for voucher use failures (Manye and Crowley 1999). A matched-pair study in Newton, Massachusetts, also found that two out of six real estate agencies showed evidence of discrimination against voucher recipients ((FHCGB) 2005). The prevalence of such discrimination is more significant in housing markets where vacancy rates are low, even though in most cases the needs for housing assistance are particularly urgent in these places.

A number of state and local jurisdictions have passed SOI laws to address discrimination problems (Tegeler, Cunningham, and Turner 2005). These laws make it illegal for landlords to discriminate against voucher recipients solely on the basis of their using a voucher. In theory, the existence of SOI laws might expand the housing choices for voucher recipients, thereby improving their locational outcomes. The evidence on the effectiveness of SOI laws with regard to locational outcomes is, however, sparse. In the sole study of the relationship between SOI laws and locational outcomes that we could identify Galvez (2011) studying 315 MSAs found that average neighborhood poverty rates for voucher holders were slightly lower in areas with SOI laws in place. Other empirical studies show that discrimination appears to persist in places where SOI laws exist, such as Chicago, Seattle and Santa Ana, Southern California (Popkin & Cunningham 2000, Galvez 2010, Basolo and Nguyen 2005).

The remainder of this article focuses on the empirical question of whether or not SOI laws improve the locational outcomes of the voucher program. The next part introduces the data used in this study and the model used to make the evaluation. The subsequent part presents the results of the models, followed by a summary of the findings and a discussion of policy implications in the end.

Data and Methodology

To measure the impact of SOI laws on voucher recipients' locational outcomes, we adopted the method of locational attainment model in our research. Locational attainment models are used broadly by scholars as a way of exploring how individual traits and contextual circumstances are translated into locational outcomes (Alba and Logan 1992, 1993; Freeman 2000, 2010; Logan et al. 1996); the latter (e.g. neighborhood racial composition) is treated as dependent variable, while the independent variable is the former. In the research presented here we employed three locational attainment models with the dependent variables being tract level measures of the poverty rate, percent of the population that is non-Hispanic white, and the percent of the population who are voucher recipients, respectively. The three constructs used here are of interest because income and racial segregation have been defining features of American cities and have been linked to historical federal housing policy (Massey and Denton 1993). More recently, the notion that voucher recipients are clustering together is one that has captured the attention of both journalists and scholars alike (Briggs and Dreier 2008; Rosin 2008). SOI law status in a jurisdiction is used as the independent variable.

Of course there exists the possibility of other explanations for any observed relationship between SOI laws status in a jurisdiction and its voucher recipients' locational outcomes. For example, in jurisdictions with SOI laws, the stock of vacant housing units might be larger and landlords might have more incentives to rent to voucher recipients. To dampen the extent to which confounding variables might undermine the validity of the findings, a difference-in-differences approach is used. We compared the difference in the locational outcomes between the jurisdiction that has a SOI law and the control jurisdiction when the SOI law is in effect, with the difference in the locational outcomes between jurisdiction that has a SOI law and the control

jurisdiction when the SOI law is not in effect. We derived four predicted values for each of the models (A, B, C, and D as listed below), and compared A-B with C-D.

A. Locational outcome in the jurisdiction that adopted a SOI law and within the time period when such law was in effect.
B. Locational outcome in the jurisdiction that did not adopt a SOI law and within the same time period in A.
C. Locational outcome in the jurisdiction that adopted a SOI law and within the time period when such law was not in effect.
D. Locational outcome in the jurisdiction that did not adopt a SOI law and within the same time period in C.

The difference-in-differences approach can also dampen the impact of omitted variables related to adoption of SOI law in a jurisdiction. For example, imagine that jurisdictions with more liberal attitudes have residents and landlords that are more receptive to having voucher neighbors and tenants and therefore voucher recipients in these areas live in more advantaged neighborhoods. The liberal attitudes of these jurisdictions also lead to the adoption of SOI laws. Because the difference-in-differences approach makes comparisons when the SOI law is and is not in effect, the liberal attitudes should affect locational outcomes in both of the time periods. Therefore, results are not biased despite liberal attitudes not being specifically included in the model.

The possibility of self-selection bias, whereby voucher recipients who wish to live in more advantaged neighborhoods gravitate towards jurisdictions with SOI laws, is also dampened to a great extent using the difference-in-differences approach. The passage of a SOI law might attract some voucher applicants who think such laws will facilitate their moving into better neighborhoods. But many LHAs have long waiting lists for vouchers and therefore the family would first have to move to the jurisdiction to get on the waiting list. This is possible, but seems unlikely. Waiting lists would likely deter moves motivated by the existence of SOI laws. Those voucher recipients who already have vouchers could in theory use portability to transfer their voucher to another jurisdiction. But unless SOI laws do indeed facilitate movement into more advantaged neighborhoods, such moves would not result in qualitatively different locational outcomes. If the attitudes and behaviors of voucher recipients who choose to move into

jurisdictions with SOI laws lead to different locational outcomes, these attitudes and behaviors should have led to their residing in more advantaged neighborhoods before they moved to the jurisdictions with SOI laws. Consequently, the absence of specific measures for self-selection should not bias the results.

