Public Housing, Concentrated Poverty, and Crime

Daniel Hartley

A number of studies have explored the relationship between public housing policy, poverty, and crime. This *Commentary* discusses the results of a recent study, which investigated the effects of closing large public housing developments on crime. To see if the demolitions—and the associated deconcentration of poverty—reduced crime or merely displaced it, researchers examined the case of Chicago. They found that closing large public housing developments and dispersing former residents throughout a wider portion of the city was associated with net reductions in violent crime, at the city level.

In the 1980s and early 1990s public housing in many U.S. cities was associated with high levels of crime. In places such as Chicago, public housing developments suffered some of the highest poverty rates in the city. But since the 1990s, public housing has changed dramatically. The old model of large, concentrated public housing developments managed by local public housing authorities has given way to a mixture of mixed-income developments that are privately managed and vouchers for private-market housing.

In many cities, the large public housing developments built after World Wars I and II are being torn down. Part of the rationale behind razing these developments is that doing so will eliminate areas of concentrated poverty and reduce some of the problems associated with it, such as high crime. However, critics have argued that the program will simply displace crime to other parts of the city.

Several studies have suggested otherwise. Researchers who have studied recent changes in public housing have generally found that the changes are associated with lower levels of concentrated poverty and certain kinds of crime. We add to this body of research with a study of the effects of Chicago's program to demolish its public housing developments and relocate residents to other areas of the city. We find that by spreading recipients of housing aid throughout more of the city, overall levels of violent crime were lowered. Property crime levels were less affected.

Our results show that higher concentrations of poverty are associated with more crime. They also suggest that programs or incentives that result in greater integration of poor and nonpoor households may reduce violent crime without increasing property crime.

Seminal Studies of Three Public Housing Policy Changes

Much of what economists had known up until recently about the links between concentrated poverty and crime came from studying changes in public housing in Chicago and a few other cities from the late 1970s to the late 1990s. Three major policy changes over this period were studied in some detail.

Gautreaux

The first policy change was brought about by a lawsuit. In 1976, the Supreme Court ruled that substandard living conditions in certain public housing developments in Chicago violated the Fifth Amendment and the Civil Rights Act. In compensation, households were given the option of using Section 8 vouchers to obtain rental housing in the private market. This episode became known by the last name of one of the parties to the lawsuit, Dorothy Gautreaux.

Initial studies of the households that took the option to leave public housing compared the experiences of households that moved elsewhere within the city to those that moved to the suburbs. The socioeconomic characteristics of the suburban neighborhoods were much different than the city neighborhoods. The suburban neighborhoods were more affluent and whiter. Households that moved elsewhere in the city wound up in neighborhoods that were almost 100 percent African American. In subsequent surveys, researchers found that the suburban households were less likely to describe their new neighborhood as unsafe than the city households.

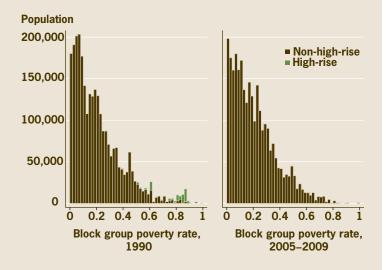
Other researchers have tried stratifying the movers by the level of educational attainment in the new neighborhood and have found that the male children of households that moved to neighborhoods with lower average levels of educational attainment had a higher mortality rate and that in the majority of cases the cause of death was homicide.

Moving to Opportunity

The second policy change involved an experiment. Motivated by the Gautreaux findings, the Department of Housing and Urban Development launched a demonstration project called Moving to Opportunity (MTO). The idea was to conduct a randomized control treatment experiment, where a random group of public housing households would be offered vouchers for private-market rental housing with the restriction that the vouchers could only be used in neighborhoods (census tracts) that had a poverty rate of 10 percent (near the national median in 1990) or less. The control group consisted of public-housing households that had indicated an interest in the program but were randomly selected to not receive the vouchers. The experiment was conducted in five cities: Baltimore, Boston, Chicago, Los Angeles, and New York.

Researchers found that children of the households that had moved to the lower-poverty neighborhoods were less likely to be arrested for violent crime, though boys were possibly more likely to be arrested for property crime. These findings suggest a connection between the level of poverty in the surrounding neighborhood and the propensity for young people to commit crime.

Figure 1. Public housing demolition has reduced extreme concentrations of poverty in Chicago



Sources: Chicago Housing Authority, annual reports; other research; authors' calculations.

The CHAC Lottery

The third policy change was prompted by a large demand for subsidized housing. In 1997 the City of Chicago accepted families onto its housing-voucher wait list for the first time in 12 years and received about 80,000 applications. To award the vouchers, the Chicago Housing Authority Corporation conducted a lottery, and over the course of the next six years it offered vouchers to a randomly selected group of about 18,000 families.

The fact that the vouchers were offered to a random group of households meant that prior to getting the vouchers, on average, the group that got the vouchers was similar to the group that did not. Furthermore, among the applicants for the vouchers, some families were living in public housing developments and some were living in privatemarket rentals. This variation turned out to be extremely helpful in attempting to separately measure the impact of a household's own income on the likelihood of being arrested and the impact of the neighborhood poverty rate on the likelihood of arrest. This is because households that won the voucher lottery when they were living in private-market rentals typically did not change the type of neighborhood that they lived in, so the vouchers served to increase their income without much change in their neighborhood. In contrast, the households that were living in public housing when they won the voucher lottery moved to neighborhoods that, while they still had high rates of poverty, were much less poor than the public housing developments that they left.

