

**PARTISAN POLITICS, ELECTORAL COMPETITION, AND IMPRISONMENT:  
AN ANALYSIS OF STATES OVER TIME\***

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## INTRODUCTION

The prison population in the United States has exploded over the past three decades. After remaining relatively stable for nearly fifty years, the U.S. imprisonment rate more than quadrupled between 1970 and the middle 1990s, climbing from 100 to 476 prisoners per 100,000 residents (Blumstein and Beck, 1999). There is now a substantial body of literature that has examined this phenomenon. Early studies focused on Rusche and Kirschheimer's ([1939]1968) labor surplus-penal severity thesis (e.g. Box and Hale, 1985; Jankovic, 1977) or the Durkheimian stability of punishment hypothesis (e.g. Blumstein and Cohen, 1973; Blumstein, et al., 1977). More recent research has focused on political explanations for variation in criminal punishment, emphasizing the role of partisan politics and arguing that Republican party dominance is associated with a law-and-order orientation (e.g. Beckett, 1997; Jacobs and Helms, 1996). To date, however, only a handful of studies of partisan politics and imprisonment rates have been published.

In the present paper, we extend this emerging body of work by further examining the link between politics and imprisonment rates. Specifically, we draw on recent political science research on politics and state social policies (e.g. Barrilleaux, Holbrook, and Langer, 2002) to propose that the effect of partisan politics on imprisonment rates is conditional on the extent of electoral competition faced by state representatives in their home districts. We also examine whether the effects of Republican strength in state government vary over time. Our paper focuses on politics and imprisonment at the state level for two reasons: First, the explanation that we propose and assess centers on state politics and policies. Second, because imprisonment rates vary greatly across states, there is nontrivial potential for aggregation bias in national-level analyses.

The organization of our paper is as follows: We review existing research on variation in imprisonment, emphasizing recent research on politics and imprisonment. Next, we discuss research on the link between state politics and public policy, focusing on studies of the impact of

constituency-level electoral competition. We then build on previous research to propose that the effects of partisan politics on imprisonment rates are conditional on electoral competition and may increase over time. We test this explanation using annual data on imprisonment across forty-nine states from 1978 to 1996.<sup>1</sup> Finally, we consider the implications of our findings for research on imprisonment.

## **POLITICS AND PUNISHMENT**

The study of variation in punishment has a long history. Early studies assessed either the labor surplus-penal severity hypothesis, examining the relationship between unemployment and imprisonment rates, or the Durkheimian stability of punishment hypothesis. The findings of these studies were decidedly mixed, which may have been due in part to methodological limitations. Generally, early studies were either cross-sectional state-level analyses (e.g. Carroll and Doubet, 1983; Galster and Scaturro, 1985; Michalowski and Pearson, 1990) or national-level time-series analyses (e.g. Inverarity and Grattet, 1989; Inverarity and McCarthy, 1988; Jankovic, 1977). Both have their limitations, given the tremendous variation in penal severity across states and over time (see Chiricos and Delone, 1992). Consequently, recent research has begun to employ data for states over time (Beckett and Western, 2001; Greenberg and West, 2001; Jacobs and Carmichael, 2001).

There also has been a shift in theoretical focus in recent research, such that political processes have become more central (e.g. Beckett, 1997; Jacobs and Helms, 1996). Specifically, a number of authors have noted that the Republican party began to campaign on a law-and-order platform in presidential elections beginning in 1964 (e.g. Beckett, 1997; Davey, 1998; Jacobs and Helms, 1996). Some scholars have posited that this rise of law-and-order rhetoric in national politics is tied to the history of race and national party politics in the United States (e.g. Beckett, 1997; Beckett and Sasson, 2000). They suggested that Democratic abandonment of Southern whites in favor of black

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<sup>1</sup> Nebraska is excluded from the analysis because it has a nonpartisan, unicameral legislature.

interests, under pressure from the liberal wing of the party in the late 1960s, gave rise to an important bloc of independent voters that became an important swing vote. Emphasizing the crime problem became a key avenue through which Republican presidential candidates could appeal to working and lower-middle class whites (Jacobs and Helms, 1996). Beckett (1997) and Beckett and Sasson (2000) have argued that the Reagan and Bush administrations of the 1980s shifted the terms of political discourse further toward an exclusionary view of marginal populations, which led to viewing minorities and the poor as threats to security rather than social problems. So, the argument is that partisan political discourse regarding minority and poor populations, not necessarily the size of these groups, impacts crime control approaches.<sup>2</sup> Consistent with this, Jacobs and Helms (1996) have shown empirically that national imprisonment rates increased most during Republican presidential administrations, which they argue occurred because of that party's emphasis on crime control.

Although these arguments refer to national party politics, recent research has extended these arguments to the state level. Davey (1998) has published a set of case studies showing that law-and-order governors can have an impact on penal policies in their states. He found that states with governors (Republicans in 6 of 7 cases) who favored law-and-order politics had much higher increases in imprisonment than neighboring states whose governors did not focus on crime control.

In addition, three recent quantitative studies have assessed the association between Republican party politics and imprisonment in states over time. Yet, these studies have produced somewhat inconsistent results. Jacobs and Carmichael (2001) report that a composite measure of Republican legislative and executive strength is associated with increases in states' imprisonment rates across three time points—1971-72, 1981-82, and 1991-92—and that these increases grow larger over time. Similarly, Beckett and Western (2001) find that increases in the percentage of

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<sup>2</sup> If the real motor for changes in social control of marginal populations is political discourse and rhetoric, then examining only the percentage of minority group members in a population, a typical way of measuring "racial threat," may have some limitations.

Republicans in the state legislature are associated with increases in states' imprisonment rates across the years 1975, 1985, and 1995. However, Greenberg and West (2001) report no effect of the party of the governor on states' imprisonment rates across the same three time points studied by Jacobs and Carmichael.

There are two potentially important explanations for the differences that emerge across these studies. First, the three studies measure Republican strength somewhat differently: Beckett and Western include only Republican legislative strength, Greenberg and West include only gubernatorial party, and Jacobs and Carmichael specify Republican strength in the state legislature to be zero unless the governor is also Republican. Because the substantive arguments above suggest that an emphasis on law-and-order should be associated with both Republican strength in the legislature and party of the governor, we include both indicators in the analyses described in this paper. This allows us to separately assess the effects of Republican strength in the legislative and in executive branches of state government on prison policies.

Second, and more important for our study, the association between Republican strength and imprisonment rates may not be as straightforward as has been proposed by previous research. Specifically, it may be that the relationship between Republican strength and imprisonment is conditional on the political situation in voting districts. Indeed, political science research on state politics and public policy suggests that political competition at the district level can influence the orientation of legislators with regard to social policies. We next discuss this research and then build on it to propose an explanation of the relationship between Republican strength in state politics, electoral competition, and imprisonment rates.

### **PARTISAN POLITICS AND PUBLIC POLICY**

Debate over the question of whether party politics and public policies are related has a long history in political science. On the one hand, some have argued that "American politics is pre-eminently party politics (Winters, 1976: 629)." On the other, Downs' (1957) median voter model

suggested that most voters are massed in the center of opinion on any given issue and parties are best served by carving out relatively similar positions (see Dye, 1984 for discussion). Much of the research addressing this debate has focused on the proposed link between party politics and welfare generosity in the states.

Early research on the politics-welfare debate focused on whether the party in control of state government affected welfare generosity (e.g. Dye, 1984; Garand, 1985; Jennings, 1979; Winters, 1976). Some argued that the electoral base of the Democratic party has most often included the “have-nots” (Key, 1949). Therefore, one would expect Democratic control of state government to increase welfare generosity, as legislators attempt to satisfy the wishes of their core constituents. By contrast, Republican control of state government is expected to lead to flat or reduced welfare benefits because the Republican electoral base tends to be composed of middle and upper class voters. However, there has been fairly limited empirical support for the hypothesized party control-welfare generosity link. Although a few studies have found that state party control affects welfare generosity (e.g. Garand, 1985), most have reported that party dominance is not an important predictor of state welfare policy once socioeconomic factors are taken into account (Lewis-Beck, 1977; Marquette and Hinckley, 1981; Winters, 1976).

Other studies of state politics and welfare have examined the degree to which statewide inter-party competition, or relative number of seats in the legislature held by each party, affects welfare generosity. For instance, Dawson and Robinson (1963) argue that majority parties in states with meaningful two-party competition must be mindful of blocs of voters who could remove them from power (regardless of which party is in control).<sup>3</sup> This suggests that welfare generosity will be greatest when there is the potential for loss of control of the legislature by either party due to electoral competition. Because the poor could represent a “swing vote” in competitive states, their

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<sup>3</sup> This is based on V.O. Key’s (1949) seminal discussion of one-party politics in the South.

needs are more likely to be addressed, leading to more generous welfare benefits. Note that this argument is in contrast to the party dominance argument, which suggests that welfare generosity will increase as the percentage of Democratic seats goes from 51 to 100.

A large body of research has tested the competition-welfare generosity hypothesis with mixed results. Although a few studies have reported that statewide inter-party competition increases welfare spending per capita (e.g. Cnudde and McCrone, 1969; Sharkansky and Hofferbert, 1969), most found no relationship between competition and welfare benefits once socio-economic variables were taken into account (e.g. Dawson and Robinson, 1963; Dye, 1966; Marquette and Hinckley, 1981).<sup>4</sup>

More recently, a number of researchers have suggested that the focus on statewide competition in previous studies of the politics-policy relationship was misplaced (see Tucker and Weber, 1992 for an overview). Their argument is that state and district-level competition are conceptually and empirically distinct. Thus, it is possible to have perfect competition at one level and none at the other. Hypothetically, 100% of state legislative elections could be won by one party based on 51% of the votes or the state legislature could be narrowly controlled by one party (51-49 seats), but no legislators would face meaningful competition on election day; these situations are likely to have very different policy consequences.

