Access to a Local Public Housing Authority Office and SSI Participation

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Abstract

This project seeks to understand what types of counties have a brick-and-mortar local Public Housing Authority (PHA). Since there are more people eligible for housing assistance than there are benefits available, allocations systems are designed to prioritize benefits. In addition, there are not enough resources for every US county to have a local PHA office. Instead, some—but not all—less-populated counties are served by either nearby county’s offices or state-level offices housed in state capital cities. The lack of a local PHA office may increase the cost of application. We seek to understand how county-level population demographics correlate with whether or not a county has a local PHA. We then seek to understand how county-level SSI applications correlate with access to a local PHA, as the two programs often serve similar populations. We conclude that counties with relatively more non-Hispanic Black residents and counties with more Hispanic residents are more likely to have a local PHA, as well as counties with a greater fraction of their age distribution between 18 and 64. Further, SSI applications and local PHA presence are highly correlated, suggesting perhaps that placement of local PHAs is determined at least in part by the need of local populations.

Keywords: SSI, housing assistance, public housing authorities
JEL Codes: I38, H75
Introduction

Housing access and affordability remains important issues across the United States. While policies exist to alleviate the burden of housing costs for low-income populations, they are generally oversubscribed. Due to resource constraints, not every county has a local public housing authority (PHA) within its borders. This is because one PHA can serve several counties with a physical office located within a single county. In other instances, local PHAs serve some counties within the state and a state PHA—usually housed in the state’s capital city—serves the remainder of the counties. This brings up an important question of access: Do counties with a physical office for a local PHA within their county borders differ from those without?

Local PHAs largely operate two housing assistance programs: housing choice vouchers (HCVs) and public housing. Within some federal limitations set out by the Department of Housing and Development (HUD), local PHAs choose how to allocate each of these often over-subscribed slots. Hembre and Urban (2020) collect data on how local PHAs allocate HCV slots, where nearly half of PHAs have a preference-based queue system that prioritizes household heads with disabilities. Further, they show that when waitlists open for PHAs that prioritize household heads with disabilities, SSI applications fall. Their finding suggested that for households with disabilities, the potential for having housing costs covered can reduce reliance on SSI. However, Hembre and Urban (2020) never considered the potential application costs of housing assistance, particularly the distance to a nearby PHA office.

Related work by Desphande and Li (2019) looked specifically at SSI application costs, considering the location of physical offices. The authors found that by increasing the cost of applying for SSI it reduces not only physical offices but SSI applications. We build upon their work to see if physical offices for a benefit that is directly related to SSI—housing assistance—is also related to SSI applications. We begin to answer this question by determining in which counties local PHAs are located. If, for example, local PHAs are more likely to locate in the most
economically disadvantaged counties, they may be sorting based on need. We seek to further understand if PHAs are more likely to locate in demographically diverse areas.

**Data Construction**

To determine which counties across the U.S. have access to a local PHA office, we construct data from the Picture of Subsidized Housing provided by HUD. We then pair these data with administrative records of SSI applications obtained directly from the Social Security Administration (SSA).

**Data on PHA Offices**

We begin with data from HUD’s Picture of Subsidized Housing. From 2010-2017, we determine whether or not each county has a PHA located within its borders. We assign this using the latitude/longitude of each PHA office provided in the data, where we consider only local PHAs that provide HCVs or public housing. We then construct a county-year panel that shows which counties had access to a local PHA office. These data are posted for future researchers to use at this link: [https://cfsrdrc.wisc.edu/publications/working-paper/wi21-q1](https://cfsrdrc.wisc.edu/publications/working-paper/wi21-q1)

Figure 1 depicts which counties across the United States did and did not have a brick and mortar PHA within its borders, based on data from HUD’s Picture of Subsidized Housing. While there is cross-state variation in the number of counties covered, nearly every state has at least one county with no PHA within its borders.
SSI Administrative Data

We use administrative data on annual SSI applications by county from 2010-2017 obtained directly from SSA. In counties where these are censored (with less than 10 applications in a given year), we set these to missing.

Census Data

We additionally collected data from the 2000 decennial Census. We chose this year since our HUD data on program participation spans 2010-2017, and we wanted to choose a year of data that pre-dated the program participation data. We collected population density (in thousands of people per square mile), percent of the county under 18, 65 or older, identifying as American Indian or Alaska Native (AIAN), identifying as non-Hispanic Black, identifying as Hispanic, identifying as non-Hispanic White, who completed only a high school diploma, who completed at least some college, and who completed a bachelor’s degree or higher education.