For the voucher winners that had been living in private-market rentals, receiving a voucher was equivalent to having 50 percent more income, on average. In response, they showed about a 20 percent drop in crime. Voucher winners that had been living in public housing experienced a 40 percent drop in their neighborhood (census-tract) poverty rate, with a 50 percent drop in violent crime arrests for children ages 12 to 18.

Our Study

The studies of Gautreaux, MTO, and the CHAC lottery show a connection between the neighborhood poverty rate and crime. However, they do not reveal whether deconcentrating poverty would lower crime overall or simply displace it.

Whether deconcentrating poverty lowers crime or does not depends on whether there are nonlinearities in the relationship between crime and poverty. Possible nonlinearities could stem from social interactions or the breakdown of social norms as exposure to crime increases. The direction of nonlinearities due to these particular mechanisms would suggest that violent crime may increase more rapidly as the neighborhood poverty rate gets higher. Do these nonlinearities exist? Or does deconcentrating poverty simply displace violent crime? Could deconcentrating poverty even result in an increase in property crime, as one might hypothesize from the MTO results?

Dionissi Aliprantis and I studied a fourth policy change to explore these questions in more depth. The change we studied stemmed from new legislation. In the 1990s, the US Congress passed several bills which, collectively, made it feasible for local public housing authorities to demolish large and poorly maintained public housing developments and replace them with new mixed-income developments with the aim of decreasing the concentration of poverty. In Chicago, public housing demolition began in the mid-1990s and by 1999 had broadened in scope to a plan to demolish all non-senior-citizen, high-rise public-housing buildings over the following 10 years. This program was not primarily aimed at reducing crime, but its focus on lowering the concentration of poverty makes it possible to examine how concentrated poverty and crime are linked.

The demolition of public housing in Chicago has greatly reduced extreme concentrations of poverty (figure 1). An analysis of census data from 1990 shows that before the demolition census block groups (the smallest geographic areas for which poverty rates are calculated) containing high-rise public-housing developments had extremely high poverty rates. The average high-rise public-housing resident lived in a block group with a staggering 77 percent poverty rate. In contrast, the average resident of the city of Chicago who did not live in a block group containing high-rise public housing experienced a 20 percent block group poverty rate. Once all of the high-rise public housing had been demolished 19 years later (with the exception of the Dearborn Homes, which was rehabbed in 2009), data from the American Community Survey reveal that the mass of population living in block groups with extremely high poverty (over 80 percent) has dropped remarkably.

About 90 percent of the former high-rise public-housing residents stayed in the city of Chicago and many have moved to neighborhoods that are still high poverty but not nearly as high as before (40 percent poverty rate, on average). In fact, the census-block poverty rate rose slightly (between a half and a full percentage point) for all city residents except the 10 percent of the population living in the least-poor neighborhoods. The most concentrated pockets of poverty in Chicago have been effectively dismantled and the residents have fanned out across a much larger area of the city, driving poverty rates up slightly in all but the least poor areas of the city.

Dionissi Aliprantis and I have studied how these public housing demolitions in Chicago have affected crime. We exploit variation in the timing of the closures to measure the closures' impact on crime in the census blocks where they are located as well as those within a half-mile radius. We use data on the year that each building was closed (provided in the Chicago Housing Authority's annual reports and from other researchers) and estimate the average effect of closing a unit of high-rise public housing on crime in the

census block in which the high-rise was located and on nearby census blocks. Similarly, we use the timing of the arrival of households displaced from the high-rises to their new census blocks to estimate the effect that they have on crime in the census blocks to which they move and the census blocks within a half mile of those. We measure the movement of these households using administrative credit history data. To allay concerns of reverse causality, we show that the timing of the building closures doesn't appear to be driven by crime levels or trends, but rather by logistical concerns such as building occupancy rates. Furthermore, the census blocks to which displaced households move do not appear to be determined by neighborhood crime trends that existed prior to the households moving there.

Overall, we find that the closures and demolitions of high-rise public housing in Chicago are associated with net reductions in violent crime, but they have less of an impact on property crime. The demolitions are associated with a reduction in homicides in the high-rise blocks and in those nearby (within 0.5 miles) equivalent to about 7.5 percent of the total number of homicides in the city of Chicago in 1991. Furthermore, there is no detectable increase in homicides in and near the blocks to which the former high-rise households relocated.

The reduction in assault and battery associated with the demolitions is equivalent to about 4.5 percent of the citywide total in and near the high-rise blocks, but there is also about a 2 percent increase associated with the arrival of relocated households in and near their new blocks. On net, the demolitions are associated with about a 2.5 percent reduction in assault and battery, citywide. In contrast, the roughly 2 percent drop in burglary in and near the high-rise blocks is offset by a 2 percent increase in burglary in and near the blocks in which the former high-rise households relocated. The net effect on non-auto theft is a small (1 percent) reduction, while the demolitions have no impact on auto theft.

The fact that there is a measureable increase in some types of crime (such as assault and battery and burglary) associated with the arrival of displaced high-rise households does not necessarily mean that they are committing the crime; crime may also rise because they are more likely to be victims of crime. In fact, a study of crime reports, arrests, and voucher records in Chicago suggests that relocated households are more likely to be both the alleged perpetrators of crime and more likely to be the victims of crime than the average resident in the neighborhoods to which they move.

Taken as a whole, the findings are consistent with the possibility that violent crime increases at an increasing rate as the local poverty rate increases. This may be the reason why dismantling the pockets of extreme poverty that were Chicago's high-rise public housing developments and providing the former residents with vouchers or low-rise public housing have contributed to the reduction in violent crime in Chicago since the 1990s.

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