Has Falling Crime Invited Gentrification?

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Any opinions and conclusions expressed herein are those of the authors and do not necessarily represent the views of the U.S. Census Bureau.

All results have been reviewed to ensure that no confidential information is disclosed.
Has Falling Crime Invited Gentrification?

1. Motivation

2. Data

3. Question 1: Move to Central City

4. Question 2: Move to Low-Income, Central City Neighborhood

5. Question 3: Neighborhood Choice

6. Conclusions
1. Motivation

Large reductions in violent crime in U.S. cities
1. Motivation

Increase in share of moves to central city

![Graph showing the increase in share of moves to central city for high-income households, white households, and college-educated households from 1990 to 2010. The graph indicates an upward trend for all categories, with college-educated households showing the steepest increase.]
1. Motivation

And in moves to low-income city neighborhoods
1. Motivation

Research questions

- As city crime falls, are ‘gentrifier’ households more likely to move into
  - Central city neighborhoods?
  - Low-income central city neighborhoods?
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  – High-income households
  – College-educated households
  – White households
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- Are their choices more crime-sensitive than those of others, leading to a change in the mix of households choosing to move into low-income city neighborhoods?
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  – Central city neighborhoods?
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  – High-income households
  – College-educated households
  – White households

• Are their choices more crime-sensitive than those of others, leading to a change in the mix of households choosing to move into low-income city neighborhoods? **YES**
2. Data

Restricted Data: Decennial Census

• Household level data from 1990, 2000, and 2010 census
• Focus on Households who moved in past year
  – Characteristics: income; race/ethnicity; education; employment; age; marital status; presence of children; foreign-born; linguistic isolation
• Census tract location
• Sample
  – Over four million mover households
  – 244 Core-Based Statistical Areas (CBSAs)
2. Data

Measures/Definitions

• ‘Gentrifier’ households:
  – High-income (income higher than CBSA median)
  – College-educated
  – White

• Moves into central city:
  – Moves into largest principal city in CBSA

• Moves to low-income, central city neighborhood:
  – Moves to central city census tract with income below CBSA median
2. Data

Crime

• Violent crime per capita of largest principal city in CBSA (central city)
• FBI Uniform Crime Reports
• Lag by one, two, or three years to rule out reverse causality
2. Data

Central city characteristics

• Decennial Census and ACS public use
  – Share minority
  – Share foreign born
  – Share college or more
  – Share poverty
  – Share units built before 1940
  – Share units built last 10 years
  – Population (equivalent to population density)
  – Median gross rent
  – Median value owner-occupied housing
  – Median household income

• Consistent geographic boundaries
3. Move to Central City

Explaining Moves to Central City

• Are mover households more likely to choose central city when violent crime in that city was lower over past three years?

• Control variables
  – Metropolitan area and Year Fixed Effects
  – Household and Central City Controls

• Estimate separately for three pairs of household types
  – High income vs low income
  – College vs non-college
  – White vs non-white
3. Move to Central City

Results: High-income/College-educated more likely to choose central city neighborhoods when city crime lower

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Low-Income</th>
<th>High-Income</th>
<th>Non-College</th>
<th>College</th>
<th>Non-White</th>
<th>White</th>
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<tbody>
<tr>
<td>Log (Violent Crime)</td>
<td>-0.01</td>
<td>0</td>
<td>-0.029***</td>
<td>-0.002</td>
<td>-0.026***</td>
<td>-0.01</td>
<td>-0.011</td>
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<tr>
<td>(0.01)</td>
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<td>Obs.</td>
<td>4,154,500</td>
<td>2,530,000</td>
<td>1,624,400</td>
<td>2,974,400</td>
<td>1,180,100</td>
<td>1,276,500</td>
<td>2,878,000</td>
</tr>
<tr>
<td>R-sq.</td>
<td>0.183</td>
<td>0.182</td>
<td>0.177</td>
<td>0.194</td>
<td>0.191</td>
<td>0.165</td>
<td>0.18</td>
</tr>
</tbody>
</table>

Differences in crime coefficients between high- and low-income and between college and non-college are significant at the 5% level.
3. Move to Central City

Crime coefficient magnitudes

• Using high-income households as an example:
  – A 26% decline in central city crime from 1990 to 2010 (average for our sample) → 1 percentage point increase in share of CBSA movers choosing central city locations
  – A 43% decline in crime (average of 10 biggest CBSAs) → 1.6 percentage point increase
3. Move to Central City

Results Robust to Alternative Models/Samples

• Inclusion of time-varying CBSA characteristics in addition to central city characteristics

• Alternative Samples
  – Sample of 100 largest CBSAs
  – Sample of 2000 and 2010 moves
  – Sample of movers from outside the CBSA

→ Crime coefficients larger for all three sub-samples
→ Crime coefficient become negative/significant for white households, though still not more negative than for non-white households
Explaining Moves to Low-Income, Central City Neighborhoods

• Explore whether falling crime in central city is associated with greater probability of moving into:
  – Low-income central city neighborhoods
  – High-income central city neighborhoods

• And test if associations differ for
  – High-income vs. low-income households
  – College vs. non-college educated households
  – White vs. non-white households
4. Move to Low-Income Central City Neighborhood

Results

• High-income and college households are more likely to move into both low-income and high-income central city neighborhoods when crime falls

• And their choices are substantively and significantly more sensitive to city crime reductions as compared to households with lower incomes and without a college education

• Little evidence that residential choices of white households are more sensitive to crime than non-white households
5. Neighborhood choice

Explaining Choice of Specific Neighborhoods

- Link household moves to neighborhood-level crime data from one large CBSA in 2010
- Explore whether *neighborhood* crime (homicide rate) appears to affect the choices of ‘gentrifier’ households to move there more than others
- Estimate with conditional logit model
5. Neighborhood choice

Results

- Households of all types are more likely to choose to move into a neighborhood when violent crime there is lower.
- High-income, college-educated and white households are two to three times more sensitive to violent crime than other households.
6. Conclusions

Falling Crime Appears to Change Mix of Households Opting for Low-Income, Central City Neighborhoods

• Evidence of link between lower crime and higher probability that high-income and college-educated households will move to both high- and low-income central city neighborhoods

• Evidence that these associations are stronger for high-income households and college-educated households than for others

• Weaker evidence of racial differences in sensitivity to crime

• Falling crime could thus contribute to change in mix of movers to urban neighborhoods

• Further work to bolster case that crime causes shifts
Thank you