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Regional Spotlight

Homicides and Poverty

In the public imagination, homicides and poverty are tightly linked—but are they?

Darcelle Bowrin-Toussaint

Senior Economic Analyst
FEDERAL RESERVE BANK OF PHILADELPHIA

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According to conventional wisdom, there is a clear and positive relationship between poverty and crime. Indeed, many social scientists have found such a correlation.¹ This conversation comes up particularly often in relation to Philadelphia, which is often called the poorest big city in America.² But this relationship is not as straightforward as it might seem. As sociologists Patrick Sharkey, Max Besbris, and Michael Friedson wrote in 2016, “It is less clear that this relationship is causal or that higher levels of poverty in a neighborhood, a city, or a nation, necessarily translate into higher levels of crime.” To support this claim, they cited the 1979 observation of fellow sociologists Lawrence E. Cohen and Marcus Felson that “during the 1960s, when poverty and racial inequality were declining in American cities, the crime rate was rising.” They also noted that, during and for years after the Great Recession, the rise in poverty and sustained unemployment did not lead to a remarkable rise in crime. More recently, the data show that during the pandemic recession in 2020, the homicide rate rose disproportionately high (though not to the highest level on record) relative

to the change in the poverty rate, especially considering that—after adjusting for transfer payments—the poverty rate fell.

Understanding patterns in poverty and crime is critical for addressing urban problems, so I examined the trends in poverty and homicides—a proxy for serious crimes—over a 32-year period (Figure 1). To determine how poverty and homicides interact,

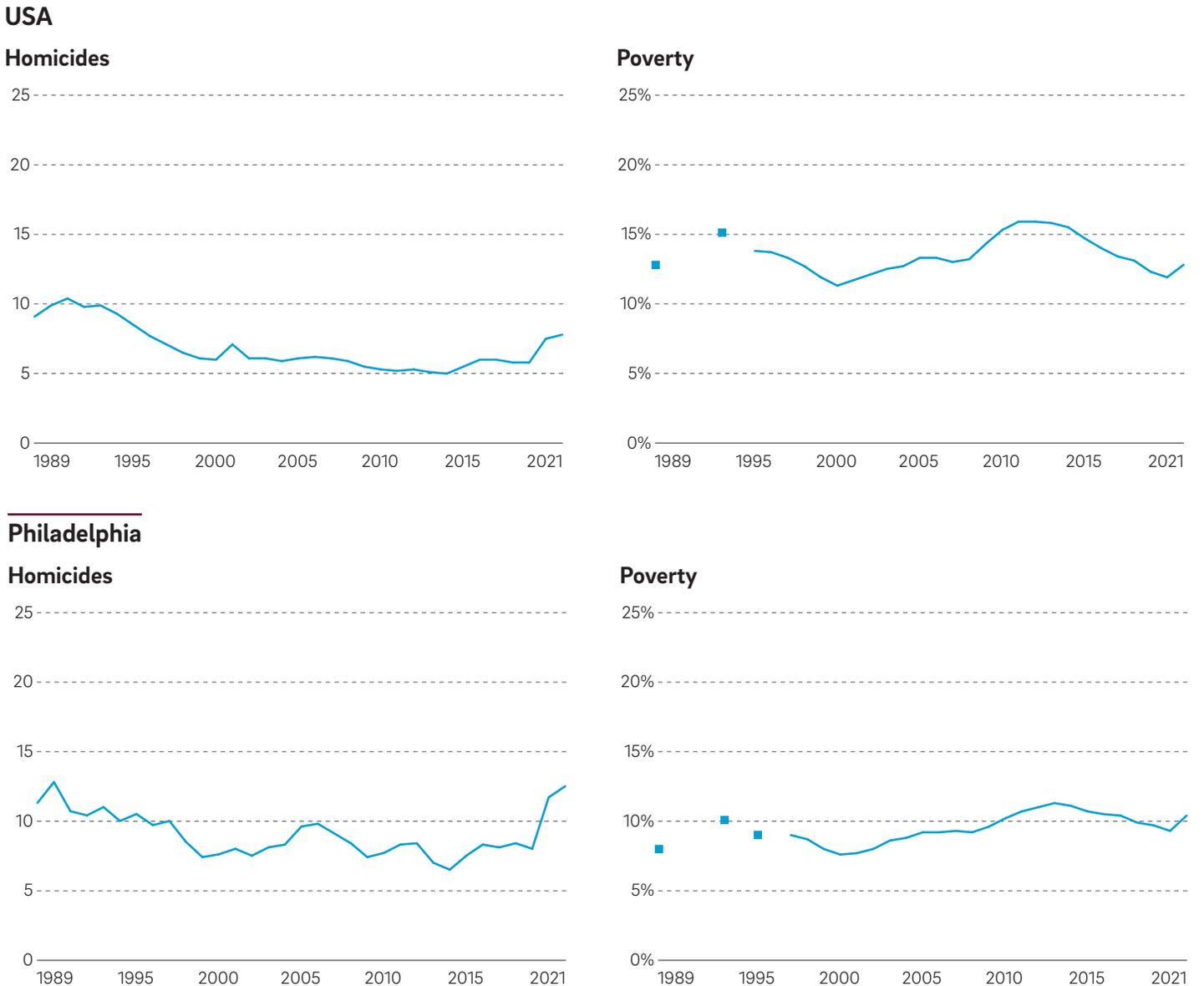
and to unpack some of the nuance of this relationship, I also quantified the correlation between them in the Philadelphia metropolitan statistical area (MSA),³ and, for comparison, in six MSAs close in population to the Philadelphia MSA, and in the U.S. as a whole. This will allow us to isolate what if anything is unique about the Philadelphia MSA.