Indeed, recent researchers have begun to suggest that the politics-policy association may be conditional on district-level competition for votes (e.g. Barrilleaux, 1997; Holbrook and Van Dunk, 1993; Ray and Havick, 1981; Tidmarch et al., 1986; Tucker and Weber, 1992). As Barrilleaux and his colleagues (2002) note, previous research has generally considered either the party in power or the macro-level balance of power between the two parties. Barrilleaux et al. suggest that one must

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<sup>4</sup> Although most research posits that competition will lead to increased welfare generosity regardless of which party is in control, Jennings (1979) argues that both competition and control are important. Thus, one would expect increased welfare generosity only when the Democrats control the legislature and there is competition.

consider both the party in power and the micro-level competition in a state. When there is close competition within a district, legislators must be truer to the preferences of core constituents, so as not to alienate core voters. Thus, Democratic legislators will be expected to produce policies more in line with Democratic preferences and Republicans more in line with Republican preferences when they face greater electoral competition. When the level of electoral competition goes down, however, there is less incentive for legislators to adhere to preferences of core voters because their seats are safe.

Consequently, it is not enough to know which party controls the most seats in the legislature in examining the impact of partisan politics on policy. One must also know whether the seats of individual legislators are safe or they face meaningful competition at the polls. According to this view, high constituency-level competition will produce a greater impact of party control on policy outcomes. As competition goes down, the policy impact of the dominant party is also expected to decline. Consistent with their expectations, Barrilleaux et al. (2002) find that welfare spending per capita is highest when Democrats control the legislature and face stiff electoral competition.

### **CONDITIONAL EFFECTS OF POLITICS ON PUNISHMENT**

Following the logic of Barrilleaux et al. (2002), we would expect imprisonment rates to increase most when Republicans control the state legislature and face stiff competition. Under circumstances of high competition, Republican legislators should be most likely to vote closer to their core constituency preferences on law-and-order issues.

To illustrate, consider a legislature that is split 60/40 favoring Republicans. Previous research on imprisonment would suggest that under these circumstances, Republican emphasis on law-and-order politics would drive imprisonment rates up (Beckett and Western, 2001; Jacobs and Carmichael, 2001). However, we suggest that the policy relevance of Republican dominance depends on the degree of competition for each individual legislator's seat. Thus, if all 60 Republicans and all 40 Democrats have homogeneous districts and face no real challenge at the polls,



there is less incentive for the Republicans to focus on law-and-order politics in their campaigns and voting behavior. The same 60/40 split of legislative seats with fierce electoral competition would suggest much greater policy relevance because candidates will need to make sure they do not alienate their core constituents in order to assure their re-election. Likewise, as constituency-level competition goes down, so does the policy impact of the party in power.

In short, we propose that the effect of Republican strength in the state legislature on imprisonment will depend on the degree of constituency-level competition. Greater district-level competition should be associated with higher rates of imprisonment as Republicans occupy more seats in state legislatures. Conversely, greater district-level competition should be related to lower imprisonment rates when Democrats occupy more seats.

We also consider that the effects of Republican party strength—of both the legislature and governorship—may vary over time. Indeed, Jacobs and Carmichael (2001) report that Republican political dominance became significantly related to imprisonment rates in the 1980s, and this relationship grew even stronger in the 1990s. Other authors, however, argue that the differences between the parties with respect to imprisonment policies were minimal by the 1980s and 1990s, either because both parties responded to a conservative shift in the electorate (Greenberg and West, 2001) or because the Democratic party attempted to woo back socially conservative “swing voters” (e.g. Beckett and Sasson, 2000: Chapter 4). However, given that some research reports that Republican strength varies over time, we allow for such a conditional relationship in the analyses reported in this paper.

### **CLASS CONFLICT, RACIAL THREAT, AND PUNISHMENT OF DISADVANTAGED GROUPS**

Other aspects of the social landscape combine with partisan politics to explain shifts in criminal punishment, of course. Specifically, political economy scholars have long argued that penal practices reflect a response to perceived threat from economically marginal and minority populations

(e.g. Jankovic, 1978; Michalowski and Pearson, 1990; Rusche and Kirschheimer, [1939]1968). Some recent research suggests that these effects may exist in addition to the effects of the partisan emphasis on law and order (e.g. Jacobs and Carmichael, 2001). Moreover, scholars have argued that the control efforts of the criminal justice system are augmented by the social control of marginal populations through the welfare system (e.g. Beckett and Western, 2001; Garland, 1985; Inverarity and Grattet, 1989). In essence, understanding the dynamics of punishment likely requires a consideration of the partisan emphasis on law and order as well as the role of economic threat, racial threat, and alternative systemic control mechanisms.

More specifically, the classic political economy perspective proposes that imprisonment increases as economically marginal populations increase because of the potential threat these populations may pose to existing social arrangements (Rusche and Kirschheimer, [1938] 1968). Consistent with this argument, some studies report that increases in unemployment rates are associated with increases in imprisonment rates, even after crime rates are controlled (e.g. Box and Hale, 1985; Greenberg and West, 2001; Inverarity and McCarthy, 1988). However, as we noted earlier, research on this issue has been mixed (Chiricos and Delone, 1992).

Following similar logic, racial threat arguments predict that social control attempts will escalate as the size of black and other minority populations increase (e.g. Blalock, 1967). As blacks and other minority populations grow in size, their political and economic influence is likely to grow, posing a threat to the social arrangements that align with majority group interests. Consistent with this reasoning, a fairly sizable body of research reports an association between the size of the black population and formal social control in the United States (e.g. Jackson and Carroll, 1981; Jackson, 1986, 1989; Jacobs, 1979; Jacobs and Carmichael 2002; Liska and Chamlin 1984). Recent research reports that states' imprisonment rates increase as the size of the black population grows, even after crime rates are controlled (Beckett and Western, 2001; Greenberg and West, 2001; Jacobs and Carmichael, 2001). The findings regarding the influence of Latino populations is less clear,

however, with one study reporting an association with imprisonment rates (Jacobs and Carmichael, 2001) and another finding no relationship once other relevant variables are controlled (Greenberg and West, 2001).

Another hallmark of the political economy approach to criminal punishment has been the argument that state social control mechanisms extend beyond the criminal justice system to the welfare system. Indeed, research on imprisonment (e.g. Beckett and Western, 2001; Garland, 1985; Inverarity and Grattet, 1989; Wallace, 1980), as well as research on the welfare state (e.g. Griffin, Devine, and Wallace, 1983; Piven and Cloward, 1971), maintains that prisons and welfare work in tandem to control “problematic populations.” Thus, punitive responses must be considered in conjunction with non-punitive responses. Consistent with this perspective, empirical research shows that as state welfare provisions expand, state imprisonment rates decline (Beckett and Western, 2001; Greenberg and West, 2001).

In short, it is likely that various aspects of the political economy of states combine to explain shifts in imprisonment rates. Consequently, even though our primary focus in this research is on the association between Republican party strength and state-level imprisonment rates, we also assess the influence of the size of economically and racially marginalized populations and states’ investments in welfare.

## **DATA**

To test the arguments outlined above, we collected annual state-level data for the period 1977 through 1996 on imprisonment rates, characteristics of states and their partisan politics. We selected these years because U.S. imprisonment rates dramatically increased during this period (Blumstein and Beck, 1999). In addition, the years studied represent the longest time-span for which we could gain access to annual state-level data on all necessary variables.

Our use of annual data offers some advantages over studies that have used 10-year intervals. With annual data, we can estimate effects more efficiently—especially effects of time-varying

covariates. Moreover, we are able to capture variation within decades. The effects of party strength and electoral competition are best assessed using annual data that can capture elections and changes in party power that usually occur every two or four years, rather than every ten years.

Our sample contains data on the 49 states with bipartisan political systems over 19 years, 1977 through 1996. (Note: Nebraska has a non-partisan, unicameral system.) Only seven state-year cases contained missing data. The final sample size is thus 924 state-years. We discuss each of the variables in our models below. Appendix A gives complete variable descriptions and documents their sources.

## MEASURING IMPRISONMENT

Previous studies have used two different measures of imprisonment. One is the proportion of the population that is admitted to prison in the given year, or admission rate (e.g. Box and Hale, 1985; Galster and Scaturro, 1985; Jacobs and Helms, 1996). The second is the proportion of the population in custody in prisons in the given year, regardless of when prisoners were admitted (e.g. Beckett and Western, 2001; Greenberg and West, 2001; Jacobs and Carmichael, 2001; Jankovic, 1977; Michalowski and Pearson, 1990). In this research, we analyze the annual admission rate to prison in each state. We maintain that admission rates are more likely than total prison population rates to be immediately sensitive to the actions of current state legislatures; total numbers of persons in custody would likely be influenced by the actions of state administrations over an unknown number of years in the past. This is especially key in our study, which unlike previous state-level research, examines annual data.<sup>5</sup>

## PARTY POLITICS VARIABLES

The variables of most interest in our study are a set of political variables. We include measures of both Republican legislative and executive strength. Specifically, we measure

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<sup>5</sup> For additional discussions of admissions as an outcome, see Jacobs and Helms (1996; footnote 3) and Sorensen, Hope, and Stemen (2003, footnote 2), and Chiricos and Delone (1992) for an overview of studies using admissions and total custody.

