Policies to Reintegrate Former Inmates Into the Labor Force*

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ABSTRACT

Incarceration rates in the United States have more than tripled in recent decades as rehabilitation has gradually taken a back seat to a policy agenda emphasizing punishment and incapacitation. This raises important questions about the effectiveness of state and federal prisons in the United States, and about whether the resources required for long prison sentences would be better spent improving prison conditions and expanding rehabilitation programs. Contrary to the widely embraced “nothing works” doctrine, we review recent empirical evidence from Norway demonstrating that a well-designed prison system can reduce recidivism and allow for successful re-entry into the labor market. We suggest several possible policy reforms that could be adopted in the United States, which, when combined with shorter prison sentences, would not require an increase in expenditures.

1. Are Convicted Criminals a Lost Cause?

Are there policies and prison reforms that can help ex-convicts reintegrate into society, or are former inmates a lost cause? An influential report released in 1974 by the sociologist Robert Martinson outlined the shortcomings of prisoner rehabilitation programs and concluded that “nothing works” (Martinson, 1974). This report proved to be a pivotal turning point in the United States, with rehabilitation gradually taking a back seat to policies emphasizing punishment and incapacitation. Incarceration rates in the United States tripled in the ensuing decades, rising from roughly 200 individuals per 100,000 in 1980 to almost 700 per 100,000 in 2014, as illustrated in Figure 1.

This policy memo revisits the “nothing works” doctrine. Based on recent empirical evidence, we conclude that convicts are not a lost cause; on the contrary, it is possible for well-designed prisons and reintegration policies to reduce recidivism and allow for successful reentry into the labor market. We base this conclusion on our recent work documenting the positive rehabilitative effects of Norway’s prison system, which stand in contrast to the negative employment and criminogenic effects found for prisons in the United States. Based on this comparison, we suggest several possible policy reforms that could be adopted in the United States to improve the prison experience and better reintegrate ex-convicts into society.

Our proposals run counter to the common presumption in policy conversations that jail time hurts economic outcomes, implying that incarceration itself is the problem. Ex-prisoners do fare poorly in the labor market; however, their labor market prospects were poor before prison—roughly half of prisoners in both the United States and Norway do not report any earnings in the years prior to imprisonment (Bhuller, Dahl, Løken, & Mogstad, 2016; Looney & Turner, 2018). We argue that prison is a missed opportunity to rehabilitate individuals with weak labor market attachment in
1 The reforms we propose, when combined with cost savings from shorter prison sentences, would not require an increase in prison expenditures.

2. Existing Evidence

CORRELATIONAL EVIDENCE

Much of the literature on the effects of imprisonment has focused on incapacitation effects, finding reductions in crime while offenders are in prison (Barbarino & Mastrobuoni, 2014; Buonanno & Raphael, 2013; Owens, 2009). There is less evidence on the longer term (i.e., postrelease) effects of imprisonment, with mixed findings on recidivism and employment (Bernburg, Krohn, & Rivera, 2006; Brennan & Mednick, 1994; Gottfredson, 1999; Skardhammer & Telle, 2012; Western, Kling, & Weiman, 2001). At face value, this research finds little evidence that prison rehabilitates individuals and suggests that locking individuals up can incapacitate them.

One caveat is that for the previously employed, there appears to be a negative effect on employment, in both the United States and Norway (Mueller-Smith, 2017; Bhuller et al., 2016). Hence, reforms should consider employment-friendly policies, such as electronic monitoring, which allow for work while serving a sentence (Anderson & Telle, 2016; Di Tella & Schargrodsky, 2013).
This research, however, is largely correlational in nature, is often based on small samples, and does not focus specifically on the effects of rehabilitative policies. Correlational studies do not adequately account for the fact that individuals sent to prison are a selected sample and may well have had even higher rates of criminality and even lower rates of employment in the absence of rehabilitative prison policies. Indeed, the average convict has already committed many crimes and exhibited weak labor market attachment prior to imprisonment.

