Race and Imprisonment Decisions in California

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Data were analyzed for 11,553 California offenders who in 1980 were convicted of assault, robbery, burglary, theft, forgery, or drug crimes. Whether an offender was given probation or sentenced to prison for such crimes could be predicted with about 80 percent accuracy from a combination of variables that described defendant and crime characteristics and criminal justice processing. The addition of race to the prediction equation for a given crime type did not improve the accuracy of the prediction. In addition, there was no evidence that other factors related to imprisonment (for example, number of conviction counts, going to trial) masked a relation between race and imprisonment. Race also was not related to the length of prison term imposed.

CRIME HAS BECOME AN INCREASINGLY IMPORTANT ELEment in American life. If the justice system is to operate fairly and efficiently, each of its aspects created to control crime deserves careful and objective scrutiny. Problems related to the speed of judgment, the appropriateness of sanctions, racial prejudice, and so on, should be analyzed to determine which components are operating correctly and which need improvement. One of the most controversial and frequently mentioned issues is the number of blacks in prison. Establishing the reason for that number—whether poverty, discrimination, failure of the justice system, or other causes—is essential for guiding those responsible for guaranteeing an equitable system.

Although blacks constitute less than 11% of the U.S. population, they make up nearly half of the national prison population. This startling disparity has prompted charges of racial discrimination. But are more blacks in prison because of racial bias in the criminal justice system or because they are more likely than whites to commit those crimes that lead to imprisonment? Young men are also overrepresented, but no one has yet suggested that this disparity is evidence of discrimination. The record clearly indicates that young men simply commit more serious crimes than women or older people do.

The distinction between racial discrimination and racial disparity is too often glossed over in research and the debate on this issue. Discrimination occurs if officials of the justice system make ad hoc decisions based on an offender's race rather than on clearly defined, legitimate standards. In contrast, racial disparity occurs when fair standards are applied but the incidence is different for racial groups.

Numerous studies have attempted to establish whether the racial disparity is due to discrimination in the criminal justice system or to other factors. The results have been mixed, largely because the analyses in most studies have failed to control for a range of variables related to imprisonment (for example, conviction crime, criminal record, and demographic factors) and for the possibility that many of these variables may be proxies for race.

We conducted an analysis that controlled for these variables and examined the proxy issue, using data on California sentencing practices. The study focused only on sentencing (prison or probation and length of term) for offenders convicted of six felony offenses in California. Thus, it did not address issues of possible discrimination in arrests and prosecution or in capital sentencing, and its results may not apply to other states.

Research Background

Two recent studies have addressed the racial question by examining the correlation between imprisonment and crime committed, on the basis of two different measures of the latter. Blumstein (*1*) focused on arrests, controlling for number of offenders of each race arrested for each crime type and assuming there was no bias in processing these arrests. Under these conditions, he estimated that 43% of the prisoners in the United States would be black, an estimate 5 to 6 percentage points below the actual percentage of black prisoners.

Langan (*2*) examined racial disparities in imprisonment using data on victims' responses about the race of those who commit crime. His study used data from the National Crime Survey (NCS), conducted by the U.S. Census Bureau on a nationally representative sample of households. The NCS investigators inquired about crimes these households experienced (including crimes not reported to the police) and the race of the criminals who committed them. This approach frees the data from any racial bias that might stem from who reports crime or from police arrest or prosecution decisions. Langan found that the percentage of black prisoners was only 4 to 5% higher than would be expected on the basis of the NCS data.

Neither Blumstein nor Langan controlled for legitimate sentencing factors (such as the offender's prior record and victim injuries) that might explain the 4 to 6% difference their studies found. The need to control for such factors is illustrated in Kleck's (*3*) review of 57 studies that examined racial discrimination in sentencing (RDS). He found that 26 studies contradicted the RDS hypothesis, 16 had mixed results, and 15 found evidence of bias. For 13 of the studies that found evidence of bias, Kleck concludes that they:

> failed to include even the most rudimentary controls for the defendant's prior record and thus failed to eliminate the possibility that black defendants receive more severe sentences than whites because they generally have more serious official records of criminal behavior. Only two out of 24 studies which introduced such controls showed consistent evidence of RDS (and one of these two failed to control for offense type) (*4*, p. 274)

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Kleck's and others' reviews of the racial disparity literature suggest that, in studies which control for factors legitimately considered in sentencing decisions, these factors often account for most or all of the observed racial disparities. This is especially true for studies that focus on offenders outside of the deep South.

