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DOES NOTHING STOP A BULLET LIKE A JOB? THE EFFECTS OF INCOME ON CRIME

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Does nothing stop a bullet like a job? The effects of income on crime
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ABSTRACT

Do jobs and income-transfer programs affect crime? The answer depends on why one is asking the question, which shapes what one means by "crime." Many studies focus on understanding why overall crime rates vary across people, places, and time; since 80% of all crimes are property offenses, that's what this type of research typically explains. But if the goal is to understand what to do about the crime problem, the focus will instead be on serious violent crimes, which account for the majority of the social costs of crime. The best available evidence suggests that policies that reduce economic desperation reduce property crime (and hence overall crime rates) but have little systematic relationship to violent crime. The difference in impacts surely stems in large part from the fact that most violent crimes, including murder, are not crimes of profit but rather crimes of passion – including rage. Policies to alleviate material hardship, as important and useful as those are for improving people's lives and well-being, are not by themselves sufficient to also substantially alleviate the burden of crime on society.

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1. Introduction

Do jobs and income-transfer programs affect crime? The answer depends on why one is asking the question, which in turn shapes what one means by "crime."

One reason to ask the question is to *understand why people commit crimes*. In the US context, more than 80% of all crimes are property offenses. So, any effort to understand why crime rates as a whole vary across people, places, and time will inevitably produce an explanation of the determinants of property crime.

But there's a different reason to ask whether jobs and transfer programs reduce crime: to *understand what to do about the crime problem*. That turns out to be a different question than "Why do people commit crime?" and one that has a different answer.

The distinction between the two questions hinges on the fact that not all crimes contribute equally to the crime problem. As noted by Chalfin and McCrary (2018), the social harms of crime in American cities are overwhelmingly driven by violent crimes, especially gun crimes, as suggested by either hedonic studies (what people are willing to pay to avoid crime in the housing market or labor market) or contingent valuation studies (which directly ask about willingness to pay).[1] To understand the effect of jobs and transfer programs on the crime problem as the public itself defines the crime problem, we need to understand the effects of these types of policies on the most serious types of violent crimes.

In this review, we focus our attention on credibly causal evidence from either randomized controlled trials (RCTs) or convincing 'natural experiments' that have a clearly defined source of exogenous identifying variation, part of what Angrist and Pischke (2017) call the 'credibility revolution' in empirical social science.[2] We also try to pay attention to issues of statistical inference, not just identification, and where appropriate note when estimates may be suffering from an elevated false-negative risk (for example, due to small sample sizes) or an elevated risk of false-positives (for example, from examining multiple outcomes with no p-value adjustment).

Since the determinants of crime may vary across countries, we focus on evidence from the US. Understanding the answer to this question in other countries, and the source of any cross-country differences that might exist, is important but beyond the scope of what this review can cover.[3]

For the question about the determinants of "crime," the best available evidence suggests that policies that reduce economic desperation, like more jobs or more generous transfer programs, reduce property crime and, hence, overall crime (see Figure 1). That evidence is consistent with "rational choice" theories of crime in which people deliberately compare the benefits and costs

[1] See, for example, Thaler (1978); Cook and Ludwig (2000); Cohen et al. (2004); Dominguez and Raphael (2015).
[2] That choice is motivated partly by empirical evidence from LaLonde (1986) that many of the most common non-experimental methods (regression, matching, etc.) cannot consistently reproduce the unbiased estimates that come from RCTs (see also Smith & Todd, 2005; and Heckman et al., 1997, 1998), and that there does not seem to be any good *empirical* way to know when any given non-experimental regression or matching estimator, etc. is giving us the right answer or not.
[3] Ferraz et al. (2022) provide an excellent, and more expansive, review of the connection between income and crime across different country contexts.

of potential criminal behavior before choosing to act (Becker, 1968). The evidence is also consistent with explanations that emphasize the role of different kinds of social comparisons or feelings of social exclusion (Vold and Bernard, 1986).

For the question about the determinants of the "crime problem," the best available evidence suggests that jobs and transfer programs have little, if any, systematic relationship to violent crime (Figure 1). That's true for jobs programs or social programs for low-income populations in general, or for specific higher-risk sub-populations like people exiting prison. Policies to alleviate material hardship, as important and useful as those are for improving people's lives and well-being, do not by themselves appear to be sufficient to also substantially alleviate the burden of crime on society.

The way to reconcile the contradictory evidence for effects on "crime" (property crime) versus "the crime problem" (violent crime) is that the former are motivated by profit, while the latter tend to be motivated by passion – including rage. Most violent crimes in the US are assaults (arguments that escalate into violence), and even most murders are assaults that escalate into tragedy because someone has a gun. Policies designed to alleviate material hardship, as important as those are for improving people's well-being, don't appear to be sufficient by themselves to prevent altercations from starting or escalating.

A few exceptions to this general rule help shed light on the underlying etiology of violence. First, robbery is one particularly important crime type that straddles both property offending and violent offending. While the property crime component of robbery seems motivated by income, the *violence* involved in robberies often appears to be incidental and spontaneous, not a pre-meditated part of the crime. Most muggers *don't* plan or want to kill their victims.[4]

Second, there is good evidence that youth summer jobs can reduce violent crime. But the youth who benefit the most economically are *not* the ones for whom violence declines the most. Relatedly, one of the few in-kind transfers that reduces violence is Medicaid, which supports the treatment of people with mental health problems. One could think of both policies as improving people's 'human capital' broadly defined, a conclusion that is consistent with the fact that public education also generates large reductions in violent crime (Lochner and Moretti, 2004).

Third, income seems to reduce violence when it helps people avoid exposure to situations of *extreme* violence risk. This includes housing assistance to people who are about to become unhoused, as well as financial assistance to people in living situations where the risk of domestic violence is particularly high.

While these exceptions help shed light on the determinants of violent behavior, they don't overturn the more general conclusion that economic desperation doesn't seem to be a key causal driver of violent crime and, hence, of the overall social burden of crime. We see this from the fact that when aggregate economic conditions change in response to business cycles or local economic development, there is little change in aggregate violent crime rates (Figure 1). That's consistent with the idea that most measured violence is *not* driven by teens, people with mental illness, people experiencing homelessness, or victims of domestic violence.

