



INN ISSUE BRIEF: Prison's don't work

Prisons are an ineffective, inefficient and inhumane way to make our communities safer. A large body of studies has examined the relationship between incarceration and crime. A review of the *highest quality* studies confirms there is no convincing evidence that the benefits of prisons outweigh their costs.¹ Despite more than a decade of decreasing crime rates in most of the world, there are continued calls from policy makers and society for tougher sentences and increased incarceration. This brief summarizes the evidence showing that imprisoning more people is not making us safer and is in fact causing more harm.

Incarceration and crime before, during, and after imprisonment. The before effect – sometimes called “general deterrence” - supposes that stiffer punishment may deter crime before it would happen. The effect during incarceration – also known as “incapacitation”- is proposed to reduce crime by taking a person who commits a crime out of circulation so they cannot commit more crime. Finally, the aftereffect – sometimes referred to as “specific deterrence” – assumes that people who have gone to prison are deterred from committing future crimes by “scaring them straight,” or teaching them job skills, or treating their addictions. Some important questions to ask are: what is the evidence that these three mechanisms do reduce crime? Does this work in all contexts globally? What are the costs, and do they outweigh the benefit? And finally, are there better alternatives? This brief examines some of these questions.

Studies on the effects of prison on crime include aggregate studies and experimental/quasi-experimental studies. The aggregate studies look at the association between crime and imprisonment rates across time and geographic units (states, countries, or communities) while controlling for a range of other factors (unemployment, inequality, policing practices, population change, change in wages, etc.). Although second-generation aggregate studies are better than their predecessors, several problems generally persist, including: 1) the inability to separate the effects of incapacitation and deterrence, 2) the inability to effectively distinguish between cause and effect.² Experimental and quasi-experimental studies can overcome some of these limitations. They examine the effects of a given intervention (i.e. longer prison sentence, custodial versus non-custodial sentences, etc.) on groups that received the intervention (treatment) and those that did not (control).

There is no clear relationship between imprisonment and crime rates at the global level. Countries with higher, or growing incarceration rates do not have lower crime rates. In many countries – the United States, Canada, Australia, and most European states – serious crime rates have been decreasing or stable over the last 20 years.³ The Latin American region, by contrast, has seen significant increases in crime over the same period. Yet nearly all these same countries have seen prison population increases.⁴ In fact, the number of incarcerated people per 100,000 inhabitants shows no strong relationship with levels of crime across countries. To the extent there is any relation, it is a positive one – slightly higher crime rates in



countries with higher incarceration rates.⁵ Prison rates have gone up and down in different countries in different years, but not consistently in line with crime rates. Research by Tapio Lappi-Seppala shows, for example, some countries' imprisonment rates move in line with crime rates (such as the USA, Denmark, Germany and Japan), while in other countries they move in opposite directions (such as in the UK, Italy, the Netherlands and New Zealand).

National studies show that the impact of incarceration on crime rates is minimal and diminishing.

Although the relationship is weak, some national aggregate studies find an association between increased detention rates and crime drops. For example, one study estimates increased imprisonment rates in Australia may have prevented up to 25% of new burglaries in the early 2000's.⁶ A number of studies show that incarceration may explain between 6 to 25% of the total crime drop in the United States between 1990-2000.⁷ Newer US studies, however, have added that beyond 2000 additional incarceration has contributed zero percent to further crime reduction.⁸ There are two important conclusions from these studies. First, incarceration rates are estimated to explain only a small fraction of crime reductions. In the US example 75-100 percent of the overall crime reduction since 1990 can be explained by other factors.⁹ Secondly, there is a diminishing return - each additional person incarcerated has a smaller and smaller impact on crime rates, until reaching zero.¹⁰

Incarceration has little to no effect on violent crime. The weak association between increased incarceration and lower crime shown in some aggregate studies in the United States is limited to property crime.¹¹ Several studies have shown no association between incarceration rates and violent crime.¹² The explanation offered is that incarceration rates have primarily increased by imprisoning larger numbers of people accused of nonviolent, drug and low-level property crimes. Thus, it is not surprising that increasing incarceration rates in this way does not reduce violent crime.¹³