An important exception to this trend was a study Petersilia (*5*) conducted on 1400 male prison inmates in California, Michigan, and Texas. Petersilia found that, in these states, courts typically imposed heavier sentences on Latinos and blacks than on whites who were convicted of the same crimes and who had similar criminal records. Further, the minority inmates also tended to receive and serve longer prison terms than their nonminority matched counterparts.

Petersilia expressed several concerns about the data in her study (*5*) and urged that it be replicated. These concerns ranged from the reliability of data sources to the lack of detailed information about the inmates' crimes and prior records. She also speculated that fuller implementation of determinate sentencing guidelines might change court and parole decisions markedly. These sentencing reforms were instituted, in part, to reduce judicial discretion and the influence of factors not legally relevant in criminal sentencing.

Our study examined racial bias controlling for the nature of crimes committed, prior record, other offender characteristics, and race. It used data on sentencing in California after the state implemented its 1977 Determinate Sentencing Act. Although previous studies are not directly comparable to the present one, some tentative support for reduced racial disparity after implementation of determinate sentencing is suggested by the present study.

Analyzing Sentencing Decisions

Overview. Our analyses focus on two sentencing decisions separately: (i) the decision to send an offender to prison or put him on probation and (ii) the length of term imposed on those imprisoned. We conducted three separate analyses for each decision: The first identifies by conviction crime what percentage of black, Latino, and white offenders received prison or probation sentences, and what the average lengths of their prison terms were. This step establishes whether there are racial disparities in sentencing based on conviction crime alone. The second analysis addresses two questions: First, controlling for offense and offender characteristics that legitimately enter judicial decisions, are there still unexplained racial disparities in sentencing? Second, does adding race to those factors add any explanatory power? The third analysis seeks to determine whether any of the other explanatory variables is a proxy for race—that is, does it mask racial effects?

Samples. Our samples of prisoners and probationers came from data collected by the California Board of Prison Terms (CBPT) on all offenders sentenced to prison in California in 1980 and on a sample of those sentenced to probation in Superior Court during that same year. This was a one-time collection effort underwritten by the legislature for purposes of analyzing consequences of implementing the Determinate Sentencing Act. To our knowledge, the resulting database is unique: it contains the richest source of information in the country for analyzing imprisonment decisions, albeit for only 1 year.

The database contains detailed information on the offender's criminal, personal, and socioeconomic characteristics as well as important aspects of the case and details of court handling. From both the prisoner and probationer samples, we selected all the adult males who were convicted of assault, robbery, burglary, theft, forgery, or drug offenses (that is, crimes that could result in either a prison or a probation sentence).

The CBPT drew its probationer sample from 17 highly populated urban counties. These counties account for 80% of the felony convictions in the state. Because the probability of being incarcerated differs among counties and crime types, we restricted the prisoner sample to offenders from these same 17 counties. We also weighted

Table 1. Number of prisoners and probationers, and the percentage in each racial group by crime type.

Conviction crime type	Sample type	Weighted number of offenders	Defendant's race (%)		
			Black	Latino	White
Assault	Prisoners	460	39	32	29
	Probationers	684	27	32	41
Robbery	Prisoners	1870	43	25	32
	Probationers	753	36	32	33
Burglary	Prisoners	1877	33	31	37
	Probationers	3644	26	32	41
Theft	Prisoners	969	39	17	44
	Probationers	3044	32	22	46
Forgery	Prisoners	169	35	15	49
	Probationers	369	31	15	55
Drugs	Prisoners	419	23	58	20
	Probationers	1079	23	33	44

Note: The sum of the percentages within a row may not equal 100 because of rounding off.

Table 2. Variables available for analysis and their code names.

Code	Variable
	Prior record and crime characteristics
NCOUNTS	Number of conviction counts
JCON	Number of juvenile convictions
ACON	Number of adult convictions
PROB	Number of probation terms
JAIL	Number of jail terms
PRISON	Number of prison terms
JINC	Number of juvenile incarcerations
PROBREV	Number of probation revocations
CON16	First conviction before age 16?
INC16	First incarceration before age 16?
APROBPAR	On adult probation/parole?
JPPROBPAR	On juvenile probation/parole?
JUSTOUT	Recent (<1 year) released from incarceration?
WEAPON	Weapon involved in offense?
INJURY	Any injury caused in offense?
VULNER	Any vulnerable victims?
KNOWRELT	Offender known or related to victim?
COMPANY	Any accomplices?
DRUGINVL	Drugs involved in offense?
DRUGADDT	Drug addict?
	Demographics
HSGRAD	High school graduate?
EMP	Employed?
MARRY	Married?
FAMKIDS	Living with spouse/kids?
PARENTS	Living with parents?
MNTLPROB	Any history of mental problems?
ALCHOLIC	Alcoholic?
AGE2125	Age 21–25?
AGE2630	Age 26–30?
OVER30	Over 30?
	Process variables
TRIAL	Convicted by trial?
PDAPATTY	Public defender attorney?
PVTATTY	Private attorney?
RELEASE	Obtained pretrial release?
	Race
BLACK	Black?
LATINO	Latino?

the prisoner and probationer samples to provide an accurate representation of the true proportions of prisoners and probationers in these counties. We have described the weighting procedures and their effect on sample sizes (*6*) (they had no impact on the percentage distribution of offenders by race).

Variables. Racial bias in sentencing would be evidenced by disparities in the in/out decision (that is, whether the offender was sent to prison or granted probation) or the length of the prison term imposed, or both. We examined four groups of correlates of these two outcomes: (i) characteristics of the crime (for example, the use of a weapon by the criminal) and the offender's prior record, (ii) the offender's demographic characteristics (including age), (iii) process variables (such as whether the offender had a private attorney), and (iv) the offender's race.

Choice of statistical models. We used different models for the in/out decision and the length-of-term decision (*7*). For the in/out analyses, we used Fisher's linear discriminant function. For computational ease, this was done using OLS (ordinary least squares) multiple regression to fit a zero-one variable indicating this decision. If **b** is the vector of estimated regression coefficients from OLS, the maximum likelihood estimates of the coefficients for Fisher's linear discriminant function are given by **kb**, where $k = n/SSE$, n is the sample size, and SSE is the residual sum of squares from the zero-one regression. Thus, all significance probabilities are unaffected by the choice between OLS and discriminant function analyses. We used OLS for the analysis of the log of the length-of-prison term analyses because this outcome was a continuous variable (*8*).

Prison or Probation: In/Out Sentencing

In our 17-county sample of convicted felons, 44% of the blacks, 37% of the Latinos, but only 33% of the whites were sent to prison (10% of the whites were Asian, Indian, or other).

The distribution of prisoners and probationers by crime type and racial group is shown in Table 1. These data show that black and Latino offenders were more likely to go to prison than white offenders, especially for assault and drug offenses. For example, 39% of those sent to prison for assault were black, whereas only 27% of those who received probation for this crime were black. Table 1 also reveals proportional differences in racial representation across crime types. Latinos constituted more than half of those convicted of drug crimes, for example, but less than 25% of those convicted of theft or forgery.

Our analyses of the in/out decision sought to establish whether these disparities were explained by differences in sentencing variables besides crime type. Table 2 lists the variables that were available for analysis.

This part of the analysis consisted of four steps. In step 1, we grouped the prisoners and probationers convicted of the same crime together, thereby reforming six offense groups. We then divided each group randomly into two subgroups, A and B, forming 12 subgroups (two for each of six crime types).

In step 2, we used the procedures we have described (*6*) to construct two discriminant rules to predict the in/out decision in each of the 12 subgroups. Rule 1 used all the prior record and crime characteristics, and all the offender demographic variables that had a statistically significant correlation with the in/out decision and/or added significantly to the overall prediction of this decision when used with other prior-record and offense variables. Rule 1 also used all the process variables. Rule 2 used all the foregoing variables plus race.

