

Review article

PRISONOMICS: LESSONS FROM AMERICA'S MASS INCARCERATION

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Vicky Pryce, *Prisonomics: Behind Bars in Britain's Failing Prisons*. London: Biteback (2013), 336 pp. ISBN: 9781849546225 (hb, £16.99).

In *Prisonomics* Vicky Pryce, an economist and former Joint Head of the United Kingdom's Government Economic Service, identifies many of the costs associated with prison use. Prisons are more costly than alternative punishment and treatment options that are used in the community (p. 245). She contends that incarceration makes inmates more likely to reoffend than do community sentences and treatment, creating additional costs in the future.

Incarcerating women, in particular, increases the social cost of prisons because someone has to pay to take care of the children, and furthermore, when mothers do not care for their children personally, the kids are more likely to become offenders in the future (p. 245). She also suggests that investing in alternative schemes, such as offering greater access to education and employment opportunities, would have a greater impact on controlling crime. To the extent that her estimates are correct, prison use represents the taking on of a large fiscal outlay and forgoing more efficient, alternative approaches.

Pryce is correct to argue that we should be open to alternative programmes to influence crime rates; and reducing the use of prisons, naturally, will reduce the expenses associated with imprisonment. However, this leaves out an important part of the issue: the benefits that prison use generates. If prisons provide net benefits, then it is efficient to continue to bear these costs.¹

This is a key issue for all developed countries. Pryce has received a good deal of publicity for her assessment of British prisons, following her own incarceration for two months in 2013 after being convicted of perverting the course of justice. In this review, I explore the issue further by drawing on the experience of the United States.

Prison growth in the United States

No other country puts people in prison at the rate and level that the United States does. There are approximately 2.2 million people in American prisons and jails (see Figure 1). To give some perspective, there are more prisoners than the combined number of American doctors, lawyers, and clergy members (Useem and Piehl 2008, p. 2). If US prisoners constituted their own city, it would be the fourth largest city in the US or the fifth largest city in Europe, exceeding the populations of Paris, Bucharest, and Vienna. If they were their own country, it would be larger

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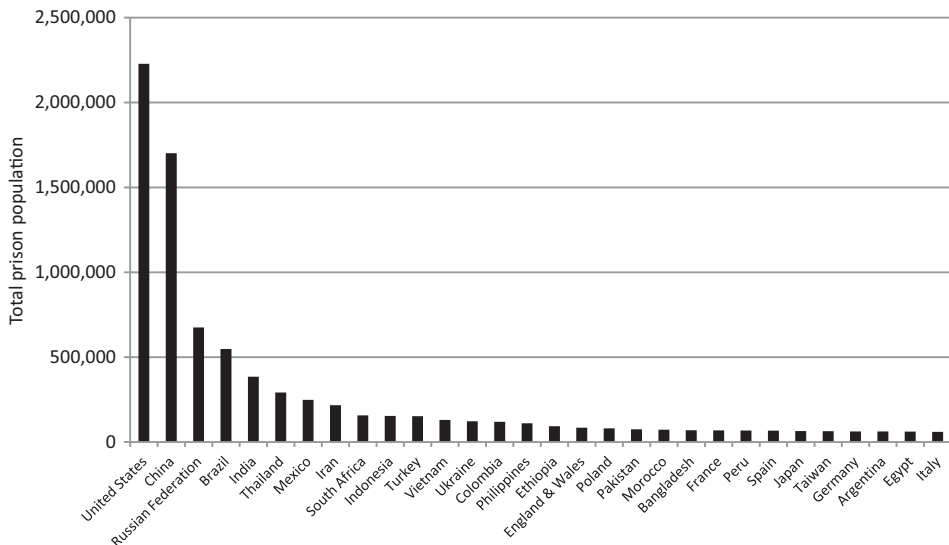


Figure 1: Top 30 countries by prison population size, 2014.
Source: International Centre for Prison Studies (2014b).

than 100 of the 243 countries and dependent territories in the world, and larger than the smallest 50 combined.