Harsher punishment does not deter crime. The idea of "general deterrence" is that the prospect of prison may dissuade people from committing crime. By extension, some policy makers have reasoned that more severe and lengthy sentences, mandatory minimums, and life sentences should be more effective in deterring crime. How much do these policies deter crime? The best quality studies on this question have concluded: not much.¹⁴ Laws meant to deter drunk driving across the world (US, Canada, UK, Finland, Norway, Sweden, France, Australia and New Zealand) mostly haven't.¹⁵ Young people don't really offend less after they come of age under criminal law.¹⁶ Laws lengthening sentences for specific or repeat crimes (i.e. California's "Three strikes law" or raised sentences for gun involved crime) have little to no deterrent effect.¹⁷ In summary, harsher punishment has negligible deterrent effects which do not justify the harmful consequences and cost of incarceration.

Incapacitation is real but is outweighed by the negative aftereffects of imprisonment. Several credible studies do find evidence of an "incapacitation effect" – crimes averted by keeping people who have committed a crime in isolation.¹⁸ One recent review and reanalysis of six of the most robust studies on incapacitation (from US, Netherlands and Italy) confirmed credible evidence of a minimal incapacitation effect on property crimes, but not violent crime.¹⁹ However, there is also evidence that incarceration



itself increases a person's risk of engaging in crime in the future.²⁰ This may be because people develop criminal networks while incarcerated, but can also be related to other consequences such as trauma, financial strain, low prospects of employment and discrimination when applying for jobs, lack of stable housing, disruption of family ties and marginalization from society.²¹

A substantial group of studies coalesces around the finding that when incapacitation and aftereffects are considered together, the first is offset by the second.²² That is: keeping someone who has committed a crime in prison may prevent some crime in the short-term, but increases it in the long-run.

Incarceration can actually increase crime in some communities. Some communities may reach a tipping point after which further incarceration is associated with higher crime rates. This is because high levels of incarceration in communities can destroy protective factors - like positive family and social relationships, the presence of parents in children's lives and economic opportunity- that help to keep crime low. When incarceration becomes concentrated in specific neighborhoods it can contribute to the destruction of social capital and social efficacy, deprive communities of income, and create resentment towards the legal system.²³

The costs of incarceration are high. Across 54 countries, the average government spending on prisons amounts to 0.3 percent of GDP.²⁴ While already significant, this estimate only includes direct costs for infrastructure and operations. Indirect costs push these numbers far higher. One attempt to quantify the real cost of corrections in the United States -considering factors such as private facilities, bail fees and costs to families- arrived at the annual cost of US\$182 billion; nearly two and a half times higher than the reported corrections budget.²⁵ This calculation would be higher still if it took into account the long-lasting impacts of imprisonment on health, personal finances, employment and broader societal costs. For example, incarceration reduces economic opportunities, earnings, and economic mobility. Moreover, it has impacts on the next generation by increasing the likelihood that children of incarcerated parents will live in poverty.²⁶

These costs are too high a price to pay for extraordinarily little return in terms of public safety.

Non-custodial approaches are more effective, cost less and have fewer negative effects. Unfortunately, in this still evolving field of research, the most robust studies have focused almost exclusively on recidivism as the outcome indicator for successful programs—rather than broader, more meaningful measures of well-being of formerly incarcerated people and society. Nonetheless, the evidence shows people given non-custodial sentences have no higher, if not lower, likelihood of recidivism than those given custodial sentences. Four randomized controlled trials comparing groups given custodial and non-custodial sentences found no difference in recidivism. Nine other quasi-experimental studies find lower re-arrest and conviction amongst those given non-custodial sentences.²⁷

Several types of alternative-to-incarceration programs can help prevent re-arrest and conviction among participants (read about some of INN's partners working with alternatives-to-incarceration [here](#)). These programs include intensive community supervision (ICS) programs²⁸; law enforcement-led or prosecution-



led diversion programs that divert individuals at the point of arrest, pre-charge or post-charge,²⁹ and juvenile diversion programs to divert youth out of traditional criminal case processing and into a variety of alternatives.³⁰ A meta-analysis of 10 randomized control trials of Restorative Justice programs -across three continents- found compelling evidence that they reduced subsequent arrests or convictions for participants, were cost-effective and increased survivor satisfaction across the board compared to the control group.³¹

