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## If You Build It, They Will Fill It: The Consequences of Prison Overcrowding Litigation

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This article examines the consequences of prison overcrowding litigation for U.S. prisons. We use insights derived from the endogeneity of law perspective to develop expectations about the likely impact of overcrowding litigation on five outcomes: prison admissions, prison releases, spending on prison capacity, prison crowding, and incarceration rates. Using newly available data on prison overcrowding litigation cases joined with panel data on U.S. states from 1971 to 1996, we offer a novel and comprehensive analysis of the impact that overcrowding litigation has had on U.S. prisons. We find that it had no impact on admissions or release rates and did not lead to any reduction in prison crowding. Litigation did, however, lead to an increase in spending on prison capacity and incarceration rates. We discuss the implications of these results for endogeneity of law theory, attempts to achieve reform through litigation, and the politics of prison construction.

The unprecedented and unparalleled size of the U.S. prison population has received an enormous amount of scholarly attention. Incarceration has become so common and widespread, especially among African Americans, that it has left significant marks on racial inequality in labor markets, wages and health, and has reshaped citizenship and race relations in contemporary America (Alexander 2010; Manza and Uggen 2006; Pager 2007; Richie 2012; Stevenson 2014; Wacquant 2001; Wakefield and Uggen 2010; Western 2007). One necessary condition for rising incarceration rates has been the massive expansion in prison construction and capacity, without which prison populations could not have grown so dramatically. Research attempting to explain the “race to incarcerate” has largely overlooked the question of prison

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construction and focused on the economic and political forces behind changes in crime control policy (Beckett 1997; Dyer 2000; Garland 2001a, b; Gottschalk 2006; Jacobs and Helms 1996; Mauer 2006; Western 2007). This research tends to lump the politics of “getting tough on crime” together with the politics of prison construction, as if they were one and the same. And yet, at least during the formative and fastest-growing years of the incarceration boom, from roughly the mid-1970s up to the late 1980s, garnering political support for prison construction was far more problematic than getting tough on crime (Eason 2006; Jacobs 1983–84; Libov 1987; Miller 2008; Yackle 1989). In other words: putting people in prison was easy, but building them was not.

Booming incarceration rates coupled with inertia against prison spending provided fertile grounds for litigation aimed at improving prison conditions and reducing crowding. In 1970, there were only six civil rights cases filed in Federal courts for every 1,000 inmates; 10 years later this rate had increased fivefold, and by 1995 such filings accounted for 20 percent of the entire Federal docket (Schlanger 2003). While only a minority of these cases involve prison overcrowding directly, prison reform litigation has become a common and enduring feature of U.S. prisons, even following the passage of the Prisoner Litigation Reform Act in 1996 (Schlanger 2003, 2006).<sup>1</sup> Despite this, there has been surprisingly little systematic attempt to assess the impact of prison overcrowding litigation. Existing research offers partial or mixed results and leaves key methodological concerns unresolved. Importantly, no study has examined overcrowding litigation’s impact on prison crowding. This means that, after decades of litigation, we still do not know if prison overcrowding litigation had its intended effect.

In this article, our goal is to gain a better understanding of overcrowding litigation’s impact on U.S. prisons. In so doing, we also hope to provide new insights into the political dynamics of prison construction. The conceptual lynchpin uniting these aims is the “endogeneity of law,” which is a term coined to describe how organizations blunt the impact of regulations and lawsuits by shaping judicial conceptions of what counts as legal compliance in ways that are aligned with professional and organizational interests

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<sup>1</sup> Prison reform litigation covers diverse aspects of prison life, including overcrowding, racial segregation, treatment of inmates, sanitation, medical care, staffing ratios, religious freedoms, and so forth. In this article, we focus specifically on cases that involve overcrowding. As we discuss in the data section, the issue of overcrowding is nearly always joined with other complaints, usually to support a claim of cruel and unusual punishment based on a “totality of conditions” (Chung 2000). At the same time, overcrowding is often viewed as the central issue that fosters and exacerbates other problems. Although our empirical analysis only pertains to cases where overcrowding is an issue, many of the insights drawn from our analysis can be applied to prison reform litigation more broadly.

(Dobbin 2009; Edelman 2005; Edelman et al. 1999, 2011). Existing research in this tradition has focused almost exclusively on equal employment opportunity law. Here, we apply the endogeneity of law approach to prison overcrowding litigation, using it to derive expectations about a set of outcomes that, taken together, depict the impact of overcrowding litigation. Specifically, we look at three possible ways that state officials could have responded to litigation: reducing prison admissions, increasing releases, and boosting spending on prison capacity. We then examine whether two secondary outcomes—prison crowding and incarceration rates—were subsequently affected by officials' response to litigation. We test our expectations about the impact of overcrowding litigation on these outcomes using state-level time series data from 1972 to 1996. Examining these outcomes in concert provides us with new insights into the ways that state governments have responded to overcrowding litigation and allows us to assess the usefulness of the endogeneity of law approach for understanding the unintended consequences of overcrowding litigation on mass incarceration and, more broadly, the power and limits of judicial activism.

### **The Endogeneity of Law and Prison Overcrowding Litigation**

The endogeneity of law perspective has its roots in neo-institutional theorizing on the effects of the law on organizational fields (DiMaggio and Powell 1983), especially the insight that actors in the field may participate in shaping the institutional demands on them (Meyer and Rowan 1977). The term, endogeneity of law, was coined and developed by sociolegal scholar Lauren Edelman and her collaborators to describe how organizations' responses to anti-discrimination legislation shaped the meaning of the law and courts' perceptions of what counts as compliance (Dobbin 2009; Edelman 1990, 2005; Edelman et al. 1999, 2011).

In their analyses, anti-discrimination regulations and subsequent litigation altered the balance of power in organizations, boosting the professionalization and influence of human resources workers (Dobbin 2009; Dobbin and Kelly 2007). In the face of ambiguous civil rights laws in the 1960s and an uncertain legal environment, executives embraced the advice of human resources professionals and their associations regarding appropriate organizational responses—for example, the adoption of internal grievance procedures or diversity training (Dobbin et al. 1993; Edelman 1990; Edelman et al. 1999). As Edelman (2005) argues, these responses were aimed primarily at signaling compliance and preventing future litigation, while interfering as little as

possible with organizational routines and the prerogatives of corporate executives. Hence they are sometimes referred to as “symbolic compliance” or “window dressing.” Over time, these corporate-crafted responses to antidiscrimination regulation came to be viewed by courts and workers as legitimate, appropriate responses—regardless of whether they actually curb discrimination (Edelman et al. 1999, 2011; Kalev, Dobbin, and Kelly 2006). The endogeneity of law perspective thus highlights the key role played by professionals in promoting organizational responses that enhance their professional interests and are tailored to the agenda of the very organizations that the law seeks to regulate.

When viewed through the endogeneity of law prism, the parallels to prison overcrowding litigation are striking. Civil rights claims in overcrowding cases were undergirded by the Eighth Amendment protection against cruel and unusual punishment. This left much room for ambiguity, because, as much as judges in successful cases agreed that prison crowding constituted a violation of inmate’s rights, it was not at all clear what level of crowding should be tolerated, let alone how to reduce it. Judges increasingly accepted correctional officials’ advice on what counts as an uncrowded prison and the standards developed by their (growing) professional organizations (Feeley and Swearingen 2004: 449).<sup>2</sup> There was a proliferation of crowding standards, but the most important and widely adopted one was the American Correctional Association’s recommendation of 60 square feet of floor space per prisoner (Bleich 1989; Chung 2000). Adherence to a crowding standard was accepted by courts as compliance with litigation requirements, but courts did not attempt to dictate *how* states should go about achieving these standards.

Considered in the abstract, adherence to a crowding standard could be achieved in several ways: lowering the admission rate, for example, through prison diversion programs; increasing the prisoner release rate, for example, by giving more time off for good behavior; or by building additional capacity.<sup>3</sup> Which response was most likely? The spirit of the litigation and court

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<sup>2</sup> This represents another interesting parallel with equal employment opportunity law: just as EEO law promoted the professionalization of human resources professionals, who carved out a niche as indispensable and influential mediators between the law and organizations (Dobbin 2009), the proliferation of prison reform lawsuits fostered the growing professionalization of corrections and judicial deference to correctional expertise (Feeley and Swearingen 2004; Sturm 1993).

<sup>3</sup> There is a fourth possibility, which is that officials simply moved prisoners around to different facilities or to local jails, as happened, for example, in Alabama (Yackle 1989). Our data do not allow us to directly assess this possibility. But, if states regularly moved prisoners to jails, then we would expect to see a reduction in crowding without corresponding changes in admissions, releases and prison capacity. Our findings do not support this conclusion.

decisions called for the former two. After all, many of the reformers behind this litigation hoped that “state decision makers would embrace less costly, noncustodial alternatives” to incarceration when forced to “bear the cost of maintaining constitutional prisons” (Feeley and Rubin 1999: 375). In contrast, the endogeneity of law perspective suggests, first, *that corrections officials will offer responses that promote their professional standing and importance within the organization* (which, in this case, is the state government). Second, *responses will be compatible with the goals of organizational executives*. In our case, this means that the responses will be more in line with the interests of the state’s political leadership than with the spirit of the litigation and court decisions. We draw on these two insights to develop specific expectations about the likely consequences of prison overcrowding litigation.