FIGURE 1

Homicide and Poverty Rates Differ Markedly Among Large Metro Regions

But rates tend to move in tandem during the sample period.

Homicide rate (per 100,000 persons) and poverty rate in seven MSAs and the U.S., 1989–2021



Although the evidence clearly shows that homicides are concentrated in poor counties, the aggregate data hides this county-level variation. Indeed, at the MSA level, I find that poverty and crime are negatively correlated over the period 1989 to 2021. For instance, although the Philadelphia and Chicago MSAs have the lowest poverty rates in this sample,⁴ these regions also have the highest homicide rates. Further, I find that poverty and crime are not positively correlated consistently during times of economic growth and recessions. Nonetheless, the concentration of poverty and crime in specific areas within the MSAs provides opportunities for lawmakers and policymakers to craft policies and target resources more effectively.

The Poverty Rate

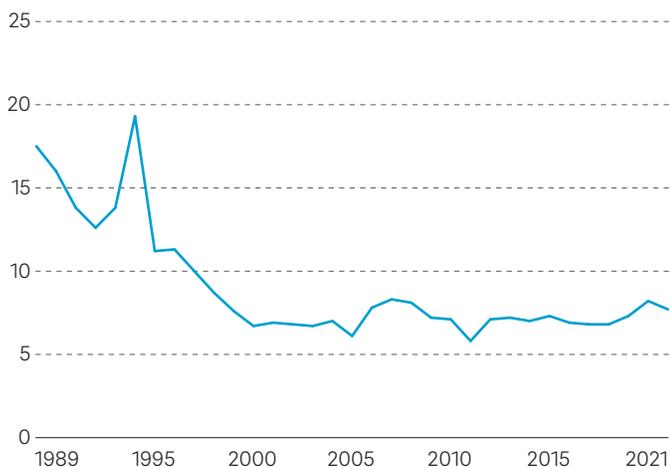
Poverty rates⁵ differed markedly among the MSAs in my sample. From 1989 to 2021, the poverty rate in the Philadelphia MSA averaged 9.5 percent.⁶ Only the Chicago MSA had a lower average poverty rate, at 9.0 percent. Conversely, the Phoenix MSA had the highest average poverty rate, at 14.8 percent. Phoenix is followed closely by the Miami and Los Angeles MSAs, each of which had an average poverty rate of 13.9 percent. The nation's average poverty rate was slightly lower, at 13.5 percent.

Despite these differences, poverty rates in these MSAs and the nation tended to move in the same direction over time. In the nation overall, the poverty rate was lowest in 2000 at 11.3 percent; it peaked at 15.9 percent in 2011 and 2012, shortly after the Great Recession (2007-2009); it fell consistently to 11.9 percent in 2020; and it