Likewise, negative employment shocks often precede imprisonment. Even among individuals accused of committing crimes, those sent to prison differ from those not sent to prison, in both observable and nonobservable ways. These differences mean that correlations (and similar analyses which cannot control for all relevant factors) describing prison exposure and subsequent recidivism and unemployment may well not be causal.

Based on the paucity of convincing evidence, leading criminology scholars have questioned Martinson’s “nothing works” doctrine over the years (see the review in Cullen, 2005). Indeed, a decade ago there was little convincing evidence on the effects of incarceration and rehabilitative prison programs due to limited data and the use of correlational methods. Nagin, Cullen, and Jonson (2009, p. 115) summarized the state of the literature well: “Remarkably little is known about the effects of imprisonment on reoffending. The existing research is limited in size, in quality, [and] in its insights into why a prison term might be criminogenic or preventative.”

**RECENT CAUSAL EVIDENCE**

An emerging literature has recognized the limitations of correlational data and uses new approaches and new datasets to tease out causal effects. A few small-scale experiments have randomized access to different types of rehabilitation programs. For example, Kuziemko (2013), using data on inmates in Georgia, finds that access to parole boards increases participation in rehabilitation programs and reduces recidivism. There are also a few experiments in the United States focusing on postrelease training and education programs for ex-convicts. These studies have estimated small effects on long-term labor market outcomes but sizable reductions in recidivism (Cook, Kang, Braga, Ludwig, & Obrien, 2014; Redcross, Millenky, & Levshin, 2012; Visher, Winterfield, & Coggeshall, 2005). Unfortunately, these small-scale experiments are not fully able to answer the question of whether, and in what situations, imprisonment is preventive or criminogenic. As we discuss in section three, more comprehensive prison reforms may be needed to successfully reintegrate criminals into society.

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2 The ideal dataset would be a long and representative panel with individual-level information on criminal behavior and labor market outcomes linked together both before and after incarceration. This type of data is just now becoming available in a limited set of countries and a limited set of states within the United States.
Larger and more comprehensive analyses have recently been used to study entire prison systems and the effects of incarceration on recidivism and employment. While it is not ethical to randomly assign some individuals to prison and not others, there is naturally occurring variation which is as good as random in some countries. In our research, we have studied the case of Norway, where criminal cases are randomly assigned to judges in a court room. Some judges are stricter and send more defendants to prison, while others are more lenient. Defendants who happen to get the stricter judge face a higher probability of being sent to prison. Since this increased probability is as good as random, the variation in judge stringency can be used to estimate the causal effect of imprisonment.

Similar studies relying on this type of naturally occurring variation are also being conducted in the United States. These studies find either no effect or that incarceration results in higher recidivism and worse labor market outcomes. Mueller-Smith (2015) uses data from Harris County, Texas and finds that incarceration increases both the severity and incidence of recidivism, worsens labor market outcomes, and increases the use of public assistance. Harding, Morenoff, Nguyen, and Bushway (2017) use data on individuals convicted of a felony in Michigan. They find that felony individuals sentenced to prison versus probation have a higher rate of repeat crime three years later. The negative effects found by Harding et al. are primarily a result of violations of postprison parole conditions, and therefore a product of escalating surveillance and punishment, rather than the criminogenic effects of incarceration. Rose and Shemtov (2017) study felony offenders in North Carolina and find a large incapacitation effect while an individual is in prison, but no significant effect afterwards. Aizer and Doyle (2015) find that juvenile incarceration results in lower high school completion rates and higher adult incarceration rates, as compared to similar juvenile offenders who are not sent to detention. Finally, Eren and Mocan (2017) find mixed results, with the incarceration of juveniles increasing future drug offenses, but having no effect on violent crime and reducing property crime.

While the available evidence on the effects of incarceration in the United States suggests this country’s prison system is not effectively rehabilitating inmates, we believe it would be a mistake to conclude that rehabilitation is not possible. In the next section, we turn our attention to Norway, where our research finds that the prison system reduces reoffense probabilities and increases employment.