## Responding to Overcrowding Litigation

As noted earlier, there was considerable political inertia against prison construction in the 1970s and 1980s, despite widespread support for getting tough on crime. Although seemingly contradictory, upon further consideration it makes perfect sense. To begin with, the decentralized decision making of the American political system creates a mismatch of incentives, where the local governmental actors who are principally responsible for sending people to prison (mayors, police, prosecutors, and judges) are mostly absolved of the responsibility of creating the capacity to imprison them. They can “get tough on crime” all they want to, without, for the most part, having to worry about the costs (Ater, Givati, and Rigbi 2014; Miller 2008). In the 1970s and 1980s, rising incarceration rates coincided with multiple recessions, chronic fiscal crises, and the tax revolt movement (Martin 2008; O’Connor 1973), leaving lawmakers especially reluctant to increase taxes to pay for prison capacity. Even when prison construction was funded, the “Not In My Back Yard” phenomenon made it difficult to site new prisons (Libov 1987; Yackle 1989: 123–124).<sup>4</sup> Perhaps more importantly, when overcrowded and abysmal prison conditions are the impetus for expansion, spending on prisons is viewed as benefitting prisoners—an extremely

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<sup>4</sup> Prison construction grew precipitously in the 1990s (Eason 2010), in part due to Federal legislation passed in 1994 that provided prison construction subsidies for states that enacted tougher sentencing laws (Turner et al. 2006). There was also a gradual shift from “Not in My Back Yard” to “Please in My Back Yard” as an economic stimulus to rural counties. The timing of this shift is not well documented, but likely occurred in the mid-to-late 1980s, becoming widely institutionalized in the 1990s (Eason 2006; Turner and Thayer, n.d.).

unsympathetic population with virtually no political power. In an era of getting tough on crime, supporting the expansion of prison capacity to ease overcrowding was tantamount to coddling criminals.

In such a fiscal and political climate, how did corrections officials and state leaders react to prison overcrowding litigation? Corrections officials were often cooperative with courts. Zimring and Hawkins (1991: 214) observe that even though corrections officials are typically the defendants in such cases, they “may have much to gain by being party to a lawsuit relating to prison practices and conditions.” Corrections officials, who are in charge not only of managing but also planning and budgeting for prisons, have to contend with other agencies and spending priorities if they wish to increase their share of the budgetary pie. Thus when prisons are targets of an overcrowding suit, it allows them to sit down at the appropriations table with the force of the Federal judiciary behind them, and their needs take on a new urgency. Such litigation therefore generally tended to enhance the political and professional standing of the correctional profession. Even when local correctional officials were sometimes blamed for mismanagement, they could point the finger at a lack of adequate funding, which was the fault of the legislature (Carroll 1998; Schoenfeld 2010; Yackle 1989).

Case studies point to other options correction officials could have and, at times, did pursue. Corrections officials who favored rehabilitation or alternative sentencing, as did one prison director in Lynch’s study of Arizona prisons (2009), sought ways to reduce crowding by diverting criminals away from prison. And as Jacobs (1983–4: 212–216) observed, since corrections officials have historically been concerned with maintaining order and control, they may favor inertia rather than adding capacity to existing facilities at the risk of undermining prison routines. In this case, they could be expected to push for population reduction measures that would also give them more control over prisoners, such as discretion over early release mechanisms. Importantly, however, correction officials would not necessarily have benefitted from actually alleviating crowding. In fact, they arguably had an interest in maintaining crowded prisons, or at least the perception of crowding, because it continuously “support[ed] their demands for more personnel, larger budgets, and stricter controls” (Bleich 1989: 1127). And, notably, they were not at risk of being personally sanctioned by the courts if they failed to comply.

Based on the endogeneity of law perspective, then, we can expect corrections officials to have promoted solutions that would enhance their position through increased resources and staffing. This means that, of the available choices, they were likely to advocate for expanded prison capacity to meet the crowding standards they themselves devised and endorsed.

State leaders, for their part, saw little political benefit in any of the options for reducing crowding. If the litigation had occurred in the 1960s, the era of “decarceration,” the story might have been different (Schoenfeld 2010). But by the mid-1970s, the public was feeling insecure due to rising crime rates (Garland 2001a), the rehabilitative ideal was in decline (Allen 1981), determinate sentencing reform was gaining momentum (Western 2007), and politicians were channeling civil-rights backlash by waging a war on drugs and competing over getting tough on crime (Alexander 2010; Beckett 1997; Wacquant 2001). Prison diversion and early releases ran counter to these trends, as did the idea of easing crowding to improve living conditions and rehabilitative prospects for criminals behind bars. Thus, we can expect politicians to have been hesitant to do anything to solve prison overcrowding. And indeed, case studies of prison overcrowding litigation show that, time and again, governors and legislatures paid lip service to prison reforms but were recalcitrant when it came to funding those changes, instead preferring ad hoc measures for as long as possible (Carroll 1998; Crouch and Marquart 1989; Lynch 2009; Schoenfeld 2010; Yackle 1989). In most of these cases, it took several years after judgments had been reached before state lawmakers took action. But when they did respond, it was to build more prison capacity, as they could frame their actions not as an attempt to ease overcrowding or as a reaction to litigation, but rather as a way to put more people behind bars.

All considered, then, the endogeneity of law perspective generates several expectations about the primary and secondary consequences of overcrowding litigation. The primary consequence is related to how, if at all, officials attempted to reduce crowding in response to litigation, whether in terms of admissions, releases or spending. Our analysis suggests that *overcrowding litigation was unlikely to have led to reduced admissions or increased release rates*, since these responses were not in line with professional or political interests. In contrast, *litigation likely led to increased spending on prison construction*, as this outcome was clearly aligned with professional goals and was the only outcome compatible with political interests in the era of getting tough on crime.

These choices may, in turn, reduce or increase prison crowding and incarceration rates, which we refer to as the secondary effects of overcrowding litigation. In this regard, the endogeneity of law perspective suggests that, regardless of what measures were taken, compliance is likely to remain symbolic. Thus, we can expect that *overcrowding litigation did not lead to reduced crowding* because, as we saw, corrections officials have an interest in keeping prisons crowded. At the same time, if political support for the response to litigation demanded compatibility with the

getting tough on crime, then we can expect *prison overcrowding litigation to have led to higher incarceration rates.*

## **Existing Research on the Impact of Prison Overcrowding Litigation**

Despite the prevalence of prison overcrowding litigation, there has been surprisingly little systematic attempt to assess its impact. In this section, we first discuss case studies of prison overcrowding litigation, then we provide a critical appraisal of the quantitative research to date.

### **Case Studies**

A handful of case studies have traced how some of the earliest and largest cases changed prison conditions in their jurisdictions (Carroll 1998; Crouch and Marquart 1989; DiIulio 1990; Feeley and Rubin 1999; Martin and Ekland-Olson 1987; Schoenfeld 2010; Yackle 1989). These case studies are illuminating, and we have drawn on them to inform our analysis. Overall, the clear picture that emerges from them is that prison reform litigation, in all its forms, has had an enormous impact on the U.S. prison system, in improving areas ranging from prison health care, disciplinary practices, food service, due process and racial segregation. It was instrumental in reforming the notoriously cruel and racist convict labor systems in Arkansas and Texas, where prisoners worked in large groups and were guarded by other prisoners (Crouch and Marquart 1989; Feeley and Rubin 1999; Martin and Ekland-Olson 1987). But while it is possible to point to one case or another as evidence of litigation's success or failure in that instance, it is impossible to draw conclusions from these studies about the overall impact of prison overcrowding litigation, for two reasons.

To begin with, case studies, by their nature, are not representative. Existing studies have been limited almost exclusively to the largest and most famous cases. For example, the cases that have received the most attention are among the 12 states where the entire correctional system was under Federal court order, and these are only a small and highly selective number of total prison cases (Schlanger 2003, 2006), representing only about 15 percent of crowding cases.<sup>5</sup> We cannot draw a conclusion about the overall impact of prison overcrowding from this select sample.

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<sup>5</sup> Estimates based on data obtained through the Civil Rights Litigation Clearinghouse created by Margo Schlanger and currently based at the University of Michigan (<http://www.clearinghouse.net>). These data are described in greater detail in the data section below.



Second, as we have seen, it often took several years after judgments were reached before state lawmakers took action. Due to the delay and the role of intervening factors, it is difficult to ascertain through case studies the causal role that litigation actually played in expanding capacity. Schoenfeld's (2010) study of overcrowding litigation in Florida is a case in point. It also provides a good illustration of many of the issues we discussed above regarding the interests of correctional officials, political inertia, and symbolic compliance. The major prison conditions litigation case in Florida, *Costello v. Wainwright*, was decided in 1974, and the judgment was indeed embraced by the director of the Florida Division of Corrections (who was also the defendant in the litigation), who "welcomed the chance to use the court as leverage with state legislators" (Schoenfeld 2010: 740). State legislators, however, viewed the court's ruling as a Federal intrusion into state matters and were also concerned that spending money on prisons would be a political liability. They appealed. The inertia against prison construction was so strong that, when their appeal was exhausted and the court insisted that they find a solution to the crowding problem, they initially responded by giving more flexibility to correctional officials to grant early releases (although they managed keep this practice out of the public eye, for the most part). Later, they constructed wooden shacks with additional cots that were used to increase the "bed count" even though prisoners did not actually sleep there. It was only in 1987, with the presence of an rabidly tough-on-crime governor, an explosion in the number of new prison admissions in the wake of the war on drugs, and a crime scandal involving a double police homicide by an early released prisoner, that the stars aligned and the legislature embarked on a massive prison expansion project, adding 20 new prisons and roughly 30,000 beds in the space of 5 years (Schoenfeld 2010).

