Intended and Unintended Consequences of Prison Reform*

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Abstract

Since the 1970s, U.S. federal courts have issued court orders condemning state prison crowding. However, the impact of these court orders on prison spending and prison conditions is theoretically ambiguous because it is unclear if these court orders are enforceable. We examine states' responses to court interventions and show that these interventions generate higher per inmate incarceration costs, lower inmate mortality rates, and a reduction in prisoners per capita. If states seek to minimize the cost of crime through deterrence, absent an income effect, an increase in prison costs should lead states to shift resources from corrections to other means of deterring crime such as welfare and education spending. However, we find that, court interventions associated with higher corrections expenditures, lead to lower welfare cash payments. This suggests that the burden of increased correctional spending is borne by the poor. Furthermore, states do not change correctional and cash payments spending after their release from court order, making the changes in corrections and cash payments spending permanent. States' responses to prison reform are most consistent with the finding in the empirical public finance literature that the amount spent on particular expenditure categories is sticky and that increases in spending in programs that affect the poor lead to declines in expenditures in other program that affect the poor.

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1 Introduction

The United States federal courts have ordered state officials to improve schools, prisons, and mental hospitals. However, the enforceability of these court orders is limited by the Eleventh Amendment of the U.S. constitution which provides states with immunity in federal court.[1] To get around the Eleventh Amendment, federal cases name specific state officials as defendants, rather than the state; nonetheless, it is difficult to enforce court orders that require additional spending against state officials since most state constitutions forbid disbursements from the state treasury except by legislative appropriation (Hirschhorn, 1984). If state governments are reluctant to appropriate the necessary funds to improve the quality of the services provided by institutions such as schools or prisons, the federal court can respond by closing these institutions, but judges may be unwilling to take such drastic measures. Furthermore, orders to close institutions may be reversed on appeal (Hirschhorn, 1984). Thus, it is unclear theoretically whether federal court orders requiring additional state expenditures are enforceable.

The empirical evidence on the issue is ambiguous. For example, federal court orders to improve prison conditions have received significant attention, but the extent to which these court orders increase correctional expenditures is disputed (Harriman and Straussman, 1983; Taggart, 1989; and Fliter, 1996), although Levitt (1996) shows that these court orders reduce prison population growth. Even if such federal court orders were fully enforceable, their impact on the provision of the services targeted by the court order as well as on other services provided by the states would depend on how the states choose to finance the additional expenditures that emerge as a

[1]The Eleventh Amendment states that "The Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State."

consequence of the court order.

A number of researchers have examined the federal court orders from a normative perspective. For example, federal court orders to reform schools, prisons, and mental institutions have been criticized as undemocratic (Sandler and Schoenbrod, 2004). Others have pointed out that the state political process gives little weight to the disadvantaged. For instance, prisoners' rights are less likely to be protected by the states since inmates are not allowed to vote. Thus, it has been argued that federal courts should be given authority over expenditures for the disadvantaged to balance out the fact that the disadvantaged have little influence in the state political process (Rose-Ackerman, 2003).

Although the intended consequence of federal court interventions is to enforce the constitutional and statutory rights of disadvantaged groups, it is possible that an unintended consequence is the decline in funds allocated to other disadvantaged groups as a consequence of the additional expenditures that have to be incurred by the states to comply with these court orders. The U.S. Congress and state courts have also intervened to force states to spend more on disadvantaged groups and this had lead to lower spending on other disadvantaged groups. The U.S. Congress can force states to spend more on groups of individuals by making it a condition to continue receiving federal grants (Rosenthal, 1987). Baicker (2001) finds that federally-mandated increases in medicaid spending lead to increases in medicaid spending at the expense of other state welfare spending. Similarly, Baicker and Gordon (2006) examine *state* Supreme Courts orders to equalize spending across school districts. They find that these orders increase state aid to localities for education at the expense of aid for public welfare, health, hospitals, and general services. Thus, if federal court orders are enforceable, it is plausible that the resources used to satisfy court orders come from other disadvantaged groups.

In this paper, we examine the impact of federal court orders to improve prison conditions. Since 1970, federal court interventions have affected such dimensions of prison operations as staffing, the amount of space per inmate, medical and mental health care, food, hygiene, sanitation, disciplinary procedures, conditions in disciplinary segregation, exercise, fire safety, inmate classification, grievance policies, race discrimination, sex discrimination, religious discrimination and accommodations, and disability discrimination and accommodations (Schlanger, 2006). In 1995, state attorneys general successfully lobbied Congress to pass the Prison Litigation Reform Act (PLRA) so that they could regain control over prisons (Wharton, 1996). The PLRA ended federal court supervision over several state correctional systems and made any further court intervention more difficult (Schlanger, 2006). Sullivan (2000) reports the deterioration of Tennessee prisons after their release from federal court supervision.[2] Nonetheless, federal courts still order states to increase state correctional expenditures. For instance, a panel of federal judges just ordered the California prison system to drastically increase prison expenditures or reduce its inmate population by 150,000 within two years (Moore, 2009).

We find that following federal court orders, prison conditions improved, prison costs per inmate increased, and state spending on cash assistance decreased. Thus, our results suggest that federal court can increase state expenditures but that it is likely that the resources used to finance these additional expenditures come from other disadvantaged groups.

Federal court orders to improve prison conditions are expected to reduce the deterrent effect of imprisonment,[3] and a large literature suggests that outlays on social

[2]Specifically, Wharton (1996) underlines the decrease in the correctional staff and increase in the number of violations of regulations governing mental health, fire safety, occupational safety, and hazardous materials.

[3]This is because, we find evidence in this paper that court intervention reduces prison deaths, and Katz et al. (2003) show that a reduction in prison death rates leads to higher crime rates. Thus,

welfare and education could be substitutes for corrections in combating crime.[4] Thus, if states seek to deter crime, an increase in state spending on social welfare and/or education following federal court intervention could be a vehicle through which this goal can be achieved.

We find that the court orders, which are associated with an increase in correctional spending, did not alter education spending, but generated a decrease in cash assistance. We provide two related explanations for these findings. First, it is possible that spending in various budget categories is "sticky." Following a court order to improve prison conditions, per capita corrections expenditures go up despite the decline in inmates per capita. If states experience higher crimes rates following a short-run reduction in the prison population, it may be infeasible to maintain a lower imprisonment rate. In general it may be difficult for the state to change the long-run level of the imprisonment rate given that it is affected by the decision of so many independent parties (state legislature, police, prosecutors, judge, juries, parole boards, and probation officers). If expenditures on corrections are "sticky," corrections expenditures will remain at a higher level even after the state has had enough time to adjust. Thus, given the budget constraints faced by the state, a permanent increase in corrections expenditures would have a negative impact on the provision of all services, including cash assistance. Second, policy makers may consider expenditures on various programs that affect the poor as substitutes. Given that court orders increase the cost

an improvement in prison conditions through court intervention implies a reduction in deterrence. Furthermore, we document in this paper that court orders reduce per capita prisoners in the state. Levitt (1996) shows that court orders impact the growth of prison population, which in turn influences the crime rate. Thus, the reduction in prison population due to court intervention is another avenue through which the court interventions may have reduced deterrence.

[4]For instance, Donohue and Siegelman (1998) argue for the effectiveness of preschool and early childhood education, family-based therapy, and job training as a crime control device. Corman and Mocan (2000, 2005), Mocan and Bali (forthcoming), Gould et al. (2002) and Lin (2008) provide evidence that local unemployment, wages and poverty have an impact on criminal activity, implying that education and training help combat crime. Lochner and Morettti (2004) demonstrate the impact of education on criminal activity.

of punishing criminals, to the extent that policy makers perceive criminals as being members of low-income groups, they may decide to decrease in welfare payments, rather than to reduce other spending items, such as transportation.[5]

Section 2 discusses prison litigation. Section 3 describes the data. Section 4 explains our empirical methodology and Section 5 presents the results.

