White Collar Crime and Criminal Careers

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EXECUTIVE SUMMARY

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Introduction

Americans have become increasingly aware of the seriousness of white collar crime and the damage it causes. Crime control theory however, has typically ignored the white collar offender. White collar offenders are generally portrayed as "one-shot criminals" who do not reoffend after their initial contact with the criminal justice system. Recent empirical studies challenge this assumption. Those convicted of white collar crimes are often repeat offenders (Weisburd, Chayet, and Waring, 1990; Benson and Moore, 1992). Despite these findings, there has been virtually no empirical examination of the effects of sanctions on white collar criminals.

This report examines the criminal careers of almost 1000 offenders convicted of white collar crimes in United States District Courts, developing a detailed portrait of their offense histories and assessing the relative effectiveness of court imposed prison sanctions in preventing or modifying future criminal behavior. Two major sets of questions guided our research:

> Who are the repeat criminals in a sample of convicted white collar offenders and how are they different from street criminals or other white collar criminals who do not reoffend? How are their criminal careers similar to or different from offenders found in more traditional crime samples? Can examination of the criminality of these offenders help us to understand the dynamics that led to their initial or continued involvement in crime?

What is the impact of sanctions on white collar criminal reoffending? What can be learned that can inform the debate about sentencing white collar offenders, about deterrence theory (in particular, specific deterrence) and potential backfire effects of punishment?

The Sample and the Data

The Sample. The sample is drawn from a study of white collar criminals conducted by Wheeler, Weisburd, and Bode (1988), in which white collar crime is considered as "economic offenses committed through the use of some combination of fraud, deception, or collusion" (Wheeler et al, 1982:642). Eight federal offenses were examined: antitrust offenses, securities fraud, mail and wire fraud, false claims and statements, credit fraud, bank embezzlement, income tax fraud, and bribery. The sample was drawn from seven federal judicial districts: Central California, Northern Georgia, Northern Illinois, Maryland, Southern New York, Northern Texas, and Western Washington. A random sample was selected of 30 defendants from each offense category in each district who were convicted during fiscal years 1976 to 1978. The sample also includes all convicted securities and antitrust defendants from the entire federal system during that period. Data were coded from pre-sentence investigation reports (PSI's) prepared for each offender.

The sample, while more "white collar" than a sample of street criminals, also departs from common images of the typical white collar offender in that they are very similar to average or middle class Americans (Weisburd, Wheeler, Waring and Bode, 1991).

Criminal History Data. The Federal Bureau of Investigation's

rap sheets were obtained as the best single source of information on an individual's arrest history. Rap sheets were not received for about 30% of the sample. This attrition, while difficult to account for, is due in part to missing FBI numbers and an inability to match records on other identifiers, and in part to FBI policy which led to purging of files of deceased and older offenders. An analysis of potential sample selection bias, which examined the relationship between a series of offender characteristics and the likelihood that they would be missing from the sample, found some bias (defendant age, number of arrests, receipt of prison sanctions, district, and gender) that in large part reflected such FBI policies.

An extensive code book was developed to record criminal history information from the rap sheets. The code book captures aspects of criminal justice system processing such as arrest dispositions, sentencing details, characteristics of confinement sentences, and information regarding community supervision. All rap sheets were coded by hand.

Tracking Deaths. Confusing death with desistance from criminality can bias models for tracking criminal careers or assessing the impact of sanctions. Although FBI policy maintains that the deceased are purged from criminal history data bases, this policy was not consistently practiced. Thus, we sought to obtain accurate information on mortality in the sample from a non-criminal justice data source, the National Death Index (NDI). The NDI, a centralized listing of identifying information on all decedents

registered by the states since 1979, provides information on fact and date of death for sample members. In total, some 14% of the sample had died between the date of sentencing for the criterion offense and 1990 when we began data collection for the study.

Crisis, Opportunity and Criminality

We first explored the nature of the criminal history of the offenders in our sample. A substantial proportion of the sample -- 48.3% -- are repeat offenders.

One-Shot Offenders. The one-shot offenders tend to be older when first committing crimes, and are less likely to be non-white than repeat offenders. They are much less likely to fit stereotypes of instability or deviance than repeat offenders in our sample. The one-shot criminals did better in school, are more likely to have completed college, and are less apt to abuse alcohol or drugs than repeat criminals in the sample. Stability in residence, occupation, and marriage provide perhaps the clearest view of the distinctions between one shot and repeat criminals, with one-shot offenders more likely than repeaters to be homeowners, to work steadily, and to be married only once.

To describe the nature of "criminal careers" that consist of a single arrest event, we examined the motivations of one-shot offenders as portrayed in pre-sentence investigations for the criterion offense. Our review revealed two main offender categories. Though criminals in both intentionally break the law, they generally do not fit common stereotypes of criminality. Their crimes appear as an aberration in what is otherwise a conventional,

stable, and law-abiding life.

We term one such group crisis responders, since the PSIs indicate that these criminals are reacting to some form of financial or personal distress when they decide to participate in criminality. Most fit traditional middle-to-upper class portraits of social stability, although some are from less established social positions. We identify a second group as opportunity takers. While their crimes are also inconsistent with their social records, participation in crime was precipitated by the desire to take advantage of some specific social or economic opportunity. Many excuse their behavior as a form of acceptable business practice.

Repeat Offenders. There are important differences in the number of arrests for repeat offenders: about a third have only one additional arrest beyond the criterion offense, another third have between three and five official criminal events, the lower threshold of which would classify them, according to Tillman (1987) as chronic offenders. About 34% reach what we define as the threshold for high rate criminals in the sample: 6 or more arrests. The highest rate offenders differ from the other repeat criminals in our sample on nearly every measure we examine, whether it reflects aspects of economic or social stability, or social background and achievement. For example, high rate offenders experience their first arrest earlier, are more likely to be non-white, have more drug problems, and are less likely to have a steady employment history at the time of the criterion offense. High rate offenders are not typically homeowners and have less

stable marital histories. Repeat criminals with three to five arrests occupy an intermediate position between the high and low rate categories in regard to social behavior, although in background they are much closer to the low frequency than the high rate offenders.

Among the repeat criminals in the sample, two main types of offenders emerged. Opportunity seekers generally have a small number of arrests recorded on their rap sheets and while less conventional on average than one shot criminals, they also do not fit common stereotypes of criminality. Such people often defend their behavior at the time of the criterion offense by arguing that a specific crisis or special opportunity led them to depart from otherwise conventional lives. However, the probation officers generally inform the court that there is something not quite believable about the defendant's story.

Most of the highest rate offenders in the sample are characterized as deviance seekers. They fit conventional stereotypes of criminality, and have social and criminal records indicating instability and low self control. Their white collar crime is part of a mixed bag of criminal conduct.

Do Prison Sanctions Deter?

Increased emphasis on the imposition and severity of the prison sanction for white collar offenders led to our concern with whether such policies could be expected to deter offenders from future criminal behavior or backfire and increase the likelihood of future involvement in crime. We were also interested in how the

prison sanction may influence the nature (i.e. seriousness or frequency) of a criminal career. Overall, nearly half of the sample was sentenced to prison for the criterion offense.

Quasi-experimental design. A quasi-experimental design was developed to define groups of offenders that are alike in terms of factors that led to the receipt of the imprisonment sanction, and to compare these groups of like offenders on measures of recidivism. To obtain groupings of similar offenders, we first used a multivariate regression model identifying factors influencing whether defendants were sentenced to prison. Developed for an analysis of judicial sentencing behavior on the original sample (Wheeler, Weisburd and Bode, 1982), the model took into account legally relevant variables, social dimensions, and act and actor related variables.

The reduced logistic regression model containing only significant parameters categorized 72% of the cases correctly, and was then used to generate individual predicted imprisonment scores for offenders in our sample. By examining the distribution of these scores for those who actually were sentenced to prison and those without a prison sanction imposed yielded 3 sets of prison and no prison comparison groups fairly close in their mean probability estimates: those with a low probability ($p \leq .40$), relatively high ($p \geq .60$), and moderate ($.40 < p \leq .60$) probability of a prison sentence.

Time to Failure. Our findings reveal little evidence of specific deterrence for the prison sample in the likelihood of

failure in the follow-up period: 30.8% of the low probability group who went to prison reoffend compared to 26.5% who did not go to prison; the difference in the high likelihood group was 39.9% (prison) versus 37% (no prison). In fact, results suggested a backfire effect of prison sanctions with 40.6% of those sent to prison in the moderate likelihood group recidivating compared to 27.9% in the no prison group. Findings on time to failure are somewhat contradictory; prison bound offenders in the high probability of prison group seemed to fail more slowly (1/3 within 2 years) than those not sentenced to prison (nearly half within 2 years). By comparison, in the low probability grouping, a prison sentence seems to accelerate failure time.

To correct for censoring, or the possibility that some individuals either cannot fail during the follow-up period or will fail after the follow-up period is ended, event history analysis is used to reexamine recidivism findings. We used two distributions that appear to fit our data: the lognormal distribution, which assumes that everyone in the sample will eventually recidivate, and the Gompertz distribution, which allows that some will never fail. Results confirm the conclusion that there is no specific deterrent value of imprisonment for these offenders. Moreover, this analysis did not find a significant backfire effect.

Frequency and Type of Offending. For high and low probability prison groups, receiving a custodial sanction has no effect on the frequency of offending after the criterion offense. Prison seems to backfire for offenders sentenced to custody in the moderate

probability group, since they commit on average a larger number of offenses than like offenders who were not sentenced to prison. Analysis of the type of subsequent crime (white collar, drug-related, or violent) suggests that the influence of imprisonment is small.

Explanations for the Findings. The types of offenders and the nature of their criminal careers may help explain the absence of specific deterrent effects. For instance, the conventionality of opportunity takers and crisis responders may be strongly impacted by the punishment process itself; the threat of losing social, occupational, or economic standing may occur well before the prison sanction is imposed.

For those more committed to criminality, opportunity seekers and deviance seekers, short prison stays such as those most often imposed in our sample may have relatively little impact on future reoffending. Time to failure is relatively long with about half of those who fail during the follow-up period going more than three years without an arrest. Thus, recidivism is possibly so removed from the term of prison that the sanction's effects have long been weakened. Opportunity seekers may reach the reasonable conclusion that the rewards of continued criminal behavior exceed the probability and severity of a prison sentence. Finally, for deviance seekers, a deterrent effect would not be likely, characterized as they are by low social control and an inability to delay gratification.

Correlates of Recidivism

A multivariate survival model is employed to assess what other factors, aside from prison, might account for variation in the form of offending among our sample. We were particularly interested in measures of social stability and conventionality.

An accelerated failure time analysis was used to predict time until recidivism using covariates. The results also describe the shape of the timing of failure by describing the estimated hazard or risk for each time period, and the cumulative survival function (the proportion of those at risk initially who survive until the start of the current time interval). Covariates were selected from the offender's prior criminal history, prior deviant behavior and conventionality, indicators of social stability, formal and informal sanctions imposed on the offender, and background variables (race, gender, and age, and social status of education and social class).

Seven variables are found to significantly predict time until failure: gender, prior criminal events, current offense as credit fraud or securities fraud, drug use, marital status, and receiving a fine. These factors are somewhat similar to those gained in other research on criminal careers. For example, criminal history is important: with an increasing number of prior events, time to failure becomes shorter. Women take longer to fail than men.

The emphasis on conventionality and respectability in understanding white collar crime is likewise confirmed. A history of drug use accelerates failure time, and being married slows it.

Prison or probation has no statistically significant impact on time until reoffending, as reflected in the results of our quasi-experimental analyses. However, the imposition of a fine increases expected time to failure significantly. Following earlier analyses of these data, we suggest that this finding reflects judicial decisions regarding the ability of offenders to pay a fine rather than the specific deterrent influence of the fine sanction (see Weisburd et al., 1991). As informal sanctions do not affect failure time, the collateral consequences of punishment may not be as important as suspected in understanding recidivism among white collar criminals.

For each of the variables significant in the multivariate model we examined the predicted cumulative survival function, which shows the proportion of offenders who have not failed until a given time; and the hazard function, which depicts the predicted monthly hazard or risk of recidivating. Results suggest that specific factors such as prior record or drug use are important in understanding recidivism. However, their impacts decline as the period of time from the criterion offense lengthens. For example, the crucial differences in recidivism between those with less and more serious prior records occur in the first 60 to 80 months of time at risk. After that time, there are no statistically discernable differences. Similarly, while males and females start out with sharply distinct recidivism risks during the first year, the gap closes over time so that by 84 months the rates are nearly identical.

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CHAPTER 1

Introduction

From the politician who abuses the public purse, to the arbitrager who manipulates the private market, Americans have become ever more aware of the damage that so-called white collar crimes cause. White collar offenses are identified as serious crimes by the public and policy makers (Wolfgang et al., 1985). Nonetheless, crime control theory has generally ignored the white collar offender. Despite speculation that white collar criminals are "rational," and hence deterrable through punishment (e.g. see Geis, 1982a; Braithwaite and Geis, 1982; Pollack and Smith, 1983), there has been virtually no empirical examination of the effects of sanctions on those convicted of white collar offenses.