This Florida case confirms many of our expectations, but it also suggests that we need to be cautious about assigning causal importance to litigation. In the face of conservative, tough-on-crime politicians, the war on drugs, prison crowding and media sensationalization of street crime, there is good reason to think that legislators would have acted more or less in the same way even in the absence of litigation. One of the advantages of quantitative research, then, is that it enables us to look at average effects, tuning out the random "noise" inherent in individual cases to look at the big picture. It also allows us to statistically control for alternative factors that may have an impact on prison outcomes, to assess whether litigation still has an impact net of these potential sources of spuriousness. Below, we review existing quantitative research assessing the impact of prison overcrowding

litigation, before turning to a brief discussion of the alternative factors we control for in this study.

### **Quantitative Studies**

Attempts to empirically examine the effects of prison reform litigation have been almost exclusively geared toward examining the “judicial power of the purse,” that is, whether the judiciary can affect legislative spending priorities (Fliter 1996; Harriman and Straussman 1983; Taggart 1989). As such, these studies did not differentiate between cases where crowding was specifically at issue and other types of reform cases, and they also focused on prison spending to the neglect of other outcomes, including how litigation may have affected prison admissions, releases and, most importantly, crowding.

These studies offer mixed results regarding whether litigation increased spending. The earliest of these studies examined 14 states that had experienced prison conditions litigation prior to 1979 and found evidence that it led to increased capital expenditures on corrections and planned capacity (Harriman and Straussman 1983). In contrast, Taggart’s (1989) study of 10 states that had experienced prison reform litigation prior to 1984 shows that it increased overall prison spending in only half of the cases. Fliter (1996) provided a more methodologically sophisticated analysis, studying the impact of major reform cases prior to 1990 in 30 states and finding that in 11 cases prison expenditures increased, in 12 cases there was no change, and in 7 cases expenditures actually declined.

Not only do existing studies offer mixed evidence and few theoretical insights about the impact of litigation, they also have significant methodological shortcomings: (1) they study a limited and selective number of overcrowding litigation cases; (2) they do not make use of a pooled cross-section time series design, instead treating each state as a separate time series; and (3) they do not include key control variables to rule out spurious relationships. Most significantly, they include no measures of prison crowding to rule out the possibility that the apparent effect of litigation is simply a spurious side-effect of crowding.

Levitt (1996) overcomes some of these problems and offers the most methodologically sophisticated attempt to examine the impact of prison overcrowding litigation, even though this was not the primary focus of his study. He was interested in assessing the impact of incarceration rates on crime and only used overcrowding litigation as an instrumental variable to disentangle the endogenous relationship between incarceration and crime rates. Levitt found that, on average, overcrowding litigation results in a decline in the growth of the incarceration rate in the first 2–3 years after a

decision is handed down, indicating that reformers' goals were achieved and incarceration growth was stalled—at least in the short term. A more recent study by Boylan and Mocan (2014) that uses a similar methodology found that prison reform litigation cases led to higher prison operational and capital expenditures, as well as higher staff-to-inmate and cell-to-inmate ratios, but lower rates of inmate deaths and lower incarceration rates.

Both Levitt's (1996) and Boylan and Mocan's (2014) analyses are restricted to the dozen court cases where the state's entire prison system was targeted. The assumption behind this is that "these states will be unable to comply with court orders on overcrowding simply by redistributing prisoners across institutions" (Levitt 1996: 328). It remains to be seen if Levitt's and Boylan and Mocan's results apply to other states, where only part of the prison system was targeted by litigation. There are good reasons to think that even narrowly focused litigation can have isomorphic effects throughout a state's prison system (DiMaggio and Powell 1984), as it sets administrators and legislators on notice and acts as an implicit threat of further litigation (Feeley and Swearingen 2004). It may also set standards or expectations for prison conditions that apply across the state (Fliter 1996). Finally, while Levitt's and Boylan and Mocan's studies included numerous controls, they failed to control for crowding itself. A thorough assessment of the effects of prison overcrowding litigation that controls for crowding and a range of alternative explanatory factors is long overdue. We discuss these alternative explanatory factors and their measures in the next section before turning to describe our data and methodology.

## **Controlling for Other Determinants of Prison Expansion**

In attempting to assess the impact of prison overcrowding litigation, it is necessary to control for variation stemming from other factors that may affect our outcomes so that we can draw more confident inferences about the results of our statistical model. In this section, we list factors that previous studies have found to impact prison outcomes, which we control for in our analysis. Table 1 summarizes their hypothesized relationship to each of the five outcome variables we employ.

### **Prison Crowding**

While prison crowding is one of the outcomes we study, we also need to control for prison crowding when modeling the other outcomes to rule out the possibility that overcrowding lawsuits and changes in prison policies are both caused by overcrowded prisons, in which case the apparent impact of litigation would be spurious. In

**Table 1.** Direction of Expected Effects of Alternative Explanatory Factors (Controls)

Alternative Explanations	PRIMARY OUTCOMES			SECONDARY OUTCOMES	
	Prison Admissions	Prison Releases	Capital Spending	Prison Crowding	Incarceration Rates
Prison crowding	–	+	+	n/a	–
Republican political control	+	–	+	+	+
Interparty competition	+	–	–	+	+
Unemployment	+	–	–	+	+
Racial threat (percent black)	+	–	+	+	+
Crime rates & drug arrests	+	–	+	+	+
State capacity	+	–	+	–	+

other words, it could be that states would have changed their admissions, release or spending practices in response to crowding, even in the absence of litigation. This would happen if lawmakers had other incentives to decrease crowding. For example, highly overcrowded prisons may pose a problem for lawmakers seeking to increase the use of imprisonment, especially if judges, wardens and parole boards act leniently in an effort to ease prison crowding. Or, they may assent to the demands of prison officials seeking to build new facilities to prevent riots in dangerously overcrowded prisons (Scruton, Sim, and Skidmore 1991; Wooldredge, Griffin, and Pratt 2001).

### **Partisan Political Control**

Prison spending and incarcerations rates have consistently been found to be affected by partisan political control. In particular, Republican party control has been found to have a positive correlation with increased state spending on prisons (Ellwood and Guetzkow 2009; Jacobs and Helms 1999; Stucky, Heimer, and Lang 2007) and incarceration rates (Beckett and Western 2001; Fording 2001; Greenberg and West 2001; Jacobs and Carmichael 2001; Jacobs and Helms 1996, 2001; Stucky, Heimer, and Lang 2005).

### **Interparty Competition**

Stucky et al. (2005) found that higher levels of interparty political competition are associated with higher levels of corrections spending, because when electoral competition is high, politicians are more concerned about proving that they are “tough on crime.”

### **Unemployment**

Several studies have found that unemployment is associated with higher incarceration rates (Beckett and Western 2001;

Chiricos and DeLone 1992; Fording 2001; Greenberg and West 2001; Sutton 2000). Rusche and Kirchheimer (1968 [1939]) also hypothesized that prison conditions deteriorate as unemployment rises to instill labor discipline.

### **Racial Threat**

U.S. race relations are central to any explanation of the massive expansion of the criminal justice system (Alexander 2010; Wacquant 2001; Western 2007). Beckett (1997) argues that the war on crime was a political tactic to channel white anxieties and backlash over civil rights unrest. More generally, theories of racial threat hold that whites feel threatened by African Americans and hence react to their increased presence with more punitive corrections policies (Jackson 1989). Jacobs and Helms (1999) find that growth in the presence of non-whites is accompanied by increased spending on corrections nationally. Other research confirms this finding for incarceration rates (Beckett and Western 2001; Jacobs and Helms 1996).

### **Crime and Drug Arrest Rates**

Studies have shown that higher crime rates are associated with higher prison admission rates (Stucky, Heimer, and Lang 2005), higher incarceration rates (Greenberg and West 2001; Michalowski and Carlson 1999) and more spending on prisons (Jacobs and Helms 1999). Another driver of incarceration over this period was the war on drugs (Beckett 1997), and Greenberg and West (2001) found that higher drug arrest rates were associated with higher incarceration rates.

### **State Capacity**

States with more economic resources and better fiscal standing should have more funds for discretionary spending. These states may be able to devote more resources to corrections.

### **Data**

We use cross-section time series data from 49 states from 1971 to 1996 to examine the impact of prison overcrowding litigation.<sup>6</sup> The unit of analysis is state year. We end the time series

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<sup>6</sup> Nebraska is excluded from these models because elections to the state legislature are nonpartisan. Models where Nebraska is included but variables for state political control are excluded show similar results to those presented in this article (results available upon request).