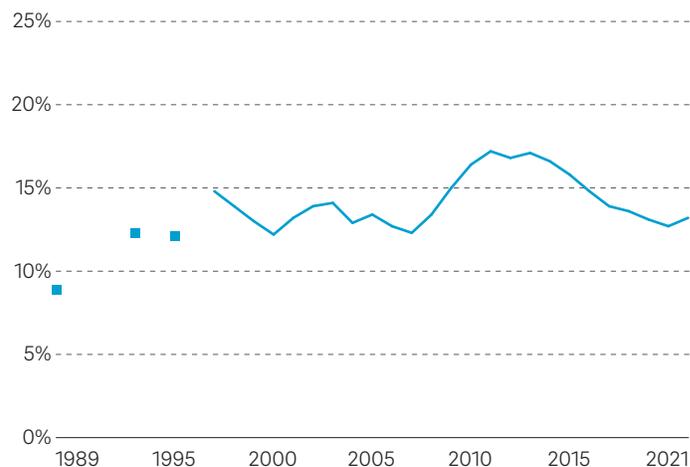
See *Measuring Homicides* [↘](#)

Miami

Homicides



Poverty

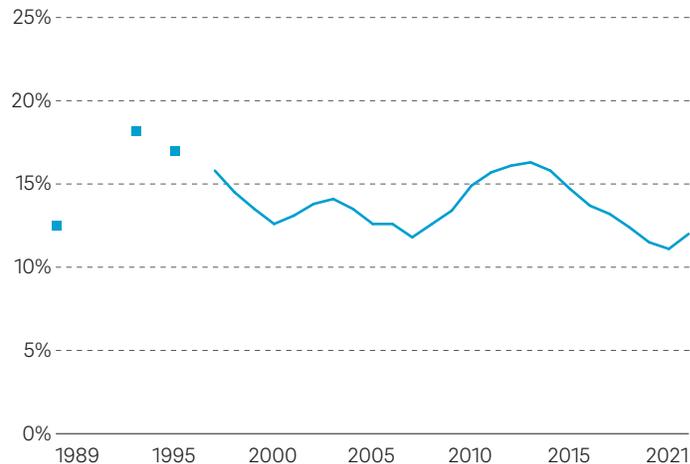


Los Angeles

Homicides



Poverty

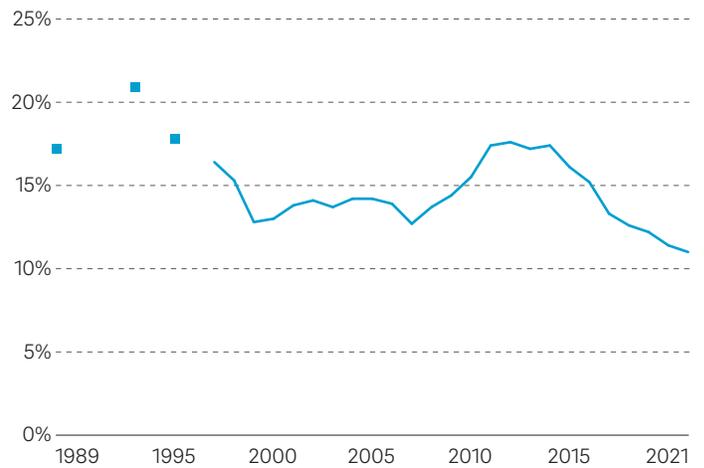


Phoenix

Homicides

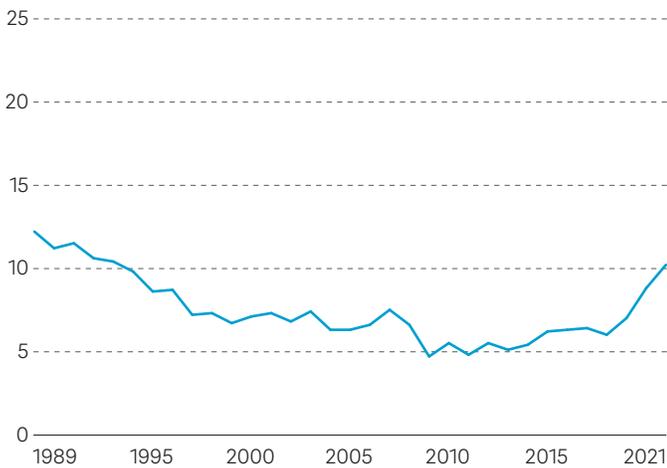


Poverty

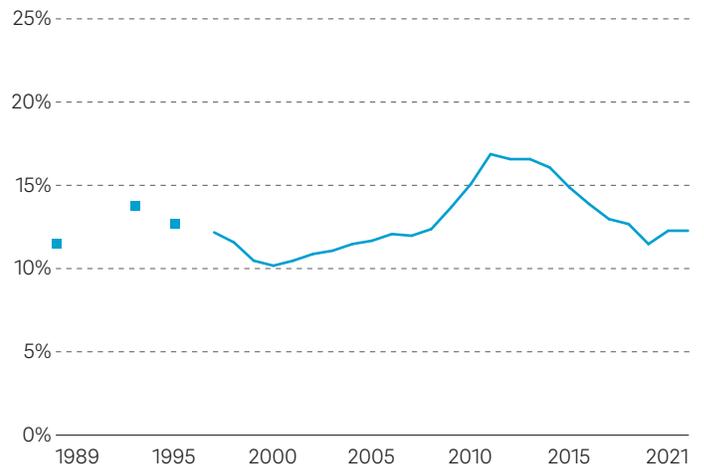


Atlanta

Homicides



Poverty



ticked up again during the COVID-19 pandemic, to 12.8 percent in 2021. These movements are mirrored in the Philadelphia, Chicago, Miami, and New York MSAs. (The only MSA in which the poverty rate remained steady from 2020 to 2021 was Atlanta, whereas it ticked down in the Phoenix MSA.)

The Homicide Rate

Just as with poverty rates, homicide rates differ markedly among my MSAs and the nation.⁷ Of the seven MSAs in my sample, Chicago and Los Angeles had the highest average homicide rates while Philadelphia was tied with Miami for third place.

Several MSAs shared the distinction of having the year's highest homicide rate at least once throughout our sample period. The Chicago MSA has generally had a higher homicide rate, recording the highest homicide rate in our sample of MSAs in 13 out of the 32 years studied. This high rate is largely associated

with Chicago's gang culture,⁸ competition for the crack cocaine market, and easy access to illegal guns.