Behind this neglect lies a common assumption about the nature of white-collar criminality. Although street criminals are assumed highly likely to recidivate, white collar criminals are thought to be "one-shot" offenders unlikely to be processed in the justice system after their initial brush with the law. This assumption is commonly stated by both researchers (e.g. see

Edelhertz and Overcast, 1982) and criminal justice practitioners.[1] However, recent studies of those convicted under white collar crime statutes suggest that a substantial proportion of such criminals are repeat offenders, and that a number have serious and lengthy criminal records (Weisburd, Chayet and Waring, 1990; Benson and Moore, 1992).

In this report we examine the "criminal careers" of almost 1000 offenders convicted of white collar crimes in seven United States District Courts between 1976 and 1978. Utilizing detailed data on offender backgrounds and the nature of court imposed sanctions originally compiled by Yale University researchers (Wheeler, Weisburd and Bode, 1988), as well as information on subsequent criminal behavior provided by the Identification Bureau of the FBI, we develop a detailed portrait of the offense histories of offenders originally sentenced for white collar crimes.[2] We also assess the relative effectiveness of court imposed sanctions in preventing or modifying future criminal behavior. We begin this introductory chapter of our report with a discussion of the research issues and questions that guided our project. We then turn to a basic description of the sample we studied and the criminal history information that forms the central focus of our

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[1] This is evidenced for example in Michael Benson's (1985) interviews with probation officers, and in Wheeler, Mann, and Sarat's (1988) interviews with federal judges who hear large numbers of white collar crime cases.

[2] We thank Professor Stanton Wheeler of Yale Law School for his permission to utilize original documents from the Yale White Collar Crime Study and his intellectual support and insights into our project.

analyses.

White Collar Crime and Criminal Careers

The criminal career approach directs attention to the factors that lead to participation in crime, the nature and extent of criminal activities of active offenders, and the duration of their involvement (e.g. see Blumstein et al., 1982; Blumstein et al., 1986). Focus on the criminal careers of street criminals has led to a series of insights about the nature of criminality and the ways in which the criminal justice system affects the future behavior of offenders. While the criminal career approach has not been universally accepted in criminology (e.g. see Gottfredson and Hirschi, 1990), its focus on patterns of offending over time has become a central feature of criminological inquiry.

Although scholars have focussed increasing attention on the criminal careers of street criminals, they have largely overlooked those of white collar offenders. A major reason for this omission is linked to the traditional portrait of white collar criminals. When the idea of white collar crime was first presented by Edwin Sutherland more than 50 years ago, he focused on persons of "respectability and high social status" (1940). Since Sutherland's day, many scholars continue to emphasize the elite social backgrounds of such offenders and the powerful positions that they occupy in society (Braithwaite and Geis, 1982; Geis 1982b). Such people are not thought likely to come into contact with the

criminal justice system, in good part because their power and financial resources are assumed to insulate them from the criminal process and its punishments. This is why much of study of white collar crime has focussed on civil and administrative law violations (Makkai and Braithwaite, 1991; Hagan and Parker, 1985; Clinard and Yeager, 1980; Stotland et al., 1980; Sutherland, 1949).

Studies of people who are prosecuted for white collar crimes contradicts this common assumption about white collar criminals. In two major investigations examining offenders convicted under white collar crime statutes in the United States federal courts a substantial number of defendants were found to have prior arrests. Benson and Moore (1992), for example, found that almost forty percent of their sample, which included those convicted of bribery, bank embezzlement, income tax evasion, false claims and mail fraud, in the early 1970s had at least one prior arrest. Weisburd et. al., (1991) studying these crimes and securities violations, anti-trust violations, and credit fraud found that more than forty percent of their sample evidence at least one prior arrest and more than a quarter had two reported prior arrests.

The first major theme in our study develops out of the contrast between these data and traditional understandings of white collar criminality. Who are the repeat criminals in these samples and how are they different from street criminals or other white collar criminals who do not reoffend? How are their criminal careers similar to or different from offenders found in more traditional crime samples? Finally, can examination of the

criminality of these offenders help us to understand the dynamics that led to their initial or continued involvement in crime?

It might be, for example, that repeat white collar offenders, as defined by the criminal justice system, are similar to other white collar criminals, but are just unlucky enough to be caught more than once. This would be consistent with research on corporate offending which suggests that such criminality is part of an established pattern of behavior for law violators (Clinard and Yeager, 1980; Braithwaite, 1982). On the other hand, some might argue that those convicted of white collar crimes who have multiple contacts with the criminal justice system are not white collar criminals at all. An example consistent with this argument would be a criminal involved in organized crime who was prosecuted for a white collar crime, such as tax evasion, merely because other prosecutorial avenues were too difficult.

The occurrence of repeat criminality in samples of white collar criminals also raises the issue of whether such offenders are more or less specialized than common criminals. Does it make sense, for example, to speak of "white collar criminals" if such offenders are likely to evidence common criminal behavior as well as white collar criminality? It would certainly alter the prevailing image of white collar crime if white collar offenders were likely to commit more serious violent crimes at other points in their criminal careers.

We suspect, overall, that study of white collar crime and criminal careers provides a special opportunity for critically

examining the appropriateness of the concept of career for understanding the development of criminal activities among offenders. Unlike most common criminals, white collar offenders are often employed and have conventional career histories. How does criminality intersect with those careers, and to what extent does it appear to be an important part of their development? Similarly, does repeat criminality among white collar criminals provide evidence of systematic development of paths to crime, or does it suggest a series of random and chance events that are a small part of the life course?

The second major theme of our study develops from concern with the impacts of sanctions on reoffending of white collar criminals. In recent years there has been a growing concern that white collar criminals have avoided the most serious sanctions in the justice system (Wheeler et al., 1982; Meier and Short, 1981, Clinard and Yeager, 1980; Watkins, 1977). This has led in the federal judiciary, for example, to increased severity in the penalties for white collar crimes (U.S. Sentencing Commission, 1987) and to a much larger number of such offenders being sentenced to imprisonment (U.S. Sentencing Commission, 1991). For the most part, such policies have been developed without an understanding of how these changes will impact the potential for future criminal conduct among sanctioned white collar criminals.

Examination of the effects of sanctions can provide insight not only for the public policy debate surrounding white collar crime sentencing, but can also contribute to the theoretical debate

surrounding deterrence theories. The failure of sanctions to provide specific deterrent effects in studies of street criminals is often attributed to the fact that such offenders have so little to lose (Mann, Wheeler, Sarat, 1980; see also Piliavin, Gartner, Thornton and Matsueda, 1986). Thus, it is argued that deterrence theory is valid, though the nature of criminals who are caught in the criminal justice system's web reduces the measure of deterrence that can be expected.

While scholars have not studied the specific deterrent value of sanctions for white collar criminals, it is often assumed that these offenders should be particularly influenced by punishment policies (e.g. see Zimring and Hawkins, 1973; Geis, 1982; Braithwaite and Geis, 1982; Braithwaite, 1985).[3] This is because white collar crime is seen as a highly rational form of criminality, in which the risks and rewards are carefully evaluated by potential offenders (Braithwaite and Geis, 1982; Geis, 1982a). Zimring and Hawkins note that "success determines the amount of investment in society an individual puts at risk when committing a threatened behavior" (1973: 128). In contrast to street criminals who have little to lose, white collar criminals, who are assumed to have relatively established positions and reputations, and thus far to fall, would seem especially susceptible to the threat of

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[3] The research that does exist tends to focus on the corporate, rather than the individual offender, and frequently examines general deterrence resulting from new legislation, changes in prosecution, or the introduction of regulations (e.g. see Hopkins, 1980; Stotland et al., 1980; Geis and Clay, 1982).

punishment.

Nevertheless, it is not apparent that the experience of punishment will lead to deterrence for these offenders. Most discussion of white collar crime deterrence is centered on the problem of general rather than specific effects (Wheeler, Mann and Sarat, 1988). The question asked is not whether a penalty will deter the person sanctioned, but whether it will impact upon the decisions of other potential offenders who might consider a similar crime. This approach follows the general assumption that white collar criminals do not reoffend, and is taken not only by deterrence scholars but also by judges who carry out white collar crime sentencing (see Wheeler, Mann and Sarat, 1988).

In the case of common crimes token is growing evidence that sanctions may backfire and lead offenders to more serious or frequent offending (Farrington et al., 1986; Sherman et al., 1986; Petersilia and Turner, 1986; Bridges and Stone, 1986). This is a particularly important concern in white collar crime sanctioning. While the experience of punishment might be expected to reinforce for the white collar offender the costs of criminality (see Benson and Cullen, 1988, for a discussion of this view), arrest, prosecution, conviction, and incarceration may produce changes in the offenders present and future job opportunities, thus altering the risk of reoffending (see Waring, Weisburd and Chayet, in press). The stigma of the criminal label may, in turn, serve to render the deterrent threat less serious; once prestige and status are lost, they may be difficult to regain. Once the cost of

illicit behavior has been minimized, recidivism may be more likely. In some sense the notion of a spiraling process of deviance, set into play by a labelling experience (see Wilkins, 1965), may be more appropriate for white collar criminals than for the common criminals for which the concept was initially developed. Evidence from corporate sanctioning provides some support for a specific deterrent effect of sanctions, though it is difficult to infer directly from corporate to individual offenders. For example, Simpson and Koper (1992) found that sanctions do constrain future wrongdoing among corporations. However industry environment and characteristics are seen to have more influence on future offending than sanctions themselves. In this regard, Braithwaite and Makkai (1991) found that sanctions do not provide a specific deterrent effect in the case of relatively small companies in Australia.

The Sample

Our sample is drawn from a study of white collar criminals conducted by Wheeler, Weisburd and Bode (1988; see also Weisburd, Wheeler, Waring and Bode, 1991). They define white collar crime as "economic offenses committed through the use of some combination of fraud, deception, or collusion" (Wheeler et al., 1982:642; see also Shapiro, 1980). Following this they examine eight such crimes in the federal system: antitrust offenses, securities fraud, mail and wire fraud, false claims and statements, credit and lending institution fraud, bank embezzlement, Income Tax fraud, and bribery. While Wheeler et al. argue that their sample includes

those offenses "that would most frequently be identified by persons as 'presumptively' white collar" (1982:643) and that most of the crimes identified in their sample fit one or another definition of white collar crime, they acknowledge that they cast a larger net for white collar criminals than most prior studies (see Weisburd et al., 1991).

The main sample was drawn from seven federal judicial districts during fiscal years 1976-1978 with specific information about offenders coded from presentence investigation reports. The districts were chosen in part to provide geographic spread, in part because they were being examined in other studies, and in part because some of them were known to have a substantial amount of white collar prosecution. The districts (and their central cities) are : Central California (Los Angeles), Northern Georgia (Atlanta), Northern Illinois (Chicago), Maryland (Baltimore), Southern New York (Manhattan and the Bronx), Northern Texas (Dallas), and Western Washington (Seattle).

To allow a detailed reading of each presentence investigation, as well as to avoid having one or two offenses dominate, Wheeler et al. chose to examine a random sample of thirty convicted defendants from each offense category in each of the seven districts. The resulting sample thus contains more antitrust and securities fraud offenders, and fewer postal fraud, IRS fraud and bank embezzlement offenders than a non-stratified random sample would. But it offers a broad and heterogeneous sample of those convicted under white collar crime statutes in the federal courts. Wheeler et al.,

(1982) also collected a supplementary sample of securities and antitrust offenders, offenses that occur relatively rarely in the federal system. They included all offenders convicted of these crimes during the three year sample period from all United States federal judicial districts (see Appendix A).

Our study seeks to examine the criminal careers of the offenders studied by Wheeler et al. Accordingly the white collar crime that was the central focus of their investigation, which we term the "criterion" offense, is important primarily because it provides a standard point of entry for sample members. However, it is important to note at the outset that the white collar crimes found here have a much more mundane quality than those which are associated with white collar crime in the popular press. While there are examples of offenders who commit dramatic and complex frauds, the bulk of white collar crimes prosecuted in the federal courts are undramatic and may be committed by people of relatively modest social status.[4] These offenses differ systematically from common crimes (Weisburd et al., 1991). Nonetheless, they have a common everyday character. As Weisburd et al. note:

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[4] See Weisburd et al., 1991, pages 62-73.

Table 1.1 Social and Demographic Characteristics of Basic Wheeler et al. (1982) Sample

	Percentage
White	78%
Unemployed	8%
Owners or officers	30%
Employed in white-collar occuaptions*	78%
N**	1090

* The definition of white-collar occupation is that used by the U.S. Census Bureau in their occupational classification system. See U.S. Bureau of the Census (1977, p. 152-155).