**Table 2.** Descriptive Statistics

Variable Name	Mean	SD	Min	Max
Prisoner admissions rate	115.56	66.90	17.91	435.91
Prison release rate	99.56	59.68	10.94	351.18
Per capita expenditures on corrections capital outlay	7.71	11.43	0.12	176.48
Prison crowding ratio	112.94	23.05	73.26	235.14
Incarceration rate	184.80	119.40	20.34	673.92
Crowding litigation action	0.08	0.27	0	1
Republican governor	0.39	0.49	0	1
% Republican legislators	38.66	18.23	0	80.32
Interparty competition	32.40	12.51	0	49.66
Percent unemployed	6.47	2.07	2.10	18.00
Percent black	9.60	9.43	0.03	39.66
State income per capita	23.03	4.15	13.83	38.13
Revenue-to-debt ratio (logged)	0.73	0.71	-0.77	3.31
Index crime rate	4869	1358	1424	8989
Drug arrest rate	226	185	4	3370

Notes: The data cover 49 states from 1972 to 1996,  $N = 1225$ . Prison admissions and release data are only available beginning in 1977,  $N=980$ . The Prison Crowding Ratio is only available beginning in 1982 with 5 missing values,  $N=730$ . Admissions, release and incarceration rates are measured per 100,000 of the population. Crime and drug arrest rates are measured per 10,000 of the population.

in 1996, because the Prison Litigation Reform Act went into effect in that year, significantly limiting the ability of courts to intervene in crowding cases (Schlanger 2003, 2006). In 1994, the Federal government also passed a program, begun in 1996, to subsidize prison construction to states that adopted tough sentencing reforms, which fundamentally altered the financing of prison construction and presents a strong discontinuity in the time series (Turner et al. 2006). Our models account for period effects and other unobserved changes over time by including fixed effects for year. We also “difference” our variables, meaning our variables are expressed as year-over-year changes, which provides a rigorous means for dealing with unobserved differences between states, as described below in the methodology section. All monetary variables are in constant 2002 dollars. Table 2 presents descriptive statistics for our variables, whose definitions and sources are described below.

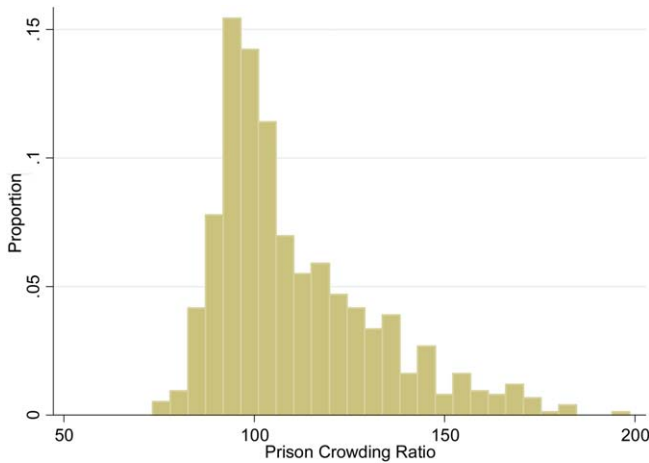
### Outcome Variables

The five outcome variables examined in this article are: (1) the prison admissions rate; (2) the prison release rate; (3) per capita state spending on capital outlay for corrections; and (4) the incarceration rate. All variables are operationalized in terms of change from the previous year (first differences).

Admissions and releases are measured as the change in the number of prisoners under a state’s jurisdiction that are admitted to/released from state prisons per 100,000 of the population. This measure includes prisoners in local jails serving a year or more. These data are only available beginning in 1977.

Prison capacity is measured as per capita state spending on capital outlays for corrections. We focus on capital outlay spending because it is directly associated with expanding prison capacity, unlike operational expenses, which might be associated with other aspects of litigation. Capital outlay spending accounts for about 10 percent of total prison expenditures on average. Ideally, we would be able to use more precise data on bed space, but such data are not systematically available over this period. Our measure of prison capacity also does not take into account private prisons. However, the capacity provided by private prisons during this period was very small. The first prison privatization in modern U.S. history occurred when Tennessee gave the Corrections Corporation of America a contract to take over an existing jail in 1984. By 1996, a census of private prisons indicates that private prison capacity was used or under construction in only 16 states (Thomas 1997). Although it is unclear how many prisoners they housed, it likely did not exceed more than 1 or 2 percent of all state inmates. Even now, when more private prisons are in operation than ever, less than 7 percent of state prisoners are held in private prisons (BJS 2013). In any event, we were unable to find consistent data tracking state-level, private prison capacity during this period, which is likely indicative of the minor role they played.

Prison crowding is measured as the ratio of the average daily population of a state's correctional system to its rated capacity, multiplied by 100. A value of 100 thus means that the state prison system is operating at its rated capacity; below 100 is below capacity; above 100 is crowded above rated capacity. We constructed this variable based on data from *The Corrections Yearbook*, which was a report published from 1982 to 2002 by the Criminal Justice Institute, which gathered annual data from surveys of state correctional systems. These data have a few shortcomings: The first is that they only start in 1982. Second, we would ideally want this information for each prison, not just the entire state system, because all it takes to get litigation is one overcrowded prison. Third, "rated capacity" has no precise, standardized definition, which raises the concern that it could be redefined as needed to conform with the population of the prison (Bleich 1989). But if rated capacity was highly fungible, we would expect it to match or exceed the prison population in most cases. A histogram of the prison overcrowding measure shown in Figure 1, however, indicates that prison systems often operate well above rated capacity. Moreover, the average value of this variable is 113, indicating that state prison systems during this period operated on average at a 113 percent of their rated capacity. As noted earlier, we use crowding as both a control



*Note:* A value of 100 on the Prison Crowding Ratio indicates that the state prison population is at rated capacity; less than 100 is under capacity; over 100 is over capacity.  $N = 1,225$

**Figure 1. Histogram of Prison Crowding Ratio (Average Daily Prison Population: Rated Capacity of State Prisons).** [Color figure can be viewed in the online issue, which is available at [wileyonlinelibrary.com](http://wileyonlinelibrary.com).]

variable and a dependent variable. In our first set of models (Table 3), we introduce crowding as a control. In models 1A and 1B in Table 4, we use it as a dependent variable to determine whether overcrowding litigation had any impact on crowding.

The incarceration rate is measured as the total number of prisoners under a state's jurisdiction serving sentences of a year or more per 100,000 of the population. Prisoners in local jails serving a year or more are counted. Prisoners sentenced in one state and serving their term in another are attributed to the state where the sentencing occurred.

Data on admissions, releases and incarceration come from the Bureau of Justice Statistics; spending data come from the Census Bureau's Annual Survey of State Government Finances.

### Overcrowding Litigation Actions

Data on overcrowding litigation comes from the Civil Rights Litigation Clearinghouse (<http://www.clearinghouse.net>), which was created by legal scholar Margo Schlanger and contains a comprehensive digital database of prison civil rights litigation filed in Federal Courts (Schlanger and Lieberman 2006). The Clearinghouse is a searchable database that includes exhaustive information on each case, providing a timeline and summary of important motions and decisions, as well as original source documents in most cases. We searched the Clearinghouse database for



“prisons conditions” cases that listed “overcrowding” or “population caps” as an issue (these case and issue category options are given by the Clearinghouse’s search function). We identified a total of 80 relevant overcrowding cases covering 41 states filed between 1969 and 1996, which includes the 12 cases where the entire state prison system was under court order identified by Levitt (1996). Plaintiffs in 10 of those 80 cases were denied relief, while plaintiffs in 70 cases covering 38 states received some relief from overcrowding.

To construct a variable of litigation actions, we carefully reviewed the histories of each case, making note of the dates when plaintiffs were granted some form of relief from overcrowding. This involved either court decisions, consent decrees or settlements between the parties. Due to the small N, we did not attempt to distinguish between different types of decisions or other specific details about the actions. Cases generally lasted over the course of many years. Sometimes defendants were brought back to court for noncompliance with the previous action and a new ruling was made; in other cases a preliminary decision was made at the beginning, followed by further developments. For example, in the *Harris v. Cardwell* case in Arizona filed in 1975, there was a preliminary decision reached in 1977 to reduce crowding by setting a population cap at the state prison. In 1980, a settlement agreement between the parties was reached whereby the defendants agreed to take measures to further decrease overcrowding (including providing at least 60 square feet per inmate). For the purposes of our litigation action variable, each of these decisions counts as a separate action even though they spring from the same case. A full list of litigation cases included in our analysis is available upon request.

We coded each action taken to relieve overcrowding and created an indicator variable that equals 1 in the year when the action was taken and 0 otherwise. Thus, a state that experienced several overcrowding suits with multiple actions taken would have a value of 1 for this variable in each of the years an action was taken. The maximum number of overcrowding litigation actions experienced by a state is 7. Twelve states experienced no litigation actions; 14 states experienced three litigation actions (the modal number). Figure 2 shows the number of new overcrowding cases filed between 1969 and 1996. The number of new cases filed began increasing substantially in 1975, reaching a peak in 1980, then trailing off toward the late 1980s. Our data begin in 1971, which is when the first overcrowding litigation case (*Holt v. Sarver*) was decided in Arkansas.

It should be noted that there were no cases where overcrowding was the *only* issue in the litigation. But there were many

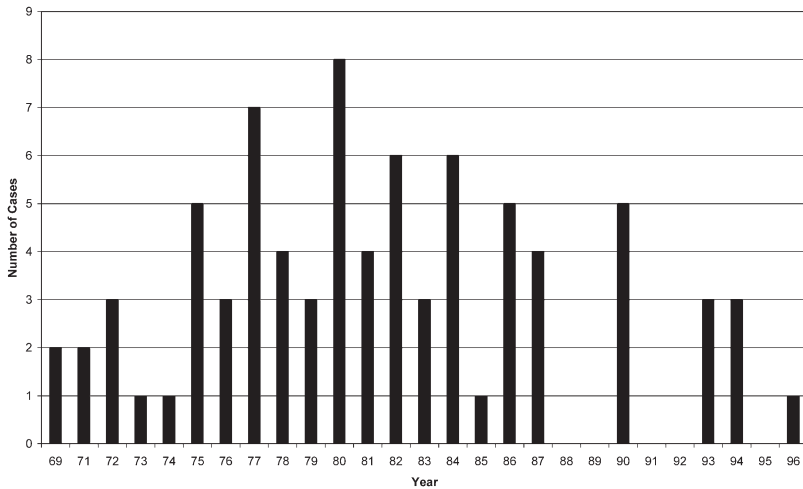


Figure 2. New Prison Overcrowding Litigation Cases, 1969–1996 ( $N = 80$ )

cases (which we did not include in our analysis) where overcrowding was not at issue at all. In short, overcrowding cases are a subset of reform cases, but at the same time there are no “stand-alone” overcrowding cases and very few litigation actions (as operationalized above) that involved only overcrowding. Our review of case materials indicated that, as a rule, the issue of overcrowding was of central importance in nearly all of these cases and was also frequently viewed as a problem that caused many other problems that were at issue in the case.

### Control Variables

*Republican political power* is measured in two ways: one is an indicator variable for whether the party of the governor was Republican (=1) or not (=0); The other measures Republican control of the legislature as an average of the percent of Republican legislators in the lower and upper houses in each state for every year (Source: Klarner 2003). *Interparty competition* is defined by how equally split the state legislature is between democrats and republicans and is measured by subtracting the percentage of Democratic legislators from 100 averaged across the upper and lower houses of the legislature (Source: Klarner 2003). *Unemployment* is measured as the percentage of the state labor force that is out of work from the Bureau of Labor Statistics’ *Geographical Profile of Employment and Unemployment* as reported in data provided by the *State Politics and Policy Quarterly* data resource (SPPQ 2010). *Racial Threat* is measured as the percentage of the population that is African American (Source: Bureau of

Labor Statistics' *Current Population Survey*). *Fiscal capacity* is defined in two ways: in terms of state wealth, measured as income per capita; and in terms of fiscal health, measured as the log of the ratio of state revenues to debt (Sources: Bureau of Economic Affairs and the U.S. Census Department Survey of State Government Finances). *Crime Rates* are measured as the number of index crimes reported to the police per 100,000 of the population; *drug arrests* are measured as the number of arrests made for drug crimes per 100,000 of the population (Source: FBI Uniform Crime Reports).

## Methods

We use ordinary least squares (OLS) regression to analyze state-level panel data to estimate the impact of overcrowding litigation on five outcomes: (1) the prison admissions rate; (2) the prison release rate; (3) correctional capital outlays; (4) prison crowding; and (5) the state incarceration rate. All of our variables are transformed into first-differences—that is, we measure their annual change, rather than their level—and our independent variables are lagged, which means we are examining the impact of annual changes in the independent variables on changes in the outcome variables in the following year (with some exceptions as described below). Using first differences in this context is useful for two reasons. First, because we are only looking at changes from year-to-year, the static values for each state are cancelled out. This is equivalent to controlling for stable unmeasured characteristics of states through the use of unit fixed effects (Wooldridge 2012). Second, first differences solves the problem of nonstationarity, which can be intuitively understood as secular trends in the data. When variables have a unit-root, meaning they follow a trend over time, for example, crime rates and incarceration rates both increasing over the time period we observe, then a positive correlation between such variables is likely to be spurious. A Hadri-Langrange multiplier test (Hadri 2000) confirmed nonstationarity in the data, indicating the need to use the first difference transformation. Lagging the independent variables enables us to be more confident in drawing causal inferences, because we know that changes in the independent variables *preceded* the changes in the dependent variables. We also incorporate fixed effects for each year, which controls for national level events and time trends that affected all states. Our stringent model specification eliminates shared time trends and produces conservative estimates (Jacobs and Helms 1999).

Time series analysis of panel data also presents the problem of heteroskedasticity and serial correlation of the errors due to repeat observation of the same units (in this case, states) over

time. Stock and Watson (2008) indicate that when there are more than two time points, the Huber–White heteroskedasticity-robust sandwich estimator will be biased unless the clustered nature of the data is accounted for. Nichols and Schaffer (2007) conclude that the correction for clustered errors in STATA will be unbiased and is preferred because it makes as few assumptions as possible about the structure of the data. We therefore use robust standard errors that are corrected for clustering. Additional heteroskedasticity due to differences in state population is contained using per capita measures and weighting the regressions by state population (Wooldridge 2012).

For each of the outcome variables, we report two models: one that does not control for prison crowding and another that does. But because our crowding data are only available from 1982, this creates a discrepancy in the time periods covered by the two models. Because the results of time series models are sensitive to the years that are included, a direct comparison of these two models is problematic: if there are differences in the results before and after controlling for crowding, we cannot immediately determine if the differences are due to the introduction of the crowding control or due to the restriction of years to the later time period (1982–1996). To draw an inference from the comparison, it is necessary to run a model restricted to the later period but *without* the crowding control. If those results are different from the full period models but similar to the later period models with the crowding control, then we can infer that the observed differences are actually due to the different time periods across the two models. For all the results reported in Tables 3 and 4, we performed this secondary analysis when differences were observed between the models. In all cases, the results showed that the observed differences were indeed due to the different years included, rather than the introduction of the crowding control variable. For simplicity we do not report these additional models in the tables, but they are available upon request.

As noted above, most of our independent variables are lagged 1 year. But, because the theory of endogeneity suggests that responses to litigation are likely to be delayed, we experimented with different lag structures for the overcrowding litigation action variable.<sup>7</sup> As discussed in more detail in the Findings section, we found that the effects of other key independent variables were only significant at different lags, and those results are the ones reported in Tables 3 and 4.

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<sup>7</sup> We also considered the possibility that states might change their behavior in anticipation of court rulings, in which case the responses would come before the litigation (Levitt 1996), but we found no evidence to support this.

Finally, there is the question of whether or not the 12 states that experienced no overcrowding litigation actions should even be included in the models. Because our analysis isolates within-state changes, these states contribute no variation to estimating the coefficient for the litigation action variable (because the value is always 0). They do, however, contribute variation to estimating the control variables, and for this reason we include them in the analysis. In any event, the results are robust in model specifications where these observations were excluded (results available upon request).

## Findings

The analysis consists of two stages. In the first stage, we examine whether states responded to litigation by changing the rate of prison admissions, releases or construction (Table 3). In the second stage, we examine the consequences of litigation for two subsequent outcomes: prison crowding and incarceration rates (Table 4).

### Litigation's Effects on Admissions, Releases and Capacity

Table 3 includes two models for each outcome: prison admissions, releases and construction. The first model for each outcome (1A, 2A, and 3A) shows the results without controlling for prison crowding, which allows us to use the longest time series possible for that outcome variable. The second model for each outcome (1B, 2B, and 2B) controls for crowding, but, as noted above, because the data on crowding are not available for the entire period, the time series for these models only starts in 1982.

Overall, prison overcrowding litigation actions do not appear to be followed by a reduction in prison admissions or an increase in release rates. The coefficient for litigation actions lagged by 2 years in Model 1A actually indicates that prison admission rates *increase* following litigation, although it is only significant at the 0.1 level. This would be consistent with endogeneity theory if state officials increased admissions because they did not want to be seen as cooperating with litigation by “going soft” on crime. Alternatively, it may be an artifact if states where litigation actions occurred were also states where admissions rates were increasing on a regular basis.

Prison crowding itself also has no impact on prison admissions and releases, indicating that the flow of prisoners in and out of prisons is unresponsive to the degree of crowding inside them. Almost none of the other control variables are statistically

**Table 3.** Modeling Primary Effects of Overcrowding Litigation: Changes in State Prison Admissions, Releases and Capital Outlays for Corrections Following Litigation

	Admission Rate			Release Rate			Per Capita Capital Outlays		
	Model 1A (77-96)	Model 1B (82-96)	Model 2A (77-96)	Model 2B (82-96)	Model 3A (71-96)	Model 3B (82-96)			
Δ Overcrowding Litigation Action (1-year lag)	1.393 (1.231)	1.891 (1.539)	-0.020 (1.551)	-0.773 (2.205)	1.350* (0.654)	1.278 (0.960)			
Δ Overcrowding litigation action (2-year lag)	1.757 (0.950)	1.162 (1.099)	1.945 (1.334)	1.031 (2.067)	1.876** (0.600)	1.554* (0.699)			
Δ Prison crowding ratio (not lagged)	-	-0.080 (0.056)	-	-0.107 (0.073)	-	0.117** (0.030)			
Δ Republican governor	-1.192 (4.062)	-1.138 (5.427)	2.108 (2.490)	2.948 (2.985)	-0.759 (1.006)	-1.569 (1.466)			
Δ % Republican legislators	0.259 (0.334)	0.328 (0.414)	0.031 (0.218)	0.101 (0.254)	0.067 (0.058)	0.087 (0.095)			
Δ Inter-party competition	0.298 (0.281)	0.321 (0.364)	0.304 (0.200)	0.405 (0.273)	-0.070 (0.041)	-0.034 (0.086)			
Δ Percent unemployed	0.573 (0.811)	0.737 (1.038)	0.168 (1.089)	0.365 (1.366)	0.028 (0.287)	-0.054 (0.450)			
Δ Percent black	0.533 (0.655)	0.580 (0.711)	1.286** (0.439)	1.289* (0.488)	-0.232 (0.198)	-0.249 (0.214)			
Δ Income per capita	1.296 (2.611)	2.050 (3.255)	-1.318 (2.236)	-0.585 (2.804)	0.983 (0.585)	0.962 (0.948)			
Δ Revenue-to-debt ratio	0.163 (1.942)	-8.929 (6.287)	-0.774 (1.640)	-6.062 (6.071)	2.449 (1.303)	6.982** (1.972)			
Δ Index crime rate (per 10,000)	0.094 (0.071)	0.102 (0.083)	-0.007 (0.058)	-0.009 (0.067)	0.005 (0.012)	0.007 (0.016)			
Δ Drug arrest rate (per 10,000)	0.082 (0.064)	0.095 (0.075)	0.017 (0.037)	0.044 (0.044)	0.007 (0.027)	0.004 (0.037)			
Intercept	7.686* (3.432)	7.360 (4.163)	13.862* (6.385)	13.794 (7.081)	0.612 (1.087)	0.624 (1.323)			
N	980	730	980	730	1,225	730			
R squared	0.17	0.18	0.12	0.12	0.07	0.11			

\*\*  $p < 0.01$ ; \*  $p < 0.05$ ;  $\hat{p} < 0.10$  two tailed.

Independent variables are lagged by one year except where otherwise noted.

**Table 4.** Modeling the Secondary Effects of Prison Overcrowding Litigation: Changes in Prison Crowding and Incarceration Rates Following Litigation

	Prison Crowding Ratio		Incarceration Rate	
	Model 1A ('82-'96)	Model 1B ('82-'96)	Model 2A (72-'96)	Model 2B ('82-'96)
Δ Crowding litigation (4-yr lag)	-0.057 (1.133)	-0.036 (1.174)	1.010 (0.993)	2.732 <sup>^</sup> (1.543)
Δ Per cap correctional outlays (4-yr lag)	-	0.017 (0.094)	0.190* (0.079)	0.221* (0.095)
Δ Prison crowding ratio (4-yr lag)	-	-	-	-0.110 <sup>^</sup> (0.055)
Δ Republican governor	5.064* (1.902)	5.079* (1.916)	-0.095 (1.437)	-1.990 (2.593)
Δ % Republican legislators	0.252* (0.121)	0.253* (0.120)	0.388 (0.169)	0.388 (0.343)
Δ Inter-party competition	-0.531* (0.216)	-0.531* (0.215)	0.327 (0.317)	0.792 (0.543)
Δ Percent unemployed	0.148 (1.005)	0.165 (0.969)	1.669 (1.094)	2.976 <sup>^</sup> (1.727)
Δ Percent black	-0.329 (0.425)	-0.327 (0.428)	-0.236 (0.380)	-0.296 (0.482)
Δ Income per capita	2.377 (1.934)	2.420 (1.998)	1.111 (1.612)	-1.753 (2.468)
Δ Revenue-to-debt ratio	-1.536 (4.803)	-1.534 (4.811)	3.821 (3.254)	15.145 (13.235)
Δ Index crime rate (per 10,000)	-0.002 (0.023)	-0.002 (0.023)	-0.110 (0.112)	-0.172 (0.159)
Δ Drug arrest rate (per 10,000)	0.045 (0.048)	0.044 (0.047)	0.043 (0.038)	0.088 (0.038)
Intercept	3.456 (4.044)	3.415 (3.922)	0.735 (6.168)	10.897** (3.444)
N	730	730	1,029	534
R squared	0.07	0.07	0.19	0.16

\*\*  $p < 0.01$ ; \*  $p < 0.05$ ; <sup>^</sup>  $p < 0.10$  two tailed  
Independent variables lagged by one year unless otherwise indicated.

significant, either. This is not too surprising given our stringent model specification and the fact that most of these variables change little over time. The only control variable that appears related to admissions and releases is changes in the percentage of the state's population that is black: increases in the percentage of the black population is associated with an increase in the release rate, which runs contrary to expectations based on previous research.

Models 3A and 3B of Table 3 indicate that spending on prison construction increases in the first and second years after a court action to relieve overcrowding. The coefficients for litigation actions in Model 3A indicate that they are associated with a \$1.35 increase in per capita capital outlays in the first year after litigation and an additional increase of \$1.88 in the second year, for a total of \$3.23. This is a very large effect, especially considering that states spent an average of \$7.71 per capita annually on capital outlays for corrections during this period, with an average annual change of just \$0.19. In separate analyses, overcrowding

litigation actions did not have a statistically significant effect on overall corrections spending—only capital outlays (results available upon request). This gives us more confidence that our independent variable captures litigation where overcrowding was a main issue. It may also account for some of the mixed results in previous research, which has typically examined total or operational expenditures.

But is the impact of litigation on spending merely a spurious side-effect of increases in prison crowding? Model 3B shows the impact of overcrowding litigation is still statistically significant after controlling for crowding, but the size of the coefficient is reduced, accounting for only \$1.55 in increased spending and only 2 years after litigation—a smaller but still sizeable effect. As noted in the methods section above, the change in the coefficients for litigation are not due to the introduction of the crowding control but rather due to restricting the analysis to the period from 1982 to 1996. What this suggests is that overcrowding litigation had less of an impact in later years, perhaps because the earlier cases were among the biggest and most egregious. Still, the results are in line with the expectations drawn from the theory of legal endogeneity.

Model 3B also indicates that prison crowding is associated with increases in spending on prison capacity. The crowding ratio measure has a mean of 113 and a standard deviation of 23. Thus an increase of one standard deviation on the crowding measure is associated with an increase in the growth of capital outlays of \$2.69 ( $= 0.117 \times 23$ ). However, actual changes in crowding from year to year were very small, with an average annual change in the crowding ratio of 0.45 over this period and little overall change throughout the period; so in practice prison crowding itself exerted relatively little direct influence on prison spending. Note, too, that crowding only showed a statistically significant relationship with same-year capital outlays—there is no lagged effect. Although this means we should be cautious interpreting the causal order of the crowding coefficient, the reverse interpretation, namely that higher spending leads to more crowding, is implausible.

### **Litigation's Effects on Crowding and Incarceration**

Table 4 displays results from models of overcrowding litigation's impact on prison crowding and incarceration rates. Models 1A and 1B show that overcrowding litigation had no impact on its intended target, prison crowding. The coefficient shown is lagged by 4 years, but we were unable to find any significant effect at any lag or combination of lags up to 5 years after the



litigation action (we did not try lags longer than 5 years).<sup>8</sup> Perhaps litigation acts on crowding indirectly through prison construction? In Model 1B we added a coefficient for prison spending and also found no effect—at any lag and regardless of whether the litigation variable was included in the model or not (results available on request). The control variables indicate that crowding is exacerbated when Republicans take political control of state government but reduced when interparty competition grows.

Models 2A and 2B analyze the impact of overcrowding on changes in the incarceration rate. As with previous models, we explored different lag structures, presenting the specifications with the most significant effects and best model fit. Model 2A indicates that, for the entire period from 1971 to 1996, prison overcrowding litigation did not result *directly* in an increase in the incarceration rate. However, increased capital outlay spending is associated with increased incarceration rates 4 year later. Specifically, a \$1 change in per capita spending is associated with an increase of 0.19 in the incarceration rate, which grew an average of 11 points annually during this period. Since prison litigation resulted in an increase of \$3.23 in per capita spending on corrections (from Table 3), its indirect impact on growth in the incarceration rate translates into at a little over half a point—a drop in the bucket. Note also that the coefficient for capital outlays is lagged by 4 years. It makes sense that this was the only significant lag we found, because prison construction is a long process, and the allocation of funds typically precedes new capacity by 3–5 years.

Model 2B shows what happens when we include a control for crowding. In this model, crowding litigation actions are *directly* associated with substantial growth in the incarceration rate of 2.7 points. As a reminder, the difference from Model 2A results from restricting our analysis to the later period rather than controlling

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<sup>8</sup> We did find a statistically significant, but small, negative relationship between same-year litigation actions and crowding changes, whereby a litigation action is associated with a decline of 2.7 in the crowding ratio (which has a standard deviation of 23). Exploration of our data indicated that this is not due to same-year changes in reduced admissions, increased releases, lower prison populations, increased spending or moving prisoners to local jails. Further analysis of the two components of the crowding ratio, average daily population and rated capacity, indicated that litigation is associated with less crowding in the same year due solely to increases in the rated capacity—although we cannot know if changes to rated capacity were made in anticipation of litigation or in response to it. Because increases in rated capacity were unrelated to increased spending on capacity, it is likely a sign of prison officials attempting to deal with litigation by simply redefining the rated capacity of their system, for example, by reclassifying single-occupancy cells as double-occupancy cells. If the flimsy wooden shacks constructed by Florida officials to increase their bed count are any indication, this type of response is a perfect example of “symbolic compliance.” (All analyses described above are available upon request.)

for crowding. So for this later period, overcrowding litigation had a direct impact on incarceration rates, in addition to the small indirect impact via increased spending on prisons, as indicated by the coefficient for correctional outlays.

Growth in prison crowding is associated with a small, delayed reduction in incarceration rates. This suggests that overcrowded prisons may grow at a slower rate. But again, because average annual change in prison crowding is small, for practical purposes prison crowding had a negligible impact on incarceration rates.

Finally, it should be noted that the models in Tables 3 and 4 have a relatively low  $R^2$  between 0.07 and 0.19. The low  $R^2$  reflects the high degree of within-state variation in the outcome variables examined here. This heterogeneity is exacerbated by the first-difference transformation, which removes time trends and stable state-level variation from the equation, generally resulting in lower values for  $R^2$  (Wooldridge 2012). What is notable here, then, is that overcrowding litigation actions are nevertheless among the few statistically significant coefficients in *any* of the models. Essentially, this means that although the models do not account for a lot of variation in the outcome variables, overcrowding litigation is a good predictor of changes in state spending and incarceration rates.