[4] See, for an example, Maxfield (1989).

Our conclusions echo those from Harvard psychology professor Steven Pinker (2011, p. 84), who describes a "dubious belief about violence … that lower [social] class people engage in it because they are financially needy (for example, stealing food to feed their children) or because they are expressing rage against society. The violence of a lower-class man may indeed express rage, but it is aimed not at society but at the asshole who scraped his car and dissed him in front of a crowd." Our review suggests that new data from an accumulating body of RCTs and 'natural experiments' confirms what many criminologists have long known, or at least strongly suspected, a conclusion that is unfortunately too often forgotten in current policy discussions. To substantially improve the material conditions of low-income people in the US, there is surely value in considering a wide range of jobs and transfer programs. But to keep low-income communities safe from the part of the crime problem they themselves worry about the most – violence – those policies by themselves won't be enough. Additional efforts will be required.

2. Crime vs. the Crime Problem

As Chalfin and McCrary (2018) noted, in US cities the 0.2% of all crimes that are murders seem to account for nearly 70% of all the social harms of crime. To quantify the social harms that come from different social problems, economists use a method developed by Nobel-laureate Thomas Schelling: asking people what they'd be willing to pay (WTP) to have less of the problem (contingent valuation). This method is how economists determine the harms of other social problems like environmental pollution.

The main drawback of contingent valuation is that people are responding to *hypothetical* questions and giving hypothetical answers; yet, studies of the implicit market price people are willing to pay for extra risk of crime victimization (that is, hedonic studies that rely on actual rather than hypothetical behavior) yields estimates that are in the same general ballpark to those from contingent valuation. For example, Cohen et al.'s (2004) contingent valuation study implies a WTP of $17.3 million for each murder averted (in 2023 dollars). By comparison, the wage premium people need to take relatively more dangerous jobs implies a value per statistical life (VSL) of between $11.9 and $13.6 million (Kniesner & Viscusi, 2019; Rohlfs et al., 2015).

Importantly, this is *not* economists imposing their own views about what is or isn't important. It's the public revealing what they care the most about themselves. The data reflect what the public says are their *own* priorities and their own WTP.

The enormous skew in the public's willingness to pay for each crime prevented—equal to $44,500 per burglary, $413,000 per armed robbery, and fully $17.3 million per murder (Cohen et al., 2004)—gives some sense for how large the fear of serious violence, especially gun violence (which accounts for most murders), looms for the public (see also Chalfin, 2015).

Notice what these willingness-to-pay numbers are and what they are not. They do *not* mean that someone would pay $17 million to avoid being killed with certainty. What people are being asked to pay for instead is a small change in risk. Imagine a town of 100,000 identical people, and there's some policy that will prevent one murder. Suppose everyone in the town were willing to pay $170 to prevent that murder, the benefit of which to everyone is a reduced risk of

homicide victimization equal to 1 in 100,000. The total willingness to pay to prevent that murder then adds up to (100,000 x $170) = $17 million.

One might worry this exercise confuses willingness to pay with *ability* to pay. Harvard law professor Cass Sunstein (2004) offered a useful framework: If people in a town are considering whether they should adopt a policy *they'd have to pay for themselves*, we should take their stated willingness to pay values at face value. To do otherwise would be to inadvertently create the risk that they adopt a policy that costs more than it's worth to people in that place. On the other hand, if some *third party* will pay for the policy – like the federal government – then we *should* adjust people's willingness to pay values to account for income.

Some commentators dislike cost-of-crime estimates for political reasons: high costs might lead to policies they dislike, such as more prisons or jails. We believe this is misguided for two reasons. First, large costs of crime could just as easily justify more *non-criminal justice* spending, too (such as public education or effective social programs). Second, history shows policies based on a politically distorted view of reality rarely turn out well.

3. Theories of the Causes of Crime

In the 4th century BCE, Aristotle argued, "poverty is the parent of crime and revolution." In the dawning statistical age of the 19th century, Adolphe Quetelet argued, "society prepares the crime, and the guilty is only the instrument by which it is accomplished" (see Vold & Bernard, 1986, pg. 132). In the early 20th century, the president who single-handedly created much of America's social safety net, Franklin D. Roosevelt, argued that one key goal of the New Deal was to strike "at the very roots of crime itself." President Lyndon B. Johnson argued as part of his Great Society that ending poverty is the "only genuine, long-range solution" for crime.

This logic makes sense for property crimes motivated by considerations of economic gain. Rational choice theories in criminology suggest criminal behavior stems from some deliberate comparison of the benefits and costs of crime (Vold and Bernard, 1986). For people in more dire economic conditions, the material gains from crime may loom relatively larger (given diminishing marginal utility from consumption), and the opportunity cost of incarceration could be lower (see also Becker, 1968). Other criminology theories emphasize the role that income plays in shaping people's social comparisons or sense of their standing within society or relative to their peers (Vold and Bernard, 1986).

Having a job, distinct from just the income component, may also help keep people busy and therefore reduce crime through incapacitation: People who are at work are not out on the streets, although it should be noted that one of the main sources of inventory loss is employees (which is to say that working does not totally eliminate criminal opportunity). Work may also change the type of peers that people associate with.

The conceptual connection between economic deprivation and violent crime is less obvious, even though it is widely believed. The saying "nothing stops a bullet like a job," which we first

heard as the slogan of Homeboy Industries in Los Angeles, is now a mantra of politicians,[5] reporters,[6] researchers,[7] advocates, and members of the general public.[8] The last mayor of Chicago argued that "violence is the expression of poverty."[9] Her successor argued the key to controlling gun violence is "to guarantee access to affordable housing, reliable transportation, good paying jobs …"[10]

One reason people may believe economic conditions affect violence is because they believe violence, like property crime, is *also* motivated by income. It certainly seems true that the media disproportionately covers or represents the types of murders that are motivated by income, like those related to drug selling or alcohol bootlegging. The most popular or celebrated movies and TV shows include *The Public Enemy*, the *Untouchables*, *Godfather*, the *Sopranos*, *Scarface*, and *The Wire*.