** This is the maximum number of cases used. Specific statistics are calculated using at least 90% of the cases.

(Weisburd et al., 1991). As Weisburd et al. explain:

> Some of those examined were indeed located far above middle class status and use resources to commit their crimes and avoid punishment that are unavailable to all but the most privileged. And indeed these criminals are as alien to middle class citizens as are the poor who are popularly associated with most street crimes. But the majority occupy positions in society that are neither far above nor far below the middle, and their crimes do not necessitate nor do their defenses rely upon elite social status. Opportunities to commit these crimes are available to average Americans. (Weisburd et al., 1991:3)

There is considerable variation in background characteristics in the sample, as is evidenced when the sample is stratified by the criterion offense (see Table 1.2). Weisburd et al. suggest that the eight legal categories can be seen as clustering into four offender groupings.[5] At the top are antitrust and securities fraud offenders: generally middle-aged white males with stable employment in white collar jobs, more often than not owners or officers in their companies, who are well above average in socio-economic status compared to other offenders. Of the two categories, the antitrust offenders tend to be richer and are less likely to have had prior convictions, though they are slightly less well educated and rank slightly lower on measures of social standing.

The perpetrators in the tax and bribery offenses are also predominantly white males, although a little more often unemployed, and less well educated than their antitrust and securities fraud counterparts. At the same time they are generally steadily employed in white collar jobs, and a least a third are owners or

[5] Our discussion here follows that of Weisburd et al. (1991), pages 48 to 60.

Table 1.2. A Statistical Portrait of the Hierarchy of White Collar Criminals

	High		Middle		Low			Outside Hierarchy
	Antitrust[6]	SEC[6]	Tax	Bribery	Credit Fraud	False Claims	Mail Fraud	Bank Embezzlement
Demographic Characteristics								
Race (Percent White)[1]	99.1%	99.6%	87.1%	83.3%	71.5%	61.8%	76.8%	74.1%
Sex (Percent Male)[1]	99.1%	97.8%	94.3%	95.2%	84.8%	84.7%	82.1%	55.2%
Age (Mean Age)[1]	53	44	47	45	38	39	38	31
Employment								
Percent Steadily Employed[3]	96.6%	59.4%	80.6%	68.4%	42.2%	46.7%	48.0%	36.8%
Percent of Employed in White-Collar Occupations[1]	95.5%	99.0%	75.4%	81.8%	86.2%	74.4%	77.5%	96.9%
Mean Duncan SEI[1]*	61.1	67.4	56.2	59.9	57.3	52.6	55.7	57.3
Percent Unemployed[2]	0.0%	2.8%	11.5%	17.8%	24.2%	24.8%	25.4%	3.0%
Social Class								
Owners or Officers[2]	71.3%	68.4%	33.3%	36.8%	31.8%	16.4%	28.0%	15.9%
Industry[2]								
Government	0.0%	0.0%	6.9%	20.3%	1.7%	5.3%	12.5%	0.0%
Professional Services	0.0%	9.7%	16.0%	23.0%	5.0%	31.9%	11.0%	0.5%
Banking	0.0%	4.8%	1.1%	2.7%	18.5%	3.5%	2.9%	91.3%
Finance	11.1%	59.7%	5.3%	5.4%	19.3%	15.9%	16.2%	2.6%
Production or Other Services	88.9%	25.8%	70.7%	48.6%	55.5%	43.4%	57.4%	5.6%
Percent Using Their Occupation in Crime[1]	100.0%	97.0%	15.0%	17.8%	48.0%	54.0%	50.0%	95.0%
Personal History								
Financial Standing								
Median Assets[4]	$200,000	$57,500	$49,500	$45,000	$7,000	$4,000	$2,000	$2,000
Median Liabilities[5]	$40,000	$54,000	$23,500	$19,000	$7,000	$5,000	$3,500	$3,000
Percent with College Degree[1]	40.9%	40.9%	27.4%	28.9%	17.8%	29.2%	21.7%	12.9%
Percent Home Owners[1]	73.5%	58.2%	57.7%	57.0%	44.8%	42.1%	33.5%	28.4%
Percent Married[1]	95.7%	80.7%	52.2%	67.9%	51.0%	52.2%	51.9%	52.2%
Percent with Prior Convictions[1]	7.7%	25.3%	37.1%	17.6%	45.6%	45.2%	40.5%	22.4%

[1]95% or more of the individuals in each offense category were used as the base for these figures.
[2]At least 90% of the individuals in each offense category were used in calculating these figures.
[3]At least 85% of the individuals in each offense category were used in calculating these figures.
[4]At least 80% of the individuals in each offense category were used in calculating these figures.
[5]At least 75% of the individuals in each offense category were used in calculating these figures.
[6]Based on the nationwide samples of securities and antitrust offenders.
*For employed individuals only

(Source: Weisburd et al., 1991: 50-51.)

officers in their businesses.

At the lower end of the spectrum are the credit fraud, false claim and mail fraud offenders. Fewer than half are steadily employed, and a quarter of each are unemployed at the time of their offenses. On average they are less likely to have substantial financial assets, to hold college degrees, or to own their own homes than the middle category, and more than two-fifths have prior criminal convictions. These offenders are younger on the average than the others and they are more likely to be female or "non-white,"[6] although white males continue to make up the modal category.

Finally we have the bank embezzlers, who cannot be easily subsumed under one of these other three groups (though they are much closer to the bottom of the hierarchy than the top). They are far younger on average than the others, and are nearly as likely to be female as male. They are similar to the lowest of the three groups in financial assets, but they are far less likely than those offenders to be either unemployed or to have a prior criminal record.

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[6] Non-whites include those identified as "Negro," "American Indian," "Asian," and "Hispanic" on the PSI cover sheet. Non-whites in this sample were predominantly African Americans.

Identifying Criminal Histories

In the Wheeler et al. study, investigators did not provide detailed information on the nature or form of the criminal histories of sample members. Following what was thought to be known about white collar criminals--that they were likely to be one-shot offenders with little or no history of prior offending--they decided to collect only very general information on criminal history, such as the total number of arrests or most serious prior crime reported. Because we wanted to examine the criminal careers of these offenders through 1990 it was necessary to identify a data source that would allow us to both supplement this information and add criminal history data subsequent to the criterion offense.

The first decision we had to make in identifying such information was in the choice of a measure of criminality. As Maltz (1984), Schmidt and Witte (1988), and Blumstein et al. (1986) note, much prior recidivism research is flawed because of a failure to critically assess the outcome measures examined. Criticism has often focussed upon the choice of the recidivism event (for example, the use of conviction or imprisonment rather than arrest) or length of follow-up period (which is typically too short to effectively measure subsequent offending).

As our investigation began more than ten years after the criterion offense of the offenders we studied, we were able to begin with a follow-up period considerably longer than that available to many other investigators. We decided to focus on arrests as our major measure of criminal conduct for two main

reasons. First, though we cannot determine when actual criminal behavior occurs, the best measure is one which comes closest in time to offending (Maltz, 1984). Second, although all measures of recidivism include a substantial degree of error, that of a false positive (including some events as recidivism that are not instances of reoffending), is considered to be less serious than that of a false negative (excluding some events as recidivism because of attrition in criminal justice processing from arrest to conviction) (Maltz, 1984; Blumstein et al., 1986). Arrests are less likely to include this latter error than are other measures of recidivism.

At the same time we recognized that the meaning of arrest for a white collar crime may be different than that for a street crime. Prosecutors, not the police, are usually the primary investigators of white collar crime (Katz, 1979). White collar criminals may also be "arrested" much later in the investigative process than are street criminals, often because white collar crimes are more difficult to unravel and seldom have the advantage of identifiable victims (Braithwaite and Geis, 1982). Such offenders may not be arrested at all if prosecutors decide to use civil actions instead of a criminal prosecution (Mann, 1992). We might therefore expect official records to underestimate the frequency of white collar crime events in an offender's criminal career even more seriously than is the case for common criminals (see Horney and Marshall, 1992).

Moreover, the fact that white collar crimes generally are of

longer duration than are street crimes (see Weisburd et al., 1991:44) provides added potential for misunderstanding criminal careers in a sample of white collar offenders. For example, a land scheme that continues over several years may lead to only one arrest. But it certainly represents a much longer period of active criminality than does a single theft or mugging. Accordingly, we might speculate that large gaps between officially reported crimes in a white collar criminal career do not necessarily mean that such offenders are inactive in these periods.

Of course, this assumes that repeat white collar criminals specialize to some degree in white collar crime, a view we will challenge in later chapters. Moreover, as noted above, white collar crimes prosecuted in the federal courts seldom approximate the complex long term offenses reported in the popular press. We suspect that the degree of bias in examining criminal history in this sample may not be very different from that in other criminal populations. Nonetheless, the potential bias represented here is one that the reader should keep in mind when interpreting our study results.

The "Rap Sheet"

Once we had identified arrest as our primary measure of criminal history it was natural that we attempt to gain access to Federal Bureau of Investigation "rap sheets" which are the best single source of information on an individual's arrest history. In theory, the rap sheet also contains complete information on

charges, dispositions, and sanctions imposed and served for most crimes.[7] However, such information is not as reliably recorded as arrests (see Cooper, Tompkins, and Marchand, 1979; Belair, 1985).[8] The FBI records were provided to Rutgers University over a two year period, after a long series of negotiations between project personnel, NIJ staff, and representatives of the Bureau.

Despite the fact that project staff submitted second and sometimes third requests for sample members for whom rap sheets could not be found, our final sample does not include three of every ten individuals found in the original sample. Reasons for non-receipt of rap sheets are difficult to clearly identify. In part the identification problem derived from the fact that a number of the offenders in the sample did not receive FBI identification numbers prior to sentencing.[9] As a result we had to use other identifiers, such as name, date of birth, and social security number to capture FBI files. Nevertheless, we were surprised at the number of records that could not be identified even after three separate requests to the FBI. We suspect that a number of offenders were purged from the files due to advanced age or receipt

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[7] Examples of excluded offenses are charges involving traffic violations and status offenses.

[8] A round table on data quality advised that dispositions are seriously underreported to the FBI, with estimates of between 30 and 50% of dispositions not reported. Arrests are apparently reported more reliably, although there is the potential for both underreporting and overreporting arrests. Both arrest and disposition information that is present is believed to be fairly accurate, however (see Belair, 1985).

[9] Forty-two percent of offenders in this sample did not have FBI identification numbers in the PSIs.

of death notices at the FBI, though there is much inconsistency in FBI rap sheet purging practices. For example, some of the rap sheets indicate that the offender has died, and others are for offenders who are over age 80, the point at which a rap sheet is by FBI procedures supposed to be purged.

Because we wanted to specify at the outset the sources of potential sample selection bias in our study, we examined the relationship between a series of background characteristics of offenders and the likelihood that they would be missing from our final sample (see Appendix B). Taking this approach we find systematic sample selection processes, which should be kept in mind when assessing the results of our study. Nevertheless, the relationships identified are generally consistent with our understanding of the collection of rap sheet information.

For example, we were less likely to receive rap sheets for the oldest defendants in our sample, reflecting, at least in part, the purging practices of the FBI Identification Bureau. Those with more prior arrests in the original study were more likely to appear in our sample as were those who received an imprisonment sanction for the criterion offense. While the criterion offense category is not significantly related to receipt of a rap sheet, district of conviction is. Interestingly enough, Illinois, which was most likely to be missing PSIs in the original study is also the district for which offenders are least likely to have identifiable rap sheets. Offenders from the district of Western Washington were most likely. Finally, women have a lower probability of having a

rap sheet that we could identify, even controlling for the seriousness of the criterion offense and the number of prior arrests. While we have no direct explanation for this result, it is consistent with the very strong gender effects found in other criminal justice processing decisions (for further discussion see Daly, 1989; Maher and Waring, 1990; Simon, 1975).

Data Collection

An extensive code book was developed in order to record criminal history information from the FBI rap sheets.[10] It captures aspects of criminal justice system processing, such as arrest dispositions, details of sentence imposed, characteristics of confinement sentences, and information regarding community supervision. All relevant dates (arrest, conviction, confinement, probation, parole) are recorded, as are all identification numbers that could be used in locating sample members in other data bases.

The code book underwent a number of revisions as researchers learned more about the rap sheets. First, FBI records came to the project in at least 5 different formats, necessitating a document that could accommodate these alternatives. Second, we wanted to have the flexibility of recording a number of charges and an infinite number of arrests, since this is essential to an accurate portrayal of the dimensions of criminal careers. Finally, a review of other research using rap sheets led us to conclude that

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[10] Rap sheet data were provided to the project in hard copy form and were coded at Rutgers University.

standards presently used for coding rap sheets are not sufficient for gaining the detailed view of criminal history that was essential to the success of our project.