3. Lessons from the Norwegian Prison System

OPPOSING RESULTS FOR NORWAY VERSUS THE UNITED STATES

We begin by comparing the causal effects of imprisonment in Norway versus the United States. As will become clear, Norway’s prison system stands in sharp contrast to the system in the United States, which is why the comparison is useful.
Our research on Norway’s prison system, which takes advantage of the random assignment of judges (Bhuller et al., 2016), yields three key findings. First, imprisonment in Norway discourages further criminal behavior. We find that incarceration lowers the probability an individual will reoffend within five years by 27 percentage points and reduces the corresponding number of criminal charges per individual by 10. These reductions are not simply due to an incapacitation effect. We find sizable decreases in reoffending probabilities and cumulative charged crimes even after defendants are released from prison.

Our second result is that a misguided correlational analysis would lead to the erroneous conclusion that time spent in prison is criminogenic. If we simply compare criminal defendants sent to prison versus not sent to prison, we find positive associations between incarceration and subsequent crime. This is true even when we control for a rich set of demographics, the type of crime committed, previous criminal history, and past employment. This stands in contrast to our analysis based on the random assignment of judges, which finds that incarceration in Norway is strongly preventative for individuals on average, both on the extensive and intensive margins of crime.

Third, the reduction in crime is driven by individuals who were not working prior to incarceration. Among these individuals, imprisonment increases participation in programs directed at improving employability and reducing recidivism, and ultimately raises employment and earnings while also discouraging criminal behavior. The positive effects of incarceration for this group are large and economically important. For the previously nonemployed, imprisonment causes a 34 percentage point increase in participation in job training programs and a 40 percentage point increase in employment rates (within five years). At the same time, the likelihood of reoffending within five years is cut in half (by 46 percentage points), and the average number of criminal charges falls by 22.

A very different pattern emerges for individuals who were previously attached to the labor market. Among this group, there is no significant effect of incarceration on either the probability of reoffending or the number of charged crimes. Moreover, they experience an immediate 25 percentage point drop in employment due to incarceration, and this effect continues out to year five. This drop is driven almost entirely by defendants losing their previous jobs while in prison.

Given the stark differences in the effects of imprisonment in the United States versus Norway, a natural question is whether the United States can learn anything from Norway’s experience. There are both similarities and differences in the criminal population and the criminal justice systems of Norway, as compared to the rest of the world. Norway looks similar to other Western European countries on most dimensions of its criminal population and criminal justice system. The United States, while sharing some commonalities with Norway and other Western European countries in its criminal population, is an international outlier along key dimensions of its criminal justice system.
DIFFERENCES BETWEEN NORWAY AND THE UNITED STATES

Comparing Inmate Characteristics
Along many dimensions, the prison populations in Norway, Western Europe, and the United States are similar. In the United States, Norway, and many of the European countries for which data is available, roughly three-fourths of inmates have not completed the equivalent of high school. Five percent of prisoners in Norway are female, compared to 5% in Western Europe and 7% in the United States. In all of these countries, inmates are, on average, in their early or mid-30s. And across all countries, formal employment prior to imprisonment is low. One demographic characteristic that plays an outsized role in the United States is race, with black individuals incarcerated at a rate several times higher than whites.

The types of offenses committed by inmates differ across countries, but perhaps less than one might expect. It is true that the United States has a much larger incidence of homicide. But in terms of the fraction of prisoners who have committed a drug offense, the rates are surprisingly similar—24% in Norway, 22% in Western Europe, and 20% in the United States. By comparison, 14% percent of inmates are serving a sentence for assault/battery and 4% for rape/sexual assault in Norway, compared to 11% and 7% in Western Europe, and 9% and 11% in the United States. Of course, all of these comparisons need to be understood in the context of a much higher incarceration rate in the United States overall. But they point to a considerable overlap in the types of crimes committed by inmates across countries.