Findings

We next explored the extent to which non-urban counties with and without physical PHA offices differ on the following equity-based on demographics. We regressed whether or not the county
has a local PHA on population density, demographic characteristics (composition of age, race/ethnicity, and education in the county).

Table 1: Which counties have a local PHA?

<table>
<thead>
<tr>
<th>Has PHA in County</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pop Density</td>
<td>0.000210 (0.00295)</td>
</tr>
<tr>
<td>% Under 18</td>
<td>-1.184*** (0.132)</td>
</tr>
<tr>
<td>% 65 Plus</td>
<td>-0.533*** (0.0951)</td>
</tr>
<tr>
<td>% AIAN</td>
<td>-0.561*** (0.0732)</td>
</tr>
<tr>
<td>% Black</td>
<td>0.132* (0.0628)</td>
</tr>
<tr>
<td>% Hispanic</td>
<td>0.321*** (0.0363)</td>
</tr>
<tr>
<td>% White</td>
<td>-0.228*** (0.0589)</td>
</tr>
<tr>
<td>% HS Diploma</td>
<td>0.122 (0.0871)</td>
</tr>
<tr>
<td>% Some College</td>
<td>0.257*** (0.0671)</td>
</tr>
<tr>
<td>% College Plus</td>
<td>0.346*** (0.0691)</td>
</tr>
<tr>
<td>Observations</td>
<td>24,909</td>
</tr>
<tr>
<td>Counties</td>
<td>3,111</td>
</tr>
</tbody>
</table>

A quick look at the data in Figure 1 suggests that more populated areas across the country are more likely to have a local PHA, Table 1 suggests that while positively correlated, county-level
population density is not very predictive of whether or not there is a local PHA. Counties with a younger (less than 18) or older (65 plus) population are less likely to have a local PHA. Counties with a higher proportion of American Indian/Alaska Native populations are less likely to have a local PHA. Counties with a higher proportion of non-Hispanic White residents are less likely to have a local PHA. Counties with a higher proportion of non-Hispanic Black and Hispanic residents are more likely to have a local PHA. Somewhat counterintuitively, counties, where a greater proportion of residents have completed at least some college, are more likely to have a local PHA. This could be because those counties have the highest level of income inequality, with the most disadvantaged and advantaged individuals in the same county.

Next, we examine how county access to a local physical PHA office correlates with SSI applications. We use data from HUD’s Picture of Subsidized Housing and SSA’s administrative counts of new applications by county and year to see if counties that did not have a PHA had higher SSI application rates than similar counties within the same state that did have a physical PHA office in 2010-2017. For simplicity, we plot the correlation between SSI applications per capita in the county and the presence of a local PHA in the county by year in Figure 2. The top panel is the raw correlation and the bottom panel uses state fixed effects, such that we only compare counties within the same state in each year. The mean rate of applications per capita over the whole period is 0.006, or 6 per 1,000 residents.

In both models, the correlation has decreased over time. However, even in 2017 where the correlation appears to be the lowest, counties with a local PHA have higher SSI application rates. The magnitude of the correlation suggests that per capita SSI applications were roughly 11 percent higher in counties that had a physical PHA in the county. The results are relatively similar when we do or do not include state-level fixed effects.

While the correlation between SSI applications and the presence of a local PHA could potentially help to understand the complementarities between housing assistance policy and SSI reliance, the correlation may actually represent an ability to place PHAs in counties with the most need for services. For example, a PHA location could be chosen to reach the maximum number of potentially eligible applicants. Since many individuals eligible for SSI are also likely to be
eligible for public housing or housing choice vouchers, SSI participation could be one variable directly incorporated in models that expand brick-and-mortar PHA offices.

Panel A: No state fixed effects

Panel B: With state fixed effects

Figure 2: Correlation between SSI applications per capita and PHA existence in the county, by year

Conclusions

Future work could circumvent the endogeneity problem of PHA locations by using openings and closings of local PHA offices over time to determine if SSI applications increase (or decrease)
once a new PHA is opened in a county. A new opening may reduce reliance on SSI if it provides new services, suggesting the two programs could be complements. At the same time, removing a local PHA office may either have no effect (if individuals already have access to housing assistance) or increase reliance on SSI applications (if new applicants have costlier access to housing assistance). Understanding these causal effects could help policymakers to better choose locations when opening or closing new PHAs.

References


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