But most violent crimes in America are not obviously motivated by income. As early as the 1950s, criminologists like Albert K. Cohen saw that many crimes were *not* motivated by obvious financial consideration; he started calling them 'non-utilitarian' crimes. Around that same time, criminologist Marvin Wolfgang noticed how often murders stemmed from arguments in which the victim either instigated or escalated it (Wolfgang, 1957). In the 1960s, Franklin Zimring concluded that 82% of Chicago murders stemmed from an argument (Zimring 1967). In the 1980s Donald Black noted that "most intentional homicide in modern life is a response to conduct that the killer regards as deviant." He noted data from Houston suggested "only a little over one-tenth occurred in the course of predatory behavior such as burglary or robbery… It is apparent that capital punishment is quite common in modern America … though it is nearly always a private rather than a public affair" (1983, p. 36).

Criminologists have come up with a classification system for violent crimes. *Instrumental violence* is committed to achieve some tangible or 'instrumental' goal (getting someone's cash or phone or watch or drug turf), where violence is a means towards some other larger end.[11] *Expressive violence* (or *reactive violence*) has the primary goal not of acquiring something tangible, but of hurting the victim – "often unplanned acts of anger, race or frustration."[12] The violence is the end itself. A careful look at 20 years of US murder data collected by the FBI

[5] https://www.chicagotribune.com/politics/ct-cook-county-commissioner-youth-summer-jobs-program-20160414-story.html

[6] https://www.cnn.com/2013/02/06/opinion/jones-guns-youth

[7] https://www.wbez.org/stories/researchers-nothing-stops-a-bullet-like-a-job/420bf0cd-9e45-40ac-846c-796e01182929

[8] https://seiuhcilin.org/2012/02/nothing-stops-a-bullet-like-a-job-6th-ward-residents-unite-against-gun-violence-poverty/

[9] http://austintalks.org/2022/03/violence-is-the-expression-of-poverty-mayor-lightfoot-stresses-importance-of-investing-in-the-west-side/

[10] https://www.nytimes.com/2023/03/15/us/black-voters-chicago-mayor-policing-crime.html

[11] See also Ferraz, Soares, and Vargas (2022) who note that property disputes arising in illegal markets or in places without a strong rule of law are often resolved with violence. This is one reason why the causes of violence may vary across countries – because the strength of the rule of law varies, and so the prevalence of violence to enforce transactions may vary.

[12] See Feshbach (1964), and Miethe and Regoeczi (2009).

concluded that only 23% of all murders were instrumental; 77% of murders—nearly four of every five—were some form of expressive violence.[13]

How might economic conditions shape expressive violence?

Under the rational choice view of crime, it is, in principle, possible that people with more lucrative jobs or more generous transfers feel like they have more to lose if they're caught committing a crime–that is, there is a higher opportunity cost.

In principle, jobs might also help incapacitate people from committing violence by keeping them off the street, although in the US, violence is overwhelmingly concentrated in the evenings and on weekends–outside regular business hours.

It is also possible that economic conditions could shape expressive violence through developmental effects; that is, parent income may shape their ability to 'invest' in their children's development (see, for example, the discussion in Mayer (1998)). This type of mechanism implicates human capital more than economic incentives. This mechanism also suggests that income may matter more during some life stages than others (for example, during childhood and adolescence, which are key developmental stages) and may affect violent crime rates potentially with some lag – that is, what matters for violence may be accumulated exposure to economic conditions, rather than current economic conditions.

Finally, some specific types of violent crime have their own unique dynamics and potential determinants. For example, while most of the public and scholarly attention historically has been devoted to 'street violence' and guns, domestic violence (child abuse, child neglect, intimate partner violence) also disproportionately affects women and children within high-poverty households. Several theoretical mechanisms link income to this underreported and important type of crime. Classic household bargaining models predict decreases in threats of violence as income earned by female members increases, but an influx of income can also increase violence if there are disputes over the allocation of resources or if abusers use violence to control victims (Becker 1981, Aizer 2010).

4. The Evidence

One of the most important criminologists of the first half of the 20th century was Edwin Sutherland, who noticed that while there's more crime in poor neighborhoods than in rich ones, when economic conditions *improved* in a neighborhood, crime didn't decline. Sutherland concluded: "Poverty as such is not an important cause of crime" (Sutherland & Cressy 1966). With the benefit of decades of more data and improved statistical methods, we would amend Sutherland's conclusion slightly: Poverty as such does not seem to be an important cause of *violent crime*. It does *not* seem to be the case that "nothing stops a bullet like a job.

A. Transfer Programs

[13] See Miethe et al. (2004)

Some of the best available evidence comes from the study of means-tested transfer programs, which provide people either with cash or in-kind benefits. These programs are particularly useful in understanding the relationship between economic conditions and crime because so many 'natural experiments' are baked into the American system. Program benefits change over the years, vary across states, get paid out in idiosyncratic ways, and often aren't funded at a level where every income-eligible person receives benefits.

For example, Foley (2011) evaluates the relationship between welfare payments and crime, taking advantage of the fact that some places pay monthly benefits around the same time (e.g., at the beginning of the month), while other places have payments spread more evenly throughout a month. Compared to places that pay out benefits several times per month, in places where benefits are paid only monthly, people get more economically desperate towards the end of the month, and property crimes increase – but violent crimes don't.

Watson, Guettabi & Reimer (2020) evaluate the effects on crime following the annual lump-sum payment to all Alaskan residents (Alaska's Permanent Fund Dividend). They document large decreases in property crimes but no changes in violent crime.

Deshpande & Mueller-Smith (2022) look at what happens when people lose eligibility for Supplemental Security Income (SSI) benefits at age 18. The idea behind the research design is that in the weeks before people turn 18, developmentally, they're not very different from the weeks right after their 18th birthday. The loss of SSI benefits at age 18 results in higher levels of involvement with property crime (but not violent crime).

One might wonder if giving people *in-kind* benefits could be better (from a crime-prevention perspective) than just giving them cash. Policymakers who are nervous about how recipients spend cash income often believe in-kind programs might be more developmentally helpful for people. However, with respect to impacts on violence, that does not seem to be the case.