2 Background and prior research

Prior to the 1960s federal and state courts almost invariably refused to hear cases regarding prison conditions (Bleich 1989; Schlanger 1999). In 1963, the Supreme Court held that inmates could employ the writ of *habeas corpus* to contest their conditions of incarceration.[6] During the mid to late 1960s, courts intervened on narrow issues. For instance, the courts prohibited guards from using two torture devices on prisoners (the crank telephone and the teeter board) and "the application of any whipping to the bare skin of prisoners."[7] In the 1970s, the federal courts took a much more activist stand. The prison systems in several states were ruled unconstitutional, and the courts enacted sweeping remedies based on the totality of prison conditions. Federal court intervention narrowed in scope in the 1980s. As described by Fliter (1996) and Schlanger (2006), this could be because the lawsuits in the 1970s made states more aware of legal liabilities, and many states created dispute resolution mechanisms to address grievances; and it could also be due the appointment

[5]Baicker (2001) finds that federally-mandated increases in medicaid spending lead to increases in medicaid spending at the expense of other state welfare spending. Further, she finds the effect to be larger with greater racial differences. Similarly, Baicker and Gordon (2006) examines *state* Supreme Courts orders to equalize spending across school districts. They find that these orders increase state aid to localities for education at the expense of aid for public welfare, health, hospitals, and general services. Court order to spend additional resources on prisons have occurred in some of the states with the greatest racial differences. Thus, if federal court orders are enforceable, it is plausible that the resources used to satisfy the court order come from other disadvantaged groups.

[6]*Jones v. Cunningham*, 371 U.S. 236 (1963).

[7]*Jackson v. Bishop*, E.D. Ark., 268 F. Supp. 804 (1967).

of conservative judges to the federal bench by Republican administrations (Schlanger, 2006; Epstein et al., 2007). Finally, in 1995 Congress passed the Prison Litigation Reform Act which made existing court orders harder to sustain and new ones harder to obtain (Schlanger, 2006).

Three previous studies have examined the impact of court orders on prison conditions. Harriman and Straussman (1983), Taggart (1989) and Fliter (1996) provide contradictory evidence on whether court orders have influenced state spending on correctional facilities. These studies limited their analyzes to total corrections expenditures and thus did not examine the impact of federal intervention on the number of state prisoners, corrections expenditures per prisoner, or corrections expenditures per capita. Further, these earlier studies did not employ panel data, and instead examined corrections expenditures one state at the time, for the states in which the federal courts intervened. Thus, the observed increase in corrections expenditures in the litigated states may have been caused by overall national trends in corrections expenditures. In contrast, Levitt (1996) examined a panel of all states for the years 1972 through 1993 and court orders that span the years 1971 through 1992. He reported that prison litigation had a short-run effect on the growth rate of prison population.

3 Data

Following Levitt (1996), we consider a state under court order if all correctional facilities of the state came under court order. Unlike Levitt, we restrict ourselves to federal court orders since we are interested in whether federal courts can improve state institutions. The Eleventh Amendment does not limit state courts and the ability of state courts to improve state institutions has already been established by Murray, Evans and Schwab (1998).

The "Litigated States" in our analysis, the date in which the state's correctional

system came under court order, and the date of release are displayed in Table 1. We used the information at the Civil Rights Litigation Clearinghouse to reconcile the small discrepancies in year and litigated status among the prior studies (Taggart, 1989; Fliter, 1996; Levitt, 1996).[8] In Section 5.2 we report that our main results hold when we employ the states and dates in Levitt (1996).

We investigate the impact of court orders on prison spending, prison mortality, welfare expenditures, medicaid expenditures, education expenditures, transportation expenditures, other state expenditures as well as local jail expenditures. This last variable is employed to investigate the extent to which states shift prisoners to jails to comply with the court orders.[9]

We define two welfare expenditure variables. The first one, "cash," measures cash assistance to individuals. It includes all state expenditures on cash programs as well as AFDC/TANF and assistance programs not under federal categorical programs (e.g., general assistance, refugee assistance, home relief, and emergency relief). The second variable, "medicaid," includes medical vendor payment benefits to individuals through Medicaid, state children's health insurance program (SCHIP), administration of medical and cash assistance, general relief, vendor, nursing homes and welfare institutions owned and operated by a government.

Because we are interested in the effect of court intervention on yearly cost of incarceration, we examine corrections operating expenditures.[10] We also analyze

[8] `http://clearinghouse.wustl.edu`. The correct data for when the state Alabama was released from court order is obtained from "U.S. Relinquishes Alabama Prisons; Dismissing 17-Year Lawsuit," *New York Times*, January 15, 1989, p. 17.

[9] We refer to 'prison' or 'corrections' as places of confinement of persons held in custody by the state government. We refer to 'jails' as places of confinement of persons held in custody by the local government.

[10] In 1992, more than three-quarters of the operating expenditures went to labor compensation (salaries, wages, and benefits), while the rest was devoted to the purchase of supplies, contract services, and the like. (Alexis M. Herman and Katharine G. Abraham, Measuring State and Local Government Labor Productivity: Examples from Eleven Services, U.S. Department of Labor, June 1998.)

the reaction of corrections capital outlays to court orders. Data for state financial variables are obtained from U.S. Census Bureau, *Annual Survey of State Government Finances and Census of Governments*. All financial variables are converted in real (2007) dollars using the consumer price index.

We follow Katz, Levitt, and Shustorovich (2003) in using prison deaths as a proxy for prison conditions. Courts have used prison deaths as a proxy for prison conditions as recently as February 2009, when federal judges found prison conditions in California so poor that inmates die regularly of suicides and lock of proper care (Thompson, 2009).[11] The prison mortality rate is computed as prison deaths per 1,000 state prisoners. Because of data limitations, the prison mortality is not adjusted for age, gender, or race of prisoners. Data on prison population and prison deaths are obtained from Donohue and Wolfers (2005), and updated using data from the Bureau of Justice Statistics.[12]

We also control for real income per capita, state unemployment rate, percentage of the state population that is black, percentage of the state population residing in urban areas, and variables gauging the age distribution in the state. Income per capita data are obtained from the Bureau of Economic Analysis. The unemployment rate is defined as the insured unemployment rate.[13] State-and-year specific age and race distribution is calculated using information from the Center for Disease Control and the Bureau of the Census. The proportion of state population residing in urban areas is calculated using census data.

Table 2 presents summary statistics for the years. Most dependent variables cover

[11] In response to these conditions the court ruled that California must release tens of thousand of inmates to relive overcrowding.

[12] The data can be downloaded at `http://bpp.wharton.upenn.edu/jwolfers/DeathPenalty.shtml`.

[13] The data for the years 1960-2000 are obtained from Donohue and Wolfers (2005). The values for 2001-2006 are calculated using state-specific weekly unemployment insurance claims information obtained from the U.S. Department of Labor.