Finally, most data suggest that the costs of non-custodial measures or sanctions are lower than holding someone in detention. For instance, the US Bureau of Prisons estimated that in 2017, it cost US\$99 a day per person in prison facilities, against \$89 in residential re-entry centers. In France, the average daily cost of imprisonment per person is about EUR €105 a day, compared with a daily cost of around €33 per day for someone serving probation.³²

It is possible to reduce BOTH prison populations and crime. Examples from several countries confirm that it is possible to decarcerate without increasing crime.

- Finland: Finland began policies in 1960 and 1970 that led to drastically cutting its prison rates. By 1990 they had reduced the incarceration rate by 65%. Prison rates in Sweden, Denmark and Norway were similar and stable during the same period. But despite Finland's drastic prison reduction, trends and rates of recorded crime were similar across all four countries (1950-2010): they rose uniformly up to about 1990 and then levelled off or declined.³³
- Alberta – Canada: Policy changes in Alberta, Canada in the early 1990's resulted in a sharp decline in the number of people sentenced to provincial prisons for less serious crimes (persons convicted of serious crimes continued to be sentenced to federal prisons). By closing two provincial prisons, diverting minor cases from the justice system, and expanding the use of alternative sentencing, the province reduced prison admissions by 32% between 1993 and 1997. Researchers have found that the decline was not due to changes in reported crime and that reduced incarceration "had no obvious important negative impacts" on people committing crimes.³⁴
- New York, New Jersey, California – USA: Between 2000 and 2015, 19 US states reduced both imprisonment and incarceration rates.³⁵ New York and New Jersey led the nation by reducing their prison populations by 26% between 1999 and 2012. California reduced its prison population by 23% between 2006 and 2012. During these same periods, not only did crime rates not rise, but they decreased in these states at a far greater rate than national crime rates.³⁶



¹ For a recent review of 30 of the most rigorous experimental or quasi-experimental studies on the link between crime and imprisonment see Roodman, D. (2017). The impacts of incarceration on crime. Open Philanthropy Project. Available at: https://www.openphilanthropy.org/files/Focus_Areas/Criminal_Justice_Reform/The_impacts_of_incarceration_on_crime_10.pdf

² For a review of the shortcomings see Nagin (2013). Deterrence in the Twenty-first Century. In Torny, M. (Ed). Crime and Justice in America 1975-2025. Vol 45. Chicago: University of Chicago Press.

³ For overview of crime drop across western industrialized nations see Torny (2007). Crime, Punishment, and Politics in a Comparative Perspective. Crime and Justice, Volume 36. See also Van Dijk, J. Tseloni, A., Farrell, G. (2012). The International Crime Drop: New Directions in Research. Crime Prevention and Security Management Series.

⁴ Global prison populations in most parts of the world have been growing since the 1980's. Since 2000, the prison population in Oceania has increased 86%, the Americas by 29% (South America by 175%), Asia by 38% (122% in South-eastern Asia) and Africa by 29%; Europe, by contrast has decreased by 45% (mostly attributable to Russia, excluding Russia it increased by 3%). Source: Walmsley, R. (2018) World Prison Population List, 12th edition, Institute for Crime and Justice Policy Research.

⁵ Van Dijk, J. (2008). Corrections: A global perspective. In J. Van Dijk, The World of Crime: Breaking the Silence on Problems of Security, Justice, and Development Across the World.

⁶ Weatherburn, D., Hua, J., and Moffat, S. (2006). How Much Crime Does Prison Stop? The Incapacitation Effect of Prison on Burglary. New South Wales Bureau of Crime Statistics and Research.