⁹ The Phoenix MSA came close to Chicago in both 1999 and 2001, recording each year's second-highest homicide rate—10.4 in 1999 and 10.8 in 2001. From 2010 to 2013, the Philadelphia MSA recorded the highest homicide rate, ranging from 7.7 to 8.4. From 2014 to 2021, Chicago recorded the highest homicide rate, with the Philadelphia MSA close behind. Overall, Los Angeles had the highest homicide rate from 1990 through 1996; Chicago from 1997 through 2003, and again from 2014 through 2021; and Philadelphia from 2006 through 2012. (Miami and Phoenix posted the highest rate in the remaining years.)

The New York MSA, however, had a relatively low homicide rate across my sample period. Up until 1993, the New York MSA's homicide rate ranged from 14 to 15.8, usually putting it in the top five MSAs in my sample. But since then, the homicide rate in the New York MSA has trended downward, reaching

just 5.2 in 1998 before edging up to 5.5 in 2000. In their 2002 working paper, economists Hope Corman and Naci Mocan attributed this decline to several factors: the 35 percent increase in the number of police officers in New York City in the 1990s; the increased incarceration rate; demographic changes (mainly a drop in the number of youths); and the economic boom of the 1990s.¹⁰ As I found in my own research, these factors confound the sometimes simplistic argument that poverty causes crime.¹¹

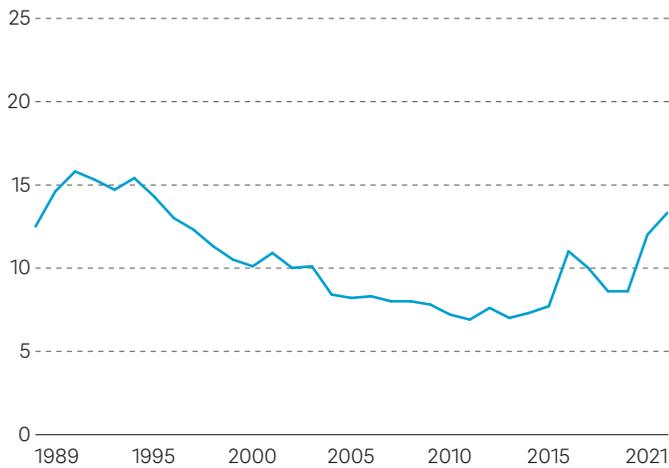
Although homicide rates differed among MSAs and the nation, they—like poverty rates—tended to move in tandem. In most of my sample’s MSAs and the nation, homicide rates were higher in the 1980s; they declined in the 1990s and 2000s; and they have inched back up since the 2010s, except in the New York MSA.