To increase the comparability of the treatment (A and C) and control (B and D) groups, the comparisons will be limited to those voucher recipients residing in jurisdictions that abut the boundary of a jurisdiction with the opposite SOI status. Thus, locational outcomes of voucher recipients living in jurisdictions with SOI laws will be compared to the locational outcomes of voucher recipients living in adjacent jurisdictions without SOI laws (See Appendix for a list of the jurisdictions included in the research).

An updated version of the Poverty and Race Research Action Council's (PRRAC) database of State, Local, and Federal Statutes against Source-of-Income Discrimination (2005) was used to identify states, cities and counties that have SOI laws. SOI laws have been adopted at the city, county, and state levels. This database was updated in 2010. See Freeman (2012) for a description of the construction of the updated SOI database. To employ the difference-in-differences approach, the SOI law must have either been adopted or repealed during the study period of 1995-2008. The only state that adopted SOI laws during the study period (1995–2008) is New Jersey. Also, Minnesota's SOI law was effectively repealed during the study period. The voucher recipients in this state can also be included in the difference-in-differences analysis. The comparison in this latter case is between locational outcomes for voucher recipients in jurisdictions having SOI laws with locational outcomes for voucher recipients in jurisdictions without such laws before and after the repealing of the SOI laws. Several cities and counties also adopted SOI laws during the study period. These jurisdictions include the cities of San Francisco (CA), Buffalo and New York (NY), and Grand Rapids (MI) as well as Frederick (MD) and Nassau (NY) counties.

To increase the comparability of the treatment and control groups, the comparisons were limited to those voucher recipients who are in jurisdictions that abut the boundary of a jurisdiction with the opposite SOI status. Thus, voucher recipients in jurisdictions with SOI laws (the ''treatment group'') will be compared to voucher recipients in adjacent jurisdictions without

SOI laws (the ‘‘control group’’). The outcomes of interest are the locational outcomes for a specific voucher recipient in a specific year.

For each of the states whose SOI law status changed (New Jersey, and Minnesota), ‘‘treatment’’ voucher recipients were selected if they were in a county on the border of the state and there were voucher recipient s in an adjacent county without a SOI law across the state boundary. These voucher recipients living across the state boundary in a jurisdiction without a SOI law were included as part of the ‘‘control’’ group. By limiting our sample to voucher recipients who lived in a county on the border of the state and where there were voucher recipients in an adjacent county without a SOI law across the state boundary we were forced to exclude some voucher recipients in jurisdictions with SOI laws if there were no voucher recipients in the adjacent jurisdictions. For each of the cities or counties whose SOI law status changed during the study period, all of the voucher recipients within these jurisdictions were selected as treatments. For the cities of Buffalo and Grand Rapids, control voucher recipients were selected from the counties that surround these cities. For Nassau and Frederick Counties, control voucher recipients were selected from adjacent counties that do not have SOI laws. Finally, for the cities of New York and San Francisco, which encompass counties, control voucher recipients were selected from adjoining counties without SOI laws. New York City’s SOI law was only passed in 2008, the year our study period ends. Consequently, the analyses will experiment with excluding the New York City observations, as there may not have been enough time for the law to take effect. By selecting voucher recipients in adjacent cities or counties, we limit the possibility of confounding factors that might arise if the comparison group had vastly different housing market characteristics.

Table 1 lists the characteristics of our sample.

Table One		
Dependent Variables		
	Mean	Standard Deviation
Tract Poverty Rate	24.3%	.14
Tract Percent White	30%	.32
Tract Proportion Voucher Recipients	6.3%	.06
Independent Variables		
	Frequency	
Used Voucher in jurisdiction with SOI law while SOI law in effect	73,373	
Used Voucher in jurisdiction with	162,920	

Table One	
SOI law while SOI law not in effect	
Used Voucher in jurisdiction without SOI law while SOI law in comparison jurisdiction in effect	61,923
Used Voucher in jurisdiction without SOI law while SOI law in comparison jurisdiction not in effect	59,183
	Control Variables
Black	49.2%
Hispanic	21.8%
Asian	3.1%
Native American	.1%
Male	21.7%
Camden County, NJ	2.5%
Gloucester County, NJ	1.6%
Warren County, NJ	1.1%
Passaic County, NJ	1.9%
Bergen County, NJ	2.2%
Los Angeles, CA	20.8%
Buffalo, NY	6.4%
Grand Rapids, MI	2.4%
Nassau County, NY	1.9%
Multnomah County, OR	3.1%
San Francisco, CA	11%
Clay County, MN	1.1%
Washington County, MN	1.4%
St. Louis County, MN	1.8%
New York City, NY	34.5%