⁷ Roeder, O. Eisen, LB and Bowling, J. (2017). What Caused the Crime Decline? New York: Brennan Center of Justice, 23. Available at: <https://www.brennancenter.org/our-work/research-reports/what-caused-crime-decline> (argues that only 6 percent of the decrease in property crime rates and 0 percent of the decrease in violent crime rates in the United States in the 1990s were explained by higher incarceration rates); See also Spelman, W. 2000. "The Limited Importance of Prison Expansion," in *The Crime Drop in America*, edited by Alfred Blumstein and Joel Wallman (Cambridge, England: Cambridge University Press, 2000) (showing 25 percent of the decrease in index crime rates in the 1990s was explained by higher incarceration rates).

⁸ Ibid. Roeder, O. Eisen, LB and Bowling, J., 2017, 23. ("increased incarceration accounted for less than one one-hundredth of the decline of property crime in the 2000s...[and] had no observable effect on the violent crime decline ... in the 2000s").

⁹ For a review and reanalysis of these factors see Roeder, Eisen, and Bowling, 2017 (finding that lower unemployment rates, higher per capita income, higher consumer confidence, lower alcohol consumption, aging population, and the introduction of COMPSTAT were associated with lower crime rates). For reviews of studies examining the relationship between these factors and crime see Stemen, D. (2007). Reconsidering Incarceration: New Directions for Reducing Crime. Vera Institute of Justice.



¹⁰ This is generally referred to as the “diminishing marginal returns” of incarceration. See Roeder, Eisen, and Bowling, 2017; Austin and Fabelo, *The Diminishing Returns of Increased Incarceration* (2004); Gainsborough and Marc Mauer, *Diminishing Returns* (2000); Raphael and Stoll, *A New Approach to Reducing Incarceration* (2004).

¹¹ Roeder, O. Eisen, LB and Bowling, J. (2017). (re-analyzing data from previous studies and adding data from 2000 to 2015; finding little to no relationship between incarceration rates and violent crime rates).

¹² See for example Levitt, “Alternative Strategies for Identifying the Link between Unemployment and Crime”(2001), DeFina and Arvanites *The Weak Effect of Imprisonment on Crime: 1971-1998,* *Social Science Quarterly* 83, no. 3 (2002), 635-53 2002, Kovandzic and Vieratitits 2006, Roeder, Eisen and Bowling 2017.

¹³ Ibid. Roeder, Eisen, and Bowling, 2017.

¹⁴ See Roodman, D. 2017 and Nagin (2013).

¹⁵ Ross (1984). *Detering the drinking driver: legal policy and social control.*

<https://books.google.com/books?id=pSCQAAAAMAAJ&hl=en&sa=X&ved=0ahUKEwiJooGv6KvJAhUIND4KHfsMA4kQ6AEIJTAA>

¹⁶ Lee & McCrary (2009). *The Deterrence Effect of Prison: Dynamic Theory and Evidence.* Updated version of NBER Working Paper # 11491. Available at:

https://web.archive.org/web/20150529035414/http://eml.berkeley.edu/~jmccrary/lee_and_mccrary2009.pdf

(Finds that among 64,073 juveniles in Florida whose 1st arrest was before age 17, after their 18th birthday passes there is no statistically significant drop in odds of 1st serious arrest since 17) and Hjalmarsson (2008). *Crime and Expected Punishment: Changes in Perceptions at the Age of Criminal Majority.* *American Law and Economics Review*, Volume 11, Issue 1, Spring 2009, Pages 209–248. Available at:

<https://academic.oup.com/aler/article/11/1/209/198170> (uses the US National Longitudinal Survey of Youth, samples of 9000 males before and after age of criminal majority and determines no evidence of effect of harsher sentences for adults on self-reported criminal behavior).

¹⁷ Helland and Tabarrok (2007). *Does Three Strikes Deter? A Nonparametric Estimation.* *J. Human Resources* Spring 2007 vol. XLII no. 2, 309-330. Available at: <http://jhr.uwpress.org/content/XLII/2/309> (find only a very small deterrent effect for California’s Third-strikes law), Raphael, S. and Ludwig, J (2003). *Prison Sentence Enhancements: The case of Project Exile.* In Ludwig and Cook (Eds). *Evaluating Gun Policy: Effects on Crime and Violence.* DC: Brookings Institute Press and Abrams (2012) “Estimating the deterrent effect of incarceration using sentencing enhancements,” *American Economic Journal: Applied Economics* Vol. 4 No. 4 October 2012 (find no clear evidence of impact of mandatory minimum laws on gun-involved assaults or robberies, nor impact of gun add-ons on gun assaults).