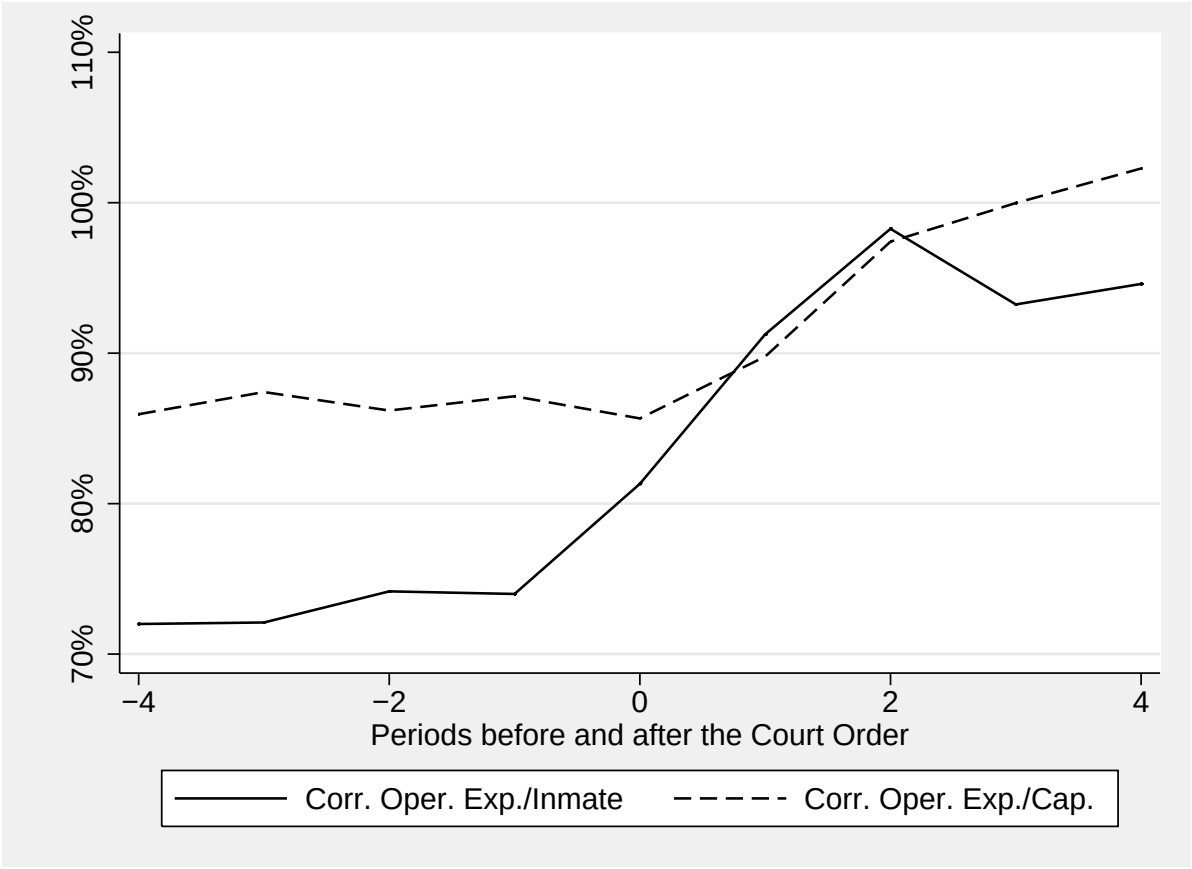
the period 1951 through 2006. The average real spending is about $31,000 per prisoner for operating expenditures and about $4,250 for capital expenditures. Average inmate-population ratio is about 2 per 1,000 residents, and average prison death rate is about 3 deaths per 1,000 inmates, which translates into 27 deaths per year for the average state.

4 Empirical methodology

In Figure 1 we display the ratio of corrections expenditures in litigated states to corrections expenditures in non-litigated states. To account for differences in wealth among states, expenditures are normalized by state income per capita, and they are deflated by the number of inmates and by the state population. The behavior of this ratio as a function of the timing of the court order is informative. The horizontal axis displays the time periods (in years) relative to the year in which the court order was issued to the litigated state. For example, four years prior to the court order, litigated states spent about 72% per inmate of what was spent by the non-litigated states. When the time period is zero (the year in which the court order was issued) the ratio jumps to about 87%; it reaches 102% two years after the court order and levels off. Thus, Figure 1 suggests that court intervention leads to higher corrections expenditures per inmate.

An ideal strategy to identify the impact of the court orders, however, would involve randomly assigning court orders to states and observing the differences in outcomes between states that received these court orders and states that did not. In fact, the eight out of twelve litigated states are in the south and thus the assignment of court orders is far from random. In the absence of such an experiment, we follow Angrist and Lavy (2001), Ashenfelter and Card (1985), and Freeman (1984) in assuming that while there are differences between states which received and did not receive court

Figure 1: Corrections Operating Expenditures in Litigated States as a Percentage of Corrections Operating Expenditures in Non-Litigated States (all expenditures are normalized by income per capita)



orders, these differences are fixed over time (after controlling for income per capita). Furthermore, the courts do not react to short-term variations in prison conditions when imposing the court orders. Specifically, court orders are not issued in reaction to transitory deteriorations in prison conditions; rather prison litigation and court orders emerge in reaction to prison conditions that would remain dire if it were not for court intervention. The graph in Figure 1 supports this statement. There is *no drop* in per inmate corrections spending in litigated states relative to non-litigated states before a court order was issued.[14] Levitt (1996) provides evidence that states

[14]Put differently, there is no indication of an "Ashenfelter dip."

start responding to prison litigation before the court decision, specifically they start responding when the lawsuit is filed. The evidence in Figure 1 is consistent with this hypothesis, as corrections operating expenses per inmate increase slightly before the court order is imposed. Thus the difference in corrections expenditures per inmate before an after the court order may somewhat underestimate the effect of the court intervention.[15]

In this spirit, we utilize a difference-in-difference methodology to examine how states react to court intervention. In particular, we investigate the impact of court intervention on various outcomes described earlier by estimating reduced-form regressions depicted by Equation (1):

$$Y_{it} = \alpha_i + \beta_{it} + \theta_t + \gamma X_{it} + \eta\,\text{CourtOrder}_{it} + \delta\,\text{CourtOrder}_{it} \times \text{Post}_{80} + \varepsilon_{it}, \qquad (1)$$

where the dependent variable Y_{it} stands for corrections expenditures (operating, or capital outlays) per prisoner, the death rate for prisoners, and prisoners per capita. These dependent variables are employed to investigate the impact of court orders on corrections expenditures and prison conditions. To analyze the extent to which states shift prisoners from state correctional facilities to local jails in reaction to federal court orders, we employ per capita local jail expenditures as an additional dependent variable. Other dependent variables include per capita state revenues, per capita expenditures on corrections, per capita state cash assistance payments, per capita expenditures on medicaid and other welfare items, per capita expenditures on education, per capita transportation expenditures, and per capita expenditures

[15]Note that corrections operating expenditures *per capita* in litigated states (the dashed line in Figure 1) remain steady in comparison to non-litigated states until one year after the court order (period 1 on the horizontal axis), while corrections operating expenditures *per inmate* rise sharply in the year in which the court order is handed out (period zero on the horizontal axis). This picture is consistent with the empirical result we report below, which shows that prisoners per capita in the state declines in reaction to a court order. It seems to indicate that the immediate reaction of the state to a court order is to adjust the prison population, while a budget increase in corrections spending takes a year to implement, possibly because of the fiscal cycle of the state.

on other items (such as administrative expenditures). These individual expenditure items exhaust total state revenue.

The vector X_{it} contains observable state characteristics as described in the data section above; α_i stands for unobserved state characteristic and θ_t represents year effects. The models also contain state-specific quadratic time trends, represented by β_{it}. "CourtOrder$_{it}$" is an indicator variable which takes the value of one if state i is under the court order in time t, and zero otherwise. "CourtOrder" can take the value of one only in litigated states, but there is variation in exposure to the "treatment" by a court order between litigated states; that is, in some states the court order remained effective for longer periods than others. For example, we see in Table 1 that the duration of a court order was from 1975 to 1997 in Louisiana, but it was from 1970 to 1982 in Arkansas. We include an interaction term between CourtOrder and a dummy variable which is equal to one in and after 1980 (Post_{80}) to account for the potentially different impact of court orders after 1980. We expect $\text{Post}_{80} \times \text{CourtOrder}$ to decrease corrections expenditures since it has been argued that court orders had a smaller effect after the 1980s because of the narrowed scope of prison litigation in the 1980s (Fliter, 1996; Schlanger, 2006). In Section 6 below, we discuss the results obtained from a model that formulates a different version of the impact of the court orders.

While the model depicted by Equation (1) analyzes the impact of a court order on the outcomes of interest, another interesting aspect is the extent to which a release from a court order influences the same outcomes. For example, while it is important to investigate whether the imposition of a court order increases prison spending and decreases spending on welfare programs, it is equally important to analyze if the effect of a release from court order is symmetric. More specifically, Equation (2) below is

used to investigate the impact of a release, conditional on being under a court order:

$$Y_{it} = \kappa_i + \pi_{it} + \tau_t + \lambda X_{it} + \mu \, \text{Release}_{it} + \omega_{it}, \tag{2}$$

where Release is a dichotomous variable which takes the value of one in the year during which the state was released from court order as well as in all years afterwards until the end of the sample. Thus, the variable Release captures the "treatment period" for the state, in which the "treatment" is the release from a court order.