Limiting the analysis to voucher recipients that are in adjacent jurisdictions serves the purpose of dampening the impact of omitted variables that may be correlated with whether a jurisdiction's SOI law status changed. If the omitted variables correlate with the change in the status of SOI laws, the estimate of the effect of these laws on locational outcomes will be biased. Using the aforementioned approach, the differences in how locational outcomes are affected by the differences in the independent variable, namely the presence of a SOI law, can be estimated. The bias in this case will exist to the extent that differences in omitted variables correlate with whether or not the status of a SOI law has changed. Because control voucher recipients were selected from the same geographic area, many of the omitted variables are likely to take on

similar values between the treatment and control cases. Of course, even with this approach some of the differences in the values of the omitted variables between the treatment and control voucher recipients may correlate with whether or not a SOI law has been adopted. If the correlation between the omitted variables and the adoption of the SOI laws is less after matching than before, assuming matching will produce preferable results does not seem unreasonable. Cities or counties that are adjacent will likely share similar housing market traits.

The voucher data used in the research were obtained from HUD and are for the years of 1995-2008. We further limited the observations to recent movers, which are defined as new admission to the voucher program, portability moving in (vouchers only) or other change of unit. The unit of analysis is the person-year. The outcomes of interest are the characteristics of the neighborhood the voucher recipient resides in for a specific year. Because neighborhood level data is not available for every year, the 2000 Census data were used to represent neighborhood characteristics for the years 1995-2003 and the 2005-2009 American Community Survey (ACS) data were used to represent neighborhood characteristics for the years 2004-2008. The results of this research should not be biased by the use of two different data sets to measure locational outcomes because the two different data sources are used for both treatment and control groups in the comparisons.

We also controlled for several individual level factors that may be associated locational outcomes including race/ethnicity and gender. Previous research suggests minority voucher recipients in particular are shunted towards higher poverty, segregated neighborhoods (Galvez 2010). Women are over-represented among voucher recipients, but male householders may have different experiences in the housing market. Hence, our decision to control for gender as well.

The equation below models the difference-in-differences approach that will be used to estimate the relationship between the status of SOI laws and voucher recipients' locational outcomes.

$$TRACTTRAIT_i = a0 + b1SOICHANGE_i + b2SOIPERIOD_i + b3SOICHANGE_i * SOIPERIOD_i + b4COMPARISONGROUP_i + b5JURISDICTION_i + b6RACE/ETHNICITY + b7GENDER + b8ELDERLY + ui ,$$

Where

a0 = An intercept

TRACTTRAITi = the locational outcome of interest (i.e. tract poverty rate, tract percent white, proportion of tract residents who are voucher recipients)

SOICHANGEi = A dummy variable indicating whether the jurisdiction adopted a SOI law, taking a value of 1 when the jurisdiction adopted a SOI law

SOIPERIODi = A dummy variable indicating a time period when SOI law is in effect, taking a value of 1 when the law is in effect

SOICHANGEi *SOIPERIODi = an interaction term between the two variables defined above, taking a value of 1 when the observation represents a jurisdiction that adopted a SOI law and is during the time period when the SOI law is in effect, taking a value of 0 otherwise

COMPARISONGROUPi = A dummy variable indicating which comparison group (e.g. treatment and control LHAs for the City of Los Angles) belongs to

JURISDICTIONi = A dummy variable indicating the jurisdiction where the voucher recipient lives

RACE/ETHNICITYi = A series of dummy variables indicating if the voucher recipient is black, Hispanic, Asian/Pacific Islander or Native American

GENDERi = A dummy variable indicating the voucher recipient's gender

ELDERLYi = A dummy variable indicating if the voucher is aged 62 or older

ui = is an error term

Because each of the local public housing authorities (PHAs) issues multiple housing vouchers, robust standard errors are used to account for dependence among voucher recipients who are clients of the same PHA. Fixed effects are used to adjust for voucher recipients residing within the same housing market.