¹⁸ Levitt, S. (1996). *The Effect of Prison Population Size on Crime Rates: Evidence from Prison Overcrowding Litigation.* *The Quarterly Journal of Economics*, Vol. 111, No. 2, May 1996, 319-351
<https://web.archive.org/web/20160112043738/http://pricetheory.uchicago.edu/levitt/Papers/LevittTheEffectOfPrison1996.pdf>, Owens 2009, *More Time, Less Crime? Estimating the Incapacitative Effect of Sentence Enhancements.* *Journal of Law and Economics*, vol. 52, Available at:
<https://web.archive.org/web/20151228213626/http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.373.300&rep=rep1&type=pdf>. Buonanno & Raphael (2013). *Incarceration and Incapacitation: Evidence from the 2006 Italian Collective Pardon.* *American Economic Review* 2013, 103(6): 2437–2465.



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Vollaard (2013). Preventing Crime Through Selective Incapacitation, *The Economic Journal*, Vo 123, 567, 262–284,
<https://academic.oup.com/ej/article-abstract/123/567/262/5080574?redirectedFrom=fulltext>.
Lofstrom and Raphael (2016). Incarceration and Crime: Evidence from California’s Public Safety Realignment Reform.
The ANNALS of the American Academy of Political and Social Science. Vol 664, Issue 1.
<https://journals.sagepub.com/doi/10.1177/0002716215599732>.

¹⁹ See Roodman, D. 2017

²⁰ For a summary of these studies see Roodman, D., 2017, 78-121. See also Cid, J.(2009). “Is Imprisonment Criminogenic? A Comparative Study of Recidivism Rates between Prison and Suspended Prison Sanctions,” *European Journal of Criminology* 6, no. 6 (2009), 459-80 (finding that individuals given suspended sentences had a lower risk of reconviction than those given custodial sentences); Cassia Spohn and David Holleran, “The Effect of Imprisonment on Recidivism Rates of Felony Offenders: A Focus on Drug Offenders,” *Criminology* 40, no. 2 (2002), 329-58 (finding that individuals sentenced to prison had higher recidivism rates and recidivated more quickly than individuals sentenced to probation); Lynne M. Vieraitis, Tomislav V. Kovandzic, and Thomas B. Marvell, “The Criminogenic Effects of Imprisonment: Evidence from State Panel Data, 1974–2002,” *Criminology & Public Policy* 6, no. 3 (2007), 589-622 (finding that increased prison releases are associated with higher crime rates and arguing that this is due to the criminogenic effects of prison). Paul S. Heaton, Sandra G. Mayson, and Megan Stevenson, “The Downstream Consequences of Misdemeanor Pretrial Detention,” *Stanford Law Review* 69, no. 3 (2017), 711-96 (finding those individuals detained pretrial were more likely than individuals not detained to commit future crime, suggesting that detention may have a criminogenic effect); Arpit Gupta, Christopher Hansman, and Ethan Frenchman, “The Heavy Costs of High Bail: Evidence from Judge Randomization,” *Journal of Legal Studies* 45, no. 2 (2016), 471-505 (finding that pretrial detention increases the likelihood of recidivism); and Christopher T. Lowenkamp, Marie VanNostrand, and Alexander Holsinger, *The Hidden Costs of Pretrial Detention* (New York: Laura and John Arnold Foundation, 2013) (finding that pretrial detention increases the likelihood of future criminal activity for low- and moderate-risk individuals).

²¹ Todd R. Clear et al., “Coercive Mobility and Crime: A Preliminary Examination of Concentrated Incarceration and Social Disorganization,” *Justice Quarterly* 20, no. 1 (2003), 33-64; Brian C. Renauer et al., “Tipping the Scales of Justice: The Effect of Overincarceration on Neighborhood Violence,” *Criminal Justice Policy Review* 17, no. 3 (2006), 362-79. For a review of empirical research confirming these findings, see Todd R. Clear, “The Effects of High Imprisonment Rates on Communities” (2008) at 118-20.

