Do Tenant- and Place-Based Rental Housing Programs Complement Each Other? Evidence from Ohio

> Brett Barkley¹ Amy Higgins¹ Francisca García-Cobián Richter^{1,2}

¹Federal Reserve Bank of Cleveland ²Case Western Reserve University

> FRBC Policy Summit June 18, 2015

The views stated herein are those of the authors and are not necessarily those of the Federal Reserve Bank of Cleveland or the Board of Governors of the Federal Reserve System.

Tenant-Based & Place-Based Rental Housing Programs

Only 25% of eligible households receive housing subsidy.

When resources are scarce, their allocation among subsidy programs becomes highly relevant.

In the U.S. (2011):

- Housing Choice Voucher (HCV) 2.1 million HH
- Low Income Housing Tax Credits (LIHTC) 1.8 million HH
- Public Housing, PB Section 8 2.3 million HH

Tenant-Based & Place-Based Rental Housing Programs

In Ohio (2011):

- HCV holders + LIHTC unit residents = 154,000
- Since about 32,000 HH use a voucher in a LIHTC unit, subsidy coverage lower.
- Place-Based Vouchers (PBV) are tied to the unit; Tenant-Based Vouchers (TBV) are tied to the tenant.

< □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > < □ > <

• There were twice as many PBVs than TBVs.

Previous Studies about HCV use in LIHTC

- Previous studies characterize the HCV-LIHTC population in relation to other LIHTC tenants.
- But does the subsidy overlap respond to needs unmet by the HCV program alone?
- Relevant counterfactual analysis: compare housing conditions of HCV households within a locality, with and without the availability of LIHTC rentals.
- Williamson et al. (2009): possible scarcity of HUD-certified affordable housing units in the private rental market.
- Or household preferences for newer, higher quality units than typically available to HCV users all LIHTC units have been built since 1987 Galvez (2002).
- Or in search for better neighborhoods or the provision of special services within the living environment.

Characteristics of Household Heads by Subsidy Type



| | All HCV | LIHTC-only | PBV | TBV |
|--------------------------|---------|------------|-----|-----|
| 62 or Older | 13 | 30 | 28 | 23 |
| W/disabilities, under 62 | 31 | 3 | 14 | 8 |
| African American | 61 | 42 | 55 | 61 |

Table: % within program. Ohio, 2011 (LIHTC) and 2012 (HCV)

▲□▶ ▲圖▶ ▲≣▶ ▲≣▶ = 差 = 釣��



Figure: Census tract neighborhood poverty rates are from the Census 2010. Bubble size represents relative share of HCV use in LIHTC units across counties. 2011 LIHTC data is from Ohio Housing Finance Agency. 2011 HCV data is from A Picture of Subsidized Housing.



Figure: NQI are quantiles of first principal component of census tract level variables from Census 2010: %poor, %employed, %in labor force, %high school, %bachelors. Bubble size represents relative share of HCV use in LIHTC units across counties.

▲□▶ ▲□▶ ▲目▶ ▲目▶ 目 のへで

An Allocation Model of Housing Subsidies

• Subsidy to rent (v, C_v) or construction (p, C_p) with $C_v < C_p$.

- HHs can be very poor or poor, and 'hard to house' or not.
- Classified into
 - T_1 (poor, not hth)
 - T_2 (very poor, not hth)
 - T_3 (poor, hth)
 - T_4 (very poor, hth)

An Allocation Model of Housing Subsidies

Housing Outcome Function for i^{th} hh of type j:

$$h(v(i,j),p(i,j)) = \begin{cases} 1 & if \quad j=1\\ v(i,j) & if \quad j=2\\ p(i,j) & if \quad j=3\\ v(i,j) \wedge p(i,j) & if \quad j=4 \end{cases}$$

An Allocation Model of Housing Subsidies



Figure: Housing subsidy allocations resulting from various optimization = -200

Cross Tabulation of Households by Type and Subsidy use in LIHTC, Ohio 2011

| Typology | LIHTC-only | PBV | TBV | Total |
|----------|------------|-------|-------|-------|
| Type 1 | 92.40 | 3.56 | 4.04 | 100 |
| | 10.51 | 0.49 | 1.33 | 5.24 |
| Type 2 | 36.43 | 45.17 | 18.40 | 100 |
| | 23.41 | 35.12 | 34.38 | 29.61 |
| Type 3 | 92.70 | 3.84 | 3.46 | 100 |
| | 26.71 | 1.34 | 2.90 | 13.28 |
| Type 4 | 34.97 | 46.28 | 18.75 | 100 |
| | 39.37 | 63.05 | 61.38 | 51.87 |
| Total | 46.07 | 38.08 | 15.85 | 100 |
| | 100 | 100 | 100 | 100 |

◆□ > ◆□ > ◆豆 > ◆豆 > ̄豆 _ のへぐ

Marginal Effects of Select Characteristics on User Type Probabilities

| | PBV | TBV |
|------------------|---------|---------|
| | | |
| Very poor | 0.421** | 0.150** |
| | (0.003) | (0.003) |
| Hard to house | 0.010** | 0.001 |
| | (0.004) | (0.003) |
| Tighter market | -0.005 | 0.037** |
| | (0.004) | (0.004) |
| | | |
| Tighter market | -0.001 | 0.050** |
| at 'very poor'=1 | (0.005) | (0.004) |
| Hard to house | 0.011** | 0.003 |
| at 'very poor'=1 | (0.005) | (0.004) |

Conclusions

- Coordination between HCV and LIHTC programs limited at federal level.
- PBV: Local planning seems to favor allocation of vouchers in LIHTC towards most needy.
- TBV: Share of population of TBV users is larger in tighter markets, possibly due to lower supply in private market.
- Use of HCVs in LIHTC does not seem to provide access to better neighborhood quality
- Integrated approach to housing subsidy programs may better allocate resources into LIHTC units that provide access to supportive services or nbhd quality.

- **Galvez, Martha**, "What Do We Know About Housing Choice Voucher Program Locations Outcomes? A Review of Recent Literature," Urban Institute. Washington D.C.: 2002.
- Williamson, Anne R., Marc T. Smith, and Marta Strambi-Kramer, "Housing Choice Vouchers, the Low-Income Housing Tax Credit, and the Federal Poverty Deconcentration Goal," *Urban Affairs Review*, 2009, *45* (1), 119–132.

・ロト・日本・モート モー うへぐ