Explaining State Black Imprisonment Rates 1983-1999
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Abstract
This paper addresses the problem of rising Black/White disparities in imprisonment and seeks to determine factors predicting which states will have the highest Black imprisonment rates for various offenses. Annual state imprisonment rates for 1983-1999 are calculated from the Correctional Populations of the United States (CPUS) and National Corrections Reporting Program (NCRP) data. Dependent variables are the logged Black and White rates of being "in-prison" (CPUS) and of sentences to prison, and the first differences of the logged rates, disaggregated by offense group. Multivariate pooled time-series analysis using panel-corrected standard errors is employed to identify the correlates of Black and White imprisonment rates, for Blacks, with and without a control for the White imprisonment rate. Factors examined include Black and White poverty rates, homicide rates, and unemployment rates, as well as the percent Black, the percentage change in the percent Black, the average level of metropolitan segregation, and the presence of a Republican governor. All independent variables are lagged one year to clarify issues of causal order. Results show a much more complex interplay of inter-racial dynamics than previous theory has predicted. Low White poverty is the most consistent predictor of high Black imprisonment rates. Blacks generally have higher imprisonment rates where the percent Black is lower, while White imprisonment rates are lower where the percent Black is increasing. Imprisonment rates are higher where homicide rates are higher. Predictors of Black drug sentences are different from those for other kinds of sentences.

Explaining State Black Imprisonment Rates 1983-1999

It is well known that Blacks[1] are much more likely to be arrested and incarcerated than Whites, and that this is a longstanding feature of the United States. What is less well known is that the Black/White disparity in the rate of imprisonment rose substantially between 1900 and 2000 despite the Civil Rights Movement and other trends toward greater racial equality. (See figure 1.) At the beginning of the 20th century, when Jim Crow segregation was at its height, national Black/White disparity ratios in imprisonment were in the range of 2 to 4. Disparity ratios were in the 4 to 6 range in the 1950s and 1960s[2] and were about 7 in the early 1980s. At the mid-1990s, the disparity ratios in prison admission were over 10, settling back down to 7 to 9 by the end of the decade, depending on the measure. (See figure 3). Even if the disparity ratios had remained constant, the Black-White gap in incarceration rates would have grown dramatically in the imprisonment boom of the 1980s and 1990s because Blacks were starting with a higher base. But the coupling of massive overall growth in incarceration with disparity increases created a system of massive incarceration focused primarily on Black people.

Why would the Black-White disparity in imprisonment grow over time? Why would the prison system become increasingly targeted on Black people? What has been going on in United States race relations to make racial differences in imprisonment so much worse in the years after the Civil Rights Movement? If we want to answer these questions, we have to be careful in specifying just what happened. This article seeks to shed light on the dynamics of spiraling Black incarceration rates in the United States by identifying the factors that contributed to state-level variations in Black and White imprisonment rates in the 1980s and 1990s. While we cannot find a simple answer to "why" from state-level variations, we do show that the characteristics of the White population and of shifting demographic patterns are more important than simple Black economic deprivation in explaining these patterns.

Our thinking on this issue begins with a quite well-established but little-known fact that seems contrary to common understanding and quite a bit of theory: Black imprisonment rates tend to be higher where Blacks are a smaller percentage of the population. One corollary of this fact is that Black imprisonment rates tend to be lower in the South than in the North. This seems contrary to regional stereotypes about race relations and contrary to theories of inter-group threat. When this pattern has been reported, it has rarely been discussed in much detail or theorized. However, it is quite consistent with theories that consider the cost of social control and the political power of the objects of this control. Using state-level data, we more carefully document this relationship and how it does and does not persist in the face of controls, identify other factors affecting imprisonment rates, and then consider the factors predicting year-to-year changes in imprisonment rates. We find that low White poverty, not high Black poverty, is the most important predictor of Black imprisonment. Overall, we find that attention needs to be focused on the dynamics of Black/White economic inequality and on the factors that fed the "drug war."

To set up the context for this analysis, we begin by sketching some basic facts about recent trends. Incarceration rates in the United States exploded between the mid-1970s and the late 1990s. By the end of the 1990s, the incarceration rate in the US was 3.5 times higher than it was at its peak at the end of the Great Depression of the 1930s, and 2.7 times higher than it was in 1981. Spiraling incarceration rates were not a simple mechanical response to crime rates.

Although crime was relatively high in the late 1960s and early 1970s when the shift began, after 1975, crime generally declined with small oscillations, while imprisonment moved steadily upward. Instead, rising imprisonment rates were due to policy changes in responses to crime, to the wave of "tough on crime" policies that increased the use of prison as a punishment for crime, increased the length of prison sentences for any given crime, and increased the rate of revocations of probation and parole. Additionally, punitive "drug war" policies, which began in the 1970s but escalated in the late 1980s, led to increases in prison sentences for drug crimes.

Some basic trends we have calculated from the data we have compiled from the National Corrections Reporting Program (NCRP) help to specify these trends. The rate of admission to prison on a probation or parole revocation was 3.5 times higher in 1999 than 1983 (the first year of the NCRP series), while the rate of new prison sentences was only 2.0 times higher. More specifically, the rate new prison sentences for all offense groups except drug offenses was only 1.5 times higher in 1999 than in 1983, while the rate of new prison sentences for drug offenses was 8.0 times higher. For all races combined, drug sentences as a proportion of all new prison sentences rose from 8% in 1983 to 32% in 1989, and stayed between 30 and 32% throughout the 1990s[3]. In short, the escalation in imprisonment rose only modestly due to sentences for violent and property crimes. Most of the increase was due to drug offenses and probation or parole revocations.

These trends were racially targeted. The rising disparity of the 1980s and 1990s can be more narrowly specified with NCRP data. Figures 2A and 2B plot the Black/White disparity ratio for different incarceration rates. Figure 2A indicates that the disparity was higher for prison admissions than for the state of being in prison[4], and that the disparity in probation and parole revocations was higher than the disparity in new sentences, especially after 1992. Figure 2B indicates that nearly all the increase in new sentence disparity was due to drug sentences. The drug sentence disparity rose from under 5 in 1983 (when it was lower than for any other offense category) to nearly 21 in 1991, and was still over 15 in 1999. By contrast, the range of variation in the disparity ratio was around 3 for robbery and 2 for theft, violent and other offenses. Figure 3 shows the differing time trends for Blacks and Whites for drug and non-drug offenses.

It is widely understood that the steep rise in drug sentences in the 1980s arose from the national-level concern with the "crack epidemic," which led to legislation making the possession of very small amounts of crack cocaine *prima facie* evidence of intent to deliver, and large increases in funding for drug enforcement efforts. That this "drug war" was focused on Blacks is not in dispute, although there is substantial dispute about whether the focus was appropriate and substantial disagreement about the correct interpretation of incomplete information about patterns of drug use and drug dealing.[5] There has been less discussion of the social and economic correlates of drug enforcement. In this paper, we will attempt to shed indirect light on some of these issues, by comparing the predictors of drug sentences with the predictors of sentences for other kinds of offenses.