²² See Roodman, D. 2017, 121. (“Aftereffects must vary by place, time, and person. But the first-order generalization that best fits the credible evidence is that at the margin in the US today, aftereffects offset in the long run what incapacitation does in the short run”.)

²³ For a review of the literature see Clear, T.R. “The Effects of High Imprisonment Rates on Communities” (2008).

²⁴ Penal Reform International (2020). *Global Prison Trends 2020*. (Calculations made using data gathered from official public documentation and financial institutions databases including IMF, OECD, Eurostat).

²⁵ ‘Following the Money of Mass Incarceration’, Prison Policy Initiative, 25 January 2017,
www.prisonpolicy.org/reports/money.html .



²⁷ Villettaz P, Gillieron G, Killias M. (2015). The effects on re-offending of custodial vs non-custodial sanctions: an updated systematic review of the state of knowledge. *Campbell Systematic Reviews*.

²⁸ Deschenes, Turner, & Pe-tersilia (1995). A Dual Experiment in Intensive Community Supervision: Minnesota's Prison Diversion and Enhanced Supervised Release Programs. *The Prison Journal*. Vol 75 (3).
<https://journals.sagepub.com/doi/10.1177/0032855595075003005>

²⁹ See for example Susan E. Collins, Heather S. Lonczak, and Seema L. Clifasefi, LEAD Program Evaluation: Recidivism Report (Seattle, WA: University of Washington, 2015), (finding that Seattle's law enforcement-led diversion program (LEAD) reduced both short-term and long-term recidivism among participants)
<https://perma.cc/RH4U-VLD4> .

³⁰ Holly A. Wilson and Robert D. Hoge, "The Effect of Youth Diversion Programs on Recidivism: A Meta-Analytic Review," *Criminal Justice and Behavior* 40, no. 5 (2013), 497-518 (reviewing 45 studies and finding that youth diverted out of the system had lower recidivism rates than youth prosecuted through traditional prosecution).

³¹ Strang H, Sherman LW, Mayo-Wilson E, Woods D, Ariel B. (2013). Restorative Justice Conferencing (RJC) Using Face-to-Face Meetings of Offenders and Victims: Effects on Offender Recidivism and Victim Satisfaction. A Systematic Review. *Campbell Systematic Reviews*. Available at:
<https://restorativejustice.org.uk/sites/default/files/resources/files/Campbell%20RJ%20review.pdf>

³² OIP, Combien coûte la prison? Quel est le coût comparé des alternatives à la prison?, oip.org, 30 January 2019
oip.org/en-bref/combiencoute-la-prison-quel-est-le-cout-comparedes-alternatives-a-la-prison.

³³ See Lappi-Seppälä, T. (2012). Criminology, crime and criminal justice in Finland. *European Journal of Criminology*, 9(2) 206-222. Available at: <https://journals.sagepub.com/doi/abs/10.1177/1477370811424372>. And von Hofer, H., Tapio Lappi-Seppälä Lars Westfelt (2012), *Nordic Criminal Statistics 1950–2010 Summary of a report*. 8th revised edition, available at: <http://www.diva-portal.org/smash/get/diva2:526664/FULLTEXT01.pdf>.

³⁴ Paul Gendreau, Claire Goggin, & Francis T. Cullen, *The Effects of Prison Sentences on Recidivism (Public Works and Government Services Canada 1999)*. Available at: <http://www.prisonpolicy.org/scans/e199912.htm> .

³⁵ Stemen, D. (2017) *The Prison Paradox: More Incarceration Will Not Make Us Safer*. New York: Vera Institute of Justice. Available at: https://www.vera.org/downloads/publications/for-the-record-prison-paradox_02.pdf

³⁶ Mauer, M. and Ghandnoosh, N, (2014). *Fewer Prisoners, Less Crime: A Tale of Three States*. The Sentencing Project. Available at: <https://nicic.gov/fewer-prisoners-less-crime-tale-three-states>