Equation (2) is estimated in the sample of litigated states and in the years following the initiation of a court order. More precisely, this sample includes all state-years after a state came under the court order.[16] For example, Table 1 shows that Alabama came under court order in 1975. Therefore, the sample includes the observations from Alabama in years 1975 and later. The same argument applies to the other states listed in Table 1. Thus, Equation (2) investigates whether the release from the court order had an impact on outcomes (conditional on being under the court order). Most models are estimated in the sample that spans 1951–2006.

5 Results

5.1 Main specifications

Tables 3–A and 3–B display the results obtained by estimating Equation (1). The variables are in logarithms. Robust standard errors are clustered at the state level. The result reported in Column (1) of Table 3–A indicates that, following court intervention, corrections operating expenditures per prisoner increase by about 27%.[17] Column (2) displays the results obtained from the model where the dependent variable is correctional capital outlays per prisoner. The estimated coefficient of CourtOrder

[16] This specification does not include an interaction term with Post_{80} because no state was released from a court order prior to 1980.

[17] The percentage impact is calculated as $\exp\{\beta - \frac{1}{2} \times Var(\beta)\} - 1$, see Kennedy (1981).

indicates that being under the court order generates an increase in per inmate correctional capital outlays by 200% following the court intervention.

These estimates imply that corrections operating and capital expenditures go up by $175 million for an average state. Court orders decrease the prison death rate by 20% as shown in column (3), which translates into about 6 fewer deaths per year for an average state. The result in column (4) indicates that court orders generate a 12% decline in prisoners per capita.

The coefficient of CourtOrder $\times$ Post_{80} (δ) is of the opposite sign of CourtOrder (η) in all regressions with the exception of jail expenditures. We cannot reject the hypothesis that the sum of η and δ is zero in case of corrections capital expenditures and inmates per capita. This result suggests that while court orders increased capital expenditures and reduced prison population prior to 1980, court orders had no significant impact on these outcomes after 1980. In column (1), the sum of η and δ is negative and significantly different from zero (p=0.02), indicating that court orders had a smaller but still statistically significant impact on corrections operating expenditures per inmate after 1980. These findings are consistent with the hypothesis that post-1980, court orders narrowed in scope (Fliter, 1996; Schlanger, 2006).

A potential reaction of states to court orders could be to shift the prison population to local jails. Columns (5) of Table 3–A displays the results where per capita jail expenditures is used as dependent variable. There is no statistically significant impact of "CourtOrder," indicating that jail expenditures do not change in reaction to court orders.

Given that court orders decrease prison population and improve prison conditions, as revealed by a decline in prison deaths and prison population, court orders effectively reduce deterrence.[18] As described in the introduction, welfare spending may be a tool

[18]In fact, Levitt (1996) has shown that the decrease in prison population due to court orders had

for short-term crime prevention as a substitute for other deterrence measures such as imprisonment and prison conditions. Spending on education is another potential but longer-term vehicle through which crime commission can be influenced. Such an increase in welfare and/or education spending would dictate an increase in total state revenue. On the other hand, the increase in correction spending following the court order could prompt a re-allocation of expenditures between various spending categories. The results presented in Table 3–B allow us to investigate the extent to which states re-allocate resources following the court orders.

In Table 3–B per capita state revenues (in column 1) and various spending categories of the state (columns 2–7) are the dependent variables. These spending categories exhaust total state expenditures. Column (1) of Table 3–B indicates that court orders have no impact on per capita state revenue. Consistent with earlier results, column (2) shows that court orders increase per capita correctional spending by 24%. In column (3) the coefficient of CourtOrder is negative and statistically significant, indicating the unintended consequence of increasing correctional spending: court orders generate about a 22% reduction in per capita cash assistance. Columns (4) through (7) demonstrate that court orders have no impact on medicaid spending, education spending, transportation spending, or other state spending.

Taken together, the results displayed in Tables 3–A and 3–B demonstrate that court orders improved prison conditions, and they increased the cost of providing correctional services. Since state revenue did not change, states maintained a balanced budget by decreasing cash welfare spending. During our period of study (1951 through 2006) there were numerous changes in the federal rules that determine cash payments. Thus, one may be concerned that our results are driven by correlation between prison litigation and changes in federal welfare rules. Our esti-

a significant impact on state crime rates.

mated dollar decrease in cash payments is larger than the dollar increase in corrections expenditures. However, the difference between the decrease in cash payments and corrections expenditures is not statistically significant. Further, a larger response in cash payments is fully consistent with 1 to 1 reallocation of funds from cash payments to corrections. The reason for this is that the census measure of AFDC/TANF includes expenditures financed by both the state and the federal government. Further, under AFDC, the federal government matched state expenditures. Thus, a $1 transfer in state resources from AFDC towards corrections could lead to a $1.80 decrease in AFDC expenditures. In general, the hypothesis that our results are driven by a correlation between prison litigation and federal welfare rules is unlikely given that our results are robust over a large number of specifications.

To investigate the sensitivity of our results to model specification, we estimate the models without control variables. The results, reported in Tables 4–A and 4–B indicate that neither the statistical significance nor the point estimate change appreciably when drop the control variables. As a further check of the validity of the identification strategy, we investigate the impact of exposure to court orders on different facets of the criminal justice system; police spending and jail spending. Specifically, we examine the impact of court orders on the *difference* between state correctional operating expenditures and (i) police expenditures and (ii) jail expenditures. If corrections expenditures and other criminal justice expenditures *move in tandem* in states that are exposed to court orders *as well as* in states that are not under the court order, this would imply that some unobserved factors confound the impact of court orders on corrections spending. Put differently, if federal intervention has an effect, the difference between corrections expenditures and other criminal justice expenditures are expected to get larger in states that are exposed to court orders. Thus, the difference-in-difference-in-differences estimates allow us to control for unobserved factors that

are not accounted for by state fixed effects, year fixed effects, state specific time trends.

Table 5 displays the results of four specifications. In columns (1) and (2) the dependent variables are the difference between per inmate (or per capita) corrections operating expenditures and per capita police spending. In column (3) the dependent variable is the difference between corrections operating expenditures per inmate and jail expenditures per jail inmate. In column (4) we report the results of the specification where the dependent variable is the difference between per capita corrections operating expenditures and per capita jail expenditures. The coefficient of CourtOrder is positive and statistically significant in all cases, indicating that the wedge between corrections operating expenditures and other correctional expenditures increased in states that were exposed to court orders in comparison to those states that were not.

To investigate the impact of having been released from a court order, we estimated models depicted by Equation (2). Tables 6–A and 6–B display the results. The sample sizes are smaller in these specifications because they analyze the impact of having been released from the court order, given that a court order was imposed. Because we have only 12 states that contribute to this identification, clustered robust standard errors underestimate standard errors. Thus, we follow Cameron, Gelbach and Miller (2008) and provide bootstrapped p-values for the variable Release [in brackets]. Regardless of whether we compute p-value using limiting p–values or bootstrap, correction and cash payments spending do not change when states are released from court order. Thus, the budget cuts that are associated with cash payment programs following the court order are not restored after the state's release from court order. Similarly, states do not alter per inmate corrections spending when the court order is lifted, and prison deaths per inmate and inmates per capita do not change when states are

released from the court order.

5.2 Robustness

To investigate the robustness of the results, we performed a number of analyses. First, we investigated whether the results were sensitive to the omission of Alaska and Hawaii. Alaska receives its tax revenues from oil, which is a highly variable revenue source. Hawaii is also unusual as a large percentage of its revenues comes from tourism. However, omitting these states did not alter the results. Second, we included in the models an indicator variable that identified the states that were sued in state courts for education spending. Controlling for this effect did not alter the estimated coefficients or their statistical significance. We estimated the prison death equation using the level of (deaths per inmates) as the dependent variable, rather than its logarithm. About four percent of the sample contained zeros for this variable. Estimating the prison death rate regression in levels did not alter the results. The coefficient of CourtOrder was estimated as -0.75 (p=0.054), indicating that a court order reduces the prison death rate by 0.75 per 1,000 inmates, which implies a reduction of about 8 deaths for an average state, which is similar to the results obtained from the model with logarithms.