Tuttle (2019) looks at what happened when the state of Florida made drug offenders ineligible for food stamps (SNAP): there was increased involvement in financially motivated crimes, but not in violence.[14] Both Luallen, Edgerton, and Rabideau (2018) and Mueller-Smith, Reeves, Schnepel, and Walker (2023) do not find any impacts on criminal recidivism among drug offenders banned from food stamps. Carr and Packham (2019) find something similar by looking at policies that smooth the disbursement of food stamp (SNAP) benefits across individuals within a state (e.g., some get transfers on the first of the month, while others get transfers on the of the month) compared to everyone receiving benefits on the same day. This resource smoothing approach within a community decreases property crime but not violent crime.[15]

[14] Yang (2017b) also looked at what happens to people's re-entry outcomes when they are released from prison on the heels of losing eligibility for welfare and other social-program benefits but did not separate recidivism effects by type of crime.

[15] Carr and Packham (2019) focus on overall crime and property crimes; private correspondence (Jillian Carr and Jens Ludwig, 11/1/202) revealed there is some effect on robbery (not surprising given the income motivation for that crime, which happens to be classified as violence) but not on assault (which accounts for most violent crimes).

Jacob, Kapustin, and Ludwig (2015) carried out a study of means-tested housing programs and evaluated what happened when the city of Chicago allocated its scarce supply of housing vouchers (which subsidize families to live in private-market apartments) using a random lottery. Comparing lottery winners and losers creates something akin to a RCT design, with a very large sample size (so impacts were precisely estimated). There were no detectable effects on any type of crime. Using data from Houston, Carr and Koppa (2020) also do not find any impact of housing vouchers on violent crime.

Perhaps social programs have bigger effects on those who are at an elevated risk for violence– such as those who are already justice-system involved. One of the first RCTs with re-entering prisoners, the Transitional Aid Research Project (TARP), was carried out in 1976 in Texas and Georgia by the US Department of Labor (Rossi, Berk, and Lenihan, 1980). The TARP experiment gave people exiting from prison cash payments for up to six months or until they found a job. The cash payments were equal to roughly half of what people would have earned if they had been working. The study was also quite large by the standards of policy RCTs (over 4,000 people enrolled), which is important because the larger the RCT, the lower the risk of missing an effect that's there in reality (a 'false negative'). The TARP experiment showed no detectable impacts of these cash payments on recidivism rates for any sort of crime.[16]

These RCT evaluations predominately test the effects of *temporary* cash assistance after prison exit. Could longer-term income opportunities make a difference? To examine that question, economists have looked at what happens when people exit prison in different states and time periods where wages in place at the time are relatively more versus relatively less generous. Yang (2017a) found declines in violent crime recidivism associated with higher low-skill wages in the county of re-entry for individuals leaving prison. Hers is one of the few well-conducted studies in this literature that finds a reduction in recidivism rates for violent crimes like assault and robbery.[17] In contrast, Agan and Makowsky (2023) find that people leaving prison at a time when their state has a relatively higher minimum wage experience a reduction in property crimes, but not violent crimes. For people exiting prison into states that at the time provide relatively larger state-earned income tax credit 'top ups,' there was no statistically significant decline in property crime and, if anything, an *increase* in violence.[18]

B. Jobs Programs

[16] See also Berk et al. (1980). Mallar and Thornton (1978) examine a smaller-scale experiment of around 400 ex-inmates in Baltimore called LIFE, the inmates were selected to be at elevated risk for property (theft) crimes specifically, and the analysis focuses on recidivism for income-motivated crimes (robbery, burglary, auto theft, and larceny). They do find a reduction in these income-motivated crimes in their study.

[17] Private correspondence, Jens Ludwig and Crystal Yang, 10/4/2021. In a related paper, Schnepel (2018) evaluates the effect of relevant job openings at the time prisoners are released and find that individuals incarcerated for violent offenses are less likely to return to prison in when more construction and manufacturing jobs are available but is not able to estimate the type of crime that returns the released individual to prison

[18] Denver, Siwach, and Bushway (2017) find declines in arrests among health-sector job applicants with criminal records who received a clearance to work. These impacts are not broken out by crime type, but, in private correspondence (3/6/2024), Shawn Bushway noted that impacts were found for *both* property and violent crimes. While the study relies on a conditional independence assumption for identification, given the dearth of evidence for violent crimes, this intervention and result seems worthy of further investigation.

As noted above, in principle, jobs programs might have different effects from transfer programs because jobs may also create an incapacitation effect or change peer associations. Yet the pattern of results from jobs programs is qualitatively similar to that of transfer programs.

For example, an RCT of the New York City CEO subsidized job program for people coming out of prison found a hint of a reduction in minor crimes, but not violent crimes (Redcross, Millenky, Rudd, and Levshin 2012, Table ES.1). We say "hint" because the impact estimate is significant at only the 10% level and was one of 13 outcomes examined (with no multiple-testing correction made). Consistent with the idea that the New York City CEO results might have been a 'false positive,' a follow-up transitional jobs study, the Transitional Jobs Re-Entry Demonstration (Redcross et al., 2010), found no statistically significant impacts on any sort of crime.

Follow-up re-entry RCTs either find no effect on violent crime or do not examine recidivism impacts separately by crime type. Bollinger and Yelowitz (2021) show that intensive job-placement assistance reduces recidivism for ex-offenders who were imprisoned for a non-violent crime, but not for those who had been imprisoned for a violent crime, although the sample size is modest so the risk of a false negative is non-trivial. Cook, Kang, Braga, Ludwig, and O'Brien (2015) look at an intensive re-entry program in Milwaukee and find hints of a decline in re-arrest rates, but do not look at different types of crime. Rossman, Sridharan, Gouvis, Buck, and Morley (1999) look at the combined effects of employment with other services and find no effects on recidivism, although the sample size is modest. Uggen (2000) looks at data from the National Supported Work Demonstration program and finds a reduction in recidivism for offenders 27 and older, but not for younger ones, but does not seem to examine recidivism separately by type of crime. Studies of job training programs for ex-offenders could, in principle, be relevant, but unfortunately often have a combination of small sample sizes and weak research designs (e.g., Anderson and Schumacker 1986, Costopoulos, Plewinski, Monaghan, and Edkins, 2017).

