

Has Falling Crime Invited Gentrification?

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Research Symposium on Gentrification
and Neighborhood Change

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Internal Census Data

The research in this paper was conducted while the authors were Special Sworn Status researchers of the U.S. Census Bureau at the New York Census Research Data Center.

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.

United States Census 2010

This is the official form for all the people at this address. It is quick and easy, and your answers are protected by law.

U.S. DEPARTMENT OF COMMERCE
ECONOMIC AND STATISTICS ADMINISTRATION
U.S. CENSUS BUREAU

Use a blue or black pen.
Start here

The Census must count every person living in the United States on April 1, 2010.
Before you answer Question 1, count the people living in this house, apartment, or mobile home using our guidelines.

- Count all people, including babies, who live and sleep here most of the time.

The Census Bureau also conducts counts in institutions and other places, so:

- Do not count anyone living away either at college or in the Armed Forces.
- Do not count anyone in a nursing home, jail, prison, detention facility, etc., on April 1, 2010.
- Leave these people off your form, even if they will return to live here after they leave college, the nursing home, the military, jail, etc. Otherwise, they may be counted twice.

The Census must also include people without a permanent place to stay, so:

- If someone who has no permanent place to stay is staying here on April 1, 2010, count that person. Otherwise, he or she may be missed in the census.

1. How many people were living or staying in this house, apartment, or mobile home on April 1, 2010?
Number of people =

2. Were there any additional people staying here April 1, 2010 that you did not include in Question 1? Mark *X* all that apply.

- Children, such as newborn babies or foster children
- Relatives, such as adult children, cousins, or in-laws
- Nonrelatives, such as roommates or live-in baby sitters
- People staying here temporarily
- No additional people

3. Is this house, apartment, or mobile home — Mark *X* ONE box.

- Owned by you or someone in this household with a mortgage or loan? Include home equity loans.
- Owned by you or someone in this household free and clear (without a mortgage or loan)?
- Rented?
- Occupied without payment of rent?

4. What is your telephone number? We may call if we don't understand an answer.
Area Code + Number
 - -

5. Please provide information for each person living here. Start with a person living here who owns or rents this house, apartment, or mobile home. If the owner or renter lives somewhere else, start with any adult living here. This will be Person 1.
What is Person 1's name? Print name below.
Last Name
First Name MI

6. What is Person 1's sex? Mark *X* ONE box.
 Male Female

7. What is Person 1's age and what is Person 1's date of birth? Please report babies as age 0 if their child is less than 1 year old. Print numbers in boxes.
Age on April 1, 2010
Month Day Year of birth

→ NOTE: Please answer BOTH Question 8 about Hispanic origin and Question 9 about race. For this census, Hispanic origins are not races.

8. Is Person 1 of Hispanic, Latino, or Spanish origin?
 No, not of Hispanic, Latino, or Spanish origin
 Yes, Mexican, Mexican Am., Chicano
 Yes, Puerto Rican
 Yes, Cuban
 Yes, another Hispanic, Latino, or Spanish origin — Print origin, for example, Argentinean, Dominican, Dominican Kibelepan, Salvadoran, Spaniard, and so on.

9. What is Person 1's race? Mark *X* one or more boxes.
 White
 Black, African Am., or Negro
 American Indian or Alaska Native — Print name of enrolled or principal tribe.

- Asian Indian Japanese Native Hawaiian
- Chinese Korean Guamanian or Chamorro
- Filipino Vietnamese Samoan
- Other Asian — Print race, for example, Fijian, Tongan, Pakistani, Cambodian, and so on.
- Other Pacific Islander — Print race, for example, Fijian, Tongan, and so on.

Some other race — Print race.

10. Does Person 1 sometimes live or stay somewhere else?
 No Yes — Mark *X* all that apply.

- In college housing For child custody
- In the military In jail or prison
- At a seasonal or second residence In a nursing home
- For another reason

→ If more people were counted in Question 1, continue with Person 2.

Form D-61 (2-20-2008)

U.S. CENSUS BUREAU

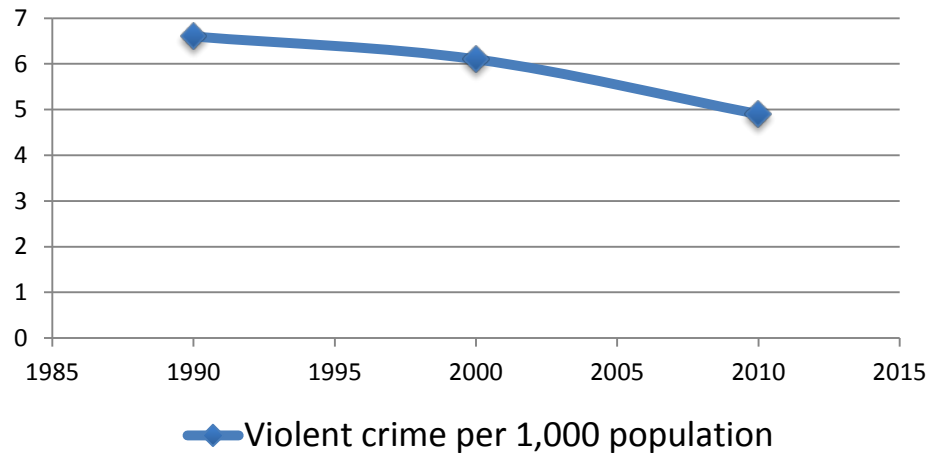
Has Falling Crime Invited Gentrification?