Republican legislative strength as the proportion of state legislators in both houses who are Republican. We measure Republican control of the executive branch with a binary variable indicating whether the governor was Republican in each state-year (i.e. Republican governor).<sup>6</sup>

We use two different variables to assess the role of electoral competition. The first is a competition index computed following the logic of Barrilleaux et al. (2002).<sup>7</sup> This index has three components—margin of victory, whether a seat is safe, and the percentage of uncontested seats in state legislative races. The margin of victory is the average across all districts of the difference between the winner’s vote share and the loser’s vote share. The percentage of safe seats refers to the percentage of all contested races where the margin of victory was 20 or more points. The percentage of uncontested seats refers to the percentage of possible elections where candidates ran unopposed. The three components were averaged together, and then subtracted from 100. This was done separately for the house and senate, and then these values were averaged to yield a competition index for every state-year.

We also estimate models using an alternative measure of competition, to check the robustness of our findings regarding electoral competition. Specifically, we estimate a model that includes the percentage of contested seats, which is the percentage of possible elections in which candidates faced an opponent. At the most fundamental level, if a candidate for office faces opposition by others, there is competition; if the candidate is unopposed, there is no competition. In addition, this measure

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<sup>6</sup> Some researchers have argued that states characterized by liberal ideology among their citizens have lower custody rates; Jacobs and Carmichael (2001) found evidence consistent with this argument. We assessed whether this might be an important factor to take into account in our models, but found that its effects on admissions were near zero after the other variables in our models were controlled. We also found that a general index of states’ ideological conservatism in government had no independent effect on our outcome once our other covariates were controlled. We note that inclusion of these measures did not change the pattern of results reported here. Measures of citizen and government political ideology were originally reported by William D. Berry and are available through the ICPSR archive, study # 1208.

<sup>7</sup> We are very grateful to Mark A. Smith of the University of Washington, who generously shared with us state election competition index data for a good portion of our time series.

may be viewed as a more basic measure of competition because it does not rely on vote percentages or assumptions about what constitutes a “safe” seat.

#### CLASS CONFLICT, RACIAL THREAT AND WELFARE VARIABLES

We also include measures designed to address class and racial threat, as well as the impact of welfare as an alternative control system. Specifically, we follow many previous studies and include a variable based on officially reported unemployment figures (i.e. percent unemployed). We also include the percentage black and percentage Latino for each state-year. To assess the argument that state social control mechanisms extend to the welfare system, we include a measure of welfare expenditures (AFDC payments per capita).

#### JUSTICE SYSTEM VARIABLES

We control for relevant justice system variables in our analyses. These include violent crime rates and property crime rates, which are expected to be associated with imprisonment rates under a rational justice system. We also include a binary variable indicating whether states are operating under presumptive sentencing guidelines, which may potentially be associated with increases in imprisonment rates (see Zimring and Hawkins, 1991).<sup>8</sup> In addition, because it is well known that prisons tend to operate near or above capacity (Harrison and Beck, 2003, Table 8), we take into account the “back door” of the imprisonment system by including in our models the percentage of prisoners released (cf. Berk, et al. 1983; Inverarity and McCarthy, 1988; Inverarity and Grattet, 1989).

#### CONTROL VARIABLES

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<sup>8</sup> During the period covered by our study, some states changed their sentencing laws to restrict discretion, partly due to the waning support for rehabilitation and greater emphasis on deterrence, incapacitation and just-deserts punishment (Marvell and Moody, 1996). Although, studies of the impact of determinate sentencing laws on imprisonment produce mixed findings (cf. Casper, 1984; Casper and Brereton, 1984; Clear et al., 1978; Marvell and Moody, 1996), changes in sentencing laws clearly are a potential source of variation in imprisonment that should be taken into account.

Finally, we include in our equations a series of variables that capture time-varying characteristics of states that are plausibly associated with admission rates.<sup>9</sup> For example, because a state's fiscal well-being could affect its ability to pursue public policies, including incarceration policies (Greenberg and West, 2001), we include in our equations Gross State Product (GSP). We control for the size of the state population (in millions), which could very well be related to rates of prison admissions. We also control for marriage rates because some other researchers have reported that higher proportions of nonintact families are associated with a breakdown in social control and increases in imprisonment (Jacobs and Helms, 1996).

### MODEL SPECIFICATION

We specify our dependent variable to be the rate of admission to prison (P), which is the proportion of adults admitted to prison. Instead of modeling P directly, we use as our response variable Y, the log odds of admission (i.e.  $Y = \log(P/(1-P))$ ). There are at least two reasons for using the log odds rather than the proportion of admissions as the response: (1) In contrast to the proportion, a linear model for the log odds does not have structural problems because possible values for the log odds include the entire real line and (2) because the expected proportion is relatively small in imprisonment studies, the distribution of the log odds will be less skewed than the proportion.

For our large adult population sizes, standard asymptotic results imply that the distribution of the response variable Y (the log odds of admission) is approximately normal with variance inversely proportional to the adult population size. That is, it is reasonable to use a Normal model for Y with variances weighted by the adult population size.

The log odds of admission value (Y) is observed over 19 times points (1978 to 1996) for each of the 49 states in our analysis. Because of the time series nature of these data, we use a Normal

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<sup>9</sup> We include state-specific fixed effects in our statistical model, but these capture only heterogeneity that manifests itself as varying state-specific straight-line trajectories over time. Time-varying state characteristics can explain departures from these straight-line trajectories.

linear model with an auto-correlated (AR(1)) error structure. We use a linear mean structure that includes fixed effects for state and the state-by-time interaction. These state-specific effects are included to account for unobserved heterogeneity across states.<sup>10</sup> The mean structure also includes the covariates described in the Data section above, and in Appendix A. Finally, the mean structure includes the following substantively meaningful interactions: Republican legislative strength by district competition; Republican legislative strength by time; and Republican governor by time.

To mirror the hypothesized causal ordering of our variables, we use the first-lag value for most of the independent variables in our analyses. One exception is the percentage of prisoners released, which should be contemporaneously associated with admissions and thus is not lagged. The other exception in each model is our measure of district competition—the competition index in Model 1 and the percentage of contested seats in Model 2. For each of these variables, we use a two-year lag value because legislators elected in one year do not take office until the following year. Thus, using the two-year lag value for the competition variables corresponds to the one-year lag values of the other variables.

We specify our model as a general linear mixed model and fit it using PROC MIXED in SAS. To make our inferences about the parameters in the mean model relatively robust to misspecifications of the correlation structure, we use empirically-adjusted standard errors (cf. Huber, 1967; White, 1980). More specifically, we based our tests of significance of effects on Wald statistics that use the empirically-adjusted standard errors.

#### MODEL FIT AND DIAGNOSTICS

Residual plots (e.g. time plots within state, histograms within time across states, residuals by predictors, etc.) indicate no obvious lack of fit. There were nine outlying residuals. The influences

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<sup>10</sup> This leads to an analysis that requires minimal assumptions about the unobserved heterogeneity. The use of fixed state-specific effects arguably also leads to a relatively conservative analysis of the other covariate effects because the bulk of the variability is accounted for by the state and state-by-time effects.



of the corresponding observations were measured using delete-observation statistics and we found that their influences were negligible. In fact, only one of the effects qualitatively changed when the observations were omitted from the analysis. Specifically, for both models, when the observations corresponding to Texas 1994 and 1995 were dropped, the effect of Republican governor dropped below significance at conventional levels.

We also compared bootstrap estimates of standard errors based on the working normal models to the empirically adjusted standard errors. They are very similar and lead to qualitatively similar conclusions.

The model predicts the observed responses reasonably well, as illustrated in the graphs in Appendix B. The graphs show that in all cases depicted, predicted values track the observed values quite closely. In addition, the correlation between predicted and observed admission rates was about 0.97 for both models. Of course, as is typical in this type of modeling, the state and time effects explain a large proportion of the variation in our outcome. Yet, for both models presented, the substantive covariates explain about 52% of the variation that was unexplained by the model that included only state and time covariates.<sup>11</sup> In addition, plots of the fit of models that include only state and time effects and exclude our substantive covariates show that this reduced model does not track the data as closely as do our full models.

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<sup>11</sup> We define total variation as  $T = \sum (y_i - \bar{y})^2$  and unexplained variation as  $U = \sum (y_i - \hat{y}_i)^2$ . Here,  $y_i$ ,  $\hat{y}_i$ , and  $\bar{y}$  are observed, fitted, and overall log average admission rates; sums and averages are taken over all states and times. The ratio  $U/T$  is the proportion of the total variation left unexplained. If  $U_R$  and  $U_F$  are the unexplained variations for the reduced and full model then  $100(U_R - U_F)/U_R$  gives the percent reduction in the unexplained variation when going from the reduced model with only state and time effects to the full model, which includes all of our other covariates as well.

## RESULTS

With the log odds models we used, it is natural to quantify the effects in terms of percentage changes in the odds of admission associated with specified changes in the covariate values.<sup>12</sup> This means that covariate effects can be interpreted in terms of multiplicative changes in the odds of admission to prison.<sup>13</sup> We present our effect estimates from Models 1 and 2 in Tables 1 and 2, respectively.<sup>14</sup> Although these effect estimates are arguably more informative and meaningful than regression parameter estimates alone, we also include parameter estimates from each of our models in Appendix C for completeness.

In our substantive discussion above, we argue that the effects of Republican party strength in the state legislature will be conditional on district-level competition at the polls, such that the party effect will be strongest when there is high competition for seats.<sup>15</sup> Consistent with these arguments, we find that the effect of the proportion of Republican seats in the legislature on the odds of admission (hereafter, the "Republican effect") indeed depends on both competition for seats and time.<sup>16</sup> This is true when we include our competition score (Model 1) and when we include the

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<sup>12</sup> With these large adult population sizes, the mean of response Y is essentially the same as the logarithm of the actual odds of admission to prison.

<sup>13</sup> So a  $\delta$  unit increase in X is associated with an  $\exp(\beta\delta)$  multiplicative, equivalently a  $(\exp(\beta\delta)-1)*100$  percent, change in the odds of admission to prison.

<sup>14</sup> We find no evidence that multicollinearity is a problem in our analyses when we examine the diagonal terms of the inverse of the correlation matrix that includes all covariates. In a linear model setting, these diagonal terms are the "variance inflation factors."

<sup>15</sup> In supplementary analyses, we substituted Jacobs and Carmichael's (2001) measure of Republican strength, which is a product of the binary Republican governor variable and the Republican composition of the legislature. The legislature's effect is zero when governors are not Republican, under this specification. We found that this variable had no effect on admissions rates. Neither the main effect nor the interaction with our competition variables was significant.

<sup>16</sup> To assess whether other covariate effects were time dependent, we used an omnibus likelihood ratio test, which is akin to the Chow test. This test, along with follow-up analyses, indicated that the only other effect that likely depends on time is the prisoner release rate effect. Including the time-by-prisoner release rate interaction in Models 1 and 2 did not qualitatively change any of our findings, nor did it change our estimates much at all. For this reason, and for the sake of model parsimony, we include only the substantively meaningful interactions involving time in the models reported here (i.e., those involving partisan politics).

percentage of legislative seats eligible for election that are contested (Model 2). In any particular year, the Republican legislature effect increases as competition increases. Also, at any particular level of competition, the Republican legislative effect increases over time.<sup>17</sup> Figures 1 and 2 illustrate these effects for each of our models.

As an example, Table 1 shows that in 1996 a 10 point increase in the percent of Republicans in the legislature is associated with (1) a significant 2.8% increase in odds of admission at the 10<sup>th</sup> percentile of the competition index (i.e. 28% of the total index); (2) a significant 5.2% increase in odds of admission at the 50<sup>th</sup> percentile of the competition index (i.e. 56% of the total index); and (3) a significant 6.5% increase in odds of admission at the 90<sup>th</sup> percentile of the competition index (i.e. 71% of the total index). (See also Figure 1.) These increases are statistically different, as indicated by a statistically significant interaction effect ( $p = 0.0202$ ). (See Appendix C.) This pattern holds for earlier years as well, although the increases are uniformly smaller.

We find remarkably similar results when we examine the model including percentage of contested seats as a measure of district competition. (See Table 2 and Figure 2.) Specifically, in 1996 a 10 point increase in the percent of Republicans in the legislature is associated with a (1) a statistically significant 2.6% increase in odds of admission when 34% of seats are contested (the 10<sup>th</sup> percentile of contested seats); (2) a significant 4.9% increase in odds of admission when 72% of seats are contested (the 50<sup>th</sup> percentile of contested seats); and (3) a significant 6.3% increase in odds of admission when 95% of seats are contested (the 90<sup>th</sup> percentile of contested seats). Again, the interaction between Republican legislative strength and contested seats is statistically significant

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<sup>17</sup> Alternative conceptions of the party-policy linkage such as those found in Elazar (1984), Patterson and Caldeira (1984), and Brown (1995) were assessed in supplementary analyses, but the patterns of findings was not as clear as in the models reported here.

( $p=0.0124$ ). (See Appendix C.) As is clearly indicated in Table 2, the Republican legislature effect increases in magnitude as the percentage of contested seats increases.

The effect of Republican strength in the legislature also increases over time, consistent with some arguments in the literature (e.g. Jacobs and Carmichael, 2001). This is true in both Model 1 ( $p = .0202$ ) and Model 2 ( $p = .0167$ ), and can be seen in the tables and figures. To illustrate this finding with the results from Model 2, suppose that 34% of the seats are contested. In 1996, a 10 point increase in the percent of Republicans in the legislature is associated with a statistically significant 2.6% increase in the odds of admission. In 1978, a 10 point increase in the percent of Republicans in the legislature is associated with a non-significant 3.4% decrease in the odds of admission (confidence interval, reported in Table 2, includes 0). As another example, suppose that 95% of the seats are contested. In 1996, a 10 point increase in the percent of Republicans in the legislature is associated with a statistically significant 6.3% increase in the odds of admission. In 1978, this increase in Republicans is associated with a statistically non-significant 0.03% increase in the odds of admission (confidence interval includes 0).

The previous two paragraphs describe how the effect of a Republican-dominated legislature depends on time and competition. What remains is a description of the magnitude of the effect of the Republican legislature itself. For later years and for any level of competition at or above the 10<sup>th</sup> percentile (for both Models 1 and 2), increases in the percent of Republicans in the legislature are associated with statistically significant increases in the odds of admission. Going back far enough in time, however, the percent change in odds of admission (at any level of competition) becomes non-significantly different from 0 ( $p > .05$ ). Loosely speaking, the Republican legislature effect starts out negligible, and becomes significantly positive over time. This is consistent with Jacobs and Carmichael's (2001) finding that Republican strength is weakly associated with custody rates in 1971-72, significantly associated in the 1981-82, and most strongly associated with custody in 1991-92.

However, our results show that the relationship is more complex. Specifically, although there is indeed a general tendency for the Republican legislative effect to become stronger over time, we demonstrate that the Republican legislative effect also depends on level of electoral competition. For example, the results from Model 2 show that when 34% of the seats are contested, the Republican effect is non-significant prior to 1995 and is significantly positive from then on. When 72% of seats are contested, the Republican legislature effect is non-significant before 1987 and is significantly positive from then on. And, when 95% of the seats are contested, the Republican effect is non-significant prior to 1985 and significantly positive from then on. The significant and non-significant effects are represented in Figures 1 and 2 with solid and dashed lines, respectively.

Although our findings regarding the Republican legislature-by-time interaction fit well with some previous research, our findings regarding the Republican governor-by-time interaction are more difficult to interpret. The results show that in the earlier years, 1978 to 1982, the odds of admission are statistically higher when the governor is Republican. However, the odds of admission are statistically lower in the later years, from 1989 to 1996, when the governor is Republican. (See Tables 1 and 2.) Rather than trying to explain this curious effect substantively, we refer back to the model diagnostics section above, where we noted that the Republican governor effect estimates are dependent on two influential observations in our data set, Texas 1994 and 1995. Because the effect disappears using conventional .05 levels of significance when these two observations are deleted, we conclude that the evidence for this effect is not convincing. Also, we note that Greenberg and West (2001) find that states with Republican governors did not differ from other states in custody rates.

In addition to our focus on partisan politics, we also anticipated that measures of economic and racial threat might contribute to the explanation of admissions to prison, based on previous research and the arguments of the political economy perspective. As can be seen in Appendix C, we find no support for this expectation in either Model 1 or 2. Admissions rates are not significantly associated with unemployment rates, percent of the state's population that is black, or the percent that

is Latino. The finding regarding unemployment is consistent with many other null findings reported in the literature regarding this variable, even though our analysis uses a reasonably long series of state-level data, unlike previous research (cf. Chiricos and Delone, 1992). However, several analyses have reported a significant association between the proportion of a state that is black and its imprisonment rates (Beckett and Western, 2001; Greenberg and West, 2001; Jacobs and Carmichael, 2001).<sup>18</sup> We suggest in our conclusions that, strictly speaking, assessing a racial threat argument about imprisonment requires examination of the race rate ratios of inmates, not non-disaggregated rates of custody or admissions. Based on our findings, we conclude that there is no evidence that economic and racial threat are important determinants of admissions rates, once political context and the other variables in our model are controlled. It is interesting to consider this null finding in a model that includes a range of political variables, *vis a vis* Beckett's arguments about political discourse regarding race. If we assume that political discourse about "problematic" populations is associated with partisan politics, then perhaps we would not expect percent black, Latino, and unemployed to have independent effects in the context of a model that includes various measures of partisan politics.

We do find some support, however, for the political economy argument that welfare may serve as an alternative control institution in contemporary society. Specifically, we find that as AFDC payments per capita increase, rates of admission to prison decline.<sup>19</sup> An increase of 10 (1983) dollars in a state's AFDC payments per capita is associated with a statistically significant 2.1% decrease in odds of admission for both Models 1 and 2. (See Tables 1 and 2.)

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<sup>18</sup> We assessed whether there may be a quadratic effect of proportion black on admissions rates, and whether the effect of percentage black might vary over time. We found no evidence of either. We also assessed whether another measure of racial threat – the non-black unemployment rate – may be important, but found no evidence of this.

<sup>19</sup> We also found no evidence that the effect of AFDC payments varied over time.

We also find that select criminal justice variables have significant effects on admission rates. First, the number of inmates exiting through the “backdoor” is associated with admissions, such that a 10 point increase in the percent of prisoners released is associated with a 7.6% increase in the odds of admission in both Models 1 and 2. As was expected, the backdoor of the prison appears to serve as a release valve of sorts. Second, property crime rates are significantly associated with prison admission rates; a 20% increase in the property crime rate is associated with about a 7% increase in the odds of admission in both Models 1 and 2. We find no influence, however, of violent crime rates on admissions in either Model 1 or 2. (See Appendix C.) It appears that, in our analyses, state prison admissions are driven by the relatively larger number of property offenses in states, and violence rates have little impact once property crime is controlled. We also find no evidence from either model that states operating under presumptive guidelines have higher (or lower) admissions rates for either Model 1 or 2 (see Appendix C). Our finding of no effect of presumptive sentencing laws comports with some previous research on the effects of determinate sentencing laws (e.g. Marvell and Moody, 1996; Sorensen and Stemen, 2002). The only control variable to exert a significant influence on admissions rates is the population size of the state. Specifically, an increase of 500,000 in state population is associated with a 7.4% and a 7.2% increase in the odds of admission in Models 1 and 2, respectively. Therefore, larger states admit persons to prison at higher rates, even when all other variables in our models are controlled, including crime rates, demographic features of states, political variables, and state fixed-effects.

Finally, we note that there are large differences in time trends across the states as measured by the time\*state interactions in both Models 1 and 2 ( $p < 0.0001$ ). There are no clear patterns in these time trends across the states, which is not unexpected because many other covariates related to changes in admission rates are included in the model. Because variables “state” and “time” serve as proxies for many unobserved covariates, we maintain that the significant time\*state interactions provide evidence of significant unobserved heterogeneity. Thus we assert that it is critical to control

for this unobserved heterogeneity in some way, such as by including state and time (and their interaction) in our models.

## CONCLUSIONS

Recent research on imprisonment has focused on the role of partisan politics, particularly on the impact of Republican party dominance. This paper extends existing research by drawing from political science arguments on state politics and developing a hypothesis about the conditions under which one would expect party strength to be associated with imprisonment rates. Specifically, we find that the effect of Republican strength in state legislatures on prison admissions depends on the degree of competition that legislators face at the polls. When district competition is low, increases in Republican strength in the legislature do not have much effect on prison admissions. By contrast, when district competition is high, increases in Republican legislative strength are accompanied by significant increases in prison admissions. Our work therefore pushes forward previous research by showing that partisan politics is most consequential for punishment policies under particular circumstances, namely when both parties have faced relatively competitive elections. Furthermore, these findings illustrate the importance of using annual state-level data over time in studies of imprisonment. Indeed, the conditional effects of Republican strength reported here would be missed by a study design using data points separated by multiple years.

Our findings also show that the effects of Republican legislative strength increase over time, becoming significant in the 1980s and growing in impact in the 1990s. This finding is consistent with state-level results reported by Jacobs and Carmichael (2001), using a different measure of Republican strength, and with national-level research on presidential party influence on imprisonment rates (Jacobs and Helms 1996). Although there have been counterarguments in the literature, suggesting convergent party effects at the national level (Beckett and Sasson 2000), the balance of evidence from quantitative studies is consistent with an increased association between Republican strength and increased incarceration from the 1970s through the 1990s.



Although we find that partisan politics involving the legislative branch are associated with imprisonment rates in important ways, we do not find much evidence that party dominance of the executive branch is of consequence. Specifically, we do not find convincing evidence of a significant association between Republican dominance of the executive branch and prison admission rates. One explanation of the weak effects of gubernatorial party could lie in the differences between the executive and the legislative branches in the nature of electoral politics. King (1989:90) argues that “[w]hile partisanship commonly plays a role ... gubernatorial elections are more the result of factors such as incumbency and candidates’ personal attributes. On the other hand, partisanship is a key determinant of state legislative election outcomes.” King (1989) also finds that state legislative and executive competition are distinct within states and have different determinants. Alternatively, it could be that governors of both parties saw the value of tough anti-crime stances in previous Presidential elections and followed suit. Indeed, Greenberg and West (2001) note several instances of (especially Southern) Democratic governors enacting law-and-order policies during this time period.

In addition to partisan politics, we assessed a number of other potentially relevant determinants of punishment. We find that welfare generosity is negatively associated with prison admissions, consistent with other research, but we do not find an association between unemployment and admissions.<sup>20</sup> Consequently, our findings provide more evidence supportive of Beckett and Western’s (2001: 55) conclusion that “penal and welfare institutions have come to form a single policy regime aimed at the governance of social marginality.”

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<sup>20</sup> The finding that lower imprisonment is associated with higher welfare benefits appears to be quite robust to measurement. Our measure captures per capita AFDC benefits only, whereas Beckett and Western (2001) include a number of welfare related benefits.

We do not find support for racial threat arguments in our analysis, using the traditional measures of percentages of the population who are black and Latino.<sup>21</sup> However, we maintain that examining racial threat arguments requires a focus on race-disaggregated imprisonment rates. Racial threat arguments imply that the target of punishment policies would more often be minorities. Thus, comparison of minority and majority rates would seem essential. On a more theoretical note, the arguments of Beckett and others that Republican political stances on law and order issues have been tied to race relations in the United States imply that political messages about race may have a more important effect on overall imprisonment rates than size of the minority populations, per se.

There are a few limitations of the current research, which must be appreciated. First, like previous studies of politics and imprisonment, we are assuming that Republican dominance is associated with an emphasis on law-and-order that translates into criminal punishment. There may be important variations within party that are missed by this approach, of course. Another alternative would be to examine the campaign platforms of individual candidates in gubernatorial and legislative races (cf. Davey 1998). Of course, this strategy would be prohibitively time-consuming in large scale quantitative studies. But, this issue highlights the need for qualitative research focused on a carefully selected sample of states that focuses on both legislative and electoral party dominance, the content of political platforms and rhetoric, and the level of district-level competition.

Another caveat is that our research, like other studies of imprisonment rates, considers only one stage in the criminal justice process. The complex interconnections between politics, imprisonment, and other parts of the criminal process, such as charging decisions, likelihood of indictment, and sentencing, need to be considered by future research.

In addition, some might argue that the recent emphasis on crime control could simply be the result of politicians responding to conservative shifts in public opinion. However, some scholars

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<sup>21</sup> We also found no association between another potential measures of black racial threat – the nonblack unemployment rate – and admissions.

argue that political rhetoric and media attention drive public concerns regarding crime rather than the reverse (Beckett and Sasson 2000). Although the analyses reported in our paper include no direct measure of public opinion, we estimated supplementary models that included a measure of liberal citizen ideology, and found that it had no association with imprisonment rates.

While partisan politics appear to affect punishment, it is also the case that criminal punishment in the United States may be consequential for party politics. Specifically, Uggen and Manza (2002) report that increased imprisonment and the accompanying disenfranchisement of voters affected the outcome of at least one U.S. Presidential election and as many as seven U.S. Senate elections. They argue that this had important consequences for partisan control of the U.S. Senate. Namely the Democrats might have been able to retain control of the Senate from 1986 to 2002 had disenfranchised felons been able to vote, because based on their demographic characteristics, they would be expected to be disproportionately likely to vote Democratic. Thus the Republican focus on law and order politics appears to have multiple consequences. In addition to appealing to conservative voters, it also likely reduces the ranks of some potentially Democratic voters (see also Mauer 2002).

The slowing of increases in imprisonment (and actual declines in some states) in the early years of the 21<sup>st</sup> century suggests that the imprisonment binge may be stalling somewhat. It may be that the political hay that could be made from law and order platforms is declining, as states realize the high costs and limited utility of warehousing increasingly older, non-violent and drug offenders. The coming years will be an important laboratory for further understanding the complex relationship between politics and punishment. Our research suggests that as we continue to study this phenomenon, we should seek to specify the conditions under which partisan politics becomes associated with punitive policies.

## REFERENCES

- Barrilleaux, Charles  
 1997 A Test of the Independent Influences of Electoral Competition and Party Strength in a Model of State Policy- Making. *American Journal of Political Science* 41: 1462-66.
- Barrilleaux, Charles, Thomas Holbrook, and Laura Langer  
 2002 Electoral Competition, Legislative Balance, and American State Welfare Policy. *American Journal of Political Science* 46:415-427.
- Beckett, Katherine  
 1997 *Making Crime Pay: Law and Order in Contemporary American Politics*. New York: Oxford University Press.
- Beckett, Katherine and Theodore Sasson  
 2000 *The Politics of Injustice: Crime and Punishment in America*. Thousand Oaks, Ca: Pine Forge.
- Beckett, Katherine and Bruce Western  
 2001 *Governing Social Marginality: Welfare, Incarceration, and the Transformation of State Policy*. *Punishment and Society* 3: 43-59.
- Berk, Richard A., Sheldon L. Messinger, David Rauma, and John E. Berecohea  
 1983 Prisons as Self-Regulating Mechanisms: A Comparison of Historical Patterns in California for Male and Female Offenders. *Law and Society Review* 17: 547-586
- Blalock, Hubert  
 1967 *Toward a Theory of Minority- Group Relations*. New York: John Wiley.
- Blumstein, Alfred and Beck, Allen J.  
 1999 Population Growth in U.S. Prisons, 1980- 1996. In *Crime and Justice a Review of Research*, Michael H. Tonry and Joan Petersilia, Eds. Vol. 26.
- Blumstein, Alfred and Jacqueline Cohen  
 1973 A Theory of the Stability of Punishment. *Journal of Criminal Law and Criminology* 64:198- 207.
- Blumstein, Alfred, Jacqueline Cohen, and Daniel Nagin  
 1977 The Dynamics of A Homeostatic Punishment Process. *Journal of Criminal Law and Criminology* 68: 317- 34.
- Box, Steven, and Chris Hale  
 1985 Unemployment, Imprisonment And Prison Overcrowding. *Contemporary Crises* 9: 209-228.
- Brown, Robert D.  
 1995 Party Cleavages and Welfare Effort in the American States *American Political Science Review* 89: 23-33.

- Caldeira, Gregory A.  
 1983 Elections and the Politics of Crime: Budgetary Choices and Priorities in America. Pp. 238-252 in *The Political Science of Criminal Justice*. Nagel, Stuart, Erika Fairchild, and Anthony Champagne, eds. Springfield, Ill: Charles C. Thomas.
- Caldeira, Gregory A. and Andrew T. Cowart  
 1980 Budgets, Institutions, and Change: Criminal Justice Policy in America. *American Journal of Political Science* 24: 413- 438.
- Carroll, Leo and Mary Beth Doubet  
 1983 U.S. Social Structure and Imprisonment. *Criminology* 21:449- 456.
- Casper, Jonathan D.  
 1984 Determinate Sentencing and Prison Crowding in Illinois. *Illinois Law Review* 1984:231-252.
- Casper, Jonathan D., and David Brereton  
 1984 Evaluating Criminal Justice Reforms. *Law and Society Review* 18:121- 144.
- Chiricos, Theodore G., and Miriam A. Delone  
 1992 Labor Surplus and Punishment: A Review and Assessment of Theory and Evidence. *Social Problems* 39: 421-446.
- Clear, Todd R., John D. Hewitt, and Robert M. Regoli  
 1978 Discretion and Determinate Sentencing: Its Distribution, Control, and Effect on Time Served. *Crime and Delinquency* 24: 428- 445.
- Cnudde, Charles F. and Donald J. McCrone  
 1969 Party Competition and Welfare Policies in the American States. *American Political Science Review* 63:858-866.
- Davey, Joseph Dillon  
 1998 *The Politics of Prison Expansion: Winning Elections by Waging War on Crime*. Westport, Ct: Praeger.
- Dawson, Richard E., and James A. Robinson  
 1963 Inter-Party Competition, Economic Variables, and Welfare Policies in the American States. *Journal of Politics* 25: 265- 89.
- Downs, Anthony  
 1957 *An Economic Theory of Democracy*. New York: Harper and Row.
- Dye, Thomas R.  
 1966 *Politics, Economics, and Public Policy in the American States*. Chicago, Ill: Rand McNally &Co.  
 1984 Party and Policy in the American States. *Journal of Politics* 46: 1097-1116.
- Elazar, Daniel  
 1984 *American Federalism: A View from the States* 3d ed. New York: Harper and Row.

Galster, George C., and Laurie Scaturro

- 1985 The U.S. Criminal Justice System: Unemployment and the Severity of Imprisonment. *Journal of Research in Crime and Delinquency* 22:163- 189.

Garand, James C.

- 1985 Partisan Change and Shifting Expenditure Priorities in the American States. *American Politics Quarterly* 13: 355-391.

Garland, David

- 1985 *Punishment and Welfare: A History of Penal Strategies*. Brookfield, VT: Gower Publishing.

Grabosky, Peter

- 1980 Rates of Imprisonment and Psychiatric Hospitalization. *Social Indicators Research* 7: 63-70.

Greenberg, David

- 1977 The Dynamics of Oscillatory Punishment Processes. *The Journal of Criminal Law and Criminology* 68:643-651.

Greenberg, David and Valerie West

- 2001 State Prison Populations and Their Growth, 1971- 1991. *Criminology* 39:615-653.

Griffin, Larry, Joel Devine, and Michael Wallace

- 1983 On the Economic and Political Determinants of Welfare Spending in the Post-World War II Era. *Politics & Society* 12: 331-365.

Harrison, Paige M. and Allen J. Beck.

- 2003 *Prisoners in 2002*. Washington, DC: Bureau of Justice Statistics.

Holbrook, Thomas M., and Emily Van Dunk

- 1993 Electoral Competition in the American States. *American Political Science Review* 87: 955-62.

Huber, P.J.

- 1967 The Behavior of Maximum Likelihood Estimates under Nonstandard Conditions. *Proceedings of the Fifth Berkeley Symposium on Mathematical and Statistical Probability*, 1, 221-233.

Inverarity, James, and Ryken Grattet

- 1989 Institutional Responses to Unemployment: A Comparison of U.S. Trends, 1948-1985. *Contemporary Crises* 13: 351-370.

Inverarity, James, and Daniel McCarthy

- 1988 Punishment and Social Structure Revisited: Unemployment and Imprisonment in the U.S., 1948-1984. *The Sociological Quarterly* 29: 263-279.

Jackson, Pamela I.

- 1986 Black Visibility, City Size, and Social Control. *Sociological Quarterly* 27:185-203.
- 1989 *Minority Group Threat, Crime, and Policing: Social Context and Social Control*. New York: Praeger.

Jackson, Pamela I., and Leo Carroll

- 1981 Race and the War on Crime: The Socio-political Determinants of Municipal Police Expenditures in 90 Non-Southern US Cities. *American Sociological Review* 46: 290-305.

Jacobs, David

- 1979 Inequality and Police Strength: Conflict and Coercive Control in Metropolitan Areas. *American Sociological Review* 44:913- 24.

Jacobs, David and Jason T. Carmichael

- 2001 The Politics of Punishment Across Time and Space: A Pooled Time-Series Analysis of Imprisonment Rates. *Social Forces* 80:61-91.
- 2002 The Political Sociology of the Death Penalty: A Pooled Time- Series Analysis. *American Sociological Review* 67: 109-131.

Jacobs, David, and Ronald E. Helms

- 1996 Toward a Political Model of Incarceration: A Time- Series Examination of Multiple Explanations of Prison Admission Rates. *American Journal of Sociology* 102:323-357.
- 1999 Collective Outbursts, Politics, and Punitive Resources: Toward a Political Sociology of Spending on Social Control. *Social Forces* 77:1497-1523.

Jankovic, Ivan

- 1977 Labor Market and Imprisonment. *Crime and Social Justice* 8:17-31.

Jennings, Edward T.

- 1979 Competition, Constituencies, and Welfare Policies in the American States. *American Political Science Review* 73: 414-429.

Key, V.O., Jr.

- 1949 *Southern Politics in State and Nation*. New York: Random House.

King, James D.

- 1989 Interparty Competition in the American States: An Examination of Index Components. *The Western Political Quarterly* 42: 83-92.

Lewis-Beck, Michael S.

- 1977 The Relative Importance of Socioeconomic and Political Variables for Public Policy. *American Political Science Review* 71: 559-566.

Liska, Allen E. and Mitchell B. Chamlin.

- 1984 Social Structure and Crime Control Among Macrosocial Units. *American Journal of Sociology* 90: 383-395.

- Marquette, Jesse F. and Katherine A. Hinckley  
 1981 Competition, Control and Spurious Covariation: A Longitudinal Analysis of State Spending. *American Journal of Political Science* 25: 362- 375.
- Marvell, Thomas B. and Carlisle E. Moody  
 1996 Determinate Sentencing and Abolishing Parole: The Long-Term Impacts on Prisons and Crime. *Criminology* 34:107- 128.
- Mauer, Marc.  
 2002 Mass Imprisonment and the Disappearing Voters. In Marc Mauer and Meda Chesney-Lind (editors), *Invisible Punishment: The Collateral Consequences of Mass Imprisonment*. New York: The New Press.
- Michalowski, Raymond J. and Susan M. Carlson  
 1999 Unemployment, Imprisonment, and Social Structures of Accumulation: Historical Contingency in the Rusche-Kirschheimer Hypothesis. *Criminology* 37: 217- 249.
- Michalowski, Raymond, and Michael Pearson  
 1990 Punishment and Social Structure at the State Level: A Cross-Sectional Comparison of 1970 and 1980. *Journal of Research in Crime and Delinquency* 27:52- 78.
- Parker, Robert Nash, and Allen V. Horwitz  
 1986 Unemployment, Crime, and Imprisonment: A Panel Approach. *Criminology* 24: 751-773.
- Patterson, Samuel C., and Gregory A. Caldeira  
 1984 The Etiology of Partisan Competition. *American Political Science Review* 78: 691-707.
- Piven, Frances Fox and Richard A. Cloward  
 1971 *Regulating the Poor: The Functions of Public Welfare*. New York, NY: Pantheon Books.
- Ray, David and John Havick  
 1981 A Longitudinal Analysis of Party Competition in State Legislative Elections. *American Journal of Political Science* 25: 119-128.
- Rusche, Georg, and Otto Kirschheimer  
 [1939] 1968 *Punishment and Social Structure*. New York, NY: Russell and Russell.
- Sharkansky, Ira and Richard I. Hofferbert  
 1969 Dimensions of State Politics, Economics and Public Policy. *American Political Science Review* 63: 867-879.
- Sorensen, Jon, and Don Stemen  
 2002 The Effect of State Sentencing Policies on Incarceration Rates. *Crime and Delinquency* 48: 456-475.
- Sorensen, Jon, Robert Hope, and Don Stemen  
 2003 Racial Disproportionality in State Prison Admissions: Can Regional Variation Be Explained by Differential Arrest Rates? *Journal of Criminal Justice* 31: 73-84.



- Tidmarch, Charles M., Edward Lonergan, and John Sciortino  
1986 Interparty Competition in U.S. States: Legislative Elections, 1970-1978. *Legislative Studies Quarterly* 11: 353-374.
- Tucker, Harvey J., and Ronald E. Weber  
1992 Electoral Change in U.S. States: System Versus Constituency Competition. PP. 75-86 in *Changing Patterns in State Legislative Careers*, Gary F. Moncrief and Joel A. Thompson, editors. University of Michigan Press.
- Uggen, Christopher, and Jeff Manza  
2002 Democratic Contraction? Political Consequences of Felon Disenfranchisement in the United States. *American Sociological Review* 67:777-803.
- Wallace, Don  
1980 The Political Economy of Incarceration trends in Late U.S. Capitalism: 1971-1977. *Insurgent Sociologist* 9:59-65.
- White, Halbert.  
1980 A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity. *Econometrica*. 48: 817 -838.
- Winters, Richard  
1976 Party Control and Policy Change *American Journal of Political Science* 20: 597-637.
- Zimring, Franklin E. and Gordon Hawkins.  
1991 *The Scale of Imprisonment*. Chicago: University of Chicago Press.

## Appendix A: Variable Descriptions and Sources

### All variables are computed for every state-year in the data set.

**Prison Admission Rate** = total admissions to adult institutions divided by the adult population. Total admissions include new court commitment, parole or other conditional release violators turned, escapees, returns from appeal or bond, and transfers from other jurisdiction and other admissions.

Source: U.S. Bureau of Justice Statistics: *Prisoners in State and Federal Institutions, Correctional Populations in the United States* (1978-1996).

**State Population** = number of state residents (in millions).

Source: Data for 1977 to 1989 are unpublished data furnished by the U.S. Census Bureau. Data from 1990 onward were downloaded from website

[[http://eire.census.gov/popest/archives/county/co\\_casrh.php](http://eire.census.gov/popest/archives/county/co_casrh.php)] “1990 to 1999 Annual Time Series of County Population Estimates by Age, Sex, Race, and Hispanic Origin.”

**Percent Latino** = total number of Latino or Hispanic residents, divided by total population, and multiplied by 100.

Source: Data for 1980 to 1989 are unpublished data furnished by the U.S. Census Bureau. Data from 1990 onward were downloaded from website

[[http://eire.census.gov/popest/archives/county/co\\_casrh.php](http://eire.census.gov/popest/archives/county/co_casrh.php)] “1990 to 1999 Annual Time Series of County Population Estimates by Age, Sex, Race, and Hispanic Origin” and then aggregated to the state level. Data for 1977-1979 were created via backward extrapolation from Latino percentages in 1980 and 1981. Annual state-level data for Latino or Hispanic populations is not available prior to 1980.

**Percent Black** = total number of black residents divided by the total population, and multiplied by 100.

Source: Data for 1977 to 1989 are unpublished data furnished by the U.S. Census Bureau. Data from 1990 onward were downloaded from website

[[http://eire.census.gov/popest/archives/county/co\\_casrh.php](http://eire.census.gov/popest/archives/county/co_casrh.php)] “1990 to 1999 Annual Time Series of County Population Estimates by Age, Sex, Race, and Hispanic Origin.”

**Violent and Property Crime Rates** = natural logarithm of the number of UCR crimes known to the police committed per 100 persons in each state-year. Violent crime is aggregated across murder, rape, robbery, and aggravated assault and property crime is aggregated across burglary, larceny, and auto theft.

Source: Uniform Crime Reports collected by the Federal Bureau of Investigation, as reported in the *Statistical Abstract of the United States*.

**Presumptive Sentencing Laws** = binary variable coded 1 if a state were operating under presumptive sentencing guidelines in a given year and 0 otherwise.

Source: Rottman, et al. (2000). *State Court Organization 1998*. U.S. Bureau of Justice Statistics, Table 48. Available at: <http://www.ojp.usdoj.gov/bjs/>

**Percent of Prisoners Released** = natural logarithm of the number of prisoners released divided by the total number of prisoners in the state's jurisdiction, multiplied by 100.

Source: U.S. Bureau of Justice Statistics: *Prisoners in State and Federal Institutions, Correctional Populations in the United States* (1978-1996).

**Gross State Product** = total Gross State Product (GSP) in thousands of dollars, divided by the state population and adjusted to 1983 dollars by the Consumer Price Index

[<http://stats.bls.gov/cpihome.htm>]

Source: <http://www.bea.doc.gov/bea/regional/gsp/current.htm>

**Percent Unemployed** = total number of persons officially listed as unemployed divided by the civilian labor force (defined as those working plus those looking for work), multiplied by 100. The measure is based on annual averages of monthly estimates from the Current Population Survey.

Source: Unpublished data provided by the U.S. Bureau of Labor Statistics.

**Marriage Rates** = Marriages per 1000 persons.

Source: *Statistical Abstracts of the United States*, 1977-1995.

**AFDC per Capita** = total AFDC payments in dollars per state-year divided by the corresponding population figure and adjusted to 1983 dollars by the Consumer Price Index.

Source: U.S. Administration for Children and Public Assistance, taken from the *Statistical Abstract of the United States*, 1977-1995.

**Republican Governor** = binary variable 1 if governor was Republican and 0 otherwise in each state-year.

Source: *The Book of the States* (various years).

**Republican Legislative Strength** = the percentage of state legislators in both houses of the state legislature that are Republican in each state-year.

Source: *Statistical Abstract of the United States* for 1977- 1996.

**District Competition Index** = an index computed following Barrilleaux et al. (2002). For each election year, we computed the following for elections for the state senate and the state house:  $100 - ((\text{percent uncontested seats} + \text{average margin of victory} + \text{percent safe seats}) / 3)$ . The house and senate values were averaged to create the competition index used in our analyses. Notes: For years between elections, the competition score takes on the value of the immediately preceding election year. For states with multi-member free-for-all (MMFFA) house districts, the candidates' vote percentages were multiplied by the number of available seats before determining margin of victory and whether the seat was safe. For states whose senates have staggered terms (e.g. only 10 of the 20 senators are elected in each election cycle), the senate value is an average of the last two elections, weighted according to the number of seats elected in each year. For the 1992 to 1996 data, states with staggered senate elections simply held over the value from one election to the next if there was no new election in a particular district. Because state legislative election data for 1990 and 1991 were unavailable, the 1990 competition value was computed as the midpoint between the 1989 and the next election year value (usually 1992) and then repeated for the intervening years.

Source: State legislative election data through 1989 were originally collected by the ICPSR (Study # 8907), and were updated by Mark A. Smith, University of Washington, who generously shared the data with us. The 1992-1996 data were computed using information from Barone, Michael, William

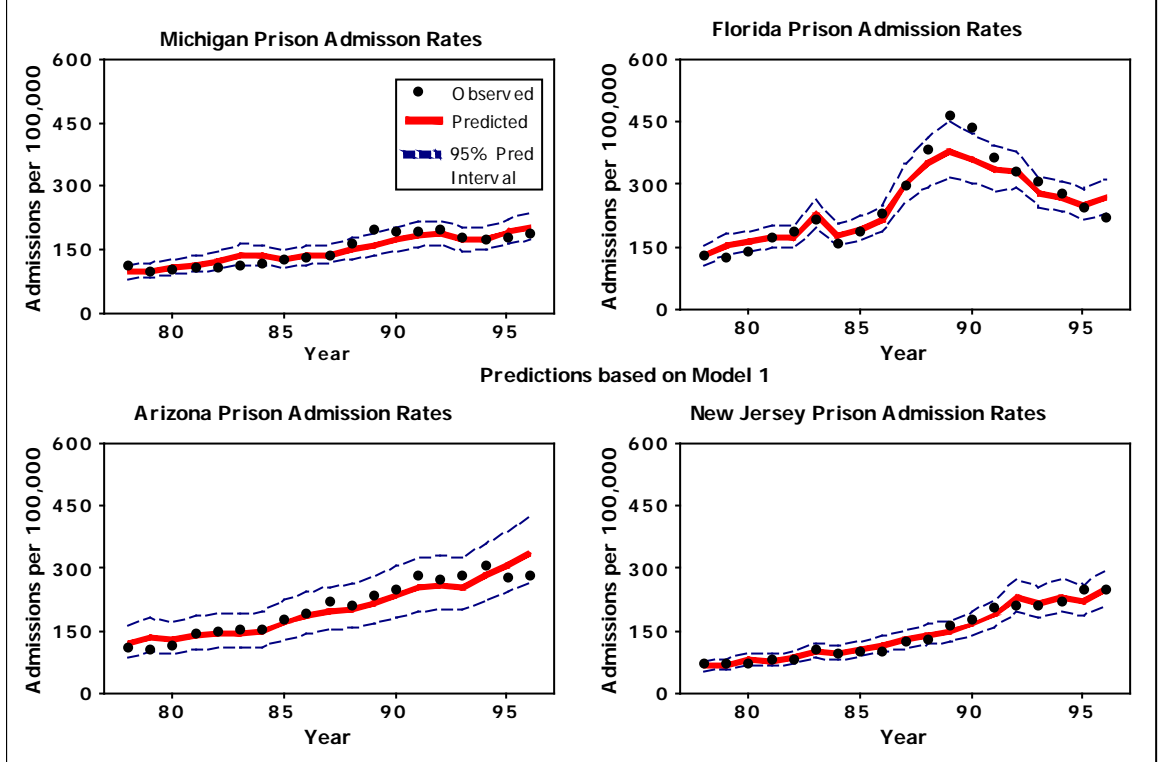
Lilley, and Laurence J. DeFranco (1998) "State Legislative Elections: Voting Patterns and Demographics" Washington, D.C.: Congressional Quarterly.

**Percentage of Contested Seats** = computed as 100- percent of uncontested seats in the state senate and house. Decisions rules discussed above hold here, as well.

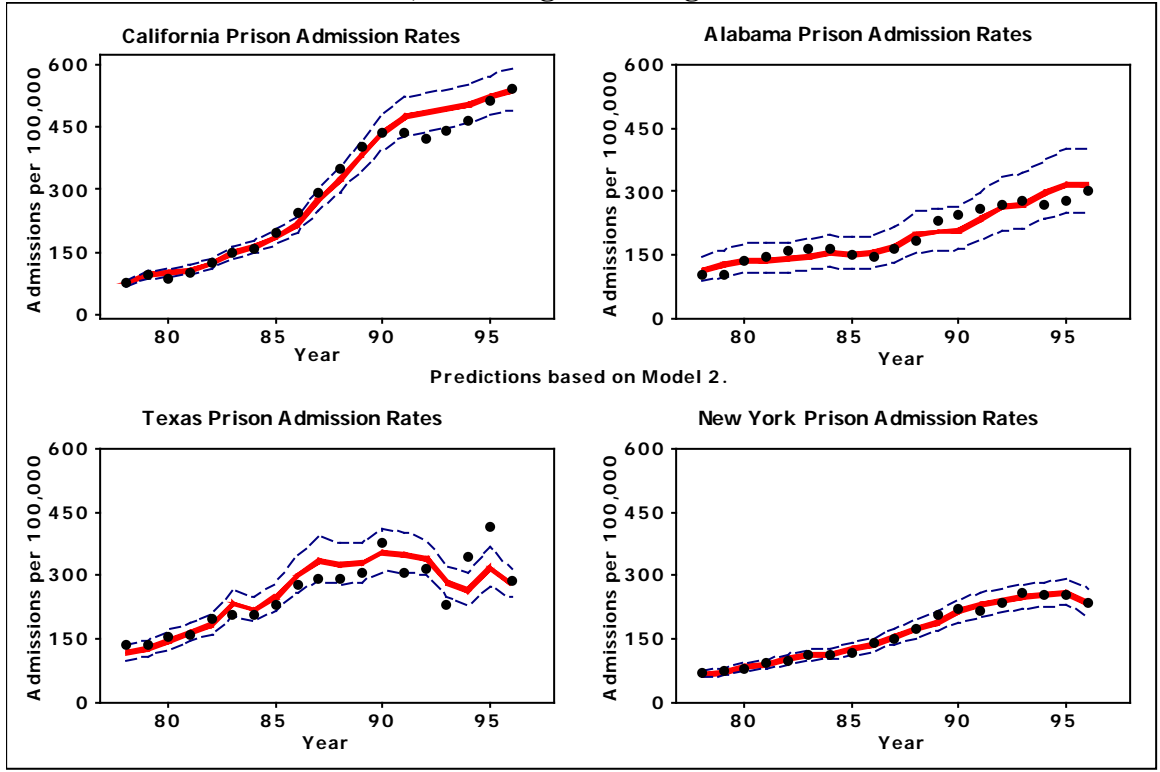
Source: Same as competition index.

### Appendix B. Observed vs. Fitted Admission Rates

#### Predictions Based on Model 1, including Competition Index.



**Predictions Based on Model 2, including Percentage of Contested Seats.**



**Appendix C: Regression Parameter Estimates from Models Predicting Log-Odds of Admission to State Prisons, 1978-1996, N= 924**

VARIABLES	MODEL 1		MODEL 2	
State Population	.1424*	(.0459)	.1391*	(.0500)
State GSP	.0152	(.0088)	.0171	(.0092)
Marriage rates	.0060	(.0083)	.0061	(.0083)
Percent Black	-.0327	(.0807)	-.0376	(.0823)
Percent Latino	.1752	(.1778)	.1664	(.1810)
Violent Crime Rate (logged)	.0653	(.0852)	.0615	(.0862)
Property Crime Rate (logged)	.3789**	(.0989)	.3874**	(.1027)
Presumptive Sentencing	-.0594	(.0437)	-.0579	(.0428)
Percentage of Prisoners Released	.0073**	(.0012)	.0074**	(.0012)
Percent Unemployed	.0053	(.0047)	.0057	(.0046)
AFDC Payments (\$ per capita)	-.0021*	(.0008)	-.0021**	(.0008)
Republican Legislature	-.6992	(.3650)	-.6466*	(.2786)
Competition Index	-.0029*	(.0013)		
Percent Contested Seats			-.0014	(.0013)
Republican Legislature * Competition Index	.0083*	(.0035)		
Republican Legislature* Percent Contested Seats			.0058*	(.0023)
Republican Legislature * Time	.0352*	(.0151)	.0338*	(.0141)
Republican Governor	.0998*	(.0345)	.0971*	(.0341)
Republican Governor * Time	-.0094*	(.0032)	-.0094*	(.0033)

\* = Significant at  $p < .05$ ; \*\* = significant at least at  $p < .01$ .

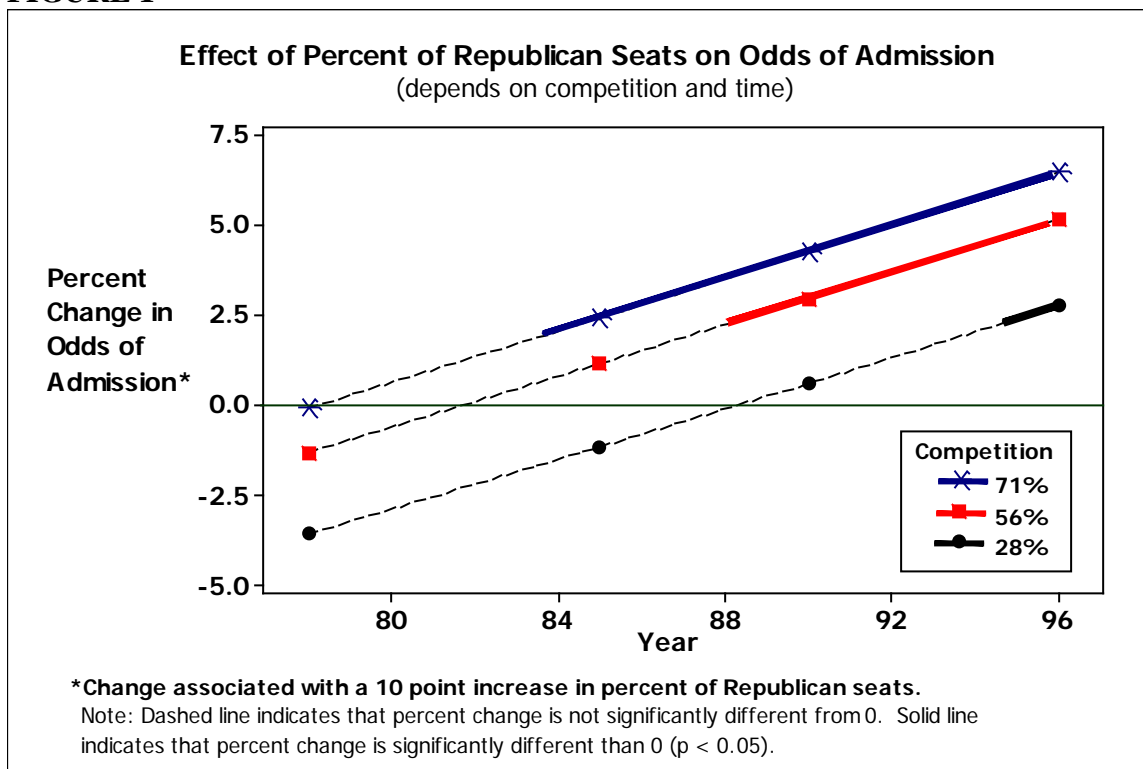
Note: Standard errors are in parentheses. State and state\*time effects suppressed.

Table 1: Estimates of Effects from Model Including Competition Index (Model 1)		
Effect Label [Increment]	Effect Modifier Profile	Percent Change in Odds of Admission
Percent of Republicans [10]	Competition = 28 Year = 78	-3.6 [-8.2, 1.4]
	87	-0.5 [-3.1, 2.2]
	96	<b>2.8</b> [ 0.7, 4.9]
	Competition = 56 Year = 78	-1.3 [-5.1, 2.6]
	87	<b>1.9</b> [ 0.3, 3.5]
	96	<b>5.2</b> [ 2.9, 7.5]
	Competition = 71 Year = 78	-0.1 [-3.6, 3.6]
	87	<b>3.1</b> [ 1.3, 5.0]
	96	<b>6.5</b> [ 3.5, 9.6]
Republican Governor	Year = 78	<b>7.4</b> [ 2.1, 13.0]
	87	-1.3 [-3.6, 1.0]
	96	<b>-9.4</b> [-15.8, -2.5]
AFDC per capita [\$10]		<b>-2.1</b> [ -3.7, -0.4]
Prisoner Release Rate [10]		<b>7.6</b> [ 5.1, 10.1]
Property Crime Rate [20%]		<b>7.1</b> [ 3.3, 10.9]
State Population [500,000]		<b>7.4</b> [ 2.6, 12.4]
Numbers in bold are significant at $p < .05$ .		
For example, when competition=28 and year=96, a 10 point increase in the percent of Republican seats is associated with a 2.8% increase in the odds of prison admission [95% CI: 0.7%, 4.9%].		

Table 2: Estimates of Effects from Model Including Percent Seats Contested (Model 2)		
Effect Label [Increment]	Effect Modifier Profile	Percent Change in Odds of Admission
Percent of Republicans [10]	Contested Seats= 34% Year=78	-3.4 [-7.3, 0.6]
	87	-0.4 [-2.5, 1.7]
	96	<b>2.6</b> [ 0.4, 5.0]
	Contested Seats= 72% Year=78	-1.3 [-5.0, 2.6]
	87	<b>1.8</b> [ 0.1, 3.5]
	96	<b>4.9</b> [ 2.9, 6.9]
	Contested Seats= 95% Year=78	0.0 [-4.0, 4.2]
	87	<b>3.1</b> [ 0.9, 5.4]
	96	<b>6.3</b> [ 3.8, 8.9]
Republican Governor	Year= 78	<b>7.1</b> [ 1.9, 12.6]
	87	-1.5 [-4.0, 1.0]
	96	<b>-9.5</b> [-16.1, -2.4]
AFDC per capita [\$10]		<b>-2.1</b> [ -3.7, -0.5]
Prisoner Release Rate [10]		<b>7.6</b> [ 5.2, 10.2]
Property Crime Rate [20%]		<b>7.2</b> [ 3.3, 11.3]
State Population [500,000]		<b>7.2</b> [ 2.0, 12.7]
Numbers in bold are significant at $p < .05$ .		
For example, when contested seats=34% and year=96, a 10 point increase in the percent of Republican seats is associated with a 2.6% increase in the odds of prison admission [95% CI: 0.4%, 5.0%].		



FIGURE 1



**FIGURE 2**