We also estimated the models depicted by equation (1) by replacing the dummy variable Post_{80} with Post_{85}, where Post_{85} takes the value of one if the year is 1985 or later. This specification investigates whether court orders had a different impact after 1985. The results were very similar to those reported in Tables 3–A and 3–B with the following difference. The impact on prison deaths became statistically insignificant. Finally, when we used the final court decision dates listed in Levitt (1996), we obtained coefficients that were very similar both in magnitude and statistical significance. The only difference was that the coefficients of prison deaths and prison population became

insignificant.

The impact of the court order may be changing over the duration of the court order. For example, the impact on prison conditions may be stronger during the first few years after the federal court issues the order, and it may die out over time. To investigate this possibility we created 5 dummy variables that identify the five time segments over the course of a court order. Specifically, the first variable takes the value of 1 during the first five years of the court order and zero elsewhere. The second variable is equal to 1 during the 6th, 7th, 8th, 9th and 10th years of the court order; and the fifth dichotomous variable is equal to 1 during the years of 21 and higher.[19] The results obtained from this specification are presented in Tables 7–A and 7–B. In column (1) of Table 7–A we observe that the impact of the court order on corrections operating expenditures is rising over time and then declining, with the biggest impact being observed during the years of 6–10 (during 2nd Five Years). Column (2) shows that the impact of the court order on corrections capital expenditures is observed only during the first five years after the order is issued. This result suggests that any capital improvements to the existing prison system takes place during the first five years. The same pictures emerges in column (4), where the impact on prison population is observed during the first five years. In this specification the impact of court orders on prison mortality is not significantly different from zero. Table 7–B indicates that the impact of a court order on per capita corrections expenditures persist for about 20 years, but that the impact on state cash assistance expenditures is realized during the first five years of the court order. When we change the window of coverage to 6 year intervals (i.e., years 1–6, 7–12, etc.), we obtained the same results. The same is true when we use windows that cover 4-year periods. In this

[19]The longest court order duration was in Mississippi with 27 years, followed by New Hampshire with 25 years, and Louisiana and Texas with 23 years (see Table 1).

case, the impact of court orders on capital expenditures were significant during the first two intervals (8 years).

We also investigated the impact of court orders on two other indicators of prison conditions: cells per inmate and staff per inmate. The number of cells is partly determined by the structure of the physical facility and the number of staff per inmate is partly a function of the composition of the inmate population. Nevertheless, these variables are indicators of prison conditions.[20] Thus, we analyzed whether or not the change in these variables between 1974 and 1990 (the only two years in which data are available) was related to the state's litigation status to shed further light into the impact of court orders on prison conditions. The results, displayed in Table 8, indicate that the states which came under the court order sometime between 1974 and 1990 (the litigated states) experienced a higher growth rates in cells per inmate and staff per inmate during that time period, indicating that litigated states experienced an improvement in prison conditions relative to non-litigated states.

6 Conclusion

Although it is believed that the intervention of federal courts has improved the conditions in state prisons, very little systematic analysis is available on the impact of court orders. The extent to which federal court orders are enforceable is disputed (Fliter, 1996; Taggart, 1989; Harriman and Straussman 1983). Even if the court orders are fully enforceable, the response of states having to spend additional resources on prisons depends on numerous factors such as the level of heterogeneity in the population, the shape of the utility function of the median voter (Baicker, 2001), the

[20]There is evidence to indicate that prisoner who are housed in large, open bay dormitories are more likely to visit clinics and to have high blood pressure than are prisoners in other housing arrangements (such as single-bunked cells, double-bunked cells, small dormitories, large partitioned dormitories). Also, prisons that contain dormitories have somewhat higher assault rates than do other prisons (Gaes, 1985).

deadweight cost of taxes and subsidies (Becker and Mulligan, 2001), and the cost of altering the provision of various government services. Therefore, theoretically, the impact of federal court orders on prison spending and prison conditions is ambiguous. Furthermore, there exists no research that investigates the reaction of states to federal court orders in such dimensions as education spending and welfare expenditures.

In this paper we employ a state-level panel data set to investigate states' reactions to federal court interventions. Specifically, we analyze the impact of court orders on prison spending, prison conditions, per capita prisoners, as well as state spending on welfare, education, transportation, and other state spending. We find that court intervention in state prisons increased per inmate operating expenditures by about 27%, doubled per capita corrections capital expenditures, decreased prisoners per capita by 12 percent and prison mortality by 6 prisoner deaths per year for an average state.

We also investigate the effect of the release from a court order, and we find no evidence that when the court orders are lifted, states adjust back their corrections expenditures. Similarly, prison mortality rate does not change following the release from court order.

Because court orders make it more expensive for states to deter crime through imprisonment, one could expect states to shift towards relatively cheaper means of deterring crime. For example, given that spending on education and welfare programs are expected to negatively impact criminal activity, states could spend more on these budget items following the imposition of court orders. However, we find that following court orders, state expenditures on education, transportation, and other items remained the same, but expenditures related to welfare spending on cash assistance decreased by about 22%. We cannot reject the hypothesis that the decline in cash assistance payments equals the increase in correctional expenditures. In addition,

our results indicate that after the state has been released from court order, spending on cash payments is not restored. The results follow from a difference-in-differences methodology. Thus, they denote changes that arise because of the exposure to a court order relative to a group of comparison states. For instance, welfare expenditures may have increased in all states, but the increase was smaller in states that were subject to court order.

One explanation of these finding is that increases in expenditures in those programs that affect the poor trigger a decrease in expenditures in other programs that also affect the poor. For instance, if state legislators believe that welfare recipients and criminals come from the same social groups, then cutting welfare spending may be considered a substitute to imprisonment in punishing criminals by the legislators. Another explanation is that spending on expenditure categories is "sticky." Given that the average duration of a court order is 18 years, we expect that entrenched bureaucracies and special interests (e.g., prison guards unions, prison contractors) would prevent resources being redistributed back from corrections to cash transfers after a state is released from court order. Regardless of the mechanism that generates this outcome, the findings underscore that states shift the burden of increased correctional spending on the poor.

Table 1: States Subject to Federal Court Intervention – "Litigated States"

State	Case	Citation	Year of Court Decision	Year of Release
AL	Pugh v. Locke	Injunction (M.D. Ala.)	1975	1989
AR	Holt v. Server	300 F. Supp. 825 (E.D. Ark)	1970	1982
FL	Costello v. Wainwright	489 F.Supp. 1100 (M.D. Fl.)	1980	1993
LA	Williams v. Edwards	Injunction (M.D. La.)	1975	1997
MS	Gates v. Collier	349 F. Supp. 881 (N.D. Miss.)	1972	1998
NM	Duran v. Apodaca	Consent decree (D. N.M.)	1980	1998
NH	Laaman v. Helgemoe	437 F.Supp. 269 (D.N.H.)	1977	2001
OK	Battle v. Anderson	376 F. Supp. 402 (E.D. Ok.)	1974	1986
RI	Palmigiano v. Garrahy	443 F. Supp. 956 (D. R.I.)	1977	1995
SC	Nelson v. Leeke	Consent decree (D. S.C.)	1985	1996
TN	Grubbs v. Bradley	552 F. Supp. 1052 (M.D. Tenn.)	1982	1996
TX	Ruiz v. Estelle	503 F. Supp. 1265 (S.D. Tex.)	1980	2002

Table 2: Summary Statistics

Variable	N	Mean	Std. Dev.	Min.	Max.
Oper. Corr. Exp./Inmate	2,660	$31,084	$17,503	$2,361	$145,744
Corr. Capital Exp./Inmate	2,305	$4,258	$6,113	$0	$77,285
Deaths/Inmate (× 1000)	2,713	3.06	1.98	0.00	26.06
Inmates/Capita (× 1000)	2,756	1.93	1.54	0.20	8.91
Jail Exp./Capita (× 1000)	1,496	$32.86	$28.27	$0.001	$153.01
General Revenue/Capita	2,830	$2,781	$1,978	$367	$26,680
State Corrections Exp./Capita	2,782	$67	$60	$3	$452
State Cash/Capita	2,782	$126	$90	$7	$799
State Medicaid/Capita	2,782	$600	$481	$41	$2,490
State Education Exp./Capita	2,782	$988	$560	$66	$4,167
State Transportation Exp./Capita	2,782	$396	$235	$79	$2,945
State Other Exp./Capita	2,782	$570	$635	$34	$8,759
Court Order	2,830	0.08	0.27	0.00	1.00
Income /Capita	2,830	$23,871	$8,166	$6,582	$52,933
Unemployment Rate	2,830	3.07	1.63	0.50	12.60
% Black population	2,830	9.4	9.7	0.04	45.3
% Urban population	2,830	66.7	15.65	24.78	100.00
% Population aged 15–24	2,830	15.8	2.2	9.1	21.5
% Population aged 25–44	2,830	27.7	3.3	15.9	39.0
% Population aged 45–54	2,830	11.4	2.3	7.4	42.6
% Population aged 55+	2,830	19.5	3.3	6.4	28.8

NOTES – All monetary values are in real dollars. Most dependent variables cover years 1951 to 2006.

Table 3-A: Impact of Federal Court Orders on Corrections

	(1)	(2)	(3)	(4)	(5)
	Corrections Oper. Exp. per Inm.	Corrections Capital Exp. per Inm.	Deaths per Inm.	Inmates per Cap.	Jail Exp./Cap.
Court Order	0.241***	1.129***	-0.220**	-0.124***	0.014
	(0.049)	(0.240)	(0.095)	(0.037)	(0.122)
Court Order × Post_{80}	-0.094*	-0.779***	0.212	0.123**	0.007
	(0.054)	(0.280)	(0.151)	(0.047)	(0.137)
Income / Capita	0.396	5.190***	0.796	-0.084	2.151***
	(0.255)	(1.328)	(0.662)	(0.178)	(0.718)
Unemp. Rate	0.005	0.145	-0.038	0.048	0.205**
	(0.036)	(0.181)	(0.075)	(0.031)	(0.077)
% Black	0.212	-0.252	0.035	0.073	-0.376
	(0.138)	(0.636)	(0.262)	(0.112)	(0.380)
% Urban	-0.994***	-0.636	0.401	1.011**	2.095**
	(0.344)	(1.468)	(0.410)	(0.379)	(0.832)
% Population 15-24	0.389	-0.673	0.275	-0.469*	0.050
	(0.319)	(1.598)	(0.655)	(0.249)	(0.655)
% Population 25-44	-0.486	-4.715	1.154	-0.304	3.689*
	(0.912)	(3.246)	(1.084)	(0.591)	(2.005)
% Population 45-54	-0.481	-2.315	0.443	-0.062	1.280
	(0.370)	(1.875)	(0.523)	(0.251)	(1.204)
% Population 55+	-0.651	-0.605	0.849	0.184	-0.084
	(0.534)	(3.027)	(0.873)	(0.459)	(0.980)
Observations	2660	2301	2553	2756	1496
R-squared	0.956	0.455	0.441	0.976	0.947

NOTES – The dependent variables are natural logarithms of the corrections operating expenditures per inmate, corrections capital expenditures per inmate, prison deaths per 1,000 inmates, prisoners per 1,000 residents and jail expenditures per capita, respectively in columns (1) to (5). All models contain state fixed effects and year dummies as well as linear and quadratic state trends. Robust standard errors clustered at the state level are presented in (parentheses). ***, ** and * indicate significance at 1%, 5% and 10%, respectively.

Table 3-B: Impact of Federal Court Orders on State Spending

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	General Rev./Cap.	Corrections Exp./Cap	Cash per Cap.	Medicaid per Cap.	Educ. Exp./Cap.	Trans. Exp./Cap.	Other Exp./Cap.
CourtOrder	-0.006	0.215***	-0.249**	-0.002	-0.028	-0.025	0.034
	(0.021)	(0.047)	(0.106)	(0.041)	(0.020)	(0.038)	(0.054)
CourtOrder × Post_{80}	0.008	-0.072	0.178**	-0.026	0.024	0.050	-0.057
	(0.030)	(0.057)	(0.087)	(0.053)	(0.037)	(0.050)	(0.064)
Income / Capita	0.375***	0.656**	-1.110***	0.478**	0.478**	0.329**	0.995***
	(0.111)	(0.292)	(0.351)	(0.206)	(0.202)	(0.159)	(0.347)
Unemp. Rate	0.019	0.064*	0.090*	0.092***	0.056**	0.079***	0.088**
	(0.018)	(0.036)	(0.050)	(0.026)	(0.026)	(0.026)	(0.036)
% Black	0.006	0.403***	-0.011	0.005	-0.057	-0.065	0.112
	(0.048)	(0.121)	(0.182)	(0.080)	(0.089)	(0.090)	(0.093)
% Urban	0.292	0.197	1.021**	0.041	0.086	0.439	0.361
	(0.345)	(0.587)	(0.418)	(0.278)	(0.415)	(0.419)	(0.477)
% Population 15–24	-0.075	-0.249	0.078	0.042	-0.033	-0.242	-0.073
	(0.157)	(0.279)	(0.450)	(0.212)	(0.236)	(0.218)	(0.251)
% Population 25–44	0.244	-1.524	2.078**	0.855	-1.322*	0.433	0.870
	(0.376)	(0.937)	(0.943)	(0.616)	(0.745)	(0.590)	(0.618)
% Population 45–54	-0.058	-1.107***	1.098**	0.286	-0.741***	-0.429	-0.163
	(0.163)	(0.392)	(0.497)	(0.273)	(0.274)	(0.281)	(0.266)
% Population 55+	0.412	-0.820	0.999	0.836**	-0.215	0.088	0.921**
	(0.248)	(0.579)	(0.807)	(0.377)	(0.326)	(0.496)	(0.393)
Observations	2830	2782	2782	2782	2782	2782	2782
R-squared	0.989	0.972	0.872	0.988	0.984	0.979	0.879

NOTES – The dependent variables are the natural logarithms of General state revenues per capita, total state corrections expenditure per capita, state cash payments per capita, state medicaid expenditures per capita, state transportation expenditures per capita and other state expenditures per capita, respectively in columns (1) to (7). All models contain state fixed effects and year dummies as well as linear and quadratic state trends. Robust standard errors clustered at the state level are presented in (parentheses). ***, ** and * indicate significance at 1%, 5% and 10%, respectively.

Table 4-A: Impact of Federal Court Orders on Corrections

	(1)	(2)	(3)	(4)	(5)
	Corrections Oper. Exp. per Inm.	Corrections Capital Exp. per Inm.	Deaths per Inm.	Inmates per Cap.	Jail Exp./Cap.
CourtOrder	0.232***	1.225***	-0.192**	-0.116***	0.105
	(0.050)	(0.227)	(0.086)	(0.034)	(0.098)
CourtOrder × Post_{80}	-0.050	-0.764***	0.184	0.099**	-0.011
	(0.062)	(0.273)	(0.131)	(0.046)	(0.124)
Observations	2660	2301	2553	2756	1496
R-squared	0.953	0.439	0.436	0.974	0.942

NOTES – The dependent variables are natural logarithms of the corrections operating expenditures per inmate, corrections capital expenditures per inmate, prison deaths per 1,000 inmates, prisoners per 1,000 residents and jail expenditures per capita, respectively in columns (1) to (5). All models contain state fixed effects and year dummies as well as linear and quadratic state trends. Robust standard errors clustered at the state level are presented in (parentheses). ***, ** and * indicate significance at 1%, 5% and 10%, respectively.