To refine the code book, consultation was sought and received from Bureau of Justice Statistics staff who were studying the reliability of state versus federal rap sheets, and Dr. Jacqueline Cohen, whose work with Michigan and New York criminal history data were used as a framework for our own coding protocols. Project staff retested and revised the document at least four times before the final version was produced.

We found that there are often substantial gaps in criminal history information, for example arrests without dispositions or even prison terms identified without corresponding arrests. Sometimes information was not entered on the rap sheet in chronological order and often a series of entries, usually from different agencies, are included for what was in reality, a single crime. In order to reduce error caused by these complexities, it was decided that senior staff would review each rap sheet and delimit the events on it according to specific criteria and knowledge of the operation of the criminal justice system. The need for close inspection of each individual rap sheet supports our decision to code from the rap sheets rather than seeking machine readable information which is available for a portion of our sample. By coding all of the rap sheets, we not only gain consistency in coding decisions, but we also insure that the data are arranged in a format appropriate for the statistical analysis

of criminal histories.[11]

The rap sheets provide a somewhat different picture of official offending than does the PSI. While forty-three percent of our offenders are identified as having a prior arrest in the PSI for the criterion offense, only thirty-two percent are so identified by the FBI. We are not surprised by the difference here, since probation officers routinely contact local police agencies and receive information that might not be sent on to the FBI. It is important to note that in examining offenses omitted on the rap sheets we found that they were usually less serious events such as traffic violations, bad checks and failure to pay child support.

In reviewing the rap sheets for evidence of the criterion offense, a number of discrepancies in the description of that event were found. It was rare for a verified sample member to be missing a criterion offense on the rap sheet, suggesting that for convicted offenders, at least, federal level white collar crimes are consistently recorded. Not infrequently, however, the crime was labeled differently. For example, what was labeled in the Wheeler et al. data as a mail fraud might be identified on the rap sheet as a securities or bank fraud. The differences here may not be as significant as they appear at first glance, since many of the

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[11]In the course of delimiting arrest events, senior researchers also made clarifying statements to coders regarding the probable characteristics of each arrest and its disposition. This process developed after discussions with Bureau of Justice Statistics staff, who encouraged the application of knowledge about the criminal justice system to reading and coding FBI rap sheets.

offenders were charged under multiple statutes.

Tracking Deaths: Special Censoring Problems in a White Collar Crime Sample

A confusion of death with desistance from criminality could bias our models for tracking criminal careers, or assessing the impact of sanctions on those careers. Our sample members may have a greater risk of death due to ageing than would a street crime sample, though it is likely that those convicted of white collar crimes would not become the victims of violent deaths as frequently as is the case for street criminals. Given the average age of sample member, it is likely that a number would have died by 1990 when we began collecting our data. Using national life tables as a guide, there is a 10-year mortality rate of 13% for people who were 51 years old in 1979 (Shryock et al., 1980:432).

The FBI Identification Bureau informed us at the outset of our study that individuals who have died are purged from FBI criminal history data bases. However, our experience suggests that a number of administrative mistakes can be found in FBI records. For example, those who receive presidential pardons and who are over 80 years old are also supposed to be purged, yet we received automated rap sheets for some individuals who fit these criteria. More importantly, the FBI is alerted to death only when a Medical Examiner's office reports deaths to the FBI. Given the very large data base that the FBI maintains, and the fact that reporting of death to the FBI is likely to be sporadic, we sought to gain accurate information on mortality in the sample from a non-criminal

justice data source.

Such consistent compilation of deaths is available in the National Death Index (NDI). The NDI is a centralized listing of a set of identifying information on all decedents whose deaths have been registered with the states since 1979 (Department of Health and Human Services, 1981). The agency has developed a matching program which uses such information as name (using both exact and phonetic spellings), social security number, and date of birth which identifies individual decedents who may be sample members. Evaluation of this program indicates that it is successful at finding true matches and that its success rate improves with the quality of the identifiers submitted (Patterson and Bilgrad, 1985). Although the NDI has primarily been used for health research, the Index permits inter-agency requests from the Federal government for fact and date of death information [12].

The importance of identifying who in the sample had died and when death occurred was confirmed when we examined the NDI data for our sample. In total some fourteen percent of the sample had died between date of sentencing for the criterion offense and 1990 when we began data collection for the study. Of those offenders for whom rap sheets were not received a similar proportion had also died by this date. Our ability to take into account the date of death of these offenders in assessing the nature of criminal

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[12] Identification of death certificate numbers, which in turn provide access to cause of death information, requires a full application for NDI use. Such use needs to be justified on health-research related grounds which are not relevant for this particular research undertaking.

careers in our sample provides an important correction for the potential bias of confusing death and desistance in our study.

What Follows

The following chapters detail what we learned about the criminal careers of a sample of offenders sentenced under white collar crime statutes. We begin in chapter two by examining the relationship between official criminality and the social backgrounds of those we study. We find that dimensions of criminality, such as frequency or seriousness do provide a basis for distinguishing offenders. Moreover, such characteristics of criminal records help us to develop a typology of the types of people who commit white collar crimes. In chapter three we turn to the impact of sanctioning on future offending. Using a quasi-experimental design we provide solid evidence that the most serious legal sanction available for white collar crime -- imprisonment -- has little effect on the likelihood or form of reoffending. In chapter four we turn from the specific effects of sanctions, to an exploration of the other factors that may impact the criminal careers of those we study. Our findings here provide partial confirmation of our typology of offenders developed earlier, as well as evidence that major factors that influence common criminal careers also affect the criminal histories of white collar offenders.

Chapter 2

Crisis, Opportunity and Criminality

Those convicted under white collar crime statutes often have official records of prior criminal conduct (Weisburd, Chayet and Waring, 1990; Benson and Moore, 1992). These facts raise important empirical and theoretical questions about the types of people that commit white collar illegalities and the meaning of the criminal records that they acquire. For example, does the absence of more than one event in the criminal records of these offenders indicate that they have been basically law abiding or just that they have evaded investigators and prosecutors? What differences can be ascribed to those with only two events versus those with five or ten? Is it merely the vagaries of prosecution that distinguish among these offenders, or do the criminal records provide evidence of distinct categories of criminals that have committed white collar illegalities?

In this chapter we describe the nature of criminal histories of offenders found in our sample. Our interest is not merely in describing how many of our offenders reach particular thresholds in what has come to be seen as a criminal career, but in identifying as well the characteristics associated with those who do. Our task, accordingly, is not only to describe the official criminal

records of those in our sample, but to provide a context from which to develop an understanding of what those records actually mean.

One Shot Criminals

Our first conclusion regarding the criminality of our sample is similar to that reached by others who have examined those convicted under white collar crime statutes. A substantial proportion of the sample evidence offending either before or after the criterion offense that originally identified them for study. Overall almost half of the sample may be defined as "repeat offenders," meaning that the FBI rap sheet includes more than one arrest event on their record (see Table 2.1). This fact challenges the traditional image of white collar criminals, who have generally been assumed to be unlikely to have multiple contacts with the criminal justice system (e.g. see Edelhertz and Overcast, 1982; Coleman, 1992). Nonetheless, the recidivism rate of these offenders is much lower than that found in samples of the general criminal population.[13]

The distinction between repeat and one-shot criminals forms the first major division in our sample. But does this distinction help us to understand how the criminal careers of the offenders we study differ one from another? When we examine the basic

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[13] About two thirds of a probability sample of defendants for various felony crimes in New York City in 1971 had previous arrests, and almost one third had prior criminal convictions. (Vera Institute of Justice, 1977). For common criminals in the Yale sample, almost 90% had prior arrests, and 81% had prior convictions (see Weisburd et al., 1991:67).

Table 2.1 Percentage of Sample who are Repeat Offenders

	Percentage	Base N
One Shot Offender	51.7%	513
Repeat Offender	48.3%	480

Sample Breakdown	Percentage	N
Criterion Offense only	51.7%	513
Offense before Criterion only	16.3%	162
Offense after Criterion only	11.3%	112
Offenses before and after Criterion	18.6%	185
Time ordering of additional offenses unclear	2.1%	21
TOTAL	100.0%	993

demographic characteristics of these two groups (Table 2.2) our findings follow relationships found in studies of street criminals (Blumstein et al, 1986, 1988). The repeat offenders are a good deal younger (as measured by age of onset), and much more likely to be defined by the probation office as nonwhite. Surprisingly, gender does not have as large an impact. Women are only slightly underrepresented among repeat criminals in the sample.

When we turn to measures of the "social records" of these offenders, as they are recorded by Wheeler et al. (1988) from pre-sentence investigations prepared for the criterion offense, the distinctions between one shot and repeat criminals is reinforced. Moreover, these data suggest that the one shot criminals are much less likely to fit stereotypes of instability or deviance than would ordinarily be expected in a sample of convicted offenders (e.g. see Gottfredson and Hirschi, 1990), and these indicators reach back into the childhoods of those examined. For example, repeat offenders are much more likely to be identified as having problems in school and on average are less likely to gain either high school or college degrees (see Table 2.3). While one in twenty of these criminals are listed as having adjustment difficulties in school, this is true for only one in a hundred of those who are one-shot offenders. Similarly, almost one in five repeat offenders are identified by probation officers as evidencing poor school performance, a characteristic mentioned for only one in ten of those with one official criminal history event.

Though drug and alcohol abuse is not reported frequently by

Table 2.2 Basic Demographic Characteristics of Samples of One Shot and Repeat Criminals

	One Shot Offenders	Repeat Offenders
Age at Onset	40.9	29.1
Base N	(503)	(472)
Female	17.2%	13.9%
Base N	(503)	(480)
Non-White	13.7%	25.6%
Base N	(511)	(480)

Table 2.3 Educational Achievement and Performance (One Shot versus Repeat Criminals)

	One Shot Offenders	Repeat Offenders
Poor School Adjustment	1.2%	5.0%
Base N	(513)	(479)
Poor School Performance	10.3%	19.0%
Base N	(513)	(479)
Education Completed		
Base N	(513)	(476)
At Least High School	31.6%	21.1%
At Least College	13.9%	12.7%

probation officers at the time of sentencing for the criterion offense, repeat criminals are more likely to be defined as drug or alcohol abusers (see Table 2.4). Although such problems are rare, less than four percent of one-shot criminals were seen as having an alcohol problem, this was true for nine percent of the repeat criminals. While 17 percent of such offenders were identified as having some type of drug problem, this was the case for only six percent of those with only one rap sheet event.

Stability in residence, occupation and marriage provides perhaps the clearest view of the distinctions between these two categories of offenders (Table 2.5). Fifty-five percent of the one-shot criminals owned their own home at the time of the criterion offense. This was true for less than forty percent of the repeat criminals. While more than six in ten of the one shot criminals worked steadily in the five years before sentencing, this could be stated for only forty-five percent of the repeat criminals in the sample. Almost seven in ten of the one shot criminals were married and married only once. In contrast less than half of the repeat criminals were married just once and almost one in five had never been married.

Criminality has generally been associated with instability, whether in regard to employment (Glueck and Glueck, 1968; West and Farrington, 1973), substance abuse (Hindelang, Hirschi and Weis, 1981; Kandel, 1978), or living arrangements and circumstances (Burgess, 1980; Sampson, 1987). Indeed, as Michael Gottfredson and Travis Hirschi argue, (1990) criminals are people who evidence low

Table 2.4 Alcohol and Drug Abuse Indicators (One Shot versus Repeat Criminals)

	One Shot Offenders	Repeat Offenders
Base N	(513)	(480)
Alcohol Problems	3.7%	9.4%
Drug Problems	6.0%	16.9%

Table 2.5 Measures of Social and Economic Stability (One Shot versus Repeat Criminals)

	One Shot Offenders	Repeat Offenders
Own Home	54.9%	37.2%
Base N	(488)	(465)
Steady Employment	62.6%	44.9%
Base N	(502)	(439)
Marital Status		
Base N	(513)	(480)
Married Once only	69.2%	48.0%
Never Married	12.1%	19.2%

levels of self control, whether they are seeking short term gratification through crime, work, or leisure activities. Together our analyses suggest that almost half of the people in this crime sample depart from this view of criminality. What is most characteristic of our one shot-criminals is not their instability, but the degree to which their social records reflect lives of conventionality. But how then can we understand such "criminal careers" that consist of a single arrest event?

A simple explanation would be to argue that these are people who merely "strayed" beyond the ambiguous line that often separates legitimate and illegitimate activities. In this view it would be misleading to think of such people, without criminal intent, as criminals at all. We suspect that it is unlikely that so many in our sample would be prosecuted under criminal statutes with such ambiguous motivations (see Wheeler, 1992). To gain a more detailed portrait of the motivations of these offenders we examined the original pre-sentence investigations used by Wheeler et al. While these are not ideal documents in which to gain an understanding of the general factors that lead to criminality, the probation officers who completed these documents many times showed interest in the motives of defendants and the life histories that brought them to their day in court.