Comparing Incarceration Rates and Sentence Lengths
Figure 1 graphs both the United States’ and Norway’s incarceration rates over time. Both countries’ rates have risen since the 1980s, but the increase has been more dramatic in the United States. Norway’s rate went up 64%, an increase which is mirrored in other Western European nations. In sharp contrast, the United States saw a 215% rise in incarceration (from a higher starting rate). Most of the growth in incarceration rates in the United States can be explained by changes in sentencing policy, as opposed to higher crime or arrest rates (Neal & Rick, 2016; Raphael & Stoll, 2013). Such policies include mandatory minimum sentences, the elimination of parole for certain crimes, and changes in the coding of different types of offenses.

Comparing Norway and the United States to a broader set of countries, the latter remains an outlier, especially given how wealthy it is. This can be seen in Figure 2.

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3 For details on the U.S. criminal population, see Bureau of Justice Statistics (2015) and Raphael and Stoll (2013). For Scandinavia and other European countries, see Kristoffersen (2014) and Aebi, Tiago, and Burkhardt (2015).
4 The numbers for the United States are the weighted average of inmates in federal and state prisons.
which plots incarceration rates versus GDP for 160 countries with a population of greater than half a million. No other country comes close to the U.S. rate of roughly 700 per 100,000, and only the six countries of Rwanda, El Salvador, Turkmenistan, Thailand, Cuba, and Russia have rates over 400 per 100,000. In contrast, the figure shows that Norway’s incarceration rate (72 per 100,000) is slightly lower than the average for other Western European countries (102 per 100,000). The United States is particularly an outlier after controlling for GDP per capita; while several countries have high GDPs per capita (purchasing power adjusted), the U.S. incarceration rate is several multiples higher than in comparably wealthy countries.

**Figure 2. Incarceration Rates versus GDP per Capita**

[Graph showing incarceration rates versus GDP per capita for various countries, with the United States and Norway having markedly higher rates.]

**Note:** Sample consists of 160 countries with population greater than 0.5 million and with available data on incarceration and GDP. Incarceration rates and GDP are for the latest available year. GDP per capita is adjusted for purchasing power parity (PPP) and reported in 2010 US dollars. The Western European countries used to construct the population-weighted average include Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the UK. Sources: Institute for Criminal Policy Research, International Monetary Fund and the World Bank.

While it is difficult to compare measures of criminal activity across countries due to differences in reporting, the markedly higher incarceration rate in the United States is not entirely due to higher crime rates. Instead, the largest portion of the difference is due to longer sentence lengths in the United States. The average time spent in prison

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5 Keeping in mind the caveat that criminal activity is difficult to compare across countries, the United Nations Survey on Crime Trends reports that the United States has roughly double the number of reported assaults than either Norway or the rest of Western Europe (Harrendorf, Heiskanen, & Malby, 2010).
Part II: Increasing Prime-Age Labor Force Participation

is around six months in Norway, with almost 90% of prison spells lasting less than one year. This is considerably shorter than the average prison spell of 2.9 years in the United States (Pew Center, 2011), and fairly similar to the median of 6.8 months in other Western European countries (Aebi et al., 2015). Shorter prison spells have the advantage of decreasing the amount of time that prisoners’ human capital will have to deteriorate and also making it easier on other margins to reintegrate into society.

Comparing Prison Conditions

Another large difference between the Norwegian and American prison systems lies in the conditions prisoners encounter while incarcerated.

Principle of Normality. Prisons in Norway follow the “principle of normality,” which dictates that “life inside will resemble life outside as much as possible” and that “offenders shall be placed in the lowest possible security regime.” The system tries to place prisoners close to home so that they can maintain links with the families. In addition, low-level offenders go directly to open prisons, which have minimal security and more freedoms and responsibilities. Physically, these open prisons resemble dormitories rather than rows of cells with bars on the door.

More serious offenders who are at risk of violent or disruptive behaviors are sent to closed prisons, which have heightened security. The two types of prisons create a separation between minor and more hardened criminals, at least until the more hardened criminals have demonstrated good behavior.6 While more serious offenders serve the majority of their sentences in closed prisons, they are usually transferred to open prisons for resocialization and further rehabilitation before release. Overall, one-third of prison beds are in open prisons, and the rest are in closed prisons.7 While the United States does have varying security levels for prisons and jails, the emphasis is on punishment and removal of privileges while in prison.