## **Conclusion**

The unprecedented growth of incarceration rates in the United States over the last 40 years necessitated a corresponding expansion of prison capacity. How was prison capacity able to grow in the face of considerable political resistance against spending money on prisons? This article uses novel data and draws on insights from the endogeneity of law perspective to assess the impact of overcrowding litigation on U.S. prisons and explore its possible role in expanding prison capacity and incarceration rates.

In line with the endogeneity of law perspective, we hypothesized that state officials were unlikely to respond to overcrowding litigation by adjusting admissions or release rates, but they were likely to respond by increasing spending on prison capacity, since this response was the only one in line with both the professional interests of corrections officials and the political interests of state leaders during this period. We also argued that, for this very reason, prison overcrowding litigation was unlikely to have a substantive impact on prison crowding and would have instead been used to promote a tough-on-crime political agenda, likely leading to higher rates of incarceration. Our analyses of five outcomes in

the aftermath of overcrowding litigation—changes in prisons admissions, releases, capital outlays for corrections, prison crowding and incarceration rates—confirmed these expectations. Here we discuss some of the implications of our findings and suggest avenues for future research.

Our study contributes to the growing literature on legal endogeneity (Dobbin 2009; Edelman 2005; Edelman et al. 1999, Edelman et al. 2011). To begin with, this literature until now has focused almost exclusively on equal employment opportunity law (although see Talesh 2009). The present case expands existing research by examining prison litigation and what happens when governmental actors, rather than private ones, are the targets of lawsuits. Our analysis and findings suggest that in such cases, the political considerations of lawmakers will play an important role in shaping the response to litigation. One implication of this is that, if litigation is to ultimately succeed in attaining its goals, legal activists need to convince lawmakers that it is in their political interests to comply in the spirit of the law or as the plaintiffs intended. Successful litigation alone is not enough, because the ambiguity it leaves regarding compliance will lead to legal endogeneity. Indeed, that overcrowding litigation had no discernible impact on prison overcrowding while also contributing to the expansion of prison capacity is an outcome rich with historical irony, because many of the prison reformers behind this litigation hoped that “state decision makers would embrace less costly, non-custodial alternatives” to incarceration when forced to “bear the cost of maintaining constitutional prisons” (Feeley and Rubin 1999: 375). Instead, their efforts appear to have had nearly the opposite of the intended results. This resembles the unintended “net-widening” effects of alternative sentencing schemes identified by Austin and Krisberg (1981), which instead of diverting people out of prisons simply enabled the penal net to expand to include people who would otherwise have gone unpunished.

Our analysis also explores another case of the co-constructive relationship between law, professionals, and legal compliance (Dobbin 2009; Edelman et al 2011; Stryker, Docka-Filipek, and Wald 2011). Others have shown the effect of prison litigation on the professional development of the correctional field (Feeley and Rubin 1992; Feeley and Swearingen 2004). We have shown here that these professionals’ agenda was reflected in the outcomes of overcrowding litigation. Clearly, we need more research on legal endogeneity across different areas of law to improve our understanding of the effect of law on the development of professional fields and of the range of groups, processes and factors involved in shaping legal outcomes (Rosenberg 1991).

Bringing insights from organizational and institutional theory to bear on research on how the law influences prisons and the criminal justice system more broadly will enrich our understanding of key processes. For one it will prompt a more thorough investigation of prison reform litigation's symbolic and substantive impact on other aspects of prison life. While it is almost certainly true that "litigation has had a dramatic impact on the nation's jails and prisons" (Feeley and Swearingen 2004: 443), the endogeneity of law perspective prescribes a thorough analysis of the actions of relevant actors and especially of symbolic compliance when assessing litigation's achievements, precisely because compliance is often constructed to align with the interests of those whose behavior it seeks to regulate. A good example of this in the case of prison reform is the issue of due process rights, which were slowly implemented in prisons in the 1960's in response to litigation. But as Alvin Bronstein, head of the ACLU's Prison Project noted, due process "gets you the fair procedures and then the prison officials make the same old unfair decisions" (Bronstein 1997: 13, quoted in Schlanger 1999: 2020).

Finally, our study contributes to our understanding of the transformation of the politics of prison construction: overcrowding litigation helped overcome political inertia and catalyze prison construction. Arguably, the effect sizes shown in our models understate the role played by prison litigation in this process, because our methodology is not geared toward capturing the more amorphous and indirect ways in which prison overcrowding litigation may have contributed to changing the political considerations surrounding prison spending. For example, Schoenfeld (2010) has described the role of overcrowding litigation in pushing Florida legislators to increase prison spending. And once they began to spend more on prisons, they quickly saw that, rather than being the liability they had assumed, it was in fact politically popular. Thus, by provoking politicians to spend more money on prisons, overcrowding litigation may have contributed to the gradual transformation of the politics of prison construction, paving the way for mass incarceration.

## References

- Alexander, Michelle (2010) *The New Jim Crow: Mass Incarceration in the Age of Colorblindness*. New York, NY: The New Press.
- Allen, Francis (1981) *The Decline of the Rehabilitative Ideal*. New Haven: Yale Univ. Press.
- Ater, Itai, Yehonatan Givati, & Oren Rigbi (2014) "Organizational Structure, Police Activity and Crime," 115 *J. Public Economics* 62–71.
- Austin, James, & Barry Krisberg (1981) "Wider, Stronger, and Different Nets: The Dialectics of Criminal Justice Reform," 18 *J. of Research in Crime and Delinquency* 165–96.

- Beckett, Katherine (1997) *Making Crime Pay: Law and Order in Contemporary American Politics*. Oxford, MS: Oxford Univ. Press.
- Beckett, Katherine, & Bruce Western (2001) "Governing Social Marginality: Welfare, Incarceration, and the Transformation of State Policy," 3 *Punishment and Society* 43–59.
- Bleich, Jeff (1989) "The Politics of Prison Crowding," 77 *California Law Rev.* 1125–80.
- Boylan, Richard, & Naci Mocan (2014) "Intended and Unintended Consequences of Prison Reform," 30 *J. of Law, Economics and Organization* 558–86.
- Bronstein, Alvin (1997) "Representing the Powerless: Lawyers Can Make a Difference," 49 *Maine Law Rev.* 1–19.
- Bureau of Justice Statistics (2013) "*Prisoners in 2013*," Washington, D.C.: U.S. Department of Justice.
- Carroll, Leo (1998) *Lawful Order: A Case Study of Correctional Crisis and Reform*. New York: Garland Publishing.
- Chiricos, Ted G., & Miriam A. DeLone (1992) "Labor Surplus and Punishment: A Review and Assessment of Theory and Evidence," 39 *Social Problems* 421–46.
- Chung, Susanna (2000) "Prison Overcrowding: Standards in Determining Eighth Amendment Violations," 68 *Fordham Law Rev.* 2351–400.
- Crouch, Ben, & James Marquart (1989) *An Appeal to Justice: Litigated Reform of Texas Prisons*. Austin, TX: Univ. of Texas Press.
- DiMaggio, Paul, & Woody, Powell (1983) "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields," 48 *American Sociological Rev.* 147–60.
- DiIulio, John (1990) *Courts, Corrections, and the Constitution: The Impact of Judicial Intervention on Prisons and Jails*. New York: Oxford Univ. Press.
- Dobbin, Frank (2009) *Inventing Equal Opportunity*. Princeton, NJ: Princeton Univ. Press.
- Dobbin, Frank, & Erin Kelly (2007) "How to Stop Harassment: The Professional Construction of Legal Compliance in Organizations," 112 *American J. of Sociology* 1203–43.
- Dobbin, Frank, et al. (1993) "Equal Opportunity Law and the Construction of Internal Labor Markets," 99 *American J. of Sociology* 396–442.
- Dyer, Joel (2000) *The Perpetual Prisoner Machine: How America Profits from Crime*. Boulder, CO: Westview.
- Eason, John (2006) "Development by Arrest: Theorizing the Growth of the Penal System in Rural America." *Paper presented at the annual meeting of the American Sociological Society*, Montreal, Canada.
- (2010) "Mapping Prison Proliferation: Region, Rurality, Race and Disadvantage in Prison Placement," 39 *Social Science Research* 1015–28.
- Edelman, Lauren (1990) "Legal Environments and Organizational Governance: The Expansion of Due Process in the Workplace," 95 *American J. of Sociology* 1401–40.
- (2005) "The Endogeneity of Law: Civil Rights at Work," in Robert Nelson, & Laura Beth Nielsen, eds., *Handbook on Employment Discrimination Research: Rights and Realities*. New York: Kluwer Academic Press.
- Edelman, Lauren, Christopher Uggen, & Howard S. Erlanger (1999) "The Endogeneity of Legal Regulation: Grievance Procedures as Rational Myth," 105 *American J. of Sociology* 406–54.
- Edelman, Lauren, et al. (2011) "When Organizations Rule: Judicial Deference to Institutionalized Employment Structures," 117 *American J. of Sociology* 888–954.
- Ellwood, John, & Joshua Guetzkow (2009) "Footing the Bill: Causes and Budgetary Consequences of State Spending on Corrections," in Steven Raphael, & Michael Stoll, eds., *Do Prisons Make Us Safer? The Benefits and Costs of the Prison Boom*. New York: Russell Sage Foundation.
- Feeley, Malcolm, & Edward Rubin (1992) "Prison Litigation and Bureaucratic Development," 17 *Law and Social Inquiry* 125–45.