The large size of the prison population is not simply due to the size of the American population. The US incarcerates people at the highest rate, too: 707 out of every 100,000 residents (International Centre for Prison Studies 2014a). The average incarceration rate across Europe is a comparatively paltry 140 out of 100,000 residents, with the rate of incarceration in 19 countries (including Austria, the Republic of Ireland, Switzerland, and Germany) in only the double digits. This exceptionalism extends beyond comparisons with Europe. According to official reports, there are 530,000 more people in American prisons than in Chinese ones, despite the fact that China has roughly a billion more residents. In 2008 one out of every 100 American adults was in either jail or prison, and one out of 31 adults was either incarcerated or on probation or parole (Lerman 2013, p. 3). The picture grows even grimmer when we examine who goes to prison, because the population is heavily biased against people from minority ethnic backgrounds. For example, one in every nine young black men and one in every 14 young Latinos are incarcerated (Lerman 2013, p. 4). No other country on Earth approaches the amount and rate of incarceration that currently exists in the United States.

Despite the level of mass incarceration in the US today, it is a relatively recent phenomenon. In the early 1980s the US incarceration rate was similar to the rate that currently exists in England and Wales, about 148 per 100,000 residents. However, the US incarceration rate began to increase substantially after that time. There is much debate about what caused the boom in prison growth. The most important reasons for it seem to include mandatory and minimum sentencing requirements, an increasingly punitive shift in public opinion, prosecutors' greater frequency of filing felony charges, special interest lobbying, and the drug war (Pfaff 2007, 2011; Useem and Piehl 2008; Page 2011; Lerman 2013, pp. 24–36; Enns 2014; Travis,

Western and Redburn 2014).² Prison growth has come with a substantial price tag, as American corrections costs roughly \$80 billion per year (Kearney et al. 2014, p. 2).

What are the benefits of prison use?

What benefits do prisons bring? The most obvious possible benefit is that prison use lowers the crime rate. Prisons can contribute to crime control through several possible mechanisms. Rehabilitation helps former offenders to resist reoffending after release. Deterrence reduces crime by discouraging people from committing crime in the first place. Incapacitation reduces crime simply because people can't commit (as many or as varied) crimes while they are incarcerated.³ While there is much debate in the economics literature about the relative importance of these mechanisms, there is consensus that there is an aggregate, negative relationship between the incarceration rate and the crime rate (Levitt 2004; Travis, Western and Redburn 2014, p. 4). To the extent that prison use diminishes crime, this is a benefit that should be set against the costs of prisons.

The available evidence shows that prisons do reduce crime, but there are important constraints on how, how much, and in what ways it does so. First, the marginal benefit of increasing the incarceration rate from low levels is initially positive, but it diminishes with greater use. When the incarceration rate increases from a low level, the people most likely to be arrested and sent to prison are those who commit crimes the most often. Because high-frequency offenders are the most likely to be caught, removing them from the community leads to a large decline in crime. As the incarceration rate increases, the marginal offenders are less criminally active, meaning that the number of crimes the marginal offender would have committed if not locked up declines as well. There is also some evidence to suggest that, beyond some point, increasing the incarceration rate can actually contribute to more crime. One study examines incarceration rates by states in the US, and finds that after the incarceration rate exceeds 325 per 100,000 residents, the relationship becomes positive (Liedka, Piehl and Useem 2006).⁴ More prison use leads to more crime.

Several mechanisms might generate this positive relationship. Post-release offenders have difficulty finding legitimate employment, which probably increases subsequent likelihood of criminal offences (Western, Kling and Weiman 2001). When parents go to prison, children are often subject to a less desirable and less stable home life, which Pryce (pp. 247–9) argues is a major cost of incarcerating females in England (see also Rose and Clear 1998). Prison affords the opportunity for an offender to learn from, and network with, other offenders. The idea that prisons are 'schools for criminals' is certainly present in anecdotal and personal accounts. John Hoskison (2013), writing (like Pryce) about his own incarceration experience in the UK in his book *Inside: One Man's Experience of Prison*, describes prisons as breeding grounds for addiction and for developing illicit job 'training'. Consistent with this, studies find that incarceration is associated with increased future illegal earnings (Hutcherson 2012). Moreover, studies using a quasi-experimental design have found that people who are incarcerated with more serious offenders are more likely to commit more and more serious crimes in the future (Bayer, Hjalmarsson and Pozen 2009; Drago and Galbiati 2011). Amy Lerman (2013) describes this as 'the modern prison paradox'. The prison system is designed to make society safer (and perhaps to rehabilitate inmates), but when people leave prison they are in many respects a greater danger to society. Having more contact with the criminal justice system is also

associated with less civic engagement, less trust in government, and less frequent voting (Weaver and Lerman 2010). The first lesson from the American experience, therefore, is that prisons can reduce crime, but there are limits to its effectiveness.