Lack of overcrowding. Norway has a policy of one prisoner per cell. In contrast, the United States has faced serious overcrowding issues as its prison population has soared, with federal prisons 39% over capacity (GAO, 2012) and over half of states at or above their operational capacity (Bureau of Justice Statistics, 2014). This means that inmates are often double- or triple-bunked, and that there is a higher inmate-to-staff ratio, making it harder to ensure the personal safety of prisoners.8

Job training, education, and drug treatment programs. To help with rehabilitation, all prisons in Norway offer education, mental health, and training programs. In 2014,

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6 This separation could be important, as Bayer, Hjalmarsson, and Pozen (2009) find that inmates build “criminal capital” through interactions with other criminals.
7 Other European countries are trying out open prisons. Mastrobuoni and Terlizzese (2015) study an open prison in Italy and find that inmates transferred to this prison commit fewer crimes after release.
8 See Davidson (2015). According to the Bureau of Prisons, the federal inmate-to-staff ratio is 4.4 to 1, whereas in Europe it is closer to three inmates per custodian.
38% and 33% of inmates in open and closed prisons, respectively, participated in some type of educational or training program. The most common programs are for high school and work-related training although inmates can also take miscellaneous courses. All inmates are involved in some type of regular daily activity, unless they have a serious mental or physical disability. If they are not enrolled in an educational or training program, they must work within prison.

By law, all prisoners in Norway have the same rights to health care services as the rest of the population. Most notably, 18% of inmates participate in a drug-related treatment program while in prison. In contrast, while most state prison systems in the United States aim to provide GED test preparation, adult basic education, and vocational skills training, a recent RAND report (2014) finds that funding for such initiatives is lacking. The GAO reports that the increased number of inmates has led to limited work opportunities and waiting lists for education programs, which both increases inmate idleness and forgoes the potential benefits of such programs. Overcrowding and limited funding have also led to long waiting lists for drug treatment programs.9

Post-release support. Norway has been a leader in reforming its penal system to help integrate inmates back into society upon release. A recent New York Times article summarizes the system’s rehabilitative aims:

The goal of the Norwegian penal system is to get inmates out of it... “Better out than in” is an unofficial motto of the Norwegian Correctional Service... It works with other government agencies to secure a home, a job and access to a supportive social network for each inmate before release. (Benko, 2015).

While offenders in Norway may lose their job when they go to prison, they are usually not asked or required to disclose their criminal record on most job applications. This stands in contrast to most U.S. states, although it should be noted that efforts to “ban the box” in the United States might have unintended, negative consequences for minorities as it appears to encourage statistical discrimination based on race (Agan & Starr, 2018; Doleac & Hansen, 2016).10

In Norway, there is an emphasis on helping offenders reintegrate into society after their release. Released offenders have access to active labor market programs established to help ex-convicts find a job and to a variety of social support services such as housing support, social assistance, and disability insurance. In the United States, the safety net is less expansive, but even so, ex-convicts often have

10 Agan and Starr (2018) and Doleac and Hansen (2016) find that ban the box laws reduce employment for Blacks and Hispanics, consistent with the idea that employers use race to infer the probability a job applicant has a criminal record. Rose (2018) finds no effect of ban the box for people with criminal records, while Jackson and Zhao (2017) find reduced employment for those with a criminal record.
a difficult time accessing services. For example, offenders are not eligible for the Unemployment Insurance program upon release and are frequently denied access to public housing (CEA, 2016). Moreover, since the passage of welfare reform in 1996, many ex-convicts are denied access to the Supplemental Nutrition Assistance Program and Temporary Assistance for Needy Families benefits. Tuttle (2018) analyzes the causal impact of SNAP bans for convicted drug offenders and finds that the policy of denying convicted drug offenders access to food stamps leads to increased rates of recidivism, driven by an increase in financially motivated crimes.