C. Exceptions to the Rule

There are just a few exceptions to this larger pattern or rule that shed light on the underlying mechanisms that drive violent crime but don't overturn the larger conclusion that jobs or transfer programs are not strategies to generate large reductions in the crime problem.

One exception to the general pattern for jobs programs seems to come from giving jobs to *teenagers*. Many cities use lotteries to allocate teen summer jobs, given excess demand. Data from cities like Boston, Chicago and New York show reductions in violent crime of up to 50%.[19] Interestingly, the 'mechanism of action' through which summer jobs reduces violent crime by teens may not be mostly about reducing material deprivation, in the sense that the teens who experience the largest reductions in violence are *not* the ones who experience the largest economic benefits (Davis and Heller, 2020).

[19] See Heller (2014) for Chicago results and Modestino (2019) for results from Boston. Gelber, Isen and Kessler (2015) find that the youth summer jobs program in New York reduces likelihood of incarceration, as well as reducing mortality rates from external causes, such as homicide. Kessler et al. (2022) find a reduction in the New York summer jobs program for teens in felony crime arrests; the estimated effect on violent crime arrests is negative but not quite statistically significant, while there is a large (75%) statistically significant reduction in convictions for violent crime arrests.

A second exception is government subsidized health insurance. Jacome (2022) looked at what happens when people lose access to Medicaid, the government health insurance program for low-income Americans, using data from a state that makes people ineligible on their 19th birthday. Losing Medicaid causes involvement in every type of crime to rise, including violent crime, an effect concentrated among those with a history of mental illness. Several studies document declines in violent crime following the 2014 state-level Medicaid expansions (He and Barkowski, 2020; Vogler, 2020; Simes and Jahn, 2022). Deza, Lu, MacClean, and Ortega (2024) evaluate the impact of nearly 200,000 individuals losing health insurance coverage in Tennessee in 2005,finding higher property crime rates as well as a significant increase in assaults of around 20%. A different study found that an 8% increase in mental health providers reduced violent crime by 2.3% (Deza, Maclean, and Solomon, 2022).

A third exception comes from providing housing assistance to people experiencing homelessness. Palmer, Phillips and Sullivan (2019) evaluated the impact of emergency financial support received through a homeless hotline in Chicago. Whether someone calling a hotline for emergency help gets help depends on availability of funding that varies more or less randomly on a day-to-day basis. Those who call on higher-funding days and get help experience large reductions in violent crime arrests (on the order of 50%).

The final exception we note here is with respect to domestic violence. As predicted from household bargaining models, Aizer (2010) found declines in domestic violence from improvements in labor market opportunities for females in the US. It also appears that layoffs and a lack of unemployment support for men can increase domestic violence. Rose (2018) links administrative earnings records to arrests for a population of 340,000 criminal offenders in Washington State and finds an increase in arrests for domestic violence following job loss. Rose (2018) also finds a protective effect of unemployment insurance with regard to violence in the household.[20] This relationship also extends to child maltreatment—Lindo, Hansen and Schaller (2018) find declines in reports of maltreatment with improved labor market opportunities for males. However, they find *increases* in child maltreatment when more females go to work highlighting a higher risk of abuse during time spent with male caregivers. For income transfers, such as welfare or food stamps, mechanisms such as increases in drug and alcohol abuse along with conflict over limited resources can lead to increases in violence within a household when benefits arrive (Hsu, 2017; Carr and Packham, 2021).

What are we to make of these exceptions to the rule?

One hypothesis is that some of these jobs or transfer programs operate through a *human capital* channel. That hypothesis is consistent with the fact that teen summer jobs don't reduce violent crime the most for those who benefit economically. (Why jobs might generate bigger human capital effects for teens than for adults would be an important question for future research to

[20] Research outside of the US also finds significant relationships between income and domestic violence. For example, Haushofer et al. (2019) find large declines in domestic violence associated with income transfers to females as well as males. In a recent working paper, and Bhalotra et al. (2021) find increases in domestic violence after job loss for either males or females within households in Brazil. See Ferraz et al. (2022) for other findings outside of the US context.

explore). This hypothesis is also consistent with the Medicaid findings if one is willing to count health, specifically mental health, as part of human capital.

A second hypothesis is that resources can be particularly useful in preventing violence if they keep people out of the most extreme situations. For example, people experiencing homelessness are particularly vulnerable to predation and are at a heightened risk of having to resort to violence to defend their space, property, and personal safety. For people in relationships with a high risk of intimate partner violence, resources could be particularly important for either party to be able to leave and change their housing situation. That may be important for both offending and victimization, recognizing that in many of these cases, the distinction can be blurry between the two (as can the distinction between offending and self-defense).

But it is not clear these exceptions change the larger rule, given that these specific sub-populations or extreme situations do not seem to drive the serious violence problem. Consider murder, the best-measured violent crime. Teens (under 18) account for 9.2% of all murders in the US.[21] (The figure for Chicago is even lower: 7.1% for murders). Domestic violence is a critically important public health problem but accounts for around 10% of murders in the US each year (Smith 2022). Crime by the homeless or mentally ill is also an important social problem, but together, they seem to also account for just a modest share of the country's most serious violence.

D. 'Macro' Evidence

One way to see that the exceptions to the rule don't overturn the rule is to look at what happens to changes in macroeconomic conditions–changes in the overall population-level income or employment rates. If the types of violence affected by income and jobs are a sufficiently important part of the overall violence problem, we should see population-level violent crime rates change in response to macroeconomic conditions. But that is not what we see.

One study by Bushway, Cook and Phillips (2013) looked at what happens to crime during every business cycle since 1933 (see also Cook and Zarkin, 1985). The "poverty causes crime" hypothesis suggests that during recessions, when the economy gets worse, crime should go up. They find that income-motivated crimes like robbery and burglary do indeed go up, as expected. But there's no consistent change in murders.

A different strategy is to compare crime rates across states over time as they experience different economic trends. States experiencing economic downturns, if anything, experience relative *declines* in murder rates (Ruhm 2015). That's the opposite of "nothing stops a bullet like a job." The leading explanation for this finding is that when people have less money in their pockets, they interact with fewer people because they're going out in public less (fewer trips to bars, restaurants, concerts, etc.) and they're also drinking less. One influential paper in this literature is titled, "Are recessions good for your health?" (Ruhm 2000).

The same conclusion holds from studies that have a clear source of identifying variation in local economic conditions. When a casino opens on an Indian reservation as in Akee et al. (2010),

[21] https://cde.ucr.cjis.gov/LATEST/webapp/#/pages/explorer/crime/arrest

relative to those who don't get any cash payments from the new casino revenues, those who do have lower rates of involvement with minor crimes but not with violence. Freedman & Owens (2016) compare places that were selected by the military as locations to build a new base with places that were not selected; selection boosts local economic development but does not yield detectable effects on murders. Raphael & Winter-Ebmer (2001) look at what happens when some places get big defense contracts, or when oil prices change in ways that affect oil-rich areas more than other places. Lower unemployment rates again seem to increase murder rates. Gould, Weinberg and Mustard (2002) finds a strong connection between wages and property crime in the US but no significant impact on the costliest of violent crimes such as murders and rape.

A few recent studies evaluate changes in crime following positive local economic shocks due to a rapid expansion in natural gas production in shale-rich areas of the United States. These shocks are complex as they typically bring a lot of young men to work in rural areas. The result seems to be *increases* in both property and violent crime (but a non-significant impact on homicide) associated with the fracking boom in shale-rich counties (James and Smith, 2017). Street (2023) isolates impacts of the fracking boom on existing residents whose labor market opportunities dramatically improve using data from North Dakota and finds declines in property and drug crime among residents, but no evidence of any impact on violent crime.

A historical example comes from perhaps the biggest natural experiment in the history of American social policy: the New Deal, which increased social relief spending in US cities from $1.54 per person in 1930 up to $21.75 by 1940 (Fishback et al., 2010). (That's about $480 per person in 2023 dollars). But that New Deal money wasn't spread evenly; more of it wound up going to places where, historically speaking, people tended to be more reliable voters for Democrats. Every extra $66,000 in relief spending (in 2000 dollars) prevented one property crime. But getting more New Deal funding had no detectable effects on homicides.[22]

5. **Discussion**

Our review of the best available empirical evidence suggests that jobs and transfer programs reduce property offending but not serious violent crimes–and, hence, have greatly attenuated impacts on the total social costs of crime, which are driven by serious violence.

One way to make sense of these results is to note that most violent crimes, aside from robbery, do not seem to be motivated by economic considerations–they are instead crimes of passion, including rage. Another way to make sense of these results is to note that economic conditions have multiple potential mechanisms on crime, including several that operate in countervailing directions. For example, better economic conditions change the benefit-cost calculation for crime under the usual rational-choice, Beckerian model of crime. But better economic conditions also lead to greater use of mood-altering substances like alcohol, which are normal goods (in the

[22] In fairness the elasticity of murder with respect to relief spending is not that different in size overall compared to the estimated elasticities for property crime (Fishback et al., 2010, Table 2), the main difference being that the murder elasticity is estimated less precisely. But if we look at things not in elasticity terms but standard deviation units (focusing on the point estimates themselves not the standard errors here), a one-standard deviation increase in relief spending reduces property crimes by 0.275 standard deviations but by only 0.076 for murder.

economic sense of the term–higher income leads to more consumption), as does going out and socializing in public, which also increases social interactions that might lead to conflict.

Note what these results can and can't tell us. It's possible that *much* larger, massive changes in income could have different effects. This sample of studies can't speak to that. But we would mention, as an aside, that arrest rates among NFL players ($2.7 million is a frequently mentioned average salary) are lower than among the general population for property crimes, but that's not true for violent crimes (Leal et al. 2015).

Taken together, the best available data and evidence suggest that economic conditions contribute importantly to property crime but are not the key driver of the crime problem itself–that is, of violent crime. The things that matter for violence seem to be *correlated* with income poverty but are not the same thing as income poverty.

To see this, examine the pattern across Chicago neighborhoods (Figure 2). Every rich neighborhood is safe. And every one of the high-gun-violence neighborhoods is poor. But there is enormous variability across low-income areas in their rates of gun violence. We see a similar pattern across countries (Figure 3): Almost every rich country (except the US) is quite safe with respect to their murder rates, while all the most unsafe countries – Mexico, Brazil, Nigeria – are quite poor. But it's *not* true that every poor country is dangerous. With respect to violence, poverty is not destiny. Something else is clearly going on.

If anything, the evidence seems to be at least as strong for the *reverse* relationship: Uncontrolled violence exacerbates poverty and joblessness. Exposure to community violence harms children's schooling outcomes and the mental health of both parents and children (Sharkey, 2018). In addition, Cullen and Levitt (1999) show that in terms of relative population growth across cities, every extra UCR part 1 offense reduces a city's population by one person. Each extra murder specifically reduces the population on net by *fully 70 people*.[23] Local economic development is hard when people and businesses are fleeing to safety. The flip side is that anything that helps control violent crime problem can be a massive tailwind for community development efforts.

From a policy perspective, ours is a disappointing conclusion because with respect to root causes, economic conditions is the root cause the government is best at solving. Many root causes, such as income segregation or racial segregation, have proven very resistant to policy intervention. But the government is *really* good at writing checks. While the official poverty rate hasn't changed much over the past 50 years, measures that better count the resources people have available to them and better adjust for inflation show that poverty has become *much* less common, perhaps dropping by as much as one-half over the past 50 years (Han et al., 2022).

Let us clarify what we are and are not saying.

Nothing we say here is to argue against policy efforts to reduce joblessness or poverty. Those are obviously important for their own sake. Crime reduction is one important goal for policy, but only one goal. Improving people's material well-being is itself clearly also a key policy goal.

[23] Steve Levitt and Julie Cullen were kind enough to redo their calculations for murder specifically for the Cook & Ludwig (2000) book.