It is clearly the case that some individuals found in our sample of one-shot criminals do not have criminal motives as they are conventionally understood. For example, a small group of offenders in this sample are tax protesters, who express their

discontent with the government by refusing to fulfill their tax obligations. There are also some individuals who provide credible and often very sad descriptions of their unintentional involvement in criminality, or in some cases their contention that their activities were never crimes at all. Nonetheless, our readings of the pre-sentence investigations suggest that most of the one shot criminals in our sample do intentionally break the law. At the same time they do not, for the most part, fit common stereotypes of criminality. While their social records are not necessarily without blemish, they lead lives that give no indication, beyond the criminal acts for which they were prosecuted, that they would have contact with the criminal justice system.

The Crisis Responders

Many of these individuals might be termed "crisis responders," since they appear to be reacting to some form of financial distress when they decide to participate in criminality (see also Cressey, 1980; Zeitz, 1981). One construction contractor, for example, had participated in a straw bidding process that resulted in the government paying artificially high prices for repairs to repossessed homes. The probation officer noted that family and friends described the defendant as "being hard-working," a "self-made man" who was "successful in his endeavors in the field of construction." The probation officer also noted that the defendant's financial condition just before the commencement of the offense was "very bleak and very desperate." While the defendant

was married three times, his most recent marriage was still intact and had lasted for more than 20 years. Though he never earned a college degree, he had completed two years of college, and had been honorably discharged from the army. The probation officer argued that the sentence should be mitigated by "the defendants lack of a prior criminal record and by the positive elements of his past social history."

The extent to which many of those who own or manage businesses in our sample see their criminality as an aberration in an otherwise law abiding and conventional life is indicated by one defendant convicted of mail fraud relating to false promotion of land developments:

> All my business life and all my personal life, I don't believe I've ever set out or attempted to do one thing that would cheat anyone. I still believe this to this day that there is no way in my makeup that I could lead myself to believe that I was going to cheat anybody. I was forced by circumstances to make a decision as to whether or not to stay in business by obtaining funds improperly and I made the wrong decision.

Of course, such statements are self-serving in the context of a plea for a judge to mitigate the defendant's sentence. Nonetheless, they have a certain credibility often reinforced by a probation officers. The criminal acts do appear anomalous in the offenders' social records, and the fact that these offenders do not come to the attention of criminal justice agents (at least as indicated by arrests) in the ten years or more that follow this event reinforces their own accounts.

A number of the offenders who fall in this group are characterized as religious people who attend church often. One

ordained minister was the head of a non-profit organization that reached a financial crisis that was "solved" temporarily through the issuance of fraudulent securities. The defendant was characterized by the probation officer as a "very devoted Christian man" and a conscientious father to his three children. The defendant had a stable marriage and an excellent community reputation. His wife of twenty-five years worked in the governor's office.

While most of those we identify as crises responders fit traditional middle or upper-middle class stereotypes of conventionality, there are those who come from less established social positions. A bank teller for example embezzled $1200. While she initially denied the offense, she later told investigators that financial pressures had forced her to take the money. She and her husband were unable to meet all their obligations and she was threatened with eviction. While the defendant had an alcoholic father, her mother was described as a proud and forgiving person. She married at age 15 because of pregnancy, and had four children at the time of the offense. Neither the defendant nor her husband had graduated from high school. Nevertheless, she had a stable marriage that had lasted since 1960, was described as performing well in school, and lived for a number of years in her present community. Her husband was described by the probation officer as a "capable self-motivated and task oriented individual," and her offense was, in the eyes of the probation officer, "apparently an isolated incident." While there

are a number of indications of instability in the life of this offender, her actions were still an aberration in her social record. There was not a pattern of crises that would lead to criminal actions either before or after her embezzlement. Rather, a specific crisis led her to stray from what was an otherwise conventional, though at times troubled life.

Opportunity Takers

In reviewing the cases we identified a second group of offenders, who we term "opportunity takers." The crimes of these offenders also appear inconsistent with their social records. However, it was not crisis that led them to participation in crime, but the desire to take advantage of some specific social or economic opportunity. While these offenders are generally aware of the criminality of their actions, their business or community context, or a sense that the crimes were trivial, appear to have led them to depart from what otherwise were conventional and law abiding lives.

One defendant, for example, was faced suddenly in the mid 1970s with a potential for economic success that had eluded him his entire life. The defendant had worked eighteen years as a transfer clerk at the U.S. Post Office. When his location was closed and he was offered a transfer he decided instead to begin working full time as a stock trader, work he had dabbled in during his free time for two years. The defendant explained to the court:

> Business on Wall Street was in one of the biggest booms ever. People were making money hand over fist. I had never in my life seen anything like it. It was like a dream or something that I had read about in fiction novels. People around me kept telling me to jump on the so-called band wagon-- how easy it was to make money quickly. 'Buy new issues' they told me. 'Trade in any name'; they said... After working so many years and putting in 16-20 hour days, six and seven days per week, and seeing how people around me were making money so easily, I succumbed to their advice... All I knew was that for the first time in my whole life I was finally making money for my family...

A number of those who might be called opportunity takers were first generation Americans, many of them recent immigrants. For example, a Korean born civic leader was convicted for offering a $600 bribe to an IRS agent. The defendant had a law degree and honorary doctorate from a Bible college. He was active in civic activities and received a number of letters from public dignitaries. The offender explained his offense by noting:

> This discussion of giving a small gift to the agent at Christmas for concluding the audit by that time was the origin of my mistake... I have always been a law abiding citizen and have no prior criminal record whatsoever. In the future, I will do my best to be an excellent, law abiding citizen in my community.

Nonetheless, the probation officer notes that the defendant had been in the United States long enough to know better than to prepare fraudulent returns or to give money to a tax official. Moreover a taped conversation indicates that the defendant and his accountant knew that their actions were not legal. Rather, according to the probation officer, toleration of such practices were common in the Korean immigrant community at that time and thus the defendant was merely taking advantage of an opportunity that he

saw as an illegal but nevertheless acceptable business practice.[14]

This notion of acceptable business practice is often used as an explanation for criminality among those whose sole offense is an antitrust violation. Many of these defendants argue that they did not understand that what they were doing was wrong, though the probation officers often raise doubts about the true degree of their naivete. For example, one offender was involved in a conspiracy to fix prices for reinforcing steel materials. The defendant, a college graduate with a stable marriage, and three children, claimed that if "any conspiracy existed, I did not know of it or participate in it... I sincerely regret this and can assure the court it will not happen again." The probation officer argued on the other hand that the defendant "exercised and abused his management authority through ____'s superior market power in other areas to coordinate and police the conspiracy in this case." The defendant explains that he was taking advantage of what he thought were "ordinary business contacts."

Among these opportunity takers are some that seem to have been prosecuted for very trivial offenses, or for what are in essence relatively minor and technical violations of the law. One defendant, for example, who managed a number of well known performing artists, was convicted for using a "blue box" to make

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[14] The probation officer argued that a jail sentence in this case, given the defendant's community status and reputation, would encourage Korean community members to adhere to American legal and tax standards.

long distance phone calls. He claims that he "had no idea of how severe and serious a matter this is." Another defendant had bought stock in a company that he had been encouraged to begin by his extensive knowledge of the supply needs of his employer. His crime was his misrepresentation of his actions in a "conflict of interest statement." Nonetheless, as he notes in his personal statement, the net result of his actions was "a reduction in cost" to his employer. He argues that "in this situation, and throughout the entire course of my employment, my activities were consistent with the best interests of my employer."

One Shot Offenders With Repeat Offender Profiles

As our descriptions above suggest, most of those with only one arrest event on their rap sheets do not fit conventional stereotypes of criminality. Their crimes appear as aberrations on what are generally conventional social records. While they may have some elements of instability in their pasts, the crimes they commit do appear as one-shot events brought on by special opportunities or crises in their lives. But it would be misleading to argue that all of those with one event on their records fit this profile. One offender, for example, who had bribed an Immigration and Naturalization Service official, had no other prior or subsequent arrests listed on his rap sheet. Nevertheless, the probation officer notes that it is suspected that he had been involved in illegal acts for years. Another offender, who worked in a bank mail room and stole $250,000 worth of securities and

bonds, was described as attempting "to prove himself that he had the courage and intelligence to carry out the theft of securities from his employer." The PSI notes that the defendant provided inaccurate personal information, and while a good student and intelligent, and due to inherit $250,000 on his 21st birthday (he was 19 at the time of the offense), he had been suspended from school for stealing checks and mail from other students. The probation officer concludes that he had a history of stealing and lying.

Repeat Offenders

While the first major division in our sample is between one shot and repeat criminals, there are also important differences in the number of arrests found among repeat offenders in the sample (see Table 2.6). Slightly less than a third of the repeat criminals have only one additional rap sheet arrest event beyond that which describes the criterion crime. Another third have between three and five official criminal events, the lower threshold of which would classify them, according to Tillman (1987) as chronic offenders. In contrast to samples of convicted street criminals, in which a majority would evidence six arrest events or more (Vera Institute of Justice, 1977), slightly more than a third of these criminals reach what we define as the threshold for high rate offenders in the sample. As earlier, our first question is whether these distinctions in the criminal histories provided by the rap sheets reflect distinctions in any demographic or social

Table 2.6 Total Number of Arrests for Repeat Criminals

Number of Arrests	Percentage	N
2	32.3%	(155)
3-5	34.6%	(166)
6 or more	33.1%	(159)
TOTAL	100.0%	(480)

history characteristics as evidenced in the pre-sentence investigations for the criterion offense.

The clearest division among the repeat criminals can be found between the highest rate offenders and others, and this distinction is apparent for demographic as well as social history variables. For example, offenders with two or three to five arrests on their rap sheet, are likely to have a first arrest in their early thirties (see Table 2.7). In contrast, those with six arrest events or more, evidence a first arrest on average some ten years earlier. Though gender does not vary greatly among the three categories, and the proportion of non-whites in the lower frequency categories average around twenty percent, in the high rate category more than a third of the sample is non-white.

When we turn to measures of conventionality, the two lower frequency groupings are often distinguished one from another. For example, in the case of school performance, slightly more than one in five of the defendants in each of the higher rate offending categories are reported by the probation officer as having performed poorly in school (see Table 2.8). This was true for fifteen percent of those with only two rap sheet entries. Only one in a hundred of those with two events are identified as having adjustment problems at school. This was true for five percent of those with three to five rap sheet arrest entries and nine percent of those with six or more arrests. At the same time, there is little difference in the actual level of education found for those offenders with fewer than six arrests, though both of these groups

Table 2.7 Basic Demographic Characteristics of Repeat Criminals

	Number of Offenses		
	Two Events	Three-Five Events	Six or More Events
Age at Onset	33.5	30.1	23.7
Base N	(154)	(163)	(155)
Female	14.8%	17.5%	9.4%
Base N	(155)	(166)	(159)
Non-White	18.1%	22.9%	35.8%
Base N	(155)	(166)	(159)

Table 2.8 Educational Achievement and Performance of Repeat Criminals

	Number of Offenses		
	Two Events	Three-Five Events	Six or More Events
Poor School Adjustment	1.3%	4.8%	8.9%
Base N	(155)	(166)	(158)
Poor School Performance	14.8%	21.1%	20.9%
Base N	(155)	(166)	(158)
Education Completed			
Base N	(155)	(166)	(159)
At Least High School	43.8%	41.6%	25.7
College	16.1%	13.3%	8.8%

show more substantial educational achievement than offenders with six or more rap sheet events.

While there are small differences among the three groups in terms of alcohol abuse, the high rate offenders evidence a much higher rate of drug abuse than others (see Table 2.9). More than a quarter of the high rate offenders are reported to have been involved with illicit drugs in the pre-sentence investigations prepared for the criterion offense. This was true for only nine percent of those with two arrest events and about eight percent with three to five arrest entries on their rap sheets.

Turning to measures of marital, employment and residential stability, the distinctions among the three categories become sharper (see Table 2.10). While half of those with only two rap sheet events owned their own homes at the time of the criterion offense, this was true of forty percent of those with three to five arrests, and only twenty-two percent of those with six or more arrests. Almost sixty percent of the low frequency arrest group have stable employment histories. This was the case for about forty-five percent of those with three to five arrests, and less than a third of the high rate offenders in the sample. While the relationship for marital status is somewhat weaker, it follows this same pattern.