A second important lesson about prison use is that not all punishments are made equal. Early work in the economics of crime assumed that offenders respond to the expected cost of punishment, that is, the probability of apprehension multiplied by the severity of the punishment (Becker 1968). If this is the case, then law enforcement officials can economise on resources by reducing the probability of apprehending offenders (for example, by putting fewer police on the street) and simply increasing the punishment received by an equal or more than proportional amount. However, this contradicts both the conventional wisdom among judges and legal professionals today and even the very earliest work on the economics of crime by the great Italian economist Cesare Beccaria (1765). Criminals, in fact, are much more sensitive to the probability of apprehension and punishment than to the severity of the punishment. This suggests that spending scarce criminal justice resources in ways that increase the probability of apprehension will generate more crime control than spending on prisons. This is also consistent with econometric studies showing that we can buy more crime decline with police than with prisons (Levitt 2004, p. 179). As legal scholar William Stuntz (2011, pp. 278–9) summarises, ‘The lesson of the 1990s is that, given our already swollen prison population, the most cost-effective crime-fighting strategy is putting more police boots on violent city ground, not putting more criminals in prison cells’.

Severe punishments, like the lengthy prison sentences found in many minimum and mandatory sentencing guidelines, also undermine the swiftness of punishment.⁵ When an offender faces the possibility of a lengthy sentence, the legal proceedings become much more costly, involve more people, and last longer. The fact that the stakes are so high requires this amount of attention to detail and procedure. Arguably, these extensive procedures are required under a rule-of-law system. However, they undermine the swiftness of punishment, which reduces its effect as a deterrent. Shorter sentences and non-custodial sentences (such as home confinement) require much shorter legal proceedings. Less severe punishments are therefore swifter, to which offenders, in turn, are more responsive. In sum, this research suggests that the legal maxim that ‘justice delayed is justice denied’ can be usefully reformulated as ‘punishment delayed is deterrence denied’.

There is a third, related, way in which prison is limited in its ability to reduce crime rates. The limitation arises from the fact that people who commit crimes typically discount the future at higher rates than do law-abiding people. As a result, the marginal effect of crime reduction diminishes as the term of prison sentences increases. For example, the tenth year of incarceration reduces crime much less than the first year. The (potential) offender already heavily discounts the cost of imprisonment relative to the benefits realised today. Edward Glaeser (1998, p. 3) explains, ‘crime seems to offer immediate rewards, and the costs of crime, especially lengthy prison sentences, are paid for only over time’. This again suggests there are serious limitations on the extent to which we can buy further crime control by enacting harsh prison sentences.

The experience of American prison growth has provided many opportunities and much data to understand how, and how well, prison use affects crime rates. Pryce (p. 244) argues that the UK Ministry of Justice needs to make drastic expenditure cuts and that prisons are a prime target for them. Yet this should be done only if the costs diminish more quickly than the

benefits. What the US experience shows is that the benefits of prison use are quite real, but limited. Moreover, lengthier sentences that take longer to implement deter less crime than do swift and certain punishments.

The problem of prison gangs

Pryce's book touches on the informal ways in which prisons operate. But there is nothing in her account which replicates the exceptional informal communities that have arisen within US prisons. I argue in my book *The Social Order of the Underworld* (D. Skarbek 2014) that ethnically based prison gangs govern the inmate community. Prison gangs are inmate organisations that operate within a prison system, have a corporate entity, and exist in perpetuity; their membership is restrictive, mutually exclusive, and often requires a lifetime commitment. The US is the only developed country in the world where prison gangs have so much power over inmates' daily lives, although other countries may have similar tendencies. There is an important link between prison growth and the growth of prison gangs (Skarbek 2012, 2014). To understand why, we need to examine the degree to which inmates have realms of autonomy, even while incarcerated.