Our argument instead is that those policies by themselves might lift people out of poverty but do not *also* achieve the *secondary* benefit of reducing the socially costliest type of crime (violence). If we wish to reduce the burden crime imposes on society, a burden that falls disproportionately on the most economically disadvantaged Americans, jobs and transfer programs won't by themselves be enough–additional policies will be needed beyond that.

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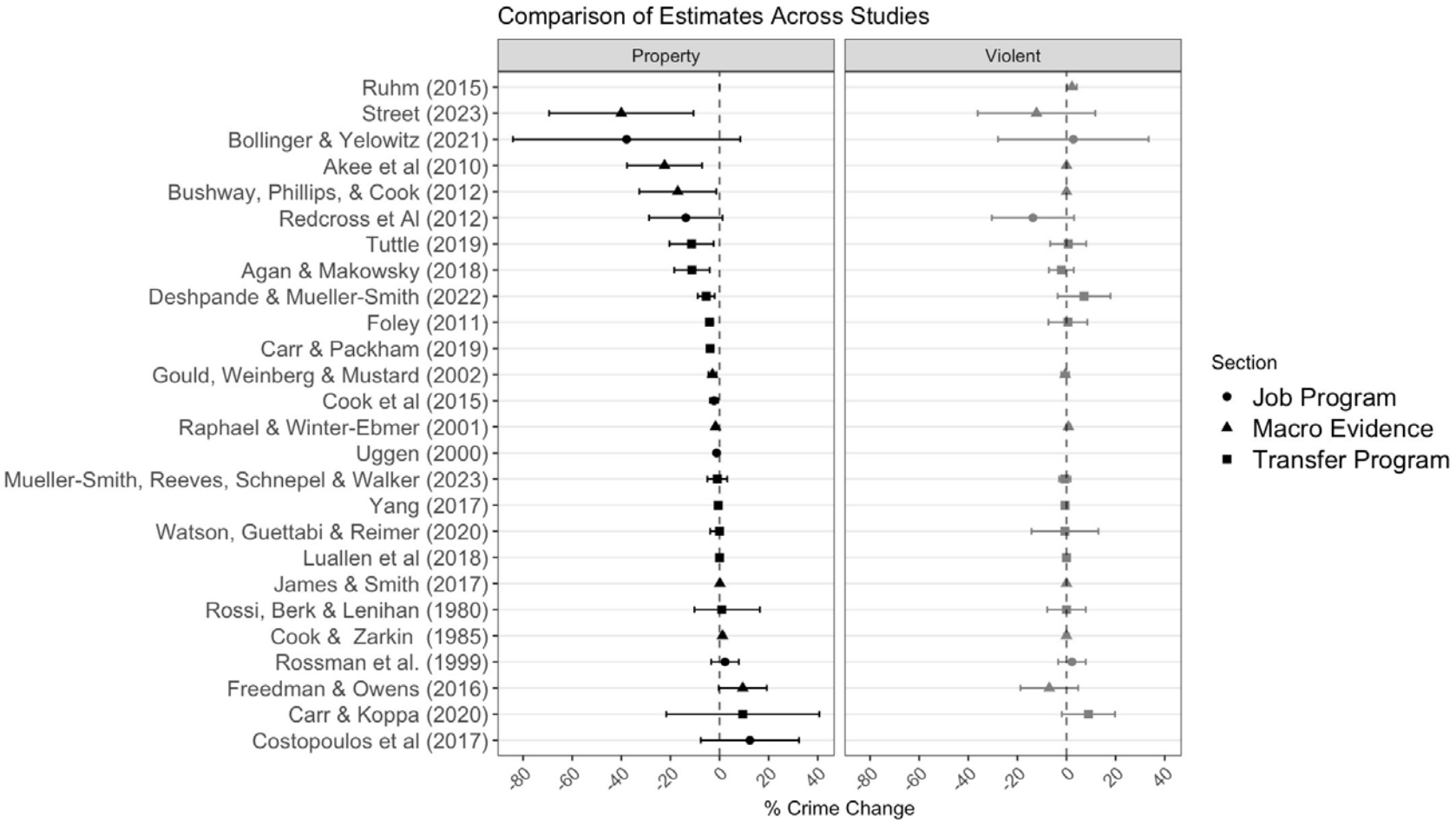

Figure 1: Summary of studies relating macroeconomic conditions, jobs programs or transfer programs on property and violent crime