Homicide rates spiked in six of the seven MSAs in my sample¹² and in the U.S.¹³ from 2019 to 2020 and have inched up further in 2021. Although it is still unclear why homicides rose dramatically in 2020, the Pew Research Center has pointed

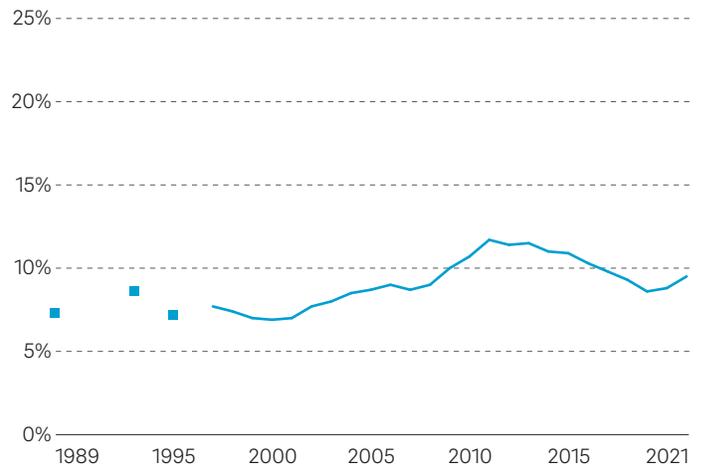
See *Homicides in Philadelphia*

Chicago

Homicides

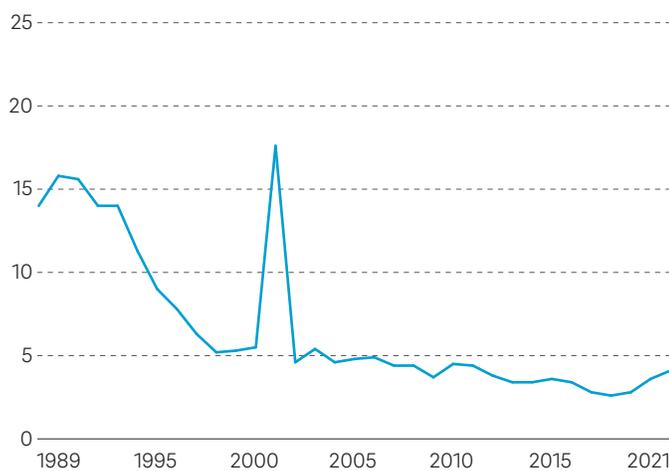


Poverty

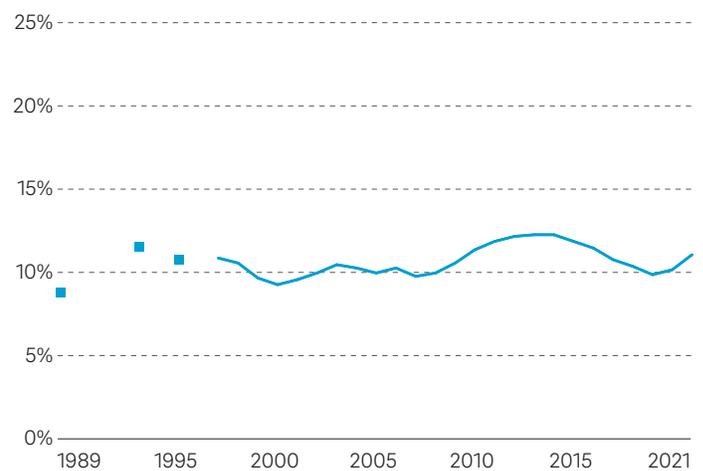


New York

Homicides



Poverty



Data Sources: Homicide data from the Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Mortality on CDC WONDER Online Database; poverty data from the American Community Survey’s 5-year estimates via https://www.census.gov/programs-surveys/saige/data/datasets.2000.List_1743592724.html#list-tab-List_1743592724

Note: Homicide data are from the Multiple Cause of Death Files, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Co-operative Program. The poverty rate is defined as the percentage of the population with incomes below a threshold level. In the U.S., these thresholds are determined by the Census Bureau and vary by family size and composition. They do not vary geographically but are updated for inflation, so the poverty rate is always reported in current dollars.

to economic and societal changes brought on by the COVID-19 pandemic and changes in police/community relations after the murder of George Floyd in Minnesota in 2020.¹⁴

Poverty and Crime: No Consistently Positive Correlation

In keeping with the literature that finds that the relationship between poverty and crime is complicated, poverty and homicides are not positively correlated consistently across my sample of MSAs. Over the period 1989 to 2021, the Los Angeles, Miami, and Phoenix MSAs had, on average, the highest poverty rates, while the Chicago, New York, and Philadelphia MSAs had the lowest. Meanwhile, the MSAs with the highest homicide rates were Chicago, Los Angeles, Miami, and Philadelphia, while the Atlanta, New York, and Phoenix MSAs had the lowest. Only in the Los Angeles MSA do we see a positive relationship between poverty and homicides.