The OLS regression coefficients in the total sample of offenders in each crime type are shown in Table 3.

In step 3, we applied rule 1 developed on subgroup A to all the offenders in subgroup B to predict whether they would go to prison, and applied rule 1 developed on subgroup B to all the offenders in subgroup A. These two subgroups were then recombined and a count was made of the number of offenders in each group whose predicted in/out status was the same as their actual in/out status (where the number predicted to be incarcerated was set equal to the number who were incarcerated). We then inserted these counts into the formula below to compute the percentage of cases whose status was predicted accurately:

Table 3. OLS regression results for the in/out decision.

Variable	Assault	Robbery	Burglary	Theft	Forgery	Drugs
NCOUNTS	0.1655**	0.0306**	0.1067**	0.1524**	0.1022**	0.2611**
JCON	0.0387*	0.0056	−0.0165*	−0.0131	−0.0198	−0.0415*
ACON	0.0311**	0.0058	0.0168**	0.0020	0.0221	−0.0099
PROB	−0.0345*	−0.0024	0.0015	−0.0074	−0.0329	0.0157
JAIL	−0.0025	−0.0008	0.0000	0.0273**	0.0247	0.0049
PRISON	0.0006	0.0315**	0.0600**	0.0834**	0.0816**	0.0724**
JINC	0.0305	0.0052	0.0748**	0.0307	0.1615*	0.0621
PROBREV	0.0045	0.0290	0.0014	0.0276	0.1257*	−0.0297
CON16	−0.0469	0.0436	0.0695*	0.0047		0.0622
INC16	0.0424	0.0074	−0.0084	−0.0379	−0.1875	0.0491
APROBPAR	0.1714**	0.0622**	0.1131**	0.0746**	0.0441	0.1296**
JPROBPAR	0.0355	0.2021**	0.1690**	0.1886**		
JUSTOUT	0.0748*	0.0464*	0.0333*	0.0484*	−0.0337	0.0569
WEAPON	0.1457*	0.2142**	0.0607**	0.0579		0.0051
INJURY	0.0579	0.1555**	0.0634*		0.4848	0.0793
VULNER			0.0471	0.0488		0.5588
KNOWRELT	−0.0252	−0.0622*	−0.0785**	−0.1032*		−0.0236
COMPANY		−0.0115	−0.0045	−0.0209		0.0501*
DRUGINVL	0.0587	0.0881*	0.0747*	−0.0014	0.4052	
DRUGADDT	0.2368**	0.1450**	0.1752**	0.1357**	0.0913	0.1725**
HSGRAD	−0.0253					−0.0198
EMP			−0.0086	−0.0130		
MARRY		−0.0153	−0.0690**			
FAMKIDS			0.1037**			
PARENTS		0.0446**				−0.0472
MNTLPROB			−0.1522**			−0.1100
ALCHOLIC	−0.1033*	−0.1335**	−0.1639**			
AGE2125		0.1357**	0.1453**	0.1062**		
AGE2630		0.1563**	0.1630**	0.1132**		
OVER30		0.1847**	0.1080**	0.0808**		
TRIAL	0.3209**	0.1501**	0.1458**	0.2763**	0.0195	0.1203*
PDAPATTY	-0.0822**	−0.0850**	−0.0626**	−0.0497**	−0.0018	−0.0591*
PVTATTY	−0.1608**	−0.3712**	−0.1562**	−0.0888*	−0.1087	−0.0966*
RELEASE	−0.2677**	−0.1606**	−0.1730**	−0.1705**	−0.1979**	−0.2766**
BLACK	0.0756*	0.0332	−0.0098	−0.0130	−0.0162	0.0531
LATINO	0.0453	−0.0386*	−0.0178	−0.0587**	−0.0364	0.1419**
N	1128	2580	5066	3724	504	1337
SSerror	154.5	352.4	749.5	499.0	65.7	165.2
Adj Rsq	0.41	0.31	0.36	0.29	0.37	0.41

*$P \leq 0.05$. **$P \leq 0.01$.

$$\text{Percentage predicted accurately} = 100 \times \left[\frac{\text{Number incarcerated who were predicted to be incarcerated} + \text{Number given probation who were predicted to be given probation}}{\text{Total number of offenders}}\right]$$

Step 4 was the same as step 3, except that we used rule 2 rather than rule 1. The difference in the accuracy of the predictions between steps 3 and 4 is a good index of the effect of race on the in/out decision, because an offender's data were not considered in computing the equation used to predict his sentencing decision.