Erving Goffman (1961) famously described prisons as 'total institutions', but the reality is that even the best-run correctional facilities cannot control the emergence and importance of many inmate activities and relationships. Clearly, when one walks into a jail or prison, the existence of formal governance institutions is obvious. There are guards monitoring people's activity. There are often large walls, razor wire, and cameras. There are bars that keep prisoners locked in their cell. It would be easy to think that these formal rules establish order and that no activity can take place outside of them. However, as Pryce, Hoskison (2013), and many other personal and academic accounts demonstrate, inmates have a significant arena in which to operate outside of formal rules (Sykes 1958; Irwin 1980; Blatchford 2008; Mendoza 2012). Guards are not always watching. Blind spots exist in even the most modern prisons. Guards cannot see everything that transpires on large, crowded prison yards. As one former inmate in California describes it bluntly, the guards 'can't see half the shit that goes on. They don't know dick about this stuff. We knew exactly where to go to fight and how to get away with it' (Trammell 2011, p. 22). Except in the most restricted and isolated confinements (which have been mostly deemed unconstitutional in the US), there will be a sphere of extralegal activity.

In this extralegal sphere, inmates have a desire to increase their safety and the security of their property and to gain access to illicit goods and services. In the free world, we can rely on formal, established, and effective institutions to provide the governance that defines and enforces property rights and provides the foundations for exchange in the form of assurances and adjudication of disputes (Dixit 2009). Inmates often cannot rely on formal governance institutions. For example, a prison guard cannot officially resolve a dispute involving an inmate's prostitution business, or between inmates who disagree about the quality of heroin or marijuana. The illicit nature of these interactions prevents resort to formal institutions. In today's American prisons, gangs have emerged as the major source of self-governance that facilitates social order.

In California, the basic structure of the inmate community requires that each inmate associate with a gang and that all members of a gang are responsible for each member's actions. This provides incentives for people not to act opportunistically. Consider, for example,

the case of buying drugs on credit, a common illicit transaction in prison. A member of the Nazi Low Riders gang, for instance, might buy drugs on credit from an inmate drug dealer with the promise to repay twice the amount in the following week. If he fails to do so, then all members of the Nazi Low Riders will be held to account for the debt. The gang members may choose to pay the debt for their associate, force him to work off the debt (perhaps by assaulting one of the drug dealer's enemies), hand him over to be assaulted in a controlled manner, or assault their own member to the satisfaction of the drug dealer's gang. An inmate at California State Prison at Corcoran explains the relationship between illicit activity and gang membership (note that, here, 'race' is prison jargon for one's ethnic and gang-based affiliation). He says,

It was my responsibility on the yard to ensure that . . . our people were not harmed by another race. I took care of the drug debts. If one of our people became delinquent in a drug debt to another race, it was my responsibility to either cover their drug debt or have them stabbed. In which case, we would send one of ours to stab him. (MSNBC 2005)

Gangs have an incentive to hold their members accountable in order to maintain their standing, respectability, and credit in the prison community.

According to prison officials in California, prison gangs play a major and dominant role in inmates' lives. In fact, even a new inmate who does not wish to affiliate with a prison gang might have little choice. As one correctional officer explains, 'When you come to prison, you have to join a gang. You have no choice. If you don't join a gang, you'd better pack up. Go into the sergeant's office and tell him you're ready to leave the yard. Because there's just no options. You have to be in a gang' (MSNBC 2005). This level of gang activity is not observed in the prisons of other developed countries. Moreover, and significantly, this has not always been the case in American prisons. In fact, prison gangs did not emerge in California until the late 1950s and early 1960s – more than a century after the prison system began operating. Throughout the United States, gangs emerged as late as the 1970s and 1980s in many states. If gangs are so important today, then *why didn't they exist in earlier periods?*

Prison gangs are highly effective at facilitating impersonal exchange. A drug dealer need not know how reliable a particular drug consumer is if he knows how trustworthy that inmate's gang is. As long as the gang will be accountable for its members' actions, then impersonal exchange can flourish. Gangs are the efficient form of social organisation, given the current size of the prison population. However, these demographics look remarkably different from those that existed prior to the time that prison gangs emerged. At that time, prison populations were relatively small. It was easy for inmates to learn about the reputations of other inmates. In small populations, reputations are easily communicated, so opportunistic behaviour (like reneging on one's debt) can be punished through ostracism and boycott. Bilateral and multilateral punishment schemes have proven effective in small populations, as evidenced in self-governance studies of Orthodox Jewish diamond merchants in New York (Bernstein 1992), the Maghribi traders in the medieval Mediterranean (Greif 1989), and the Hawala international money-transfer system (Schaeffer 2008). In small, homogeneous populations, decentralised governance is effective.