To further corroborate these observations, I used correlation analysis to investigate whether changes in the poverty rate are associated with changes in the homicide rate. In Los Angeles, I found a moderately positive relationship between the poverty and homicide rates: That is, an uptick in poverty is associated with a moderate uptick in homicides. For each of the other MSAs and for the U.S., I found negative correlations (some weak, some moderate, and some strong) between the poverty and homicide rates. In these other MSAs and in the U.S., an uptick in the poverty rate is not associated with an increase in the homicide rate. In short, I do not find a correlation between the poverty and homicide rates in these MSAs or in the U.S. over the period 1989 to 2021.

However, economic conditions changed during this period. Homicides have since fallen from the recorded highs of the 1990s, but so too has poverty, which fell consistently until the onset of the Great Recession. (The poverty rate then rose briefly before falling again until 2020.) As such, I thought it useful to examine the relationship between poverty and homicides during periods of economic expansion and contraction for these MSAs and the U.S. overall.

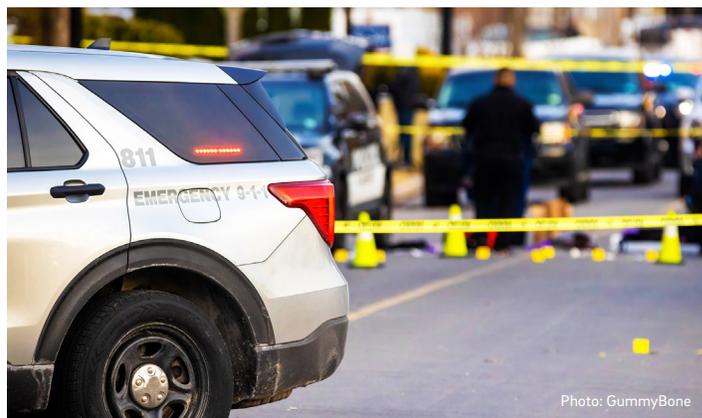
During the period 1992-2000, following the early 1990s recession, the correlation between poverty and homicides for the Philadelphia, Chicago, Los Angeles, New York, and Atlanta MSAs, and for the U.S. overall, ranged from strong to very strong. Only in the Phoenix MSA was the relationship positive but weak. Thereafter, the bursting of the dot-com bubble caused a recession in the early 2000s. From 2002 to 2006, while the economy was returning to a path of growth, the correlation between the poverty and homicide rates was very strong in the Philadelphia MSA, strong in the New York MSA, and moderately strong in the U.S. and the Los Angeles MSA. Meanwhile, the Atlanta, Chicago, and Phoenix MSAs all recorded moderately to strongly negative correlations over this period.

During the Great Recession (2007-2009) and the period of economic growth that followed until the COVID-19 recession, all MSAs and the U.S. overall recorded negative correlations—except for the Los Angeles and New York MSAs, which recorded posi-

Measuring Homicides

The two most detailed systems to track homicides in the U.S. are the Supplementary Homicide Reports (SHR), which are part of the Uniform Crime Reporting Program administered by the Federal Bureau of Investigation since 1930, and the Centers for Disease Control and Prevention's Fatal Injury Reports, which are developed from the National Vital Statistics System (NVSS) and maintained by the National Center for Health Statistics. The Fatal Injury Reports include data derived from the registration of births and deaths at the state and local level; this system dates to 1933.

When comparing statistics, the NVSS consistently shows a higher number and rate of homicides in the U.S. than does the SHR. This is most likely due to the differences in coverage and scope and the mandatory reporting required under the NVSS versus the voluntary nature of the data collection under the SHR. Because the NVSS data are more comprehensive, this article references statistics from the NVSS Fatal Injury Reports.