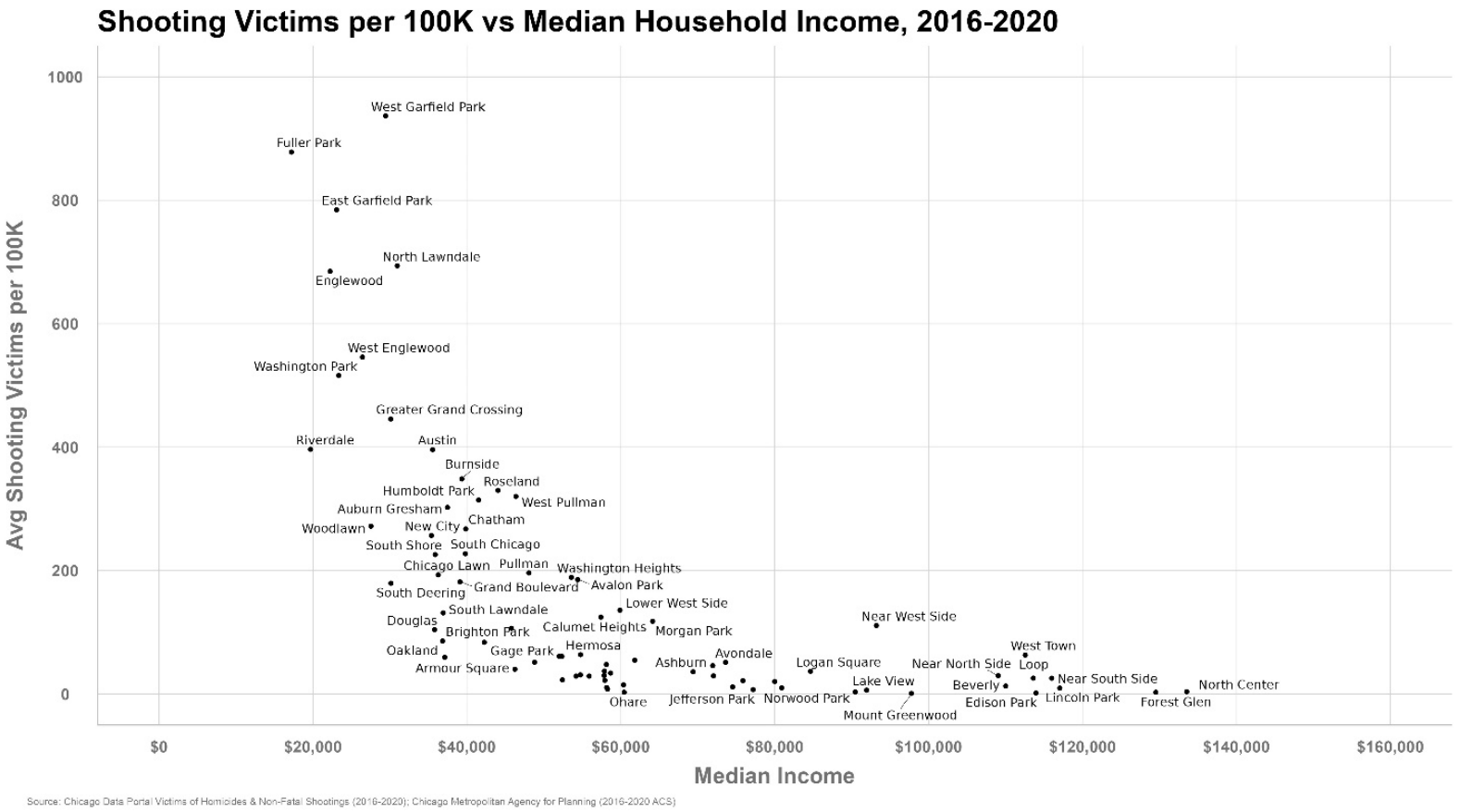

Figure 2: Shooting victims per 100,000 neighborhood residents for Chicago's 77 community areas ("neighborhoods"), related to each community area's median household income

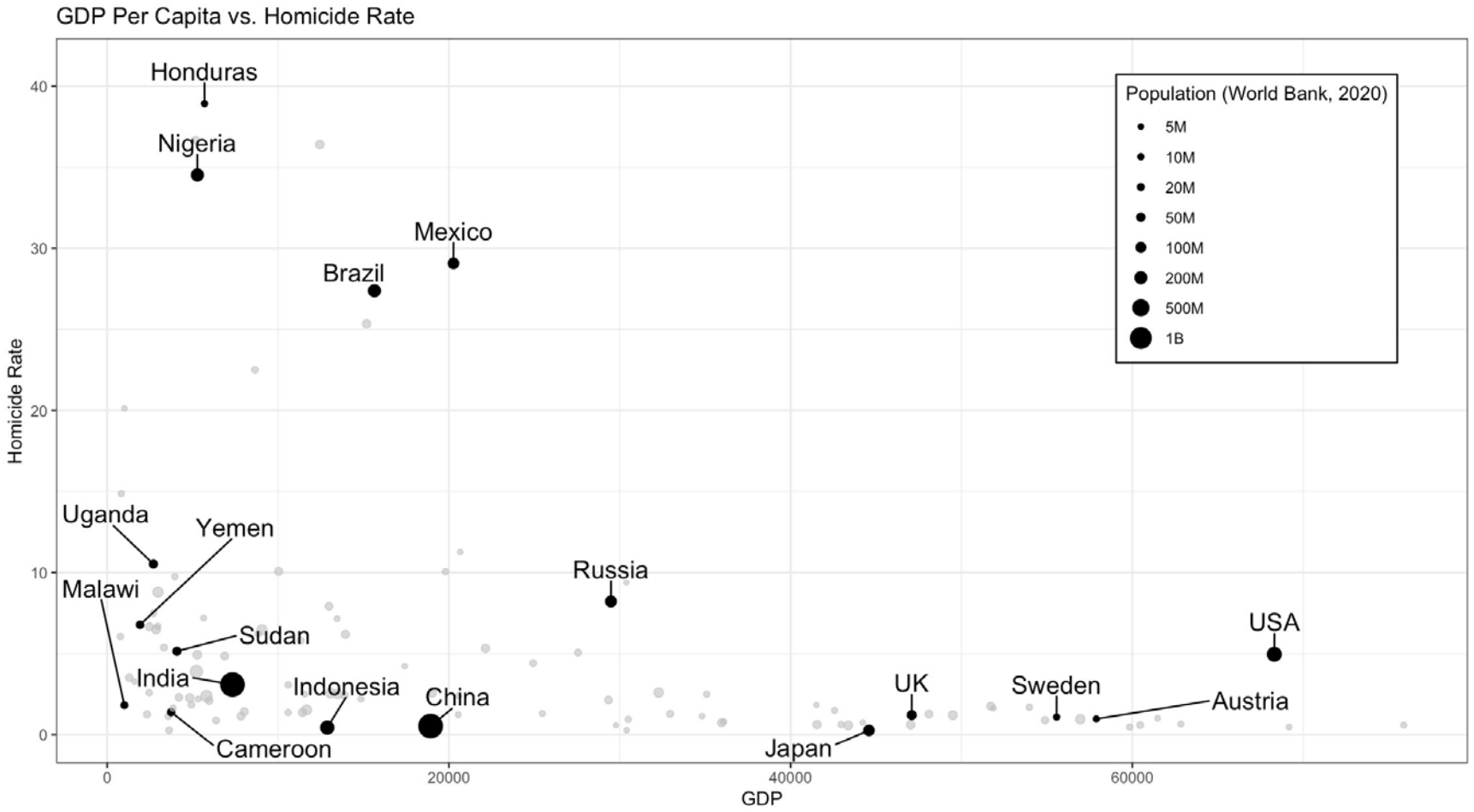

Figure 3 Homicide rates per 100,000 residents for selected countries plotted against Gross Domestic Product (GDP) per capita (adjusted for purchase power parity