Table 4-B: Impact of Federal Court orders on the State Spending

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	General Rev./Cap.	Corrections Exp./Cap	Cash per Cap.	Medicaid per Cap.	Educ. Exp./Cap.	Trans. Exp./Cap.	Other Exp./Cap.
CourtOrder	0.002	0.224***	-0.274**	-0.007	-0.023	-0.012	0.046
	(0.019)	(0.050)	(0.113)	(0.040)	(0.022)	(0.039)	(0.053)
CourtOrder × Post_{80}	-0.004	-0.050	0.158*	-0.023	0.031	0.035	-0.068
	(0.031)	(0.051)	(0.086)	(0.053)	(0.038)	(0.052)	(0.069)
Observations	2830	2782	2782	2782	2782	2782	2782
R-squared	0.988	0.970	0.864	0.987	0.983	0.977	0.866

NOTES – The dependent variables are the natural logarithms of General state revenues per capita, total state corrections expenditure per capita, state cash payments per capita, state medicaid expenditures per capita, state transportation expenditures per capita and other state expenditures per capita, respectively in columns (1) to (7). All models contain state fixed effects and year dummies as well as linear and quadratic state trends. Robust standard errors clustered at the state level are presented in (parentheses). ***, ** and * indicate significance at 1%, 5% and 10%, respectively.

Table 5: Impact of Federal Court Orders on the Difference Between Corrections Operating Expenditures and Local Police and Jail Spending

	(1)	(2)	(3)	(4)
	Corrections-Police	Corrections-Police	Corrections-Jail	Corrections-Jail
	Version 1	Version 2	Version 1	Version 2
CourtOrder	0.274***	0.231***	0.314***	0.322***
	(0.053)	(0.050)	(0.104)	(0.093)
CourtOrder $\times$ Post_{80}	-0.107**	-0.097	-0.206*	-0.206**
	(0.052)	(0.060)	(0.115)	(0.102)
Income / Capita	0.136	0.203	-0.395	-0.487
	(0.255)	(0.288)	(0.537)	(0.449)
Unemp. Rate	-0.056	-0.006	-0.045	-0.142*
	(0.039)	(0.048)	(0.105)	(0.083)
% Black	0.168	0.318**	0.074	0.484
	(0.139)	(0.149)	(0.222)	(0.339)
% Urban	-1.245**	-0.495	-1.876**	-2.424***
	(0.574)	(0.451)	(0.732)	(0.843)
% Population 15–24	0.620*	0.247	0.306	0.346
	(0.315)	(0.266)	(0.696)	(0.683)
% Population 25–44	-0.312	-0.707	-3.017**	-4.409**
	(0.632)	(0.786)	(1.482)	(2.009)
% Population 45–54	0.002	-0.922**	-1.497**	-1.931
	(0.344)	(0.407)	(0.700)	(1.273)
% Population 55+	0.227	0.030	0.337	-0.034
	(0.587)	(0.585)	(0.979)	(1.059)
Observations	2161	2248	1400	1482
R-squared	0.931	0.888	0.811	0.952

NOTES – The dependent variables are the differences between the natural logarithms of the following variables: (1) [Corrections Operating Expenditures/Inmate]-[Local Police Expenditures/Population], (2) [Corrections Operating Expenditures/Population]-[Local Police Expenditures/Population], (3) [Corrections Operating Expenditures/Inmate]-[Jail Expenditures/Jail Inmates] and (4) [Corrections Operating Expenditures/Population]-[Jail Expenditures/Population]. All control variables are in natural logarithms. All models contain state fixed effects and year dummies as well as linear and quadratic state trends. Robust standard errors clustered at the state level are presented in (parentheses). ***, ** and * indicate significance at 1%, 5% and 10%, respectively.

Table 6-A: Impact of Releases from Federal Court Orders on Corrections

	(1)	(2)	(3)	(4)	(5)
	Corrections Oper. Exp. per Inm.	Corrections Capital Exp. per Inm.	Deaths per Inm.	Inmates per Cap.	Jail Exp./Cap.
Release	-0.047	-0.130	0.020	0.006	-0.026
	(0.053)	(0.227)	(0.144)	(0.053)	(0.061)
	[0.839]	[0.972]	[0.988]	[0.977]	[0.964]
Income / Capita	0.768	-2.347	0.524	0.258	-0.107
	(0.526)	(3.140)	(1.776)	(0.663)	(0.753)
Unemp. Rate	0.066	-0.294	0.360	0.079	0.157*
	(0.056)	(0.367)	(0.216)	(0.072)	(0.072)
% Black	0.093	0.512	1.110	-0.028	0.411
	(0.131)	(0.980)	(0.513)	(0.098)	(0.545)
% Urban	-1.747	-2.840	-0.780	3.796	2.034
	(1.133)	(7.938)	(4.136)	(1.223)	(2.207)
% Population 15–24	-0.369	1.969	1.072	0.110	2.508
	(0.582)	(4.837)	(2.239)	(0.464)	(1.191)
% Population 25–44	0.694	-6.170	2.806	-1.832	2.867
	(1.995)	(6.527)	(3.506)	(1.048)	(1.685)
% Population 45–54	0.241	-1.053	0.933	0.694	3.022
	(1.588)	(6.485)	(3.425)	(1.610)	(2.126)
% Population 55+	0.779	-1.147	7.497	-3.748	-4.912
	(1.667)	(7.343)	(4.987)	(2.115)	(2.052)
Observations	355	355	346	367	290
R-squared	0.966	0.642	0.466	0.988	0.951

NOTES – The dependent variables are natural logarithms of the corrections operating expenditures per inmate, corrections capital expenditures per inmate, prison deaths per 1,000 inmates, prisoners per 1,000 residents and jail expenditures per capita, respectively in columns (1) to (5). All models contain state fixed effects and year dummies as well as linear and quadratic state trends. Robust standard errors clustered at the state level are presented in (parentheses). The values in [brackets] are the p-values of the estimated coefficients of Release based on bootstrapping proposed by Cameron, Gelbach and Miller (2008).

Table 6-B: Impact of Releases from Federal Court Orders on State Spending

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	General Rev./Cap.	Corrections Exp./Cap.	Cash per Cap.	Medicaid per Cap.	Educ. Exp./Cap.	Trans. Exp./Cap.	Other Exp./Cap.
Release	-0.019	-0.039	-0.069	0.023	-0.039	-0.008	-0.073
	(0.009)	(0.051)	(0.082)	(0.034)	(0.017)	(0.053)	(0.035)
	[0.777]	[0.940]	[0.907]	[0.978]	[0.586]	[0.982]	[0.706]
Income / Capita	0.673	0.595	0.412	0.714	0.781	0.646	0.594
	(0.215)	(0.331)	(0.882)	(0.405)	(0.217)	(0.508)	(0.633)
Unemp. Rate	0.002	0.110	0.055	0.017	0.057	0.069	0.093
	(0.020)	(0.049)	(0.075)	(0.042)	(0.016)	(0.099)	(0.060)
% Black	-0.064	0.247	0.249	-0.430	0.014	0.059	-0.080
	(0.063)	(0.211)	(0.429)	(0.250)	(0.072)	(0.196)	(0.163)
% Urban	0.313	1.906	2.573	-0.289	-1.142	1.630	1.987
	(0.287)	(1.317)	(2.683)	(1.130)	(0.430)	(0.961)	(0.924)
% Population 15–24	-0.315	0.204	-0.740	0.005	-0.456	0.609	-0.017
	(0.257)	(0.747)	(0.701)	(0.650)	(0.421)	(0.499)	(0.479)
% Population 25–44	-1.002	-1.609	-3.261	-0.347	-0.829	-0.979	-1.191
	(0.687)	(1.974)	(2.135)	(0.999)	(1.165)	(1.482)	(1.508)
% Population 45–54	-0.470	1.317	-0.118	0.327	0.616	-0.486	-1.439
	(0.551)	(1.396)	(2.378)	(1.238)	(0.569)	(1.172)	(0.957)
% Population 55+	-0.269	-2.383	-4.649	-0.476	1.138	-2.715	-1.532
	(0.384)	(1.683)	(2.268)	(1.388)	(0.381)	(1.131)	(1.179)
Observations	357	357	357	357	357	357	357
R-squared	0.987	0.966	0.904	0.976	0.985	0.859	0.973

NOTES – The dependent variables are the natural logarithms of General state revenues per capita, total state corrections expenditure per capita, state cash payments per capita, state medicaid expenditures per capita, state transportation expenditures per capita and other state expenditures per capita, respectively in columns (1) to (7). All models contain state fixed effects and year dummies as well as linear and quadratic state trends. Robust standard errors clustered at the state level are presented in (parentheses).