Homicides in Philadelphia

On an annual basis, the Philadelphia MSA's homicide rate was 11.3 in 1989. It ticked up to 12.8 in 1990 and then fell to 10.4 in 1992. Homicides then ebbed and flowed before recording a low of 7.4 in 1999. This decline in the 1990s may be due to a combination of the Philadelphia Police Department's implementing the CompStat program²¹ and hiring more police officers, and the end of the crack epidemic. After 2000, the trend reversed, and the homicide rate continued to grow, peaking at 9.8 in 2006. The lowest homicide rate over this period was 6.5 in 2014. The homicide rate then reached 8.3 in 2016 and remained at (roughly) 8.3 until 2019. The homicide rate rebounded strongly to 11.7 in 2020 and continued to grow in 2021 to 12.5 as the MSA continued to grapple with gun violence. The 2021 homicide rate was almost as high as in 1990, reversing all the progress made over the last three decades, with provisional homicide records for 2022 showing only a minor dip in homicides, to 12.2. However, as of November 7, 2023, homicides in the city of Philadelphia are down 30 percent compared with 2022.²²

tive correlations from 2010 to 2019. Miami was the only MSA in this sample that showed a negative correlation between poverty and homicides irrespective of the period.

One overarching reason why poverty and crime are not always positively correlated is the motivations for crime.¹⁵ For instance, in 2022, John Jay College emeritus professor of criminal justice Barry Latzer wrote that “crimes of violence are usually motivated by quarrels, personal grudges, perceived insults, and similar interpersonal conflicts, not by economic necessity. Consequently, a decline in one’s financial condition is not likely to cause violent criminal behavior. This explains why an economic recession or depression does not invariably produce a crime spike.”



Photo: Denis Gavrilov

From Concentration to Opportunity

As Hanna Love and Tracy Hadden Loh of the Brookings Institution wrote in 2023, while the spike in homicides was widespread for the nation, its toll was not distributed evenly. Instead, increases in homicides were largely concentrated in disadvantaged neighborhoods that already had high rates of gun violence, along with significant histories of public and private sector disinvestment. Although this concentration of poverty and crime is worrying, it gives regional and local lawmakers and policymakers the opportunity to craft targeted solutions to address poverty and crime. The benefits of these interventions can be meaningful for the communities and the economy at large. In 2016, economists Raj Chetty, Nathaniel Hendren, and Lawrence F. Katz found that exposure to a better environment during childhood is a key determinant of an individual’s long-term outcomes. And earlier this year, my colleague Bryan Stuart found that public investments in lower-income children have the potential to not only improve outcomes for those children but also benefit government budgets and the economy in general.

There is a growing body of research about Moving to Opportunity (MTO) experiments, in which families with children, teenagers, and young adults are allowed to participate in randomized housing mobility experiments. Under these experiments, families are offered housing vouchers that allow them to relocate from high-poverty to low-poverty areas.¹⁶ Researchers then compare the long-run outcomes of these children with a control group of children who remained in the disadvantaged areas.

Research shows that children who move to low-poverty areas generally exhibit reduced violent behaviors; there are also substantial reductions in violent-crime arrests for experimental group males, and displaced children are more likely to be employed and earn more in young adulthood.¹⁷ Although these experiments help relatively few families due to limited resources and individual concerns,¹⁸ and although they have not been replicated nationally, MTO still reduces the concentration of poverty while providing positive outcomes.

Opportunity also exists for minimizing the concentration of homicides, since crime is geographically clustered to a remarkable degree.¹⁹ Homicides were concentrated in the most populous county of each MSA – most likely in specific, high-crime neighborhoods. Over the period on average, at the lower end of the spectrum, one-quarter of all homicides in the New York MSA were committed in Kings County, 44 percent of homicides in the Atlanta MSA were committed in Fulton County, and 58 percent of homicides in the Miami MSA were committed in Miami-Dade County. Meanwhile, in the Philadelphia MSA, 69 percent of homicides were committed in Philadelphia County, while more than 90 percent of homicides were committed in Maricopa County and Los Angeles County in the Phoenix and Los Angeles MSAs, respectively. With this information, policymakers could funnel resources into hot spots—for example, by increasing police presence through more frequent patrols, raids, and arrests of lawbreakers.

Conclusion

Whereas the literature generally finds a strongly positive relationship between poverty and crime, I find that poverty and crime are not positively correlated consistently in these seven MSAs and the U.S. However, the underlying concern remains that poverty and homicides are concentrated and persistent, and they affect the quality of life in many neighborhoods, cities, counties, and MSAs, as well as nationally. This presents an opportunity for lawmakers and policymakers at both the regional and local levels to direct resources and create programs to target and reduce the concentration of poverty and crime in these areas.