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

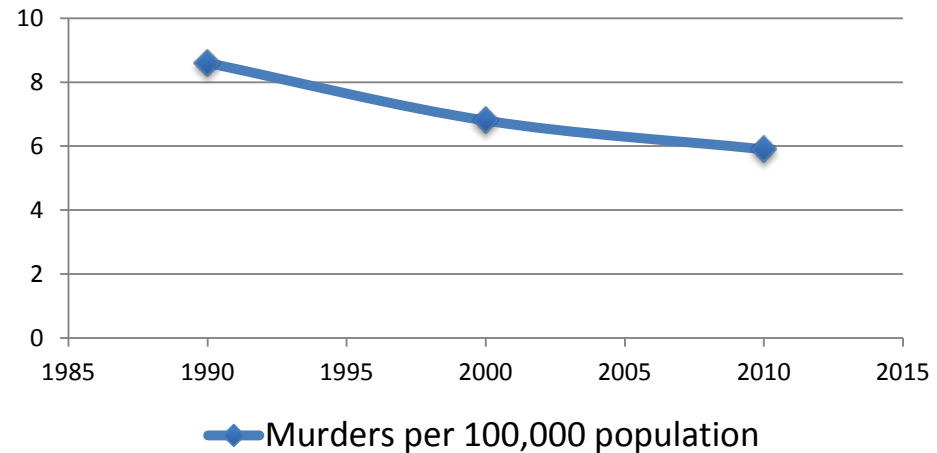
1. Motivation

Large reductions in violent crime in U.S. cities

Violent crime per 1,000 population

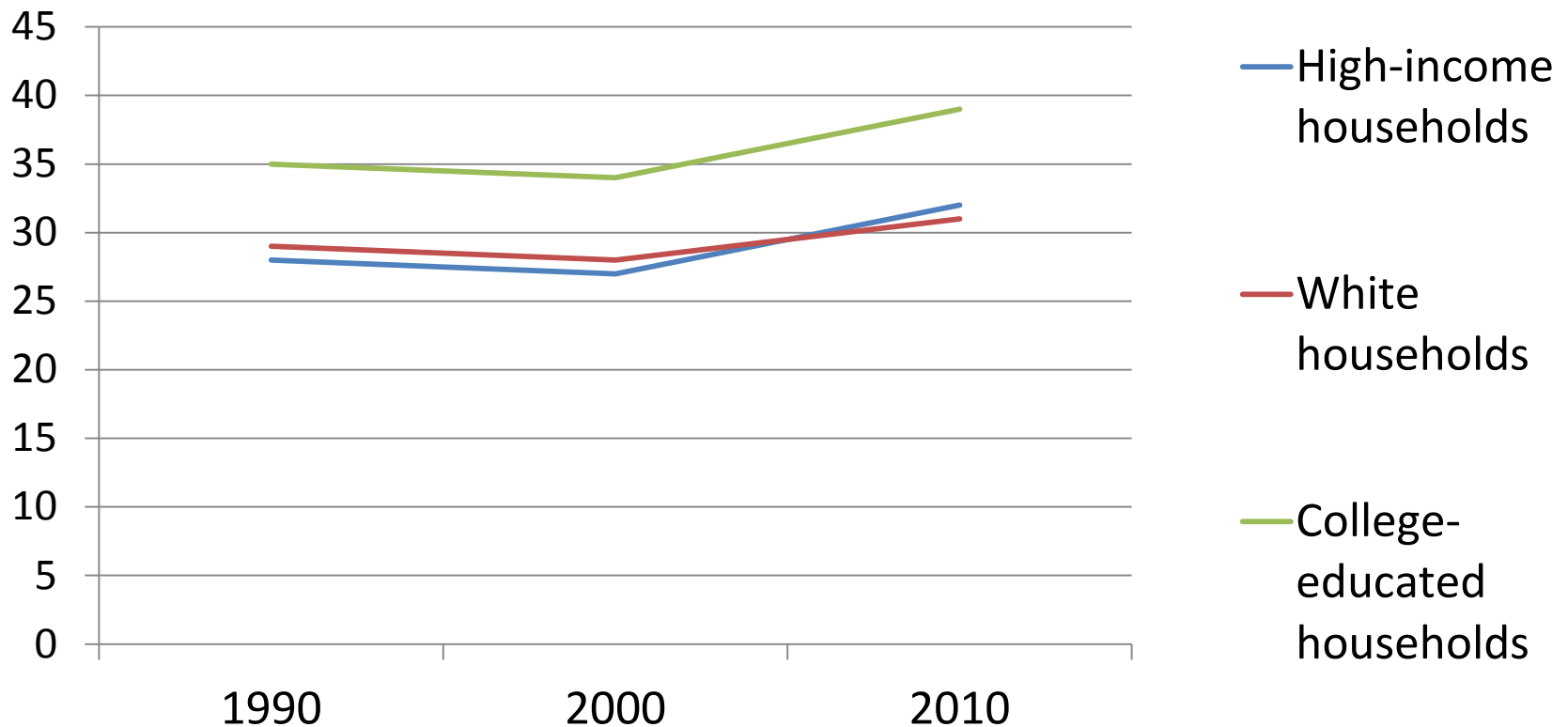


Homicides per 100,000 population



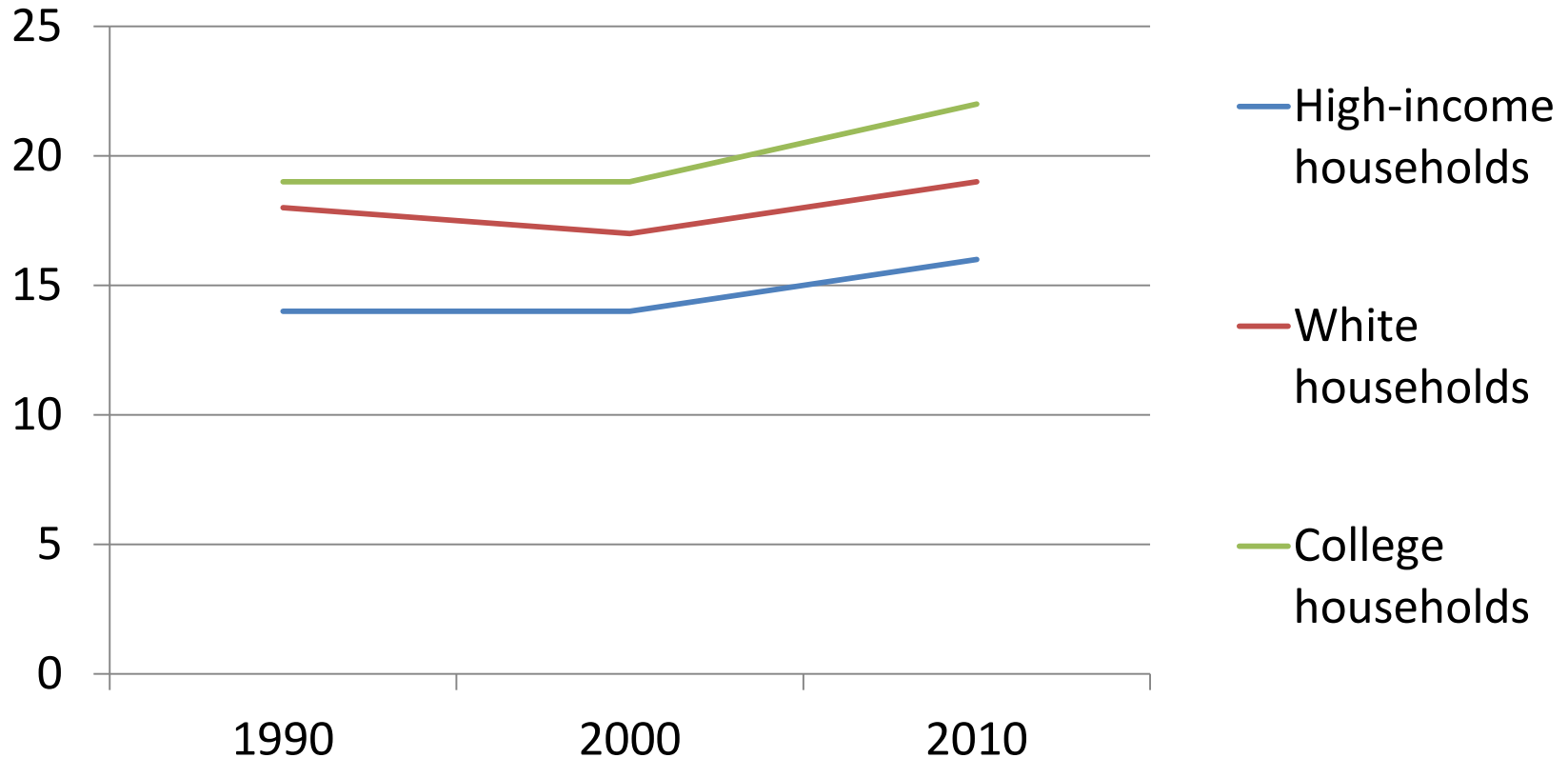
1. Motivation

Increase in share of moves to central city



1. Motivation

And in moves to low-income city neighborhoods



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Research questions

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 - 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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Research questions

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 - Central city neighborhoods?
 - Low-income central city neighborhoods?
- ‘Gentrifier’ households
 - 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

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

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

4. Move to Low-Income Central City Neighborhood

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



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Thank you