Prior to the rapid increase in the prison population, inmates could interact in illicit markets where people and reputations were known fairly well. Prison growth undermined this. Inmates could not keep track of people and their past behaviour, so gangs emerged to fill the need.

Therefore, it is not by coincidence that the US has both the largest prison population and the most serious prison gang problem. The former has a direct influence in creating the conditions that give rise to the latter.

Prison gangs' rise to power offers several lessons for the UK and other developed countries' prison policies. First, larger prisons and larger prison populations foster an environment in which inmates turn to gangs for protection and governance. Scaling up the use of prisons will increase the importance of the extralegal sphere within prisons. As populations grow, inmates will turn to more centralised and sophisticated organisations to provide the governance that inmates desire. Prison gangs are experts at filling this governance vacuum. In addition to putting power into the hands of gang members, these gangs also undermine efforts to rehabilitate inmates. As John Hoskison (2013) vividly shows, going to prison means adapting to an entirely new way of life. Like inmates in California, it is difficult to avoid becoming entangled in these entrenched criminal networks. If we desire prisons to rehabilitate inmates, then prison use should not create the conditions that give rise to prison gangs.

A second lesson to take away from the American experience with prison gangs relates to the effectiveness of highly restrictive housing units, of which the US has made substantial use. The degree of restriction varies and is known by several names, including administrative segregation, secure housing units, and Supermax. Inmates in these units are often housed alone and have no physical contact with other inmates or staff. It is also common for them to have only one hour per day out of their cell, during which each can exercise alone in a small area. Officials have explicitly designed these housing units to suppress prison gang activity. Nevertheless, as the case of California shows, they have failed. Despite their extensive use, it has not led to any decline in the importance of gangs throughout the prison system. The reason for this is that it ignores the fact that inmates actually have a demand for gangs. Inmates need gangs to provide extralegal governance, so when one gang is sent to a Supermax housing unit another emerges to meet inmates' needs. Supermax housing is effective at deterring assaults against staff, but as a tactic for suppressing gangs it has failed. It targets the suppliers of governance without removing the needs that give rise to inmates' demand for governance. To the extent that other countries wish to adopt this aspect of the American prison system, they should do so only in ways and for reasons that have proven effective.

Ideas for reforming prison

Establishing law and order is one of the most common tasks that people assign to governments. And like all government institutions, criminal justice policymakers have to meet the fundamental challenge of accomplishing this goal in the face of both imperfect information about what is efficient and imperfect motivation on the part of government actors. Effective criminal justice institutions should be robust to these realities, performing well even when the world deviates from the ideal conditions economists often assume (Leeson and Subrick 2006; Pennington 2011).

The first major problem facing policymakers is that governments lack access to a price mechanism to direct their use of resources. How many resources should be devoted to prisons versus other criminal justice activities? How many resources should be devoted to criminal

justice instead of education or the environment, or left in private hands? Solving the economic problem is difficult, if not impossible. As F. A. Hayek (1945) and Ludwig von Mises (1920) famously argued, central planning cannot solve the problem of economic calculation. In the absence of property rights, exchange does not generate meaningful market prices. With no market prices, there is no information about how to use resources most effectively given constraints.

Incarceration lacks the fundamental characteristics of exchange. Law enforcement officials and perpetrators do not voluntarily agree to terms of incarceration. These ‘transactions’ are not wealth-generating and do not make both parties better off. There is no price emerging from these interactions. Government resources lack a clear residual claimant, so the signals produced in these processes do not meaningfully reflect resource constraints and the preferences of the public. Profit and loss signals for prison wardens do not correspond closely with whether they are economising on resources to produce the best prisons, and, even so, wardens lack the authority to close down a prison and reallocate resources to alternative uses. Despite their name, this is also nothing ‘private’ about private prisons. Like state-run prisons, they do not respond to market prices in determining who to lock up and for how long. There is no competition from consumers. The hallmarks of effective market activity – the reason why many economists favour markets – are absent.