How well the actual in/out decisions coincided with the predicted decisions based on rule 1 and rule 2 is shown in Table 4. For four of the six crimes, predictive accuracy does not improve when race is considered. The two exceptions are robbery and drugs. However, in both cases, the inclusion of race improved accuracy by only 1%. Moreover, racial disparities were not the same for the two crimes. For robbery, blacks had a relatively higher and Latinos a lower probability of going to prison, whereas for drugs, Latinos had a higher probability and white offenders had a lower probability.

The variables that were predictive of going to prison for one crime were generally the same as those for another crime. They were :

- Having multiple current conviction counts, prior prison terms, and juvenile incarcerations.
- Being on adult or juvenile probation or parole at the time of the current offense.
- Having been released from prison within 12 months of the current offense.
- Using a weapon in the current offense.
- Having a history of drug or alcohol addiction or both.
- Being over 21 years of age.
- Going to trial, as opposed to pleading guilty.
- Not being released before trial.
- Not being represented by a private attorney.

Across all crime types, we predicted with 80% accuracy which offenders would be sentenced to prison. Adding race to the prediction formulas did not improve this accuracy rate by even 1%.

These results suggest that, once we consider the other factors related to sentencing, knowing the offender's race does not improve our ability to predict who will be sentenced to prison or probation (the in/out decisions). This implies that, for our samples, any racial disparity in sentencing does not reflect racial discrimination. However, it is still possible that other variables may be proxies for race. In other words, the relation of these factors with race may hide racially biased decisions. To address this concern, we examined the relation between the in/out decision and offense and offender characteristics in two ways.

We first examined the extent to which race was correlated with each of the predictors used in rule 1. The results of this analysis showed again that a potentially high correlation between the predictors and race did not mask racial bias in the in/out decisions. For example, the best single predictor of going to prison was the number of con-

Table 4. Percentage of offenders whose predicted in/out sentence was the same as their actual in/out sentence.

Conviction crime type	Rule 1: without race	Rule 2: with race
Assault	80	80
Robbery	80	81
Burglary	80	80
Theft	81	81
Forgery	76	76
Drugs	83	84

Table 5. Average prison term imposed, by race and crime type.

Offenders	Prison term (months) for					
	Assault	Robbery	Burglary	Theft	Forgery	Drugs
All	48	58	32	26	27	36
Blacks	49	57	33	26	29	35
Latinos	47	58	31	26	26	37
Whites	48	59	33	26	26	35

Table 6. OLS regression results for the length of prison term imposed.