- (1999) *Judicial Policy Making and the Modern State: How the Courts Reformed America's Prisons*. Cambridge, U.K.: Cambridge Univ. Press.
- Feeley, Malcolm, & Van Swearingen (2004) "The Prison Conditions Cases and the Bureaucratization of American Corrections: Influences, Impacts and Implications," 24 *Pace Law Rev.* 433–75.
- Fliter, John (1996) "Another Look at the Judicial Power of the Purse: Courts, Corrections, and State Budgets in the 1980s," 30 *Law and Society Rev.* 399–416.
- Fording, Richard (2001) "The Political Response to Black Insurgency: A Critical Test of Competing Theories of the State," 95 *American Political Science Rev.* 115–30.
- Garland, David (2001a) *The Culture of Control: Crime and Social Control in Contemporary Society*. Oxford, MS: Oxford Univ. Press.
- (2001b) *Mass Imprisonment: Social Causes and Consequences*. New York, NY: Sage Publications.
- Gottschalk, Marie (2006) *The Prison and the Gallows: The Politics of Mass Incarceration in America*. Cambridge, MA: Cambridge Univ. Press.
- Greenberg, David F., & Valerie West (2001) "State Prison Populations and Their Growth, 1971–1991," 39 *Criminology* 615–53.
- Hadri, Kaddour (2000) "Testing for Stationarity in Heterogeneous Panel Data," 3 *Econometrics J.* 148–61.
- Harriman, Linda, & Jeffrey Straussman (1983) "Do Judges Determine Budget Decisions? Federal Court Decisions in Prison Reform and State Spending for Corrections," 43 *Public Administration Rev.* 343–51.
- Jackson, Pamela Irving (1989) *Minority Group Threat, Crime, and Policing: Social Context and Social Control*. New York, NY: Praeger.
- Jacobs, David, & Jason Carmichael (2001) "The Politics of Punishment Across Time and Space: A Pooled Time-Series Analysis of Imprisonment Rates," 80 *Social Forces* 61–89.
- Jacobs, David, & Ronald E. Helms (1996) "Towards a Political Model of Incarceration: A Time-Series Examination of Multiple Explanations for Prison Admission Rates," 102 *American J. of Sociology* 323–57.
- (1999) "Collective Outbursts, Politics, and Punitive Resources: Towards a Political Sociology of Spending on Social Control," 77 *Social Forces* 1497–523.
- (2001) "Toward a Political Sociology of Punishment: Politics and Changes in the Incarcerated Population," 30 *Social Science Research* 171–94.
- Jacobs, James (1983–1984) "The Politics of Prison Expansion," 12 *New York Univ. Rev. of Law and Social Change* 209–41.
- Kalev, Alexandra, Frank Dobbin, & Erin Kelly (2006) "Best Practices or Best Guesses? Assessing the Efficacy of Corporate Affirmative Action and Diversity Policies," 71 *American Sociological Rev.* 589–617.
- Klarner, Carl (2003) "The Measurement of the Partisan Balance of State Government," 3 *State Politics & Policy Quarterly* 309–19.
- Levitt, Steven (1996) "The Effect of Prison Population Size on Crime Rates: Evidence from Prison Overcrowding Legislation," 111 *The Q. J. of Economics* 319–51.
- Libov, Charlotte (1987) "NIMBY Takes Hold." *The New York Times* (accessed 10 April 2013).
- Lynch, Mona (2009) *Sunbelt Justice: Arizona and the Transformation of American Punishment*. Stanford, CA: Stanford Univ. Press.
- Manza, Jeff, & Christopher Uggen (2006) *Locked Out: Felon Disenfranchisement and American Democracy*. Oxford, MS: Oxford Univ. Press.
- Martin, Isaac (2008) *The Permanent Tax Revolt: How the Property Tax Transformed American Politics*. Stanford, CA: Stanford Univ. Press.
- Martin, Steve, & Sheldon Eklund-Olson (1987) *Texas Prisons: The Walls Came Tumbling Down*. Austin, TX: Texas Monthly Press.
- Mauer, Mark (2006) *The Race to Incarcerate*, 2nd ed. New York, NY: The New Press.

- Meyer, John, & Brian Rowan (1977) "Institutionalized Organizations: Formal Structure as Myth and Ceremony," 83 *American J. of Sociology* 340–63.
- Michalowski, Raymond J., & Susan M. Carlson (1999) "Unemployment, Imprisonment, and Social Structures of Accumulation: Historical Contingency in the Rusche-Kirchheimer Hypothesis," 37 *Criminology* 217–49.
- Miller, Lisa (2008) *The Perils of Federalism: Race, Poverty, and the Politics of Crime Control*. Oxford, MS: Oxford Univ. Press.
- Nichols, Austin, & Mark Schaffer (2007) "Clustered Errors in Stata." *Paper presented at the U.K. Stata User's Group Meeting*, London, U.K.
- O'Connor, James (1973) *The Fiscal Crisis of the State*. New York: St. Martin's Press.
- Pager, Devah (2007) *Marked: Raced, Crime and Finding Work in an Era of Mass Incarceration*. Chicago: Univ. of Chicago Press.
- Richie, Beth (2012) *Arrested Justice: Black Women, Violence, and America's Prison Nation*. New York, NY: New York Univ. Press.
- Rosenberg, Gerald (1991) *The Hollow Hope: Can Courts Bring About Social Change?* Chicago: Univ. of Chicago Press.
- Rusche, Georg, & Otto Kirchheimer (1968[1939]) *Punishment and Social Structure*. New York, NY: Columbia Univ. Press.
- Schlanger, Margo (1999) "Beyond the Hero Judge: Institutional Reform Litigation as Litigation," 97 *Michigan Law Rev.* 1994–2036.
- (2003) "Inmate Litigation." 116 *Harvard Law Rev.* 1557–701.
- (2006) "Civil Rights Injunctions over Time: A Case of Study of Jail and Prison Court Orders," 81 *NYU Law Rev.* 550–630.
- Schlanger, Margo, & Denise Lieberman (2006) "Using Court Records for Research, Teaching and Policymaking: The Civil Rights Litigation Clearinghouse," 75 *UMKC Law Rev.* 153–67.
- Schoenfeld, Heather (2010) "Mass Incarceration and the Paradox of Prison Conditions Litigation," 44 *Law and Society Rev.* 731–67.
- Scruton, Phil, Joe Sim, & Paula Skidmore (1991) *Prisons under Protest*. Buckingham, UK: Open Univ. Press.
- Stevenson, Bryan (2014) *Just Mercy: A Story of Justice and Redemption*. New York, NY: Spiegel and Grau.
- Stock, James, & Mark Watson (2008) "Heteroskedasticity-Robust Standard Errors for Fixed Effects Panel Data Regression," 76 *Econometrica* 155–74.
- Stryker, Robin, Danielle Docka-Filipek, & Pamela Wald (2011) "Employment Discrimination Law and Industrial Psychology: Social Science as Social Authority and the Co-Production of Law and Science," 37 *Law & Social Inquiry* 777–914.
- Stucky, T. D., Karen Heimer, & Joseph B. Lang (2005) "Partisan Politics, Electoral Competition and Imprisonment: An Analysis of States over Time," 43 *Criminology* 211–47.
- Stucky, Thomas D., Karen Heimer, & Joseph B. Lang (2007) "A Bigger Piece of the Pie? State Corrections Spending and the Politics of Social Order," 44 *J. of Research in Crime and Delinquency* 91–123.
- Sturm, Susan (1993) "The Legacy and Future of Corrections Litigation," 142 *Univ. of Pennsylvania Law Rev.* 639–738.
- Sutton, John (2000) "Imprisonment and Social Classification in Five Common-Law Democracies, 1955–1985," 106 *American J. of Sociology* 350–86.
- Taggart, William (1989) "Redefining the Power of the Federal Judiciary: The Impact of Court-Ordered Prison Reform on State Expenditures for Corrections," 23 *Law and Society Rev.* 241–71.
- Talesh, Shauhina (2009) "The Privatization of Public Legal Rights: How Manufacturers Construct the Meaning of Consumer Law," 43 *Law and Society Rev.* 527–62.
- Thomas, Charles (1997) *Private Adult Correctional Facility Census*. Univ. of Florida, Gainesville, FL.: Center for Studies in Criminology and Law.

- Turner, Robert, & David Thayer. N.d. "Yes in My Backyard! Why Do Rural Communities Use Prison Based Economic Development Strategies?" Unpublished Manuscript.
- Turner, Susan, et al. (2006) "An Evaluation of the Federal Government's Violent Offender Incarceration and Truth-in-Sentencing Incentive Grants," 86 *Prison J.* 364–85.
- Wacquant, Loïc (2001) "Deadly Symbiosis: When Prison and Ghetto Meet and Mesh," 3 *Punishment and Society* 95–133.
- Wakefield, Sara, & Christopher Uggen (2010) "Incarceration and Stratification," 36 *Annual Rev. of Sociology*, 387–406.
- Western, Bruce (2007) *Punishment and Inequality in America*. New York: Russell Sage Foundation.
- Wooldredge, John, Timothy Griffin, & Travis Pratt (2001) "Considering Hierarchical Models for Research on Inmate Behavior: Predicting Misconduct with Multilevel Data," 18 *Justice Q.* 203–31.
- Wooldridge, Jeffrey M. (2012) *Introductory Econometrics: A Modern Approach*, 5th ed. Mason, OH: Cengage Learning.
- Yackle, Larry (1989) *Reform and Regret: The Story of Federal Judicial Intervention in the Alabama Prison System*. New York: Oxford Univ. Press.
- Zimring, Frank, & Gordon Hawkins (1991) *The Scale of Imprisonment*. Chicago: Univ. of Chicago Press.

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