Table 7-A: Impact of Court Orders on Corrections: Models with Staggered Court Order Effects

	(1)	(2)	(3)	(4)	(5)
	Corrections Oper. Exp. per Inm.	Corrections Capital Exp. per Inm.	Deaths per Inm.	Inmates per Cap.	Jail Exp./Cap.
1^{st} Five Years	0.234***	0.749*	0.061	-0.069**	0.079
	(0.065)	(0.394)	(0.156)	(0.032)	(0.090)
2^{nd} Five Years	0.323***	0.519	-0.127	-0.079	0.262
	(0.098)	(0.386)	(0.188)	(0.068)	(0.164)
3^{rd} Five Years	0.304**	0.194	0.086	-0.010	0.322
	(0.121)	(0.441)	(0.187)	(0.103)	(0.208)
4^{th} Five Years	0.222*	-0.403	-0.182	0.101	0.253
	(0.114)	(0.634)	(0.231)	(0.109)	(0.249)
5^{th} Five Years	0.210*	-0.492	0.049	0.001	0.254
	(0.108)	(0.562)	(0.239)	(0.115)	(0.249)
Income/Capita	0.381	4.974***	0.767	-0.051	2.094***
	(0.260)	(1.348)	(0.646)	(0.178)	(0.743)
Unemployment Rate	0.002	0.140	-0.026	0.046	0.189**
	(0.035)	(0.176)	(0.074)	(0.031)	(0.078)
% Black	0.176	-0.262	0.045	0.078	-0.415
	(0.134)	(0.597)	(0.259)	(0.111)	(0.385)
% Urban	-0.912***	-0.602	0.387	0.994**	2.159**
	(0.314)	(1.508)	(0.412)	(0.376)	(0.887)
% Population 15 to 24	0.304	-0.831	0.382	-0.426*	-0.013
	(0.316)	(1.583)	(0.656)	(0.245)	(0.655)
% Population 25 to 44	-0.521	-4.800	1.297	-0.294	3.760*
	(0.915)	(3.282)	(1.102)	(0.594)	(2.023)
% Population 45 to 54	-0.484	-2.570	0.508	-0.043	1.329
	(0.374)	(1.885)	(0.521)	(0.253)	(1.206)
% Population 55+	-0.534	-0.690	0.810	0.177	0.227
	(0.501)	(3.018)	(0.887)	(0.465)	(0.970)
Observations	2660	2301	2553	2756	1496
R-squared	0.956	0.458	0.443	0.976	0.947

NOTES – The dependent variables are natural logarithms of the corrections operating expenditures per inmate, corrections capital expenditures per inmate, prison deaths per 1,000 inmates, prisoners per 1,000 residents and jail expenditures per capita, respectively in columns (1) to (5). All models contain state fixed effects and year dummies as well as linear and quadratic state trends. Robust standard errors clustered at the state level are presented in (parentheses).

Table 7-B: Impact of Court Orders on State Spending: Models with Staggered Court Order Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	General Rev./Cap.	Corrections Exp./Cap.	Cash per Cap.	Medicaid per Cap.	Educ. Exp./Cap.	Trans. Exp./Cap.	Other Exp./Cap.
1^{st} Five Years	-0.011	0.206**	-0.258**	-0.059	-0.001	-0.039	0.007
	(0.024)	(0.093)	(0.126)	(0.046)	(0.035)	(0.050)	(0.055)
2^{nd} Five Years	-0.004	0.232**	-0.200	-0.065	-0.001	0.015	0.012
	(0.028)	(0.095)	(0.200)	(0.066)	(0.063)	(0.077)	(0.061)
3^{rd} Five Years	-0.028	0.231**	-0.202	-0.089	-0.032	0.022	-0.021
	(0.039)	(0.113)	(0.277)	(0.078)	(0.078)	(0.093)	(0.077)
4^{th} Five Years	-0.017	0.205*	-0.185	-0.037	-0.055	0.058	-0.055
	(0.051)	(0.117)	(0.334)	(0.132)	(0.094)	(0.123)	(0.119)
5^{th} Five Years	-0.041	0.107	-0.229	-0.086	-0.024	-0.020	-0.011
	(0.048)	(0.111)	(0.316)	(0.105)	(0.084)	(0.118)	(0.101)
Income/Capita	0.369***	0.645**	-1.121***	0.479**	0.468**	0.328**	0.979***
	(0.111)	(0.295)	(0.347)	(0.209)	(0.203)	(0.162)	(0.347)
Unemployment Rate	0.019	0.060*	0.089*	0.090***	0.059**	0.075***	0.088**
	(0.018)	(0.036)	(0.045)	(0.026)	(0.026)	(0.026)	(0.037)
% Black	0.010	0.385***	0.016	0.012	-0.051	-0.065	0.110
	(0.048)	(0.119)	(0.180)	(0.080)	(0.090)	(0.091)	(0.094)
% Urban	0.277	0.229	0.951**	0.019	0.073	0.431	0.366
	(0.354)	(0.577)	(0.376)	(0.283)	(0.422)	(0.423)	(0.476)
% Population 15 to 24	-0.063	-0.293	0.169	0.049	-0.013	-0.232	-0.097
	(0.159)	(0.274)	(0.418)	(0.216)	(0.236)	(0.220)	(0.250)
% Population 25 to 44	0.250	-1.530	2.123**	0.843	-1.304*	0.434	0.864
	(0.379)	(0.930)	(0.946)	(0.617)	(0.744)	(0.590)	(0.623)
% Population 45 to 54	-0.059	-1.112***	1.125**	0.275	-0.739**	-0.420	-0.172
	(0.163)	(0.397)	(0.496)	(0.272)	(0.276)	(0.281)	(0.264)
% Population 55+	0.397	-0.761	0.918	0.806**	-0.235	0.097	0.934**
	(0.251)	(0.572)	(0.784)	(0.382)	(0.330)	(0.504)	(0.390)
Observations	2830	2782	2782	2782	2782	2782	2782
R-squared	0.989	0.972	0.872	0.988	0.984	0.979	0.879

NOTES – See Table 6–B.

Table 8: Impact of Federal Court Orders on Prison Cells and Prison Staff

	(1)	(2)	(3)	(4)
	Δ Cells/Inm.	Δ Cells/Inm.	Δ Staff/Inm.	Δ Staff/Inm.
CourtOrder	0.271**	0.209***	0.138***	0.093**
	(0.130)	(0.063)	(0.038)	(0.039)
Δ Income / Capita		1.416***		0.454**
		(0.438)		(0.215)
Δ Unemp. Rate		-0.182		0.0294
		(0.129)		(0.054)
Δ % Black		-0.910***		-0.192**
		(0.277)		(0.085)
Δ % Urban		-1.285***		-0.109
		(0.395)		(0.246)
Δ % Population 15–24		-0.359		0.211
		(0.882)		(0.335)
Δ % Population 25–44		-1.747		-0.440
		(1.270)		(0.687)
Δ % Population 45–54		2.679***		0.649***
		(0.504)		(0.222)
Δ % Population 55+		1.305**		0.001
		(0.640)		(0.258)
Observations	49	49	49	49
R-squared	0.084	0.720	0.215	0.584

NOTES – The dependent variables are prison cells per inmate in the first two columns and prison guards per inmate in the last two columns. All variables are in natural logarithm differences. Robust standard errors clustered at the state level are presented in (parentheses). ***, ** and * indicate significance at 1%, 5% and 10%, respectively.

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