Variable	Assault	Robbery	Burglary	Theft	Forgery	Drugs
NCOUNTS	0.0998**	0.0885**	0.1221**	0.1134**	0.0893**	0.1470**
JCON		0.0036	0.0059			
ACON		0.0001	−0.0001	0.0064	−0.0055	
PROB						−0.0019
JAIL		−0.0136*		−0.0131*		−0.0143
PRISON	0.0359*	0.0711**	0.0781**	0.0345**	0.0331	0.0296
JINC	0.0496*	0.0308*	0.0312*	0.0259		
PROBREV	−0.0814*	0.0513*	0.0162	0.0518*	−0.0710	
CON16		0.0215	−0.0053*	0.0597*		
INC16	−0.1596**	−0.0411	0.0315	−0.0142		0.0468
APROBPAR	−0.1029**	0.0415*				
JPROBPAR			−0.0361			
JUSTOUT		0.0111				
WEAPON	0.2316*	0.2697**	0.2450**	0.0777**	−0.2922	0.0172
INJURY		0.0385*	0.2014**			
VULNER	0.0147		0.2139**			
KNOWRELT			−0.0128	0.1019*		
COMPANY		0.0255	−0.0179	0.0240		0.0662
DRUGINVL			0.0210	0.0145		0.4684**
DRUGADDT		0.0378	0.0862**			
HSGRAD						
EMP	−0.1169**					
MARRY						0.0547
FAMKIDS						
PARENTS						
MNTLPROB			0.1025*			
ALCHOLIC		−0.0932**				
AGE2125		−0.0343*		−0.0328		
AGE2630			0.0546**			−0.1334**
OVER30						
TRIAL	0.2219**	0.2283**	0.3111**	0.1766**	0.0490	0.2920**
PDAPATTY	−0.0205	−0.0434**	−0.0485**	−0.0482**	0.0047	−0.0237
PVTATTY	0.0361	−0.2928**	−0.0302**	0.0527*		−0.1791
RELEASE	0.0364	−0.0507**	−0.0115	0.0204	−0.0237	−0.0190
BLACK	0.0356	−0.0132	−0.0037	0.0035	0.0711	−0.0696
LATINO	0.0335	−0.0077	−0.0155	−0.0025	0.0134	0.0231
N	616	2172	2279	1225	165	481
Adj Rsq	0.18	0.34	0.38	0.22	0.20	0.24

*$P \leq 0.05$. **$P \leq 0.01$.

viction counts. "Counts" refers to the number of separate crimes the offender was convicted of during the current court proceedings. Within a given crime type, all three racial groups had about the same average number of counts (for example, the values for black, Latino, and white burglars were 1.3, 1.2, and 1.3, respectively). Similarly, the percentages of black, Latino, and white burglars whose cases went to trial (as opposed to being settled through plea bargaining) were 7, 7, and 5, respectively.

To pursue the matter further, we investigated whether race effects were hidden by measuring the degree to which race was related to the predicted probability of imprisonment generated by rule 1 in the analysis above. We found that with one exception, less than 1% of the variance in these predictions could be explained by offender race. The exception was drug crimes, where race accounted for 7% of the variance. Moreover, drug crimes were the only type for which race, by itself, explained more than 2% of the variance in the in/out decision (*9*). Latinos convicted of drug crimes had a higher probability of imprisonment, even after the factors known to affect the in/out decision (and measured here) are statistically controlled. Taken together, these findings demonstrate that the variables most highly correlated with the in/out decision are not proxies for race.

Length of Prison Term Imposed

Under California's 1977 Determinate Sentencing Act, judges may assign one of three specified terms (short, middle, or long) for each conviction offense. The Act further instructs judges to impose the middle term unless there are aggravating or mitigating circumstances. If the short or long term is imposed, the judge must specify the circumstances that led to the selection of this term in the sentencing documentation. Enhancements for particular aggravating circumstances, such as prior record or weapon use, must be formally pled and adjudicated. The Act was designed to "eliminate disparity and provide uniform sentences throughout the State" [California Penal Code 1170.(a)(1)].

Petersilia (*5*) found that minority offenders sentenced to prison before this Act became law were likely to receive somewhat longer sentences than whites whose official criminal records showed them similarly culpable. The CBPT prisoner database let us examine whether this trend still held for offenders incarcerated after the Act became law.

The high degree of agreement in the average (mean) prison term imposed across racial groups is shown in Table 5. None of these means differed by more than 3 months. Moreover, an analysis of variance indicated that within a crime type, the means were not different from each other by a statistically significant ($P < 0.05$) amount. Across crime types, the offenders in one racial group did not tend to receive shorter or longer sentences than those in another group.

We also used OLS regression to examine how well offender prior record, offense variables, offender characteristics, process variables, and race predicted the length of the prison term imposed. The dependent variable for these analyses was the log of the length of the term imposed. Again, we found that including offender race in the regression model did not improve predictive accuracy for any of the six crimes studied. Thus, offender race did not appear to influence prison sentence lengths.

The regression model and the percentage of variance explained for each crime are shown in Table 6. These models predicted with about 70 to 80% accuracy whether an offender received a sentence that was above or below the median sentence (which corresponds to a 40 to 60% improvement over chance).