If prisons are to be used, then, is there a way to make them more effective in light of these challenges? Several innovative proposals might be capable of improving prison use. First, legal scholar Alexander Volokh (2011a,b) has suggested the implementation of a prison vouchers scheme, akin to school vouchers. Each inmate would have the ability to choose at which prison he or she would be incarcerated. Different inmates benefit from different programmes, including educational, vocational, or religious services. Under a voucher scheme, prisons could specialise in identifying what inmates want and providing these services. Vicky Pryce’s vivid account suggests that in some female prisons there is no matching at all between inmate needs and programme availability. Vouchers would help. Other inmates prefer to be close to family and loved ones. Some inmates desire to live among inmates who share the same religious lifestyle and dietary requirements. Others prefer a focus on drug-free living and access to twelve-step programmes. If prison officials are compensated, at least partly, by their ability to attract inmates, then vouchers provide a possible improvement to the current mismatch between inmate needs and programme availability.

A second problem facing prison administration is aligning the motivation and incentives of officials with the desired public policy goals. Even if officials know how to administer prisons more effectively, for instance by matching inmates with the best programmes or facilitating rehabilitation, this will not necessarily lead to improvements if officials lack the incentives to implement them. One way to incentivise prison officials is to make their payment contingent on post-release behaviour by inmates. If we believe that prisons can rehabilitate inmates, then we should base wardens’ pay on recidivism rates. The fewer inmates who return to prison, and the more slowly this happens, the bigger will be the bonus. Employment contracts can link compensation to other factors that we care about, including clean drug tests, attendance at meetings with one’s parole agent, participation in drug-treatment programmes, and gainful employment. This would put increasing pressure on officials to figure out what inmates want and provide an incentive to respond to it. Pryce’s account of female prisons depicts many officials as unconcerned about, if not hostile to, inmates’ access to educational and work

programmes while incarcerated. If officials received bigger bonuses when inmates earned degrees or subsequently found jobs, then they would be more likely to help them do so.

Finally, there may be reason to think that prisons don't have to be operated by the state or contracted out to 'private' prison providers. Indeed, it is a false dichotomy to think only of the state versus the market (Cornuelle 1965). There may be an important role to be played by civil society – the third sector – in providing social services (E. Skarbek 2014). Guy Opperman, a Member of the UK Parliament, details the potential benefits of, and challenges to, such a scheme in his book *Doing Time: Prisons in the 21st Century* (2012). Charities in many countries effectively provide hospitals, hospice care, education, welfare services, and a host of other important social services. There seems to be no reason in theory why they couldn't capably provide prisons (or something like them) in a way that benefits inmates and society more generally. Of course, as with the previous two proposals, the details of the plan will determine their actual success or failure. For instance, in order for charitable prisons to work, inmates may need discretion over where they are incarcerated and what types of charitable organisations are qualified to provide such services. Competition and government oversight would also seem crucial.

Prisons are a blunt tool for solving an important problem, so an innovative society should be open to thoughtful experimentation with more nuanced methods of achieving desired ends. Criminal justice is, indeed, one of the most important issues in society. Although law and order is often provided privately (Benson 1990; Powell and Stringham 2009; D'Amico 2010), the state is clearly a major player in its provision in all developed countries. Given that the state plays such a role, we must rely on evidence-based research to guide policy. The American experience with mass incarceration provides many lessons. Increasing prison use reduces the crime rate. However, there are strict limitations on our ability to continue doing so at ever-higher levels. The likelihood of punishment deters more crime than do increases in the severity of punishment. Swift and certain punishments are more effective. Substantial increases in the prison population also give rise to the emergence of prison gangs, which undermine rehabilitation efforts and have other negative effects. Lastly, shaping the way that prisons operate – by harnessing feedback and decentralised monitoring mechanisms – may be able to improve prison conditions and their ability to rehabilitate offenders and control crime.

Notes

1. In addition, Pryce focuses on the average cost per inmate of prison use, but arguably the marginal cost of prison use is just as important, if not more so. Relatedly, the question of deterrence should not ask how the average offender would respond, but how the marginal offender would respond.
2. This relates to the broader issue of illegality, prohibition, and the often unintended consequences of outlawing particular goods and services (Meadowcroft 2008).
3. However, see Skarbek (2010, 2011) for a study of how prison facilitates some types of crimes.
4. This should not be seen as an objective threshold valid for all countries, but rather as evidence that at some level of incarceration the direction of the effect can reverse.
5. Mark Kleiman's *When Brute Force Fails: How to Have Less Crime and Less Punishment* (2009) provides a thoughtful analysis of the use of swift, certain, and fair policies.

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