Prima facie, whatever was going on to cause these patterns has to be something more complex than a simple response to crime rates. In fact, it is well understood that the shifting crime control policies that led to these patterns in imprisonment were products of political decisions by elected officials to be "tougher" on crime generally, to shift from rehabilitative to punitive models of

handling offenders, and to channel money into a supply-side "drug war." Our argument is that understanding these patterns requires a framework that links theories of social control, political processes, and ethnic/racial conflict. These basic patterns suggest that patterns of Black/White inequality are not simply holdovers from the past, but are being created and recreated in the ongoing present. Instead of trying to explain away racial disparities with the right controls, our goal should be to understand <u>how</u> and <u>where</u> and under what <u>conditions</u> racial inequality in social control is increased or decreased. Clearly, the prison system has become a major part of the system of racial inequality in the United States.

Instead, we suggest the need to attend to threat and social control dynamics in inter-group conflict, the political "clout" of minorities, and the costs of repression. We believe the explanation of the longstanding negative relation between "percent Black" and the Black imprisonment rate is probably relatively straightforward: it arises because it is more costly and politically more difficult to execute repressive policies targeting Blacks where Black people are a more significant fraction of the population. In our analysis, we control for demographic, economic, and political factors as a way of focusing in on just how this process works.

Prior Theory and Research

Theories of Threat
Most thinking about the racial dynamics of criminal justice has focused on theories of threat, generally taking off from Blalock's (1970) power-threat thesis, which predicts a curvilinear relation between a minority's size and the hostility it encounters. The thesis says that political antagonism towards Blacks increases as the size (threat) of a Black population grows, but decreases once the Black population achieves a certain degree of political power. Most research on threat has focused on the relation between total social control rates and the percentage of the population who are Black. There is substantial evidence that expenditures on social control are higher where the Black population is larger. Jackson's (1989; 1992) research consistently finds that the size of a Black population predicts the size of a police assets and enforcement capability. She interprets these relationships not in terms of an actual crime threat, but in terms of political decision-making against a backdrop of power-threat -- particularly as a function of post-1960s riot social control. Jackson and Carroll (1981) find a curvilinear relationship between percent Black and police expenditures, similar to what Blalock's theory would predict. Greenberg, Kessler, and Loftin (1985) qualify the findings in a follow-up to Jackson and Carroll. They find that the curvilinear relationship of percent Black on police strength is apparent for the 1950s and 1960s, but not 1970s in the South. Outside of the south, percent Black had a small quadratic effect in the 1950s, a modest one in the 1960s, and a negligible one in the 1970s.

Fording (2001) analyzes incarceration and AFDC as alternate responses to [Black] insurgency using two-stage least squares and panel-corrected standard errors for a pooled time series of US states 1962-1980, with a focus on factors that increase a welfare response. His analysis shows that incarceration escalates in response to insurgency events and calls important attention to the relation between political events and the criminal justice system. Electoral access, the percent Black, is treated as a mediating factor that increases the welfare response, but he does not directly consider the question of the relation between percent Black and the incarceration response.

Sometimes explicit, but usually implicit, in explanations of threat hypotheses, is generalized fear, paranoia, and prejudice of Whites towards Blacks (Tolnay and Beck 1992 have a concise discussion). Research shows that the presence of Blacks (higher percent Black) is linked to White perceptions of crime, and heightened racial prejudice (Quillian 1996). Taylor (1998) also argues that percent Black is related to a "swelling" of such attitudes, but contends that the actual mechanisms underpinning threat are unclear. Stults & Baumer (2003) use structural equation modeling to directly represent the mediating perceived and economic threat. Oliver and Mendelberg (2000) emphasize limitations on threat perceptions, and argue that the assessment of threat depends on the SES context of Whites. Niemann et al. (1998) note that White workers have very negative stereotypes of Black workers.

Race-Specific Rates and Percent Black
The correlation is strong and positive between the <u>total</u> imprisonment rate of a state and the percentage of the population who are Black. This fact has been the basis of a great deal of theorizing about social control being higher where there is a greater threat to Whites from Blacks. For example, in Greenberg and West's (2001) multivariate analysis, percent Black and the change in percent Black are among the strongest predictors of total state imprisonment rates in 1971, 1981 and 1991. Other examples are Arvanites (1993, 1997), Arvanites and Asher (1998) and Jacobs and Carmichael (2001). Positive correlations between percentage Black and total imprisonment have been used to support "minority threat" or "black criminality" explanations, but there is an aggregation error. Because the Black-White differentials in arrest and imprisonment are so high, percent Black is nearly always a significant predictor of total imprisonment rates. Percent Black has to drive the total incarceration rate because it is Blacks who are being imprisoned.

The race-specific incarceration rates tell quite a different story. Considering simple bivariate correlations, the percent Black is <u>negatively</u> correlated with Black rates of prison admission and being in prison in the historical admission statistics for 1926-1982 compiled by Langan (1991), in the National Corrections Reporting program data for 1983-1999, and in the imprisonment figures published in Correctional Populations of the United States 1981-1998. (Jackson (1989) also makes this point regarding city-level arrest rates.) Our preliminary analysis shows that states with smaller Black/White ratios do have much higher between-state dispersion in their Black imprisonment rates than states with larger Black populations, but this does not appear to be a methodological artifact. When the between-year standard deviation is calculated within states, it has only a very small negative correlation with the Percent Black, and the negative correlation is even smaller for the coefficient of variation (standard deviation divided by the mean). Rather, it appears that states with small Black populations differ substantially from each other in their Black incarceration rates. Nevertheless, despite this large variability, on the average their Black incarceration rates are higher than for states with larger Black/White ratios.

The negative relationship between the percent Black and the Black incarceration rate is periodically reported, but given little theoretical attention. Langan (1991) attributes much of the growing disparity in imprisonment between 1926 and the 1970s to the migration of Blacks from the South to the North and West, where Black incarceration rates were higher. But that answer begs the question of <u>why</u> incarceration rates were higher in the North. Christianson (1981)

documents state-level imprisonment disparities using the prison census; his tables show the negative relation to percent Black, but it is not discussed. DeLisi and Regoli (1999) note the negative relationship between percent Black and imprisonment disparity, but simply adduce it as "proof" that racial disparities in imprisonment cannot be due to prejudice, since (they assert) it is not feasible that the South is less prejudiced than the North.

Only a handful of multivariate studies have examined the predictors of state-level Black imprisonment rates or Black/White disparities, and none has given serious theoretical attention to the negative effect of percent Black. Blumstein (1982; 1993) considered three possibilities for the rate of racial disparities: (1) Blacks in South are more compliant; (2) Blacks in the North live in more high crime areas; (3) A compositional effect, wherein liberal states send only serious offenders to prison and the racial differential in arrest (or offending) is highest for very serious crimes, then transparent processing would lead to high imprisonment disparities. He finds some evidence for the last explanation, but the rising drug incarcerations of the 1980s and 1990s are inconsistent with this hypothesis.

Bridges and Crutchfield (1988), predict state-level disparities in imprisonment using the prison census of 1982 and a wide variety of independent variables. Their dependent variable is the disparity ratio, but they decompose this by predicting the log of Black and White imprisonment rates separately. Imprisonment of both races is strongly related to race-specific arrest rates. Factors that significantly reduce White imprisonment (net of the arrest effect) are higher Black/White inequality, a higher ratio of Black to White metropolitan concentration, the use of parole, and a lower percentage Black in the population. The coefficients for Black imprisonment are generally non-significant, except that use of parole also reduces Black imprisonment. The authors conclude that most of the disparity is produced by factors that reduce White imprisonment rates, rather than those that increase Black rates.