Although I examined the direct link between poverty and crime, this link “may be spurious,” as Sharkey, Besbris, and Friedson wrote, “or it may be mediated by other processes related to labor force attachment, family structure, or connections to institutions like the military or the labor market.”²⁰ As such, we need more research into the variables that explain the persistence of both poverty and homicides in these MSAs, as well as research that helps us understand how different channels—for instance, the labor market— influence the dynamics between poverty and crime. 

Notes

- 1 See Lieberman and Smith (1986); Hsieh and Pugh (1993); and Golash (2005).
- 2 Flora (2021) shows that poverty in the Philadelphia region is consistently lower than in the nation and lower than in other metropolitan areas, despite ongoing reports that of the 10 largest cities, Philadelphia has the highest rate of deep poverty (Lubrano 2015).
- 3 An MSA is a geographic region designated by the U.S. Office of Management and Budget. By “Philadelphia MSA,” I mean the Philadelphia–Camden–Wilmington MSA. Because of data limitations, I focus on homicide rates and not overall crime statistics, which include property crimes.
- 4 The sample includes the Philadelphia–Camden–Wilmington MSA and six MSAs that bracket the Philadelphia MSA in size: three that are larger than Philadelphia (New York–Newark–Jersey City, Los Angeles–Long Beach–Anaheim, and Chicago–Naperville–Elgin), and three that are smaller (Atlanta–Sandy Springs–Alpharetta, Miami–Fort Lauderdale–Pompano Beach, and Phoenix–Mesa–Chandler).
- 5 Official poverty thresholds do not vary geographically, so adjusting for cost of living from MSA to MSA could cause poverty to be higher than official records indicate, complicating the analysis.
- 6 The poverty rate is defined as the percentage of the population with incomes below a threshold level. For example, in 2023 a family of four with two children would be in poverty if the family income fell below \$30,000, up from \$26,500 in 2021. In the U.S., these income thresholds are determined by the Census Bureau and vary by family size and composition. Official poverty thresholds do not vary geographically but are updated for inflation using the Consumer Price Index (CPI-U), so the poverty rate is always reported in current dollars.
- 7 All homicide rates are per 100,000 persons.
- 8 See Ali (2014).
- 9 See Ander (2021).
- 10 The CompStat program, they argue, was less important.
- 11 The homicide rate in the New York MSA rose to 17.6 in 2001, but this includes the victims of the terrorist attacks on September 11, 2001, and will be ignored for the sake of this analysis. In 2002, New York recorded a homicide rate of 4.6 and remains the MSA with the lowest homicide rate.
- 12 The exception is the Miami MSA, in which homicides fell in 2021 but remained higher than in 2019. This fall was attributed to the Miami–Dade Police Department’s Operation Summer Heat. In the Phoenix, Los Angeles, and New York MSAs the rate was still lower than in the early 2000s, whereas in the Atlanta, Philadelphia, and Chicago MSAs the rate was higher.
- 13 The FBI’s crime statistic estimates for 2022 show that nationally,

the number of violent crimes decreased by an estimated 1.7 percent in 2022 compared with 2021 estimates, while murders and nonnegligent manslaughter recorded a decrease of 6.1 percent compared with the previous year.

- 14 See Gramlich (2021).
- 15 See Latzer (2022).
- 16 The most common reason families gave for volunteering for the program was that they wanted their children to be able to avoid the risks from crime, violence, and drugs in their origin neighborhoods. See Kling, Lieban, and Katz (2007).
- 17 See Sciandra, Sanbonmatsu, Duncan, et al. (2013); Ludwig, Duncan, Hirschfield (2001); and Chyn (2018).
- 18 Only about half of the eligible participants used the voucher, in part because of difficulties in moving and in securing apartments in lower-poverty neighborhoods. See Sampson (2008).
- 19 See Sampson (2012).
- 20 See Sharkey, Besbris, and Friedson (2016).
- 21 CompStat—short for Computer Statistics—is a computerization and quantification program used by police departments. It was first set up by the New York City Police Department in the 1990s. The CompStat model involves collecting, analyzing, and mapping crime data and other essential police performance measures on a regular basis to ensure that police officers are in the areas where they are most needed. It also allows for the evaluation of the success of crime-fighting strategies to make informed decisions.
- 22 See the Philadelphia Police Department’s Crime Maps & Stats webpage, <https://www.phillypolice.com/crime-maps-stats>.

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