4. Policy Proposals

Our research on Norway’s criminal justice system serves as a proof-of-concept demonstrating that time spent in prison with a focus on rehabilitation can help ex-convicts reintegrate into society. The Norwegian prison system is successful in increasing participation in job training programs, encouraging employment, and discouraging crime, largely due to changes in the behavior of individuals who were not working prior to incarceration. This suggests that job training, employment, and reduced recidivism go hand in hand. The bundle of shorter sentence lengths, better prison conditions and programs, and postrelease support helps rehabilitate ex-convicts. Combining the lessons learned from Norway with the best available evidence from other studies (for summaries, see Doleac, 2018; James, 2016; Raphael & Stoll, 2014), we propose the following reforms:

- **Shorten Prison Sentences**
  Reduce average prison sentence lengths from the current average of three years to less than one year. This can be achieved by changing mandatory minimum penalties, considering alternatives to incarceration such as electronic monitoring, increasing the use of probation and parole, expanding the use of residential reentry centers, and easing conditions under which courts can reduce an inmate’s sentence.

- **Improve Prison Conditions and Prisoner Safety**
  Reduce inmate-to-staff ratios and eliminate overcrowding to comply with the operational capacity of prisons. Increase the separation of hardened criminals from low-level offenders, especially in state prison systems.

- **Increase Funding for Job Training, Educational, and Drug Treatment Programs**
  Increase funding for these oversubscribed programs to meet demand. Also, impose a mandatory requirement to participate in job training, education, or prison employment programs if physically and mentally able while in prison.
• **Expand Postrelease Programs**

Promising postrelease strategies include comprehensive and high-quality support services (housing, employment, substance abuse, cognitive behavioral therapy), and reducing the intensity of supervision for probationers and parolees.

**What Will It All Cost?**

Implementing some or all of the proposed reforms may seem daunting, given their high expense. Indeed, Western European countries spend an average of $66,000 per inmate per year, which is roughly double the average of $31,000 for the United States. But these averages mask substantial heterogeneity, in part due to differences in wages and labor costs.\(^\text{11}\) For example, in Norway, the cost is $118,000 (about the same as Sweden, Denmark, and the Netherlands); in Italy, it’s $61,000; and in Portugal, it’s $19,000. In the United States, the state of New York spends $60,000 per prisoner, Iowa spends $33,000, and Alabama spends $17,000. In New York City, the annual cost-per-inmate reaches $167,000.\(^\text{12}\)

Reform, however, is more affordable than it may initially appear and could even produce cost savings if prison sentences are shortened.\(^\text{13}\) Recall the United States is an outlier in incarceration rates, and that much of this difference is due to sentence lengths that are roughly 5 times longer, on average, than those in European countries. Simple calculations reveal that a European-style prison system, with its higher costs but shorter prison sentences, would result in significant cost savings even if the number of crimes being committed is twice as high in the United States.\(^\text{14}\) Shorter prison sentences would free up significant sums of money to spend on job training, education, drug treatment programs, and postrelease support. Shorter sentences would also lower incarceration rates and alleviate overcrowding in federal and state prisons without the need to build new prisons.

While the direct savings from shortening prison times are substantial, the Norwegian experience suggests that implementing a rehabilitative prison system has additional benefits. To the extent that prison increases postrelease employment, this will indirectly reduce expenditures on safety net programs and possibly increase tax

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\(^{11}\) In most countries, a majority of prison costs are due to labor expenditures; for example, in Norway, two-thirds of the prison budget is spent on labor.

\(^{12}\) Cost estimates are calculated by dividing total prison budgets by the number of prisoners. The numbers for Western Europe are for the year 2013 and are purchasing power parity adjusted (Aebi et al., 2015). The data for 40 U.S. states with available data are for 2010 (Vera Institute of Justice, 2012). New York City data are for 2012 (NYC Independent Budget Office, 2013).

\(^{13}\) Raphael and Stoll (2014) argue that prison sentences in the United States could be dramatically shortened without inducing a rise in crime.

\(^{14}\) The cost savings become even larger when accounting for the fact that labor costs to hire prison staff are substantially lower in most areas in the United States compared to Europe.
revenue. And while it is difficult to monetize the benefits from fewer crimes being committed, the potential benefits to society from reduced recidivism are large.

References