Conclusions

Taken together, our findings indicate that California courts are making racially equitable sentencing decisions. The racial disparities apparent in the in/out decision are not evidence of discrimination in sentencing—once we control for relevant crime, prior record, and process variables. This finding held for five of the six of the crimes studied (assault, robbery, burglary, theft, and forgery). Drug crimes were the exceptions, where Latinos faced a higher probability of imprisonment. We found no evidence of racial discrimination in the length of prison term imposed for any of the crimes studied.

It is also clear that the other variables are not proxies for race—that is, they are not masking what are actually racially influenced decisions. Moreover, sentencing decisions were predictable, even though our database contained only some of the many variables that legally can be considered in imposing criminal sentences. For example, we did not know in multiple-offender robberies whether the defendant was the ringleader or just the driver of the getaway car, and we had no way of measuring the credibility of witnesses. Nevertheless, in more than 80% of the cases, we predicted accurately whether the offender would receive prison or probation; including offender race in the formulas did not increase predictive accuracy.

The current study did not examine decisions made at other justice system decision points (those made by the police and prosecutor) nor did it examine the more global relation between poverty and minority representation in the justice system. The present study does show, however, that two very important sentencing decisions do not show evidence of discrimination against minority offenders.

At this point we cannot tell why the present results differ from those of the earlier California results (*5*). A tentative conclusion could be that California's Determinate Sentencing Act has contributed to racial equity in sentencing. However, because of differences between studies, this remains an open question.

REFERENCES AND NOTES

1. A. Blumstein, *J. Crim. Law Criminol.* **73**, 1259 (1982).
2. P. Langan, *ibid.* **76**, 666 (1985).
3. G. Kleck, *Am. Sociol. Rev.* **46**, 783 (1981).
4. ———, *Law Hum. Behav.* **9**, 271 (1985).
5. J. Petersilia, *Racial Disparities in the Criminal Justice System*, R-2947-NIC (RAND, Santa Monica, CA, 1983).
6. S. Klein, S. Turner, J. Petersilia, *Racial Equity in Sentencing*, R-3599-RC (RAND, Santa Monica, CA, 1988).
7. Some analysts consider the latter decision as conditionally dependent on the former and would therefore prefer to utilize Tobit or Heckman's sample-selection model [J. Heckman, *Ann. Econ. Soc. Meas.* **5**, 475 (1976)]. This preference stems from concerns about models that do not directly correct for the correlation between outcomes. However, W. Manning *et al.* [*J. Econometr.* **35**, 59 (1987)] have demonstrated that the overall prediction bias in two-part models (such as ours) is negligible if one does not know the true model specification and relies on the available data. These authors conclude, "In effect, picking a specification that fits the observed data largely eliminates the bias from 'ignoring' the selection effect. In the absence of a priori information (e.g., exclusions or the exact specification of the right-hand-side variables), these results raise the issue of whether the selection model can be distinguished from an empirically derived two-part model, even in a case favorable to the selection model" (p. 60).
8. G. Haggstrom, *J. Bus. Econ. Stat.* **1**, 229 (1983).
9. Preliminary analyses indicated that adding interactions between race and predictor variables to the models would not produce a practical increase in the accuracy of these models to predict the in/out decision or sentence length. These analyses began by constructing two interaction terms for each independent variable: black × variable and Latino × variable. Thus, there were twice as many interaction terms as there were predictor variables. Given the large number of these terms, we did not test them individually (because several were likely to achieve statistical significance simply by chance). Instead, we examined whether predictive accuracy could be improved by using all of them together. This liberal omnibus test was run 12 times, once for each combination of the six crime types and two outcomes (in/out and sentence length). However, despite the large sample sizes and extensive number of interaction terms considered, they produced very small F values (the only F greater than 2.0 was for the in/out decision on robbery, which was 2.16). These results indicate that adding race interaction terms to the model would not produce a meaningful increase in predictive accuracy and, thus, these terms were not included in subsequent analytic steps.
10. The views expressed in this article are those of the authors and are not necessarily shared by the RAND Corporation or its research sponsors.