Hawkins and Hardy (1989) find a negative correlation between percent Black and the Black/White imprisonment disparity controlling for arrest rates using the prison census of 1980, but merely report the result without discussion. Yates (1997) predicts the average 1991-3 disparity in imprisonment rates for 49 states using multiple regression, and found that the Black/White disparity was negatively related to historical levels of Black insurgency, the presence of Black elected officials, Black/White inequality and the Black/White disparity in statewide urban concentration. Though noting that prior research by Bridges and Crutchfield has revealed a negative relationship between percent black and the Black/White imprisonment disparity, Yates does not analyze the effect of black relative population size. Crawford, Chiricos, Kleck (1998) find in Florida that racial difference in sentencing more apparent in lower percent Black contexts.

Assessing the Effects of Differential Involvement
A great deal of older research explained Black overrepresentation in prisons as a product of Black's higher rates of offending, either with ecological correlations between percent Black and crime rates, or calculations of the contribution of differential arrest rates to differential imprisonment rates. One technique, originally used by Blumstein (1982, 1993) and often repeated with variations (e.g. Boggess and Bound 1997; Crutchfield, Bridges, and Pitchford

1994; Austin and Allen 2000), calculates the proportion of imprisonment disparity due to arrest disparity, and attributes arrest disparities to "real differences" in crime. Such calculations find that arrests do account for a significant proportion of the disparity, that the proportion accounted for by arrests has declined over time and varies greatly by offense and depending upon the level of geographic aggregation used. However, arrest rates themselves are a product of both offending rates and enforcement rates, so comparisons of arrest rates and imprisonment rates cannot tell the whole story. For very serious crimes, especially homicide, robbery, rape, and aggravated assault, most scholars agree that there are substantial racial differences in rates of offending that are roughly tracked by arrest rates, and most of the difference in rates of imprisonment appears to be due to differences in rates of arrest, although there is evidence that the enforcement response is greatest when the <u>victim</u> is White and the offender is Black. (Arrest statistics do not include information about victims.) At the other end of the spectrum, for drug possession offenses, the evidence is that much of the difference is in enforcement, not underlying rates of offending. Although varying greatly depending on the year and the specific drug, public health data indicate that rates of using illegal drugs are generally lower for Black juveniles than White juveniles, and roughly comparable for Black adults and White adults, but the rates at which Black juveniles and adults are arrested for possession of illegal drugs are several times higher than for Whites. For drug dealing, there is a more contentious debate, with one set of experts arguing that illegal drugs are sold principally by Black and Hispanic gangs, while other experts argue that the racial mix of those selling illegal drugs is doubtless about the same as that of those using illegal drugs.

This study does not use arrests as controls, both because of the reservations stated above and because state-level arrest statistics are both error-laden (because they are heavily affected by non-reporting bias) and difficult and cumbersome to process for a long time series at the level of disaggregation by race and offense that we require. Instead of trying to determine whether racial disparities can be explained away by arrest rates, we are concerned with trying to identify the social and economic factors that predict the disparities. Depending on the factors that prove salient, we may be able to draw inferences about the dynamics that give rise to the observed patterns.

Processes of Inequality, Segregation, and Crime
Liska and Chamblin's (1984) discussion of the interplay of segregation and population dynamics provides a useful starting point for considering the role of Black population size. They test three theories – power resistance, emergent "perceived threat", and benign-neglect – for Black and White arrest rates in 100 cities in 1972. Residential segregation has a negative effect on arrests for both races, while the percentage nonwhite has no effect on White arrest rates but a significant negative effect on Black arrest rates. This is interpreted as evidence for the "benign neglect" hypothesis. The explanation hinges on viewing policing and segregation as alternate approaches to the control of interracial crime. When Blacks and Whites are less segregated, interracial crime is higher and generates a stronger social control response against Blacks. As segregation and the percentage Black increase, interracial crime decreases, and Black-on-Black crime increases. Whites care less about Black-on-Black crime, so social control responses decrease. A replication for 1982 finds that the relationship is still negative, although weaker (Chamlin and Liska 1992). Liska and Yu (1992) note that percent Black consistently predicts the police homicide rate (police killings of citizens). Using UCR, Vital Statistics, and other data, they find that a

generalized climate of threat associated with the presence of non-Whites. However, their controls for crime lead them to conclude that this is not due to actual crime threat.

Eitle et al. (2002) critique the "Black threat" literature for inadequate conceptualization that uncritically uses "percent Black" as a proxy for threat. Instead they use direct measures of political threat (ratio of Black to White votes), economic threat (ratio of White to Black unemployment), and violence (operationalized as the proportion of all violent offenses from the National Incident Based Reporting System that involved Black-on-White crimes). Data are 46 South Carolina counties in 1992-4. The dependent variable is the disparity ratio of Black to White arrest rates for violent felonies. Only the proportion of violent offenses that are Black-on-White significantly predicts the Black/White disparity in violent felony arrests; the percentage Black-on-Black has a non-significant negative effect. Although this is a very narrow test, as the independent and dependent variables are very similar, it is consistent with the "benign neglect" arguments of Liska and Chamblin.

Understanding Threat and Group Composition: Towards a Synthesis

We can gain greater understanding of issues of threat in the context of Blacks and Whites in the US by digging more deeply into the nature of threat and issues of the relative power. Simple criminological theories that have assumed that imprisonment is a simple response to crime have neglected the political dimension of crime control. High imprisonment rates generate costs that are absorbed by taxpayers who, presumably, generally support this use of their money. Scholars from a variety of approaches have stressed the processes whereby crime became politicized as an issue in the late 1900s. Sutton (2000) compares the rise of imprisonment cross-nationally and concludes that it is driven not only by crime and "labor surplus" (unemployment) issues, but also by welfare spending and the political power of right parties. Beckett and Sasson (2004) review the rise of the Law and Order era, including the War on Crime and the Victim's Rights movement, beginning in the late 1960s, and argue that public opinion supporting escalated imprisonment followed media frenzies and strategic political decisions.

There are thus at least two straightforward reasons why Black imprisonment rates ought to be negatively related to the relative size of the Black population. First, there has to be some upper limit on the carrying capacity of any population to support non-productive prisoners. Given that imprisonment so disproportionately targets Blacks, the total imprisonment rates of states are strongly positively correlated with the percent Black in the population, but in states in which more than 20% of the population are Black, massive incarceration of Black people could bankrupt an economy. States with large Black populations may well need at least some of their Black residents as workers.

Second, at least since the passage of the Voting Rights Act, states with larger Black populations do have more Black voters, and it is logical to expect that they provide a dampening influence on the political support for massive incarceration of Black people. Conversely, it is small, politically weak populations that are especially at risk from symbolic "tough on crime" political strategies.

However, a <u>rise</u> in the percent Black is quite likely to evoke a threat response in the majority White population. In fact, Blalock's original arguments about threat were implicitly temporal: a new small minority would evoke little threat but the threat would rise as the group size rose. Instead of assuming that there is some specific proportion in the population that reduces threat, it is more likely to imagine that threat is greatest when a situation is in flux, and lower when a situation is stable. In addition, the threat potential of a given percentage increase is likely to be greater when the base is larger.

In line with Liska and Chamblin, we expect to see segregation and incarceration be somewhat substitutable as means of social control. It is where Blacks and Whites are more integrated that there is more threat to the White population from the Black population. We note, however, that this expectation runs contrary to the general assumption that crime and thus imprisonment is especially a feature of segregated Black ghettos.

Apart from simple population dynamics, threats arise from violence and economic inequality. Poverty and unemployment have long been linked to crime, and it is logical to expect to find positive ecological effects of poverty and unemployment on crime and thus on imprisonment for crime. Homicide is a particularly visible and threatening crime, and it is logical to expect that social control responses will be higher where homicide is higher.

Finally, in light of recent political patterns and some recent research, we suggest that states with Republican governors may be more "tough on crime," and especially tough on Black crime, than states with Democratic governors.

Methods

Imprisonment measures. Data numbers of Black and White people who are "in prison" are compiled for 42 states for 1983-1998 from the Correctional Populations of the United States reports, which give the numbers of men and women of each racial group who are in prison in each state as of mid-year. Counts for men and women are summed. Data on prison admissions for 30 states for 1983-1999 are compiled from the National Corrections Reporting Program data files. Separate prison admission counts are generated for new sentences (which are further broken down by offense group), probation and parole revocations, and "other." This paper analyzes only the new sentences. We separate sentences for drug offenses from sentences for all other crimes. NCRP data have been extensively reviewed for errors and inconsistencies. In cases of clear errors or inconsistencies, interpolated values have been substituted using available data, when there is enough data to justify the interpolation.[6] In both cases, rates are calculated using the adult population of each race, and the logarithm is taken of the rate. The first difference of the logarithms is the equivalent of the percentage increase/decrease in the dependent variable.

The rates of being in prison (CPUS) are heavily influenced by the rates of new prison sentences (NCRP), but other factors affecting imprisonment rates include sentence lengths and the rates of probation and parole revocations, which are not included in this analysis. Thus it is possible that a different set of factors may predict overall imprisonment rates than predict rates of each type of

prison sentence. Prison sentence rates are generally more responsive to short-term effects, while imprisonment rates are more responsive to resource constraints.

Independent variables. After examining a wide variety of variables in preliminary analyses, we focus our attention on a small set of well-defined variables that have a large impact on imprisonment rates. The percent of the total population that is Black is calculated from Census estimates, as is the percentage change in the percent Black. There are some curvilinear effects of Percent Black. Based on preliminary plots, a trichotomy creates three groups of states: 0-8% Black, 8-20% Black, and over 20% Black. Table 1 shows which states fall in each group. From the Current Population Survey, we obtain Black and White rates of adult poverty and unemployment. From the Uniform Crime Report Supplementary Homicide Reports we obtain the Black and White rates of homicide victimization; the perpetrator's race is not given in these reports. State governors' party affiliation is created by combining data assembled by Berry et al. (1998) with data from recent State Yellow Books. The dissimilarity index for 1980, 1990, and 2000 for each metropolitan area is obtained from data compiled and made available by David Cutler, Edward Glaeser, and Jacob Vigdor (Cutler, Glaeser and Vigdor 1999). A weighted average for each state is calculated by multiplying each metropolitan area's dissimilarity index by the size of its Black population.

All independent variables except population percentages are lagged one year to clarify time order among factors that may be mutually causal. When the first difference is the dependent variable, both the lags and the lagged first differences of the poverty, homicide, and unemployment variables are included as predictors.

Analysis. With 17 years and 42 or 30 states, we have time-series-cross-section data which we analyze following the suggestions in Beck and Katz (1996). This involves using OLS regression, panel-corrected standard errors (PCSE), the assumption of fixed effects (states are a universe of entities, not a sample), and using the first difference of the dependent variable instead of an autocorrelation correction to control for serial correlation. We are interested in both the cross-sectional tendency of some states to have higher Black imprisonment rates than others, and the dynamic question of which states increased their Black imprisonment rates most during the period under question. The dependent variables are strongly trended: "in-prison" rates for both races and White prison admission rates rose steadily throughout the series while Black prison admissions rose steeply through the 1996 and then declined modestly in the last two years of the series. Poverty and unemployment rose in the late 1980s and declined in the 1990s.

We calculate separate regressions for White and Black imprisonment and prison sentence rates, and also calculate the predictors of the Black/White disparity by regressing the Black rate on the White rate and other variables. Our work demonstrates the importance of using race-specific rates for both independent and dependent variables, and we find that each race's prison experiences are affected by the other race's demographic and economic characteristics as well as its own.

Multiple Correlations Among Factors

Our analysis is conducted with special attention to the problem of subtle patterns of multicollinearity. The analysis of sentences in the NCRP excludes states with extremely small Black populations. In the NCRP subsample, the percentage change in Percent Black is negatively correlated with the Percent Black (r=-.42) and the White homicide rate (r=-.52). There are also time trends that need to be considered. All imprisonment rates show some positive trending with time, which is especially strong for all Black imprisonment and for all drug sentences. The time trends are especially strong for Black poverty, which is negatively trended with time (r=.-47 in the NCRP subsample); other non-trivial correlations in the -.2 to -.3 range are for White poverty and White and Black unemployment. It is thus possible for the magnitude or even the signs of these effects to change with controls for time trends.

Apart from these issues, preliminary analyses revealed some unexpected patterns of correlations and instability in results depending on exactly which variables were entered into regression equations, even though the bivariate correlations among indicators and variance inflation measures indicated few obvious problems. To shed further light on these issues, we regressed each independent variable on all the other independent variables, separately for the two samples analyzed. These analyses found multiple correlations in the general range of .4 to .6 for most independent variables. Republican governor is the only independent variable with a small R^2. The economic factors are generally trended with time. The highest multiple correlation is for the dissimilarity index. Due to these intercorrelations, instead of presenting full models with all independent variables, we used iterative procedures and sensitivity analyses to find the subset of strong consistent predictors and not over-interpret weak effects.

Results

I. Some Bivariate patterns

Based on scatter plots, we have broken the distribution of Percent Black into three groups: less than 8%, 8-20%, and more than 20%. Figure 4 shows the imprisonment rate for these three groups in the 1980s and 1990s. The figure shows that states with high Black populations have consistently lower imprisonment rates, but the middle group is less different from the low group in the 1990s than the 1980s. The relationship between Percent Black and sentences for non-drug crimes is consistently negative in both decades, while drug sentences were highest for the middle group of states with percent Black ranging from 8-20%.

Figure 5 shows how the prison sentence rates vary jointly with Percent Black and the Change in Percent Black, and the imprisonment rate. These figures clearly show that Black population dynamics play a key role in Black imprisonment. If the Percent Black is greater than 8%, the figure shows a strong positive effect of the percentage change on both measures of imprisonment. The effect of the percentage change is less consistent in the states with small Black populations.

Table 2 shows the bivariate correlation coefficients among all variables in the static analysis. Those independent variables that have correlations with magnitude greater than .2 (and thus $R^2 >$ .04) are highlighted. Due to multicollinearity among independent variables, attention is paid to

the bivariate relations in identifying the most meaningful set of predictors for each dependent variable.

Time variables. Preliminary analysis has revealed that the linear trend of year accounts for most of the variation over time for most variables in the analysis. The time trend is much stronger for Black imprisonment rates than White. The time trend for Black Drug sentences is not linear: Black drug sentences rose steeply in the 1980s, and then leveled off in the 1990s. A quadratic equation provides an acceptable fit to this trend. To obtain uncorrelated terms, we center year around its mean (1991.5) and then square the centered term.

Sampling Issues
        We restrict the analysis of sentencing rates to those 30 states that report to the NCRP throughout the series, have significant Black populations, and are non-missing for the independent variables of interest. We have investigated sampling issues by comparing the NCRP states with the full set of states. Regressions predicting CPUS imprisonment rates for the two samples are virtually identical for most independent and dependent variables. The exceptions are the effects of Black population and population change variables on White imprisonment: the effect of the change in the percent Black is more strongly negative for the NCRP sample than for all CPUS states, and a weak non-significant negative effect of the population percentage Black is less negative for all CPUS states than for the NCRP subset. In general, the biggest difference between the NCRP states and the full set of states is that the non-NCRP states have a higher proportion of states with very small Black populations. The effect of dissimilarity is also stronger in the NCRP sample than the full sample, and the effect of Black unemployment is negative in the full sample and zero in the NCRP subsample.

II. Static Models. Which states imprison more people?

Because of multicollinearity, the coefficients in full models with all variables included are unstable and misleading. For this reason, only reduced models are shown. The reduced models are products of several different iterative procedures designed to identify variables with strong consistent effects that make significant contributions to the total R^2, and eliminate variables that change signs in complex interactions.

Whites
Table 3 shows the reduced models for the independent variables that best predict each of the three measures of White Imprisonment.

White Imprisonment (CPUS): The most powerful bivariate predictors of a state's White imprisonment rate are the White homicide victimization rate ($R^2=.29$), a negative coefficient on the dissimilarity index ($R^2=.19$) and a simple linear effect of year ($R^2=.20$). The percent Black has no effect, while the change in the percent Black has a negative effect that is much smaller for all states than for the NCRP subset. A multiple regression with all independent variables has an $R^2=.65$. The explanatory power of the poverty variables overlaps with the others (especially homicide and dissimilarity), and only four variables explain all that can be explained in these

trends: year, higher White homicide rates, lower racial segregation (dissimilarity), and declining (or non-increasing) Percent Black in the state. These coefficients are shown in Table XXX.

White Sentences for Ordinary Non-drug Crimes: The largest single predictor of White rates of prison sentences for non-drug crimes is the change in the Percent Black: Whites are much less likely to be sentenced to prison when the percent Black is rising. In addition, White prison sentence rates were substantially higher where segregation (dissimilarity) was lower, Black homicide was higher, and Black unemployment was lower. The R^2 for year is .07. Although it is the single strongest bivariate predictor of sentences for ordinary crimes, the White homicide rate becomes non-significant when the other factors are included because they jointly predict the White homicide rate (R^2=.45). In particular, the White homicide rate has a substantial negative correlation (-.52) with the change in the Percent Black. Conversely, although the Black homicide rate has a zero bivariate association, it reduces the total R^2 by .03 if it is dropped from the equation. The positive bivariate effect of Percent Black becomes non-significant with controls.

White Sentences for Drug Offenses: White drug sentences exhibit a strong positive trend with time which has $R^2 = .15$. This trend weakens but remains significant with controls. Apart from this, White prison sentences for drug offenses are highest where Blacks are a large percentage of the population, the percent Black is not increasing or is declining, the White homicide rate is high, and Black unemployment and White poverty are low. The negative bivariate effect of White poverty is small, but its contribution to explained variance holds up in the multivariate models. All coefficients remain significant when Black homicide enters the equation, but the change in R^2 is less than .005, pointing to multicollinearity among the independent variables.

Overall, the effects of the independent variables are quite similar across the three types different types of imprisonment measures. There is a positive linear time trend in all three. The change in percent Black always has a negative effect, as does dissimilarity. White and/or Black homicide rates have positive effects.   Apart from these common factors, White drug sentences are negatively related to Black unemployment and White poverty.

Blacks
Table 4 shows the reduced models for Black imprisonment measures.

Black Imprisonment (CPUS): The most powerful predictor of a state's Black imprisonment rate is the linear effect of year (R^2=.35).[7] This time trend dwarfs all other effects. The percent Black has a strong negative effect (R^2=.09). Black poverty has a strong **negative** bivariate effect, but is not significant when other variables are controlled. Other significant factors are a negative effect of dissimilarity, a positive effect of a Republican governor, and negative effects of White poverty Black unemployment.

Black Sentences for Ordinary Crimes. The time trend for Black sentences for non-drug offenses is relatively weak. The strongest predictors of Black sentences for ordinary crimes are being in states with a lower Percent Black and a higher level of change in the Percent Black. Next in strength are a negative effect of White poverty and a positive effect of White homicide. Additional contributions are made by a negative effect of dissimilarity, a positive effect of

Republican Governor, positive effects of Black poverty and Black homicide, and a negative effect of White unemployment. A control for time does not diminish these coefficients and adds little additional explanatory power.

Black Sentences for Drug Offenses. The curvilinear time trend is by far the biggest predictor of Black drug sentences, with the linear and squared time terms alone accounting for 55% of the variance; the full model with all terms has an R^2 of .66 (with all the other independent variables adding only 11% to the explained variance), and the regression on all variables except time has an R^2 of .37 (so that time adds 29% to the explained variance over and above the effects of all the other independent variables). Deciding whether the time effects are exogenous or endogenous is obviously problematic in this case. Apart from time, the strongest and most consistent predictor of high rates of Black drug sentences is a low White poverty rate: it alone has a strong bivariate relation and a consistent effect in multivariate models with and without a control for time; it adds .06 to the R^2 after time is controlled. When time is controlled, the only other significant contributor to the multiple R^2 is the White homicide rate, which adds another .05. That is, treating the time trend as an exogenous national effect, the only other factors that predict which states will have high Black rates of drug sentences are that they have low White poverty rates and high rates of White homicide victimization.

If we ignore the time trend, the two strongest predictors of Black drug sentences are the negative effects of the White and Black poverty rates; each has a bivariate R^2 of about .20, and jointly their R^2 is .29. Of course, poverty, especially Black poverty, is negatively trended with time, and there are few sociological accounts of why Black drug sentences should be lower where more Black people are poor. After the negative effects of Black and White poverty, four factors each add about .02 to the total explained variance: dissimilarity (negative), Black unemployment (negative), Republican governor (positive), White homicide (positive).

The patterns are broadly similar across the different measures of Black imprisonment. White poverty and dissimilarity both have negative effects across all three measures: Black imprisonment is higher where Whites are not poor and there is less segregation. Consistent with recent political history, Republican Governor has a positive effect on all measures of Black imprisonment. White homicide has a positive effect on both types of prison sentences, although it is not a significant factor in imprisonment rates.

There are some differences, however. The change in Percent Black has a strong positive effect on Black sentences for ordinary non-drug crimes, but not on other measures. Black homicide is only related to non-drug sentences. White unemployment is negatively related only to non-drug sentences. Black poverty has a positive relation to non-drug sentences, but a negative relation to drug sentences if time is not controlled.

Disparity
In assessing "bivariate" effects for disparities, all regressions for the Black imprisonment rate control for the White imprisonment rate. Table 5 shows the reduced form equations for the disparity analyses. The regression of the Black rate on the White rate yields an R^2 of .31, indicating that 31% of the variation in Black rates can be explained by being in a state with high White imprisonment rates. For ordinary crimes, the White sentencing rate accounts for only

10% of the variance in the Black sentencing rate, while for drug offenses this figure is 42%. The linear year trend is a strong positive predictor of imprisonment disparity, while it has no effect on the disparity in non-drug sentences. The disparity in drug sentences is heavily affected by a curvilinear trend that explains an additional 29% of the variance. Percent Black has a strong negative effect on the disparity in all three measures. The White poverty rate also has a strong negative effect on the disparity in all three measures. Only Percent Black and White Poverty affect drug disparities after the time trends.

In addition to the factors already discussed, White homicide has a negative effect on disparities in Black imprisonment, while it has a positive effect on disparities in non-drug sentences; in both cases, this effect is controlled for Black homicide and White poverty. Other factors that affect the disparity in non-drug sentences include Republican Governor (+), Black poverty (+), Black unemployment (+), and White unemployment (-).

III. Change Models. What factors predicted high percentage increases in imprisonment?

The cross-sectional time-series analysis so far has confounded the general tendency of a state to have a certain level of imprisonment with changes over time. To focus in more narrowly on the factors that affect changes, we take the first difference of each rate as a dependent variable. That is, we calculate the difference between this year's logged rate and last year's logged rate, and treat that difference as the dependent variable. Taking the differences of logged rates is equivalent to modeling the percentage increase in the rate. The difference scores are necessarily negatively correlated with the rates, as percentage increases are necessarily higher off a smaller base. If a rate is going up and then down, there is a built-in negative correlation between the difference scores and time, because the percentage increases off the smaller bases will be smaller than the percentage decreases off the larger bases. Linear growth will also generate a negative correlation between difference scores and time. Difference scores for logged rates will be positively associated with time only if growth is exponential. Taking the 1980s and 1990s as a whole, imprisonment rates increased, Black drug sentences exhibited a sharp increase followed by a leveling off, and other sentences had relatively constant rates.

The time trends in the first differences are generally not linear or quadratic, so we examine possible effects of time by calculating each year's mean for the dependent across states in the sample as a control for possible national-level extraneous factors affecting these rates. This is equivalent in its effect on the R^2 to entering a set of dummy variables for years. In these models we include not only the lagged level of each independent variable but, in addition, the lagged first difference (change) for the poverty, unemployment, and homicide variables.

Whites

Table 6 shows the reduced form models for the change in measures of White imprisonment. The main pattern for changes in White imprisonment rates is that there is very little variance to be explained. The highest R^2 that can be obtained with all possible variables is never greater than .14, and the substantive independent variables can account for very little of the variation. Imprisonment rates for Whites grew modestly through the 1980s and 1990s, while the percentage

increase (captured by the first difference of the log of the rates) declined modestly and is thus negatively correlated with time. The between-state variation is considerably greater than these general trends.

White Imprisonment (CPUS).   Few of the independent variables have effect on changes in the White imprisonment rate. With or without a control for the annual mean, the significant factors affecting changes in White imprisonment rates are Percent Black (-), Change in Percent Black (-), Republican Governor (-), and Black unemployment (+); the R^2 for these variables is .03; if the annual mean is controlled, their coefficients weaken and they add .02 to the total R^2 of .07.

White Sentences for Ordinary Crimes. There is very little explained variance for changes in White sentences. The annual mean explains has an R^2 of .08, the time variables have an R^2 of .02, and none of the other variables has any significant effect.

White Sentences for Drug Crimes. Unlike the static models, the first differences in White drug sentences show little time trend: the R^2 for the quadratic year terms is only .02, and the R^2 for the annual national mean is only .06. The bivariate effects point to the level and change in Black unemployment as the major positive predictors of rises in White drug sentences. Without a control for the annual mean, the only significant predictor is a positive effect of the level of Black unemployment, for R^2=.04. The annual mean has an R^2 of .06; when it is controlled, The change in percent Black (-) and the change in the Black unemployment rate (+) jointly add .05 to the total R^2. White drug sentences rose more when Black unemployment was high. Controlling for the national trends, the rise in White drug sentences was greater than average where there was rising unemployment in a stable Black population.

Blacks
Table 7 shows the reduced predictors of the first differences for Black imprisonment measures.

Black Imprisonment. Unlike Whites, the changes in the Black CPUS imprisonment rate exhibit strong time trends: the R^2 for the national mean is .18, and the quadratic year terms have an R^2 of .10.   If the annual trend is controlled, Dissimilarity (+) and the change in the Black homicide rate (-) add .05 to the R^2; if there is no control for the time trend, three variables generate an R^2 of .08: Dissimilarity (+), change in White poverty   (-), and level of Black poverty (+). Black imprisonment rose more than average where there was more segregation and where the Black homicide rate was declining.

Black Sentences for Ordinary Crimes. The time trend is modest, the annual mean dummies have an R^2 of .08. Two factors are related to the rise in Black sentences for non-drug crimes, whether or not the mean is controlled and both effects are positive: the Percent Black, and the change in the Black homicide rate. Black sentences for non-drug offenses rose where there were more Blacks and the Black homicide rate had gone up. The effect of the White homicide rate is smaller and non-significant when Black homicide is controlled.

Black Sentences for Drug Offenses.   Unlike the other race/offense groups where there is very little explained variance in changes across time in sentencing rates, Black drug sentences show a substantial effect of quadratic time trends: the R^2 for the national mean is .31. Positive effects

for three change variables add .03 to this R^2: the change in the Percent Black, the change in the Black unemployment rate, and the change in the Black homicide rate. That is, greater-than-average changes in the Black rates of drug sentences occurred where the Black population was growing and there was rising Black unemployment and Black homicide.

Of course, the rising national Black rate of drug sentences was also responsive to national levels of the independent variables. If time trends are not controlled, a number of variables taken together have an R^2 of .19. Black drug sentences went up when/where dissimilarity (segregation) was high, Black homicide was low but rising, White homicide was high, Black unemployment was high, and White poverty was declining.

Disparities
Table 8 shows the reduced form models for the assessment of the disparity in changes in Black imprisonment rates.

Disparities. The R^2 predicting Black non-drug sentences from White non-drug sentences is .53; states which have high increases in sentencing Whites also have high increases in sentencing Blacks. The single major predictor of rising disparity in ordinary crimes is simply linear time, which adds .07 to the R^2, the same as the annual mean does. But two other variables have additional effects that are largely independent of the time trend. Disparities in non-drug sentences rose more where Black unemployment and Black homicide were rising. If there is no control for the time trend, rising sentence disparity is also associated with declining White poverty.

The association between Black and White drug sentences is comparable to non-drug sentences are, R^2 = .49. However, the effect of the time trend is much larger and adds another .18 to the R^2. If the annual mean is controlled, two variables add .02 to the R^2: Percent Black (+) and White Poverty (-): Disparity in drug sentences rose more than the national average where there were more Blacks and Whites were less poor. If the time trend is not controlled, an R^2 increment of .10 can be obtained from a series of variables: Dissimilarity (+), Percent Black (+), change in Black homicide (+), level of Black homicide (-), level of White homicide (+), and level of White poverty (-). As the table indicates, the strongest of these factors is Percent Black, followed by the Change in the Black homicide rate.

Black and White imprisonment rates are less highly correlated than sentences, and the R^2 for the White rate in predicting the Black rate is only .19. Changes in the disparity in imprisonment (CPUS) are strongly trended by time, with the quadratic year terms adding .09 to the R^2 after the White rate, almost as much as the .10 R^2 for the annual mean. The percent Black (+) and the change in the White poverty rate (-) are the consistent predictors of disparity whether or not there are time controls, adding .03 to the explained variance.

Pulling together these patterns in the analysis of first differences, it is clearest to begin with the Black trends. With or without controls for national trends, increases in Black sentences for non-drug offenses were higher where both Black poverty and Black homicides had risen in the previous year (i.e. the difference scores were positive). For Black drug sentences, the national trend accounts for 84% (.31/.37) of all the variance that can be explained with these variables,

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and the effects of other variables differ depending on whether the national mean is controlled. Controlling the national mean identifies the cases that departed from the overall trends in the Black drug war and reveals that rises in Black drug sentences were especially high where the Black population percentage, Black unemployment, and Black homicide were all rising. Not controlling for the national mean focuses attention on the predictors of the overall national rise. All the independent variables taken together can account for 59% (.22/.37) of the explainable variance in changes in Black drug sentences. The strong factors predicting the overall trends are (1) positive effects of dissimilarity, the level of Black unemployment, the level of White homicide rates, and rises in Black homicide rates; and (2) negative effects of the level of Black homicide and changes in White poverty.

The strong factors predicting rises in the Black imprisonment rate (CPUS) depart in some unexpected ways from the patterns for sentencing. These unexpected patterns doubtless arise because imprisonment rates arise from multiple processes, not just the new sentence rates analyzed here. Most surprising is that, if the national mean is controlled, above-average rises in Black imprisonment are negatively associated with recent rises in Black homicide, but positively associated with dissimilarity. The homicide effect remains negative but is not significant if the national mean is not controlled, although dissimilarity remains significant, and there is an additional positive effect Black poverty and negative effect of the change in White poverty. Rather than attempting to interpret these patterns directly, it is likely to be more reasonable to study the predictors of the constituent processes.

In contrast with Blacks, the main pattern for changes in White imprisonment rates is that there is very little variance to be explained, none at all for non-drug sentences. Both White drug sentences and White imprisonment rose more where the Percent Black was lower, and both rose more where Blacks had higher unemployment rates. It is interesting that White drug sentences (and consequently White imprisonment) rose more rapidly where there were fewer Blacks to target. Black drug sentences also rise more with high Black unemployment. These results suggest that Whites were caught up in a drug war that responded to Black unemployment, this suggests that crime control responding to Black unemployment also affected Whites.

The disparities in the difference scores indicate the predictors of a Black imprisonment rise that is unusually disproportionate to the White rise. Here we see some effects that point especially to the interplay in racial politics. The strongest effect on the disparity in annual <u>changes</u> in imprisonment rates (CPUS) is that it was higher where the percent Black was <u>larger</u>. That is, although the level of Black imprisonment was higher where the Black percentage was smaller (Table 5), the Black/White disproportion in the rate of increase was greater where the percent Black was larger. This effect arises because White increases in drug sentences are larger where the Black population percentage is smaller. If the average national change score in Black imprisonment is controlled, we find that the disparity in change scores is negatively related to the change in White poverty. Looking at drug sentences, if the national mean change is controlled, above-average disparity in changes in drug sentence rates is positively related to Black poverty and negatively related to White poverty. If the national mean is not controlled, the significant predictors are the positive effects of dissimilarity, changes in Black homicide, and the level of White homicide; and a negative effect of the level of Black homicide. The strong factors predicting a disparity in the changes in non-drug sentence rates are rises in Black homicide and

Black unemployment and declines in White poverty and White unemployment. The latter are highly intercorrelated.

Discussion

Tables 9 and 10 provide symbolic summaries of the results across the different measures and analyses. Summing up across all analyses, we see clear evidence that the interactions between populations are crucial for understanding White and Black imprisonment rates and the disparity between them. Predictors of the level of imprisonment rates (from the static models in Tables 3, 4 and 5) highlight the predictors of where imprisonment rates were highest. Predictors of the difference in imprisonment rates (Tables 6, 7, and 8) highlight the factors that correlated with percentage changes in the rates. As a percentage change scores necessarily has a built-in negative correlation with the score itself (as it is easier to get a high percentage change off a smaller base), so the two analyses tend to capture different aspects of the issue. We may highlight some of the key points that arose from the analysis:

- Low White poverty is the strongest and most consistent predictor of high Black imprisonment and the disparity in imprisonment. Contrary to common assumptions, White poverty does not increase White imprisonment, and is negatively correlated to White drug sentences. The change in White poverty is also negatively related to changes in Black imprisonment rates and negatively related to the disparity in changes in non-drug sentences and imprisonment rates. Something about not having a large poor White population leads states to imprison Blacks and to have more drug sentences for both races. The relative lack of poor Whites lowers the proportion of the majority population who are at high risk for imprisonment and perhaps this makes them more supportive of punitive crime control policies.
- The effects of Black poverty are more inconsistent than would normally be expected. Black poverty is NOT a significant state-level correlate of the level of Black imprisonment or drug sentences, and is only a weak positive correlate of Black non-drug sentences and the disparity in such sentences. However, Black poverty has more of an effect on the first differences. The level of Black poverty is positively correlated with rises in Black non-drug sentences and Black imprisonment. The level of Black poverty is also a positive correlate of the disparity in the change in both drug sentence rates and the changes in drug sentence rates.
- White unemployment is negatively related to Black non-drug sentences and to the disparity in changes in non-drug sentences, but has no significant effect on White imprisonment rates. This runs somewhat counter to a significant older literature that links unemployment to crime.
- The effects of Black unemployment are mixed. Black unemployment is a negative predictor of the level of both White and Black prison sentences, although the effect is weaker for Blacks, leading to a positive effect on the disparity for the level of drug sentences. For the difference scores, the level or change in Black unemployment has positive effects on both Black and White drug sentences, and on the disparity in non-drug sentences. There is evidence that the drug war escalated for both races where Black unemployment was high, but Black longer-term levels of Black unemployment are not

predictive of longer-term levels of Black imprisonment. In fact, higher overall levels of Black imprisonment were found where Black unemployment was lower.

- There is substantial evidence that minority in-migration produces a targeted threat response. Across all measures, the imprisonment rates for Whites are much lower where the Black population is rising, and the rise in White imprisonment levels (CPUS) is lower where the Black population is rising. By contrast, Blacks are much more likely to be sentenced for non-drug offenses where the Black population is rising, and Black drug sentences rose more where the change in the percentage Black was higher. The disparity in drug sentences is positively related to the change in percent Black. These results all point to a rising Black population as a crucial predictor of a state's imprisonment being focused towards Blacks and away from Whites.

- The negative "percent Black" effect that motivated this paper generally holds up. Across all measures, Black imprisonment and the racial disparity in imprisonment are generally higher where Blacks are a smaller proportion of the population. Percent Black is generally unrelated to White sentences, except that it is positively related to White drug sentences. Considering the changes in imprisonment measures, the percent Black is negatively related to the first difference in White drug sentences and White imprisonment (CPUS), leading to a positive effect on the disparity in the change scores for imprisonment (CPUS). Thus the positive effect of percent Black on the disparity in changes in imprisonment rates arises from the tendency of a large Black population to suppress White drug sentences.

- White homicide victimization is associated with a high level of prison sentences for both races, while Black homicide victimization is much less salient for predicting the level of sentencing. However, the change in Black homicide has a positive effect on the change in Black non-drug sentences and, thus, on the disparity in changes in non-drug sentences.

- Both races are <u>less</u> likely to be imprisoned where segregation is high, but this effect is stronger for Whites; segregation has no effect on the disparity. The <u>rise</u> in Black imprisonment (difference score) is higher where segregation is higher and, if the national mean is not controlled, the rise in Black drug sentences was highest where dissimilarity is high. As Table 1 shows, the highest-segregation states are those in the industrial north. Many of the lowest-segregation states are excluded from the NCRP analysis and have states with very small Black populations. Among those in the NCRP analysis, those with relatively low dissimilarity intermix states with small Black populations and states of the Old South.

- After other factors are controlled, Republican governors are associated with higher imprisonment rates for Blacks and higher disparities in drug sentences.

Overall, the analysis suggests a focus on new questions. Spiraling Black imprisonment rates are not a simple response to Black poverty. When other factors are controlled, the Black poverty rate is a positive predictor of Black sentences for ordinary crimes, a finding that is not surprising. But Black drug sentences are not positively related to Black poverty, and it is drug sentences that were the major source of increase in Black imprisonment. Black poverty is, however, related to the disparity in drug sentences. That is, the drug war and a high rate of Black drug sentences does not appear as a response to Black poverty, although the disparity in drug sentencing is higher when Black poverty is higher. Relatedly, Black unemployment has few effects on Black imprisonment except for Black drug sentences. In fact, both Blacks and Whites have higher drug

sentence rates where Black unemployment is higher and rising. Thus, the drug war seems especially to have targeted areas with high and rising Black unemployment, rather than Black poverty. Although hardly conclusive, these patterns point to viewing the drug war as related to labor market issues.

Instead, quite a bit of the evidence points to a more political model of Black imprisonment, including the negative effects of White poverty, the positive effects of Republican governors, the negative effect of percent Black, and the positive effect of the change in percent Black. It looks like Black imprisonment is especially high where there are potential political gains and few political costs in high Black imprisonment or high imprisonment disparities.

Conversely, a larger Black population appears to raise White prison sentence rates somewhat, although a rising Black population suppresses them. Taken together, these patterns suggest that there is more racial equality in systems with a higher percentage Black, a suggestion borne out in the disparity analysis. The one exception is that the disparity in the rate of increase in imprisonment was higher where there are more Blacks. However, the rate of increase is especially high off a small base, so this may be capturing effects at the low end of the percent Black continuum.

The threat potential of homicide is quite high and homicide is generally positive correlated with imprisonment. An increase in the Black homicide rate is significantly associated with a rise in Black sentences for both drug and non-drug offenses, and with the disparity in the rise in non-drug sentences. Both Black and White homicide victimization (with each controlled for the other) are significantly associated with levels of Black sentences for non-drug crimes and with White sentences for drug crimes. Homicides receive substantial coverage in local news programs (often referred to cynically as the "if it bleeds it leads" syndrome), and there is evidence to support the belief that this produces higher imprisonment rates for both races. It should be noted in this that the vast majority of prison sentences are for non-homicides; homicide is statistically quite rare as a reason for imprisonment, even in the middle of a homicide wave. It is possible that higher homicides are an indicator of higher overall crime rates, or that higher homicides lead to a more punitive response to other crimes, or both. It is important to note that the impact of homicides on sentencing appears to transcend racial boundaries. However, the White homicide rate, but not the Black homicide rate, is positively associated with the disparity in drug sentences, so there is some evidence of differential attention to White victimization as a threat which increases drug enforcement.

This analysis has not provided clear answers to its motivating questions, although it points toward possible answers. The overall rise in Black imprisonment in recent decades is at least partially attributable to the migration of Black people away from Black population centers into areas in which they are a small and growing minority who are especially threatening and subject to social control responses. The negative effect of White poverty coupled with the effects of the demographic variables clearly point to the overlapping of class and race boundaries as especially important in evoking threat and social controls responses.

The ways in which drug sentences have different correlates from other crimes, especially for Blacks, strongly suggests that the "drug war" was responding to something other than ordinary

crime. As would be expected, Black non-drug sentences and changes in Black non-drug sentences are associated with Black poverty, when other factors are controlled, but Black drug sentences do not show any clear association with poverty. We know, in fact, that high drug sentence rates result from enforcement decisions to focus on drug offenses, usually in response to federal law enforcement grants. These patterns can be clearly seen in local-level data. For example, figure 5 shows how Black (but not White) drug sentences in one county skyrocketed in 1992, the year the city police received a multi-million dollar drug enforcement grant. These federal funding priorities acted like an external shock that escalated Black prison sentences due to factors outside the usual explanatory models.

The question is what the consequences of this "external shock" in Black social control were. The most likely consequence of high rates of Black imprisonment is that it lowered the employment prospects and increased the long-term poverty of those imprisoned and their families. This, in turn, is likely to have increased the future potential for high rates of non-drug crimes. Whether these likely effects are true remains for future research.

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Notes

[1] The naming of racial/ethnic groups is inherently conflict-laden and politicized. In selecting group names for this paper, we acknowledge these conflicts. We choose to use the terms Black and White because they are shorter, punchier, fit better in table labels, generally viewed positively (or at least not negatively) by the people in the group, parallel to each other, and more consistent with standard statistical sources than African American and European American. Our choice to capitalize both treats them as "groups" rather than simple demographic categories (c.f. Methodist or Republican vs. elderly or female). As this is a paper on imprisonment rates, not the politics of naming, we will not dwell on the reasons for our choices, except to say that we have thought about the matter.

[2] There are a variety of sources for historical imprisonment rates that yield different disparity ratios.

[3] Our calculation from NCRP data.

[4] This may be an artifact, because the CPUS does not break out Hispanics, but instead generally counts them as White.

[5] Add a few references to summaries of the literature here.

[6] Examples of interpolation rules: if a state one year fails to make racial breakouts, the interpolation algorithm assumes that the racial proportions are the average of adjacent years. If a state has no "new sentences" one year but reports total admissions in line with adjacent years, the interpolation rule assumes that the proportion of total admissions that were new sentences is comparable to adjacent years. Interpolation rules are used only when there is enough data to make interpolation conservative. States with fewer than ten years of data or very small and inconsistently-reported numbers of Black prisoners were dropped entirely, as were years for which a state's data were too sparse or inconsistent to make interpolation reasonable.

[7] $R^2 = .36$ for all 16 year dummies, indicating that, again, the linear trend captures the full time effect.