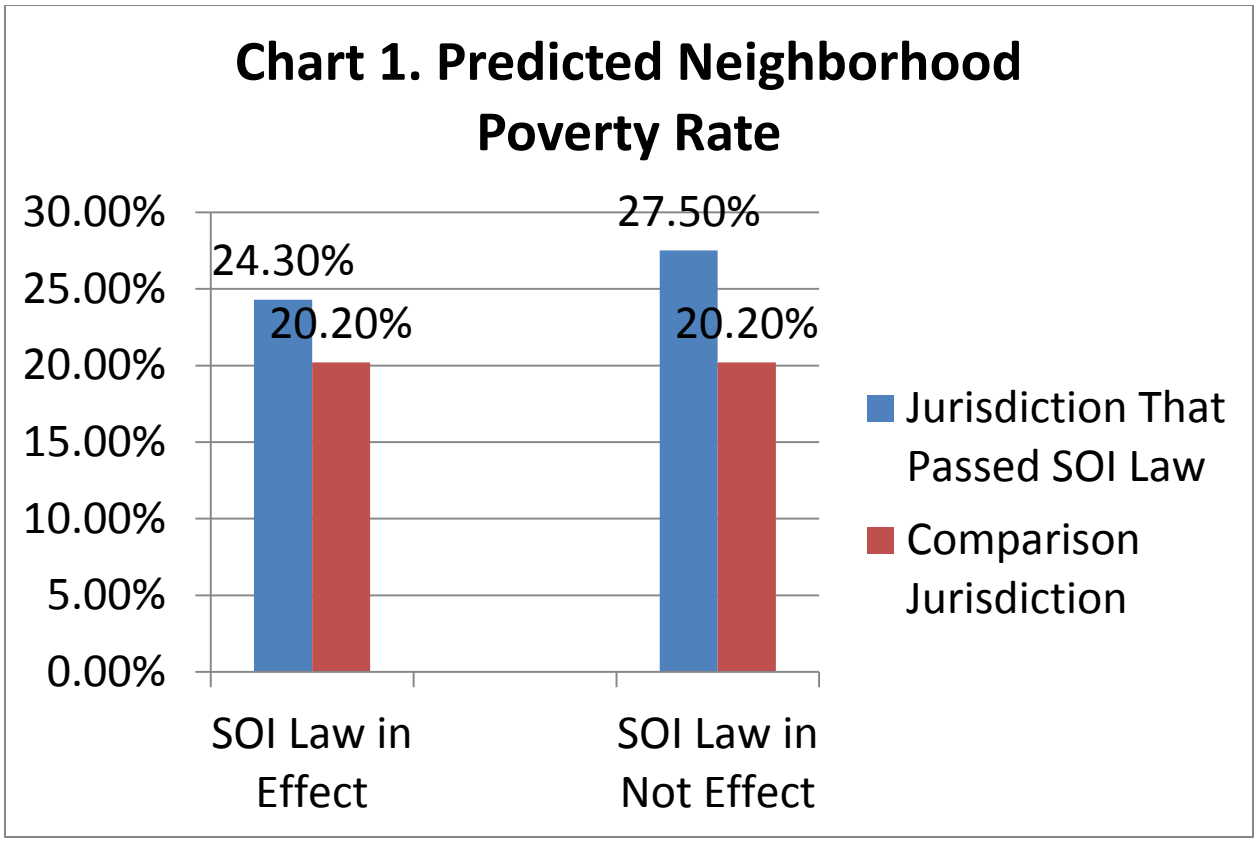
Results

The results of our difference-in-differences analyses suggest SOI laws have a modest impact on the locational outcomes of voucher recipients. Living in a jurisdiction with a SOI law during the time when the law was in effect was associated with voucher recipients living in neighborhoods with lower poverty rates, more whites and slightly smaller concentration of voucher recipients. Below we discuss these results in detail. To ease interpretation we present the results in terms of predicted percentages for

the neighborhood characteristic in question. Using this approach, the other independent variables in the models are set at their mean. We predict neighborhood outcomes for four scenarios: 1) residing in a jurisdiction with a SOI law while the SOI law is in effect, 2) residing in the comparison jurisdiction without a SOI law while the SOI law is in effect, 3) residing in a jurisdiction that passes a SOI law during the period when the SOI law is not in effect, and 4) residing in the comparison jurisdiction without a SOI law while the SOI law is not in effect. It is the difference-in-differences between 1 and 2 and between 3 and 4 that will tell us if the SOI laws are effective. The full models are in table A2 in the appendix.

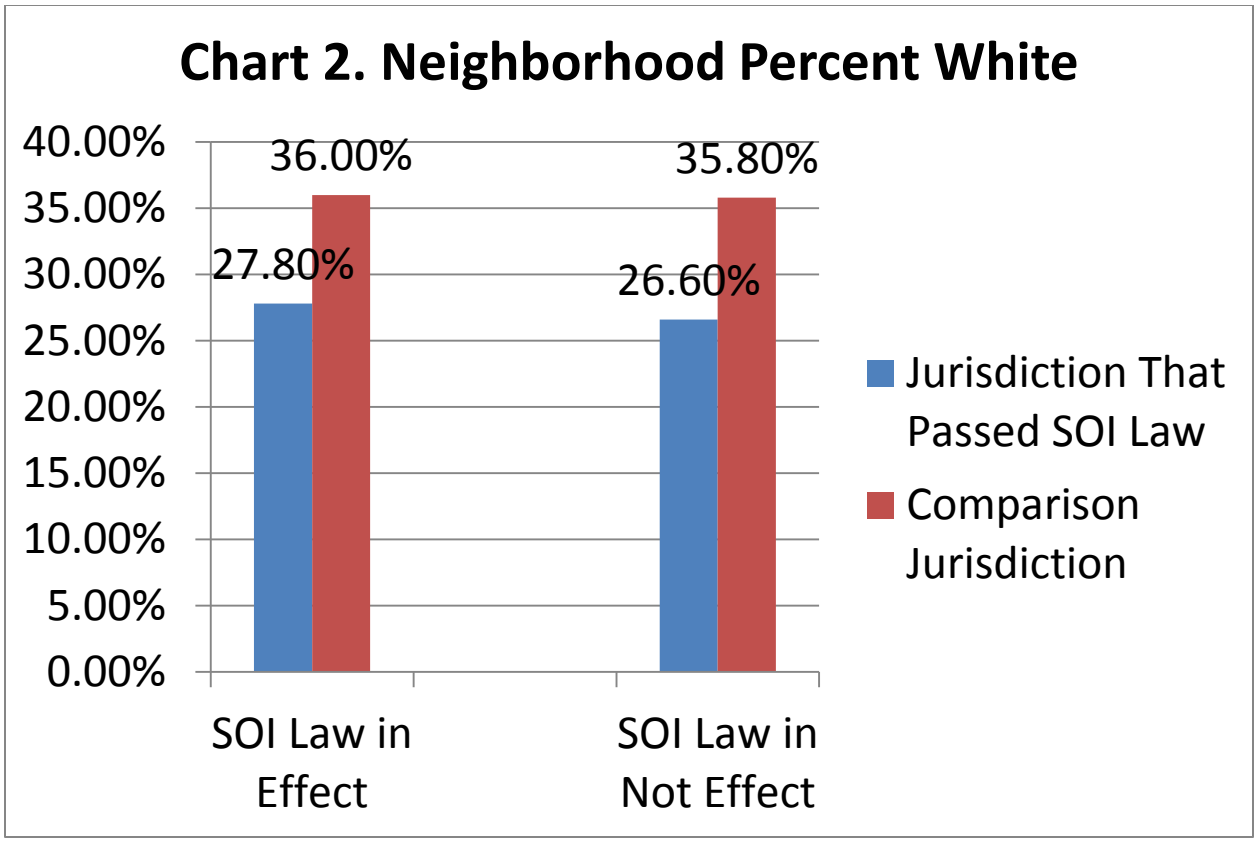
Poverty Rates

Chart 1 illustrates the predicted poverty rates for our four scenarios. What is notable is that amongst voucher recipients living in jurisdictions with SOI laws the neighborhoods they reside in are substantially lower when the SOI laws are in effect. In contrast, the poverty rates experienced by voucher recipients living in jurisdictions without SOI laws are essentially the same both during the time when the laws are in effect and when they are not. This pattern is consistent with the notion that SOI laws facilitate movement into lower poverty neighborhoods. The difference in poverty rates, at three percentage points is perhaps not dramatic but still substantial.



Percent White

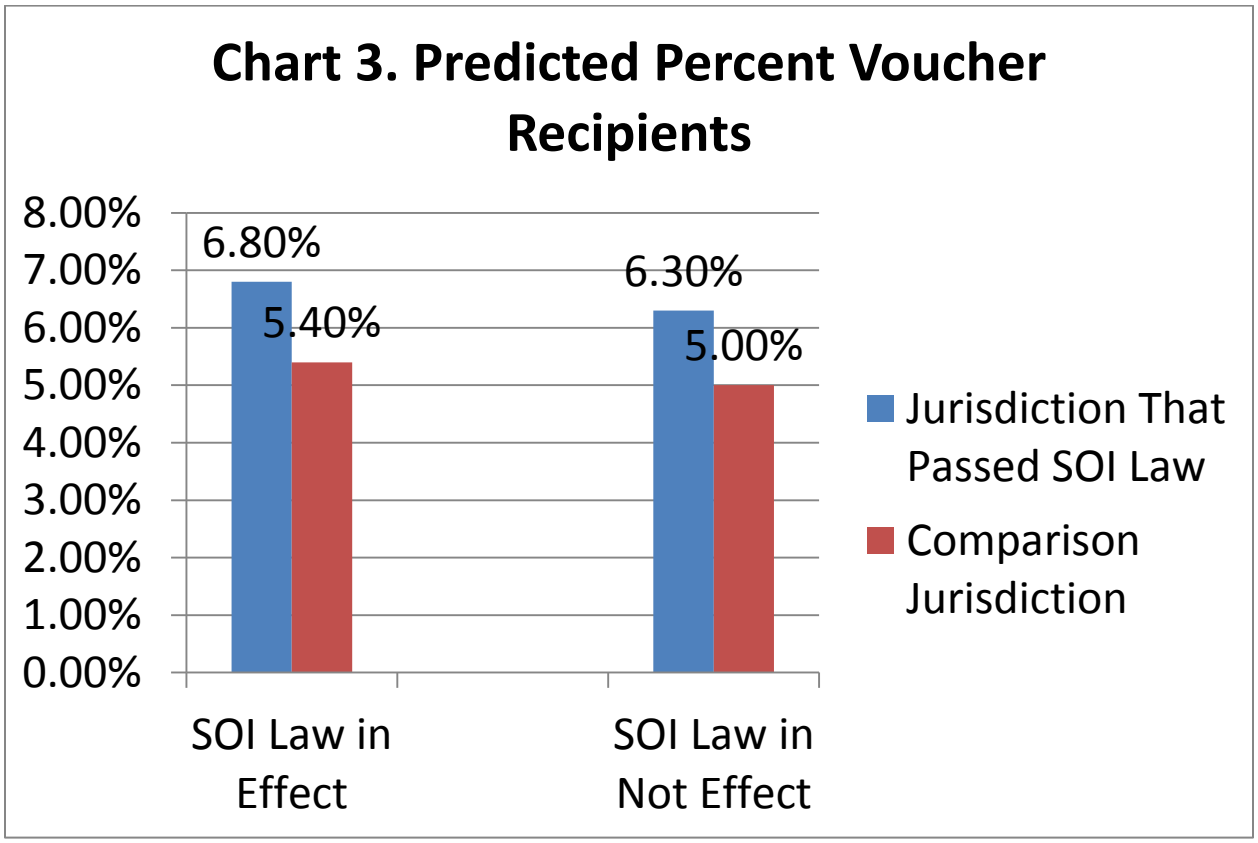
Chart two illustrates the predicted percent white in voucher recipient neighborhoods for our four scenarios. Voucher recipients in jurisdictions with SOI laws have slightly more white neighbors when the SOI laws are in effect than when these laws are not in effect; 27.8% white for the former and 26.6% for the latter—a difference of 1.2 percentage points. Voucher recipients in jurisdictions without SOI laws also have slightly more white neighbors when the SOI laws are in effect than when these laws are not in effect; but the difference for this comparison is more modest; 36% for the former and 35.8% for the latter, a difference of .2 percentage points. While this result is statistically significant and consistent with the notion that SOI laws facilitate movement into whiter neighborhoods, the magnitude of these differences are modest.



Voucher Concentration

The last neighborhood outcome considered here is the concentration of voucher recipients in a neighborhood. Results for this outcome are presented in chart three. The results show that concentrations of voucher recipients were higher while SOI laws were in effect both in jurisdictions that passed SOI laws and jurisdictions that never had such laws. In both cases the concentration of voucher recipients was higher in the jurisdictions that had a SOI law at some point. Moreover, the absolute size of difference was similar—1.4 vs. 1.3 percentage points. Relatively speaking, the increase in voucher recipient concentration was smaller in the jurisdictions that had SOI laws at some time during the study period. While the increment was a tenth of a percentage smaller in jurisdictions with SOI laws the base was higher (6.3% vs. 5%) in the jurisdictions that had a SOI law at some point. Whichever way the difference-in-differences is interpreted, absolutely or relatively, it seems fair to characterize this difference as small

and inconsequential. SOI laws do not appear to facilitate the movement of voucher recipients away from concentrations of other voucher recipients.



Additional Analyses

To assess the sensitivity of our results we reran our models on various subsamples of the original sample. The subsamples on which the models were re-estimated include: the entire sample excluding New York City and its' comparison locale, blacks only, and Hispanics only. As noted previously New York City's SOI law was only passed in 2008; hence our experimenting with re-estimating our models without New York City. There may not have been enough time for the SOI law to have an impact in New York City. Excluding New York City and its' comparison locale did not change in a substantial way the pattern of results reported earlier. The neighborhood poverty rate was still the outcome for which SOI law appeared to be having the largest impact. There was little evidence that SOI laws were having a substantial impact voucher recipients' access to whiter neighborhoods or neighborhoods with lower

concentrations of voucher recipients when New York City and its' comparison locale were excluded from the analysis.

We also conducted separate analyses for blacks and Hispanics, respectively, to test whether these groups might benefit especially from SOI anti-discrimination laws. Given these two groups' historic experiences with housing discrimination and segregation it seems reasonable to explore results for these groups separately. When the sample is limited to blacks the predicted probabilities show that SOI laws are associated with blacks living in neighborhoods with more whites, lower poverty rates and *higher* concentrations of voucher recipients. None of these results, however, are statistically significant. For Hispanics the predicted probabilities suggest that SOI laws are associated with Hispanics living in neighborhoods with more whites and lower poverty rates. These results also are not statistically significant.

The additional analyses do not alter the overall storyline. SOI laws appear to have a modest impact on locational outcomes with the largest relationship observed for neighborhood poverty rates. When stratified analyses were attempted the results were either similar or in some cases attenuated. Most commonly the stratified analyses resulted in results that were not statistically significant. Given that the relationships between SOI laws and locational outcomes were small to begin with, the stratified analyses which result in a loss of statistical power, not surprisingly led to insignificant results.

Conclusion

The research presented in this paper tested whether SOI laws influence locational outcomes for voucher recipients. In our concluding section we briefly summarize our findings, place these findings in the context of other research and conclude with implications for future research and policy.

Our results suggest SOI laws can have a modest impact on locational outcomes. We found substantively important reductions in neighborhood poverty rates associated with the implementation of SOI laws and small but statistically significant reductions in minority concentration as well.

Concentrations of voucher recipients, however, do not appear to be related to SOI law implementation in any meaningful way.

Our results seem plausible when placed in the context of other research. First, our results suggest SOI laws have a modest impact on locational outcomes, a finding similar to research on fair housing laws which also suggests modest impacts on the locational outcomes of minorities. For example, state fair housing laws were found to moderately impact housing outcomes for black renters (Collins 2004),and several demographers have linked lower levels of segregation in newer metropolitan areas to the fact that much of the housing built in these areas was built after the passage of federal fair housing laws (Logan, Stults, and Farley 2004; Massey and Denton 1993). Our results suggest SOI laws have impacts on locational outcomes similar to other anti-discrimination laws—modest if not dramatic. Second, previous research has found that SOI laws do have an impact on the experiences of voucher recipients. Freeman (2012) found that SOI laws were associated with higher utilization rates. And, similar to the findings presented here Galvez (2011) found SOI laws to be associated with lower levels of poverty concentration in the neighborhoods of voucher recipients but no difference for segregation from non-voucher recipients. Put into context, the findings presented are consistent with the notion that SOI laws can make a difference in locational outcomes for voucher recipients. SOI laws would not appear to be a panacea or to make dramatic differences in the spatial patterns of voucher recipients, but the laws do appear to have some impact.

Yet there still remains area for additional research. To employ the difference-in-differences approach this research had to focus on but a small subset of jurisdictions that have SOI laws. Therefore, the external validity of the findings presented here are unknown. Furthermore, no attempt has been made to assess whether different variations of SOI laws are more effective than others, neither in the research presented here nor in other research on the effects of SOI laws (Freeman 2012; Galvez 2011). For example, SOI laws might be more stringently enforced in some jurisdictions. In sum, additional research is needed to understand more fully the relationship between SOI laws and voucher use.

To the extent policy makers wish to further geographic opportunities for voucher recipients, SOI laws could be one tool that would help foster greater geographic mobility for voucher recipients. It is also possible that SOI laws could have an even large impact if these laws were stringently enforced or if enacted at the federal level. The impacts of SOI laws that were more stringently enforced or enacted at the federal level are of course unknown. But the research presented here along with other research suggests SOI laws can enhance the performance of the HCV program.

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Dependent Variables		
	Mean	Standard Deviation
Tract Poverty Rate	24.3%	.14
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	Control Variables	
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Hispanic	21.8%	
Asian	3.1%	
Native American	.1%	
Male	21.7%	
Camden County, NJ	2.5%	
Gloucester County, NJ	1.6%	
Warren County, NJ	1.1%	
Passaic County, NJ	1.9%	
Bergen County, NJ	2.2%	
Los Angeles, CA	20.8%	
Buffalo, NY	6.4%	
Grand Rapids, MI	2.4%	
Nassau County, NY	1.9%	
Multnomah County, OR	3.1%	
San Francisco, CA	11%	
Clay County, MN	1.1%	
Washington County, MN	1.4%	
St. Louis County, MN	1.8%	
New York City, NY	34.5%	

APPENDIX

Table A1. States and Jurisdictions with SOI	
STATES	YEAR ADOPTED
Connecticut	1989
Maine	1975
Massachusetts	1989
Minnesota*	1990 (undermined 2003)
New Jersey*	2002
North Dakota	1983 &1993
Oklahoma	1985
Utah	1989
Vermont	1987
Washington D.C.*	2006
Wisconsin	1980
JURISDICTIONS	
Corte Madera, Marin County, CA	2000
East Palo Alto, San Mateo, CA	2000
San Francisco, CA*	1998
Champaign, Champaign County, IL	1994
Chicago, Cook County, IL	1990
Harwood Heights, Cook County, IL	2009
Naperville, IL	2000
Urbana, Champaign County, IL	1975
Wheeling, IL	1995
Frederick, Frederick County, MD*	2002
Howard County, MD	1992
Montgomery County, MD	1991
Boston, Suffolk County, MA	1980
Cambridge, Middlesex County, MA	1992
Quincy, Norfolk County, MA	1992
Revere, Suffolk County, MA	1994
Ann Arbor, Washtenaw County, MI	1978
Grand Rapids, Kent County, MI*	2000
Buffalo, Erie County, NY*	2006

Nassau County, NY*	2000
New York City, Bronx-Kings-Queens-Richmond-New York Counties, NY*	2008
West Seneca, Erie County, NY	1979
Borough of State College, Centre County, PA	1993
Philadelphia, Philadelphia County, PA	1980
Bellevue, King County, WA	1990
King County, WA	2006
Seattle, King County, WA	1989
Dane County, WI	1987
Madison, Dane County, WI	1977
Ripon, Fond du Lac County, WI	1988
Sun Prairie, Dane County, WI	2007
Wauwatosa, Milwaukee County, WI	Circa 1985
Iowa City, IA	1997
St. Louis City, MO	2006

*-Indicates a jurisdiction included in the study

Table A2. Models Predicting Locational Outcomes

Dependent Variable	Poverty Rate	Percent White	Proportion Voucher Recipients
Time period when SOI is in effect	0.000	0.002	0.020
	(0.48)	(1.57)	(53.84)**
Resides in Jurisdiction that enacted SOI law	0.073	-0.091	0.014
	(94.10)**	(64.46)**	(48.13)**
Interaction term	-0.032	0.010	-0.016
	(31.09)**	(5.15)**	(33.95)**
Black	0.049	-0.315	0.013
	(72.85)**	(234.86)**	(39.70)**
Hispanic	0.049	-0.264	0.011
	(61.09)**	(171.71)**	(27.48)**
Asian	0.031	-0.232	0.001
	(21.11)**	(87.95)**	(1.75)
Indian	0.034	-0.105	0.006
	(9.83)**	(17.46)**	(4.18)**
Male	0.027	0.048	0.009

Table A2. Models Predicting Locational Outcomes

Dependent Variable	Poverty Rate	Percent White	Proportion Voucher Recipients
	(42.83)**	(45.96)**	(26.91)**
Elderly	-0.033	0.056	-0.008
	(48.95)**	(44.64)**	(20.74)**
Camden	-0.073	0.299	-0.010
	(39.48)**	(57.73)**	(9.45)**
Gloucester	-0.102	0.364	-0.009
	(53.91)**	(73.64)**	(11.77)**
Warren	-0.099	0.426	-0.040
	(46.64)**	(122.59)**	(79.77)**
Passaic	-0.036	0.132	-0.026
	(16.22)**	(39.71)**	(36.32)**
Bergen	-0.111	0.251	-0.015
	(52.90)**	(88.60)**	(10.35)**
Los Angeles	0.013	-0.041	-0.027
	(19.17)**	(38.20)**	(92.26)**
Buffalo	0.012	0.271	-0.006
	(11.07)**	(119.51)**	(13.07)**
Grand Rapids	-0.044	0.356	-0.029
	(29.34)**	(105.39)**	(56.14)**
Nassau	-0.112	0.255	-0.041
	(106.31)**	(67.76)**	(74.47)**
Multnomah	-0.039	0.370	-0.047
	(24.27)**	(145.01)**	(94.85)**
San Francisco	-0.054	0.022	-0.023
	(54.30)**	(12.32)**	(52.66)**
Frederick	-0.053	0.386	-0.024
	(23.75)**	(116.43)**	(34.04)**
Clay	-0.058	0.471	-0.037
	(34.07)**	(192.27)**	(63.10)**
Washington	-0.184	0.580	-0.058
	(96.75)**	(119.58)**	(119.87)**
St Louis	0.036	0.480	0.011
	(16.72)**	(194.73)**	(10.86)**
Constant	0.178	0.490	0.053
	(183.28)**	(265.61)**	(127.76)**
R^2	0.22	0.59	0.08
N	330,957	330,957	330,915

* $p<0.05$; ** $p<0.01$

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