Those we term high rate offenders differ from the other repeat criminals in our sample on nearly every measure we examine, whether it reflects aspects of economic or social stability, or social background and achievement. Though drawn from a study of white

Table 2.9 Alcohol and Drug Abuse Indicators of Repeat Criminals

	Number of Offenses		
	Two Events	Three-Five Events	Six or More Events
Base N	(155)	(166)	(159)
Alcohol Problems	9.0%	8.4%	10.7%
Drug Problems	10.3%	13.9%	26.4%

Table 2.10 Measures of Social and Economic Stability of Repeat Criminals

	Number of Offenses		
	Two Events	Three-Five Events	Six or More Events
Own Home	50.0%	40.4%	21.7%
Base N	(488)	(488)	(488)
Steady Employment	59.5%	44.2%	29.6%
Base N	(439)	(439)	(439)
Marital Status			
Base N	(155)	(166)	(159)
Married Once only	60.0%	48.8%	40.9%
Never Married	14.2%	19.3%	23.9%

collar crime, the statistical portrait of these criminals does not depart very much from that which dominates studies of common criminality. Those with three to five arrests occupy an intermediate position between the high and low rate categories in regard to their social behavior, though in background they are much closer to the low frequency than high frequency offenders. Those with only two arrests appear only slightly less conventional than the one shot criminals we examined earlier.

This latter conclusion raises an important question for understanding the low rate criminals among the repeat offenders we examine. Can we assume that each additional arrest provides significant insight about these criminals? If an arrest is indicative of some larger rate of offending, as is often assumed in street crime (Schneider and Wiersema, 1990; Sherman and Glick, 1984), then we might conclude that the distinction between one-shot and "two-shot" criminals is a substantive one. If on the other hand, this group is comprised of people very similar to the "crisis-responders" and "opportunity-takers" we described earlier, we are led to question the conclusion that the white collar crime that brought them into this sample was an aberration on an otherwise conforming social record.

Some insight into this problem can be gained by looking in more detail at the types of crimes that comprise the second arrest event for these criminals (see Table 2.11). In contrast to the high rate offenders, who are more likely than not to have been arrested at one time or another for a violent crime, it was very

Table 2.11 (Continued) Arrest History by Type of Crime for Repeat Criminals (Excluding Criterion Offense)

Number of Events	Arrests for WCC Crime	Percent	Arrests for Other Crime	Percent
2	52	20.7%	76	21.1%
3-5	82	32.7%	134	37.2%
6 or more	117	46.6%	150	41.7%
Total Events	251	100.0%	360	100.0%

Table 2.11 Arrest History by Type of Crime for Repeat Criminals (Excluding Criterion Offense)

Number of Events	Arrests for Violent Crime	Percent	Arrests for Drug Crime	Percent
2	17	14.5%	7	8.7%
3-5	36	30.8%	16	20.3%
6 or more	64	54.7%	56	71.0%
Total Events	117	100.0%	79	100.0%

unlikely for the other event of those with only two rap sheet entries to be a violent crime.[15] It was even less likely for these offenders to have committed a drug crime as their second event.[16] Only 7 in 155 of these "two shot criminals" were ever arrested for a drug related crime. This may be contrasted with fifty-six of the 159 high rate offenders. One in three of these lower frequency repeat offenders were identified as committing a white collar crime leading to their second arrest. This was true for 74% of the high rate offending category. However, we were struck by the less serious nature of many of the remaining events recorded on the criminal records of those with only two arrests. For these repeat criminals, the other arrest event after appears as an almost chance encounter with the criminal justice system.

In the case of one offender convicted of an anti-trust offense in 1977, there is also a 1974 arrest for drunk driving. The offender, who was born in 1936 was honorably discharged from the navy as a petty officer 3rd class in 1960 and had been employed steadily from that time until the PSI had been prepared. There is no evidence of a subsequent arrest, nor does this defendant appear in the national death index files that we examined. Looking at the criterion crime, this file reads like other crisis responders in our one-shot offender sample. Indeed, the probation officer

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[15] The violent crime category includes homicide, kidnapping, assault, and robbery.

[16] This category includes all dangerous drug offenses (covering amphetamines to synthetic narcotics), as well as driving under the influence of drugs. This category does not include alcohol offenses.

remarked that the "defendant's contention that his agreement to enter into this collusion was because of a literally life-threatening situation for his company appears credible." It would be difficult to link the DWI arrest to any pattern of deviance in this offender's life history, especially given the fact that drunk driving was viewed as a less serious crime at that time than it is now. It appears as one of those momentary departures from conventionality that afflict most conventional citizens.[17]

Two cases, involving assaults that were eventually dismissed, also suggest a similar pattern. In one, an alderman who was convicted of fraud and false statements in 1975, was also arrested subsequently in 1983. In the PSI for the criterion offense the defendant was described by his pastor as a frequent church attender who would go out of his way to help other people. He had written a book on the history of his area of the city and was described in positive terms by the editor of the local newspaper. Describing his involvement in crime, the defendant explains:

> I was one of the few alderman who served on a full-time basis with no outside employment or income, and because of my desperate financial need to support my family in addition to maintaining a full-time office I succumbed to the temptation of accepting income which I failed to report on my income tax returns... I have never been in trouble before and I just got in over my head.

The second case, is similar to that of opportunity takers earlier in the chapter. This offender had utilized a blue box to avoid paying phone bills and was convicted of mail and wire fraud.

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[17] See self-report studies by Elliot and Ageton, 1980; Hindelang, Hirschi and Weis, 1975; 1979; Reiss, 1975.

There was no evidence of any special crisis. He had read several articles about blue boxes and decided to try it. A self employed businessman, he gained a B.A. on scholarship in 1971 and had an intact marriage. There is no evidence, beyond the dismissed assault charges when the defendant was sixteen, of involvement with the criminal justice system either before or after the criterion crime.

We suspect that most of the cases that fall in this low frequency category are similar to those above, in that there is little evidence of a "criminal career" as it is usually understood. The second events on these records appear almost as chance occurrences, usually not of a very serious nature, often reflecting experiences that are common to many Americans who are never convicted of a crime at all. Nevertheless, there are some offenders in this group that provide a much less conventional portrait. It is not so much that they differ in social background from those criminals we have already described, but that they appear less respectable and less stable. There is more of a pattern to their criminality.

In many of these cases, the second event is a white collar crime, and the probation officers give the impression that the defendants are hiding aspects of their financial situation or of their past conduct. These are not people who are responding to a crisis, but neither are they individuals whose criminality appears a sharp departure from lives of conventionality. They appear not as opportunity takers, but as "opportunity seekers." Their crimes

are more compatible with their social histories, and one can begin to discern a pattern of behavior even in the pre-sentence investigations for the criterion offense.

Opportunity Seekers

While those we describe as opportunity seekers are, as described above, found among those with only two rap sheet arrests, they are much more common among people in our sample with three to five arrest events.[18] There are many people here who do not fit traditional stereotypes of criminality, but nonetheless turn more than once or twice to criminal behavior. Such people often defend their behavior at the time of the criterion offense by arguing that a specific crisis or special opportunity led them to depart from otherwise conventional lives. However, the probation officers generally inform the court that there is something not quite believable about the defendant's story.

In one case, for example, a defendant convicted of false claims to a bank, argued that he was "in a financial bind and needed money desperately." He noted, that "I was about to lose my house and everything. I am sorry for what I have done but at the time, I saw no other way out." In contrast, the probation officer

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[18] We should also note that some of those with three arrest events appear more similar to one and two shot offenders than those we describe below. For example, a bank teller convicted of embezzlement, had two prior arrests on her rap sheet. Both were for driving while intoxicated three years prior to this criterion offense. The defendant was forty three at the time, and it appears that both arrests were related to stress induced by the death of her son during military training exercises.

argues that the "[D]efendant is not prone to criminal behavior but is miserably lacking in scruples and moral values and not above committing criminal acts to perpetuate his life style." Like many of those who fall in this grouping, the defendant neither fulfills images of respectability and success nor those of a life which is defined by low self-control and deviance. While the defendant dropped out of high school after performing poorly, he was honorably discharged as a corporal from the marines in 1966. After his discharge he completed two years of college as an average student. He was born out of wedlock, did not know his father, and was raised by a great aunt. Nonetheless, the defendant had a stable marriage of nine years at the time of the criterion offense. He held ten different jobs in just ten years, but his employer at the time the PSI was completed, a home shopping service, considered his performance to be above average.

In another case, a defendant who completed a B.S. in engineering from a well known state university, operated a fraudulent investment scheme from his home which realized $425,000 from 62 investors. Although he did not pay interest, he sent investors statements which lulled them into a false sense of security. The defendant had a prior civil violation involving the issuance of securities without a permit, and the rap sheet shows three subsequent arrests for grand theft in the early 1980s. While this record does not necessarily provide evidence of specialization in white collar crime, here as with many of the offenders that fall in this category, one finds relatively few arrests for violent or

drug crimes. Such criminals may be seen as quite willing to violate the law, but they also evidence a substantial degree of self control and delay of gratification. This offender, for example, has a college education, and conducted this scheme out of companies that he had created in the late 1960s. It may be as his ex-wife claimed that he has difficulty in assessing right and wrong in business matters, but his life is not generally typified by instability and deviance.

One group of opportunity seekers follows this pattern, but is more likely to be found among the high rate offenders than others. These criminals may be seen as career flim-flam artists. One offender, for example, shows nine arrests between 1950 and 1987, including five arrests for mail fraud, one for "flim-flam", one for theft, one for embezzlement and one for grand larceny. The probation officer notes that the available evidence suggests "the defendant is an individual who has complete disregard for any person's financial rights excepting his own." In another case, a defendant had six arrests between 1960 and his death in 1983. These include false practice of law, bank fraud, two "false pretense" arrests, an arrest for false statements to a bank, and a trespassing violation. While the defendant claimed that his wife had rehabilitated him, and stopped him from drinking, the probation officer notes that he lied extensively about his educational and military achievements in his pre-sentence interview.

Deviance Seekers

Despite the presence of those we have described as opportunity seekers among the high rate offenders in our sample, most high rate offenders fit fairly easily into conventional stereotypes of criminality. These are people with social and criminal records indicating instability and low self control. Their white collar crime prosecutions present only one part of a mixed bag of criminal conduct. For example, one defendant, whose criterion crime was mail fraud, had twelve arrests between 1966 and 1988. These ranged from white collar related crimes such as fraud, forgery and theft of securities, to aggravated arson, a weapons offense, and an arrest for distribution of cocaine. The defendant's mother was institutionalized when he was young, and he was brought up by his father and a housekeeper who his father eventually married. The defendant was divorced once and was separated at the time of the criterion offense and waiting to marry a women he was living with. While the defendant claims no addictions, his family revealed a serious drinking problem. The probation officer remarked that the defendant was "an unsettled, poorly adjusted young man of low normal intelligence."

Often a white collar crime on the records of the offenders who we label "deviance seekers" are of a relatively inconsequential type. One defendant with twelve arrests between 1966 and 1988, was convicted for submitting a false claim regarding travel reimbursement for drug treatment. In this case a white collar crime appears as an aberration on the defendants criminal record,

which includes burglaries, petty thefts, probation violations, drug crimes, and grand larceny. In another case, a women embezzled less than $100 of bank funds as part of a larger scheme to obtain information and money from accounts in a bank. She came from a troubled home, and left high school because of a pregnancy. While four of her six subsequent arrests were for petty white collar crimes, such as distributing counterfeit cards and forgery, she has two prior arrests for prostitution and a subsequent arrest for petty theft and providing a false ID to a police officer.[19]

These cases have a familiar ring for those who study crime, and the probation officers often use language that is ordinarily associated with common criminality when describing these offenders. For example, one criminal, who had nine arrests between 1952 and 1986, including rape, larceny, burglary and battery, is described as follows by the probation officer:

> Defendant verbalizes his desire to cooperate but never does. It is thought that little can be accomplished in this case, in as much as the defendant does not indicate any anxiety or motivation to change his attitude at this time...defendant seems to be an individual who is easily frustrated and discouraged. It also appears that he has very limited intellectual capacity, as well as considerable emotional problems.

Though forty years old at the time of the criterion offense this summary could easily be applied to a teenage street criminal who

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[19] We found that it was more difficult in the case of women offenders to differentiate those who we define as opportunity seekers and those who fit more easily into common stereotypes of criminality. The limited nature of this offender's record might be looked at as somewhat similar to the former category of offenders, at least in the period subsequent to the criterion offense. Our problem here reflects in part the limitations of common crime opportunities for women.

comes before the docket for sentencing in a state court.

Conclusions

A number of people who are convicted of white collar crimes are very similar to traditional images of criminality, nevertheless most of those who fall in this white collar crime sample do not fit easily into conventional understandings of criminality or criminal careers. For many, the notion of a career in crime belies what is most important about their involvement in the criminal justice system. Such an involvement is often an aberration on a record that is otherwise marked by conventionality and not by deviance. These criminals are described as "opportunity takers" and "crisis responders", and are very different from offenders who ordinarily dominate the study of criminality, though we suspect that they can be found as well among those who commit more common types of crime. They pass across the boundaries of criminality because of some real life crisis, or some special criminal opportunity. Besides these indicators of criminality, their lives are not very different from law abiding citizens.

Many of those with more lengthy criminal records in our sample also depart from conventional images of criminality. We define these offenders as opportunity seekers and distinguish them from more common criminals by the fact that they evidence many characteristics of conformity and stability that are seldom associated with criminality. At the same time, their social and criminal records suggest that their crimes are not aberrations on unblemished records. It is part of a pattern of behavior often

reaching into childhood, and sometimes leading to a lifetime of schemes and frauds.

Chapter 3

Do Prison Sanctions Deter?

Sutherland's ground breaking discussions of white collar crime are best remembered for their challenge to the dominant etiological theories of his day. However, Sutherland was equally concerned about the relatively lenient treatment that white collar criminals received in the American justice system of the 1930s and '40s (see Sutherland, 1949). Over the last two decades, the question of sanctioning of white collar criminals has once again became a central research and public policy concern. While there is much debate over whether or not white collar criminals are treated more leniently than others (see Weisburd et al., 1991; Weisburd, Waring and Wheeler, 1990; Benson and Walker, 1988; Hagan and Parker, 1985), the assumption that prison terms are too rarely imposed on white collar criminals has played an important role in the development of American sentencing policy. The United States Sentencing Commission, for example, has taken as one of its tasks to increase the severity of sentencing for white collar criminals and in particular, to increase the likelihood that such offenders are sentenced to prison (U.S. Sentencing Commission, 1987).

In this chapter we examine the impact that this emphasis on

imprisonment is likely to have on those convicted of white collar crimes. Should we expect that present punitive policies will deter offenders from future criminal behavior? Or might imprisonment "backfire" and increase the likelihood that individuals convicted of white collar crimes will again be processed in our criminal justice system? Given the finding that many people convicted of white collar crimes recidivate, we are also concerned with how prison sanctions influence the nature of a criminal career. Do they impact upon the seriousness or frequency of the subsequent crimes that an offender commits?

The Effects of Imprisonment: Methodological Concerns

In the analyses that follow in this chapter we focus primarily on the impact that the presence or absence of a prison sanction has upon subsequent criminality. Our decision not to examine the impact of length of sentence was due in part to the difficulty we encountered in accurately defining time served. For us, as for other researchers who examine the federal system before imposition of the guidelines, neither the courts nor other federal agencies provide a precise method for tracking offenders through the criminal justice system (Criminal Justice Information Policy, 1988).[20] Because of possible reductions in prison sentence through

[20] When we drew information from the FBI, the Bureau of Prisons, and the Federal Parole Bureau, we were not able to establish with any degree of certainty the time in prison offenders had actually served. In the case of the rap sheets we found that time of release was seldom reported, though it was much more likely for an entry to be made when an offender entered a federal correctional facility. While the Bureau of Prisons has more

either good time credits or parole release, imposed sentences also cannot provide an accurate estimate of time served.[21]

Irrespective of the difficulty of gaining information on the length of served prison terms in our sample, our decision not to examine the impact of length of prison upon recidivism is consistent with other major criminal career studies (e.g. see Blumstein et al., 1986; Blumstein et al., 1988). In our sample, as in most street crime samples, relatively few offenders are sentenced to very long prison terms and thus there is little basis upon which to make comparisons of the experiences of the offenders examined. In our sample about half of those sentenced received a prison term (see Table 3.1). Of these, less than half had been sentenced to more than six months imprisonment and less than 40% to a prison term of more than a year. Given the fact that prisoners in the federal system were unlikely to serve more than one third of

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accurate information on prison stays, during the period of time we studied computerization was just beginning and information on imprisonment is often missing for our offenders. Moreover, because different identifiers were used by different federal agencies, and some of our offenders served special sentences in local institutions, even those offenders who could be tracked are not accurately identified by the Bureau. Finally, parole records are accurate, but they fail to provide information on those offenders who did not come under the Parole Commission's jurisdiction.

[21]We could not use length of sentence as a measure of time served because it was common for prisoners to be released before the expiration of their sentence either because of credits earned for good behavior or because of discretionary early release policies supervised by the United States Probation Department. While the federal judiciary has established a "real time" sentencing system with the implementation of the U.S. Sentencing Guidelines, for offenders sentenced during the period examined by Wheeler et al., (1982) there is often little relationship between the length of prison sentence imposed and that served by defendants.

Table 3.1 Prison Term Imposed for the Criterion Offense

	Percentage
Offenders Receiving Prison Sentences	49.4%
Base N	(993)
Length of Term Imposed for Sentenced Offenders	
Base N	(430)*
6 months or less	53.0%
6 months and 1 day - 1 year	8.8%
1 year and 1 day - 3 years	23.7%
3 years and 1 day - 5 years	7.2%
More than 5 years	7.2%

* Length of sentence data was not available for 48 offenders.

their imposed sentence before the imposition of the U.S. Sentencing Guidelines,[22] we believe that the basis for any comparisons of length of sentence are even more constrained in our sample than in the case of more general criminal career studies (e.g. see Schmidt and Witte, 1988).

The fact that we could not identify how long those sentenced to prison actually served meant that we also could not take into account how such prison penalties affected the time that offenders were "at risk" to recidivate in our sample. Even recognizing that white collar crimes, such as mail and wire fraud, can be committed by an offender in state custody,[23] it is clear that the risk of reoffending is different for those in prison and those not.

The actual biases that develop from the absence of accurate information on time served for the criterion offense in our sample is likely to be small. As is illustrated in Table 3.2 it takes, on average, a very long time for offenders who will reoffend in our sample to gain a subsequent rap sheet entry. Only a quarter of those in the sample who reoffend do so within the first year of follow up. Of the 297 individuals in the sample who fail in the follow-up period, half take more than three years to gain a subsequent rap sheet entry. This may be compared with studies of

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[22] This estimate was developed by the U.S. Sentencing Commission (U.S.Sentencing Commission, 1991, Volume II).

[23] In a remarkable case from the sample, one false claims swindler submitted fraudulent tax statements for himself in the name of Michael Rodent (also known as Mickey Mouse) and seven dependents: "this offender submitted as many as eight-five false claims to the IRS for as much as $77 thousand per year". (Weisburd et al., 1991:34).

Table 3.2 Proportion Failing by Time Period (for Recidivists)

Time to Failure	N	Pctg. Failing in Time Period	Cumulative Percentage
Less than 1 month	15	5.1%	5.1%
1 month - 6 months	30	10.1%	15.2%
6 months and 1 day - 1 year	36	12.1%	27.3%
1 year and 1 day - 2 years	44	14.8%	42.1%
2 years and 1 day - 3 years	28	9.4%	51.5%
3 years and 1 day - 5 years	62	20.9%	72.4%
More than 5 years	82	27.6%	100.0%
TOTAL Number of Failures	297		

street criminals which often find reoffending likely within a year of follow-up (Visher and Linster, 1990). Overall, for this sample, time served for the criterion offense is likely to account for a very small proportion of the overall time at risk for offenders who do reoffend.

Comparing Recidivism For Similar Offenders

Our first problem in assessing the impact of prison sanctions was to arrive at a method that would allow us to fairly compare offenders sentenced to prison to those who did not receive a prison sanction.[24] The simplest solution would have been to examine recidivism among the two groups in our sample. However, it is very likely that those sentenced to prison are dissimilar on important characteristics that might influence subsequent criminality from those who did not receive a prison penalty. For example, prior analyses of our data suggest that judges are more likely to sentence to prison those offenders who commit more serious crimes or those who show evidence of prior arrests (see Weisburd et al., 1991). Clearly a simple comparison of subsequent criminality for those who received a prison sanction and those who did not would be hindered by the fact that the offenders in each of these groups would be expected to differ in very significant ways.

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[24] Our analyses are based on imposition of prison sentence and not whether an offender had actually served that sentence. As noted in footnote 3 supra we could not identify with certainty the length or type of prison sanctions for those in our sample.

There are two general methods for correcting sample estimates so that valid comparisons can be made in studies such as ours. One choice is to use statistical controls which allow the researcher to isolate the impacts of specific factors while controlling out for confounding variables included in the analysis. We use this approach in Chapter 4 when we attempt to identify potential factors other than prison that influence subsequent criminality. A second approach is to use a quasi-experimental design. Though this method is not as reliable as true experimental designs,[25] as Farrington, Ohlin and Wilson note "quasi-experiments are far more convincing than correlational analyses and can be carried out in many instances when randomized experiments cannot" (1986:91).

In the following analysis we use a quasi-experimental design in which we compare groups of offenders that are alike in terms of factors that led to their receipt of an imprisonment sanction. In order to identify similar defendants we began with a multivariate regression model that identified the factors influencing whether defendants were sentenced to prison. We then use this model to calculate, for each offender we study, the predicted probability of going to prison, irrespective of whether that particular offender was actually sentenced to prison. This provided us with a method for identifying similar offenders who were sentenced differently by

[25] The only way to ensure internal validity in a causal study, the technical term for the problem examined here, is to conduct a randomized experimental design (see Farrington et al., 1986; Weisburd and Garner, 1992). In a recent review of experimental research in criminology, not a single study which randomly allocated imprisonment sanctions was identified (see Weisburd, Sherman and Petrosino, 1990).

the judges they faced.

In developing our estimates of the predicted probabilities of imprisonment for offenders in the sample, we draw from a model of sentencing behavior developed for this data set by Wheeler, Weisburd and Bode (1982; see also Weisburd, Chayet and Waring, 1990). Their model took into account twenty-one variables including such legally relevant indicators as prior record, type of conviction, statutory category of the offense, and the district of conviction, and obvious social dimensions: sex, race, age, education and social status. Going beyond prior sentencing studies, they also controlled for both "act-related" (e.g. amount of victimization, geographic spread, type and number of victims, and offense complexity) and "actor-related" (role in the offense, cooperation with prosecution, remorse over the crime, and social record) variables often mentioned by federal judges (see Wheeler, Mann and Sarat, 1988). We estimate a reduced logistic regression model including only the significant parameters ($p<.05$) for our sample cases (see Appendix C). This model, which categorized seventy-two percent of the cases correctly (an increase of thirty-three percent over the base rate (54%)),[26] was then used to develop the individual predicted imprisonment scores for our offenders.

Examining the distribution of these scores for those who had a prison sanction imposed and those who did not, we found that treatment and comparison groups closest in their mean probability

[26] For this analysis offenders were placed in the "predicted prison category" if their probability estimate of imprisonment was greater than fifty percent.

estimates were gained by dividing our sample into three sub-samples.[27] The first (A) includes offenders with a relatively low probability of imprisonment ($p \leq .40$). The second (B) includes only those offenders with a relatively high predicted likelihood of receiving an imprisonment sanction ($p > .60$). The final group (C) represents a moderate probability category ($.40 < p \leq .60$).

As Table 3.3 illustrates, dividing the sample up in this manner provides treatment and comparison groups with a fairly large number of cases that are relatively close in their overall mean estimates of probability of imprisonment.[28] Of the three sub-samples, the "moderate" category has the closest estimates, with both treatment and comparison groups showing an average probability of fifty percent. The "low probability" category, with a difference of .07 between the treatment and comparison groups, has the largest difference in mean probability estimates.

When we examine specific variables that might impact upon subsequent criminality we find strong support for this basic

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[27] If the model used to create the three groups meets the overall assumptions of regression analyses, then within each value of **Σxb** the assignment of an observation to the prison or non prison group should be random (Lewis-Beck, 1980). We assume that within somewhat larger ranges of predicted probability there would also be roughly random sorting of offenders into prison and non-prison groups.

[28] This issue of the size of the groups was important in part because we wanted our three comparisons to provide powerful statistical tests of the questions we examined. Using Cohen's (1977, 1988) definition of moderate effects and a .05 two tailed significance test, the size of our sub-samples would provide a statistical power level above .80--a level that both Gelber and Zelen (1985) and Cohen (1988) suggest for experimentation.

Table 3.3 Mean Probability of Imprisonment by Offender Groupings

	Number of Cases	Mean Probability of Imprisonment
Low	455	
Prison	91	.27
No Prison	364	.20
Moderate	216	
Prison	120	.50
No Prison	96	.50
High	318	
Prison	240	.78
No Prison	78	.73

approach to the creation of equivalent groups. Looking at gender, race, class, drug use, prior arrests, marital status, type of residence, district and type of conviction for the criterion offense, and employment history across the three probability sub-samples we find that the selection procedure we employed created very similar prison and no prison comparison samples. Indeed as is evidenced in Table 3.4 in only one of the thirty comparisons that were examined (gender in the low probability sub sample) was there a statistically significant difference between the prison and no prison samples.[29]

Time to Failure

We begin our analysis by examining how the prison and no prison comparison groups differed in terms of their likelihood of "failure" during the follow-up period. Failure is defined in our analysis as any subsequent rap sheet entry for a new event, usually an arrest, but sometimes evidenced in our data by a prison or jail entry (with no arrest noted on the rap sheet) or a probation or parole violation (in which a finger print record was transferred to the FBI).

As is apparent from Table 3.5 there is very little evidence of deterrence for the prison sample in terms of the likelihood of

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[29] We do not believe that this one difference warrants any change in the weights of our analysis, as suggested by Berk (1987). Our decision here derives in part from the fact that the gender difference is relatively small. Further, because the result is gained from a series of thirty significance tests which would be expected, on average, to yield one significant result just by chance.

Table 3.4 Comparison of Sample Characteristices by Prison Sentence Imposed and Offender Groupings

	Low		Moderate		High	
	P	NP	P	NP	P	NP
Female	27.8%	40.4%*	7.8%	1.5%	2.1%	0.0%
White	68.4%	72.3%	79.4%	77.9%	81.3%	85.7%
Married	55.1%	54.5%	51.5%	61.8%	67.2%	66.7%
Own Home	52.1%	40.9%	40.7%	40.3%	56.0%	64.3%
Steadily Employed	51.4%	55.1%	49.5%	44.4%	51.2%	58.0%
Alcohol Problems	5.1%	4.6%	8.8%	11.8%	8.9%	7.1%
Drug Problems	5.0%	10.0%	14.7%	14.7%	17.2%	14.3%
Prior Arrests						
None	65.8%	70.4%	49.0%	57.4%	33.9%	35.7%
One	10.1%	16.9%	21.6%	16.2%	15.6%	17.9%
2 - 5	21.5%	10.8%	19.6%	17.6%	24.5%	17.9%
6 or more	2.5%	1.9%	9.8%	8.8%	26.0%	28.6%

P - Prison
NP - No Prison
* Statistically significant at $p < .05$ level.

Table 3.4 (Continued) Comparison of Sample Characteristices by Prison Sentence Imposed and Offender Groupings

	Low		Moderate		High	
	P	NP	P	NP	P	NP
Class						
Worker	60.8%	67.7%	59.8%	48.5%	35.9%	32.1%
Owner	13.9%	15.0%	17.6%	23.5%	28.6%	32.1%
Officer	3.8%	3.5%	5.9%	10.3%	8.9%	12.5%
Manager	11.4%	8.5%	5.9%	10.3%	13.0%	3.5%
Sole Proprietor	10.1%	5.4%	10.8%	7.4%	13.5%	19.6%
Offense Category						
Bank Embezzlement	20.3%	35.8%	19.6%	16.2%	8.3%	8.9%
Tax Fraud	6.3%	5.4%	27.5%	20.6%	30.2%	30.4%
Credit Fraud	17.7%	15.0%	15.7%	17.6%	12.5%	17.9%
Mail Fraud	15.2%	12.7%	14.7%	23.5%	24.0%	17.9%
Securities Fraud	3.8%	0.4%	2.0%	2.9%	9.9%	8.9%
False Claims	21.5%	16.2%	14.7%	14.7%	13.0%	12.5%
Bribery	10.1%	9.6%	5.9%	2.9%	2.1%	3.6%
Antitrust	5.1%	5.0%	0.0%	1.5%	0.0%	0.0%

P - Prison
NP - No Prison

* Statistically significant at $p < .05$ level.

Table 3.4 (Continued) Comparison of Sample Characteristices by Prison Sentence Imposed and Offender Groupings

	Low		Moderate		High	
	P	NP	P	NP	P	NP
District						
Southern New York	22.8%	20.8%	16.7%	23.5%	13.0%	12.5%
Maryland	3.8%	9.6%	14.7%	10.3%	12.0%	1.8%
Northern Georgia	15.2%	14.2%	13.7%	10.3%	10.9%	12.5%
Northern Texas	12.7%	12.7%	9.8%	14.7%	24.5%	19.6%
Northern Illinois	13.9%	7.3%	11.8%	17.6%	15.1%	16.1%
Central California	22.8%	19.2%	17.6%	13.2%	14.6%	23.2%
Western Washington	8.9%	16.2%	15.7%	10.3%	9.9%	14.3%

P - Prison
NP - No Prison

* Statistically significant at $p < .05$ level.

Table 3.5 Failure (Based on Arrests) Post Criteron Offense by Prison Sentence Imposed and Offender Groupings

	Low		Moderate		High	
	P	NP	P	NP	P	NP
Failure	30.8%	26.5%	40.6%	27.9%	39.9%	37.0%
No Failure	69.2%	73.5%	59.4%	72.1%	60.1%	63.0%

P - Prison
NP - No Prison

failure in the follow-up period. In the group that was defined by a high probability of imprisonment, the prison sample had a failure rate of about forty percent and the no prison sample had a rate of thirty seven percent. In the low prison group, the results are very similar, though the base rate of failure for both samples is much lower. Thirty-one percent of the prison sample recidivated in the follow-up period, as opposed to twenty-seven percent of the no prison sample. In the moderate probability of imprisonment category, there are larger but not statistically significant differences between the samples. But the direction of this relationship does not suggest a deterrent effect for imprisonment. Forty-one percent of the prison sample failed in the follow-up period contrasted with twenty-eight percent of the no-prison sample.

Turning to "time to failure" for those who did recidivate during the follow-up period, our findings are somewhat contradictory. In the case of the high probability group it appears as if prison tends to slow down the rate at which offenders fail.[30] For example, only a third of the prison sample who fail in the follow-up period do so in less than two years (see Table 3.6). This contrasts with more than forty percent of the no prison sample. In both groups more than two thirds of those who fail do so within five years.

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[30] Of course, this effect may be caused by a reduction in the "time at risk" of offenders who were imprisoned. We suspect, however, given the relatively short prison stays involved (see Table 3.1) that imprisonment would have little impact on the statistics provided here.

Table 3.6 Number of Failures for Offenders by Prison Sentence Imposed and Offender Groupings

	Low				Moderate				High			
	P		NP		P		NP		P		NP	
	Base N	Cum. Pctg.	Base N	Cum. Pctg.	Base N	Cum. Pctg.	Base N	Cum. Pctg.	Base N	Cum. Pctg.	Base N	Cum. Pctg.
Less than 1 month	1	4.3%	2	3.1%	2	5.0%	1	5.0%	4	6.0%	0	0.0%
1 month - 6 months	7	34.9%	7	14.0%	2	10.0%	2	15.0%	5	14.1%	2	10.5%
6 months and 1 day to 1 year	3	47.7%	9	28.1%	5	22.5%	2	25.0%	8	25.4%	4	31.6%
1 year and 1 day to 2 years	3	60.7%	12	46.9%	9	45.0%	3	40.0%	7	35.2%	2	42.1%
2 years and 1 day to 3 years	2	69.4%	7	57.8%	4	55.0%	4	60.0%	5	42.3%	1	47.4%
3 years and 1 day to 5 years	3	82.4%	12	76.6%	9	77.5%	3	75.0%	17	66.6%	3	63.2%
More than 5 years	4	100.0%	15	100.0%	9	100.0%	5	100.0%	24	100.0%	7	100.0%
TOTAL	23		64		40		20		71		19	

P - Prison
NP - No Prison

In the low probability grouping, prison seems to speed-up rather than slow down failure. Almost half of those in the prison sample who recidivated in the follow-up period did so within one year. Less than a third in the no prison sample did so. Half of the latter group did not fail until twenty seven months into the follow-up period. In the moderate probability category, the rates of failure are similar for both the prison and no prison samples.

These findings overall suggest that the impact of prison on recidivism overall is small, and that when an effect exists it is likely to lead to a "backfire" rather than a deterrent impact. There is some evidence in the high prison sample of a slow-down in the speed of time to failure, though the opposite result was found in the low probability prison and no prison samples.

One problem in interpreting these data is that we have assumed so far that everyone in our sample is free to fail during the entire follow-up period. As discussed in our introductory chapter, however, a number of the offenders in our sample died during the follow-up period and thus cannot be seen at risk of failure after their deaths.[31] Conversely, our discussion so far assumes that those who have not failed in the follow-up period will never fail. They are deemed successes. However, it is possible, and even likely, that some of these offenders will fail after the

[31] A somewhat similar problem is reflected in the problem of prison or jail sentences in the follow-up period. As we noted earlier, most scholars assume that such reduction in risk time is relatively small for most offenders. We think this particularly relevant in the case of our sample, where individuals seldom commit crimes that would lead to long stays of imprisonment.

"censoring" date of the study (i.e. the last date about which data was collected).

One technique that allows us to correct these assumptions, while providing a general estimate of the differences in the models of failure for the prison and no prison samples we study, is what has come to be called event history analysis (Allison, 1984). Event history analysis treats those individuals who have not failed by the end of the follow-up period as "censored." That is, it recognizes the fact that they may fail in the period subsequent to the data collection period. It also censors individuals in our study who died before the end of the follow-up period. The estimates in table 3.7 are developed using models provided in Surfit, software developed by Michael Maltz of the University of Illinois (1989).

Because there are a number of distributions that might be used to estimate the form of reoffending over time in such models, we provide parameter estimates from two distributions that appear to provide a good fit to our data.[32] The first, the lognormal distribution, is commonly employed in recidivism research (e.g. see Schmidt and Witte, 1988). It assumes that everyone in the sample will eventually recidivate given a follow-up period of infinite length. The Gompertz distribution has been used less often in

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[32] The choice of a distribution is based both on the log likelihood statistic gained and the number of parameters included in the model (see Maltz, 1984). As is illustrated in Appendix 5, the lognormal and Gompertz distributions generally provide the smallest log likelihood estimates with the least number of parameters.

Table 3.7 Survival Models by Prison Sentence Imposed and Offender Groupings

	Low		Moderate		High	
	P	NP	P	NP	P	NP
1) Lognormal Distribution						
Log Likelihood	- 154.57	-449.56	-241.11	-134.23	-478.46	-130.6
Pctg. Survival	0	0	0	0	0	0
μ	6.36	6.78	5.54	6.35	5.65	5.78
σ	3.05	2.78	2.02	2.70	2.29	2.40
2) Gompertz Distribution						
Log Likelihood	- 154.18	-446.57	-240.09	-133.23	-478.84	-130.6
Pctg. Survival	68.1%	73.3%	58.6%	68.8%	50.8%	59.8%
θ	.01	.006	.008	.007	.006	.008
$\hat{A}$	- .03	- .02	- .01	- .02	- .009	- .01

P - Prison
NP - No Prison

research on criminal careers. However, it allows for the possibility that some people will never recidivate, an assumption we think is much more consistent with our sample.[33]

Our major concern is whether the estimates gained here confirm our earlier findings. Looking at the lognormal distributions for the high, moderate and low groups, we do not find statistically significant differences. The results for the Gompertz models also suggest that prison does not significantly impact recidivism. In both cases the contours of the likelihood functions for each of the prison and no prison comparisons in our analysis are not found to be significantly different at the five percent level.[34]

Overall, these findings support our conclusion that there is no specific deterrent value to imprisonment for these offenders. Whether we examined the absolute number who fail, or the general distribution of failure as represented in the failure rate models, there is no evidence that imprisonment will improve the post sanctioning behavior of those convicted of white collar crimes. While our simple comparisons between the groups suggest a backfire

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[33] Other recidivism studies have found that models which do not constrain all offenders to failure often provide a better fit than other models (Schmidt and Witte, 1984; Maltz and McCleary, 1977; 1978, Maltz, et al., 1979, Maltz and Pollock, 1980). Unlike the incomplete models, created by Maltz and McCleary (1977 and 1978) however, the Gompertz model does not assume that some individuals have a zero probability of recidivism. Rather, the probability that some will survive infinitely is an outcome of the values of the parameters of the distribution.

[34] Using Surfit we developed contours for each of the six distributions based on a ninety-five percent confidence interval. In each of the pairs of prison and no-prison samples the contours were found to overlap. We want to thank Michael Maltz for his assistance in constructing and interpreting these analyses.

sanctioning effect in specific cases, these results are not confirmed in the event history analyses.

Frequency and Type of Offending

While prison appears to have little impact upon the time to failure of those we study, it might be that there is an effect on the frequency of offending following the criterion offense. This is clearly not the case for either the low or high probability comparisons. In both groups, the distributions of the number of offenses is similar for both samples.[35] For the high grouping, between sixty and sixty five percent of the offenders in both samples had fewer than three subsequent rap sheet events (see Table 3.8). For the low probability comparison the proportions are somewhat similar, though, not surprisingly, slightly larger. Between eighty-five and ninety-one percent of the offenders who did recidivate in all four of these groups committed fewer than six subsequent crimes. While the frequency of offending for the samples in the moderate probability group evidences larger differences, the effect once again is in the "backfire" rather than deterrence direction. Those who served a prison term in this sample, on average, committed a larger number of offenses.

Turning to the type of crime committed subsequent to the criterion offense, we examine whether the rap sheet event recorded

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[35] This is of course implied by simple extrapolation of the hazard rates from the preceding analyses. However, the appropriateness of this simple extension is unknown and therefore we take the approach described here.

3.8 Number of Events After the Criterion Offense for those who Reoffend by Prison Sentence Imposed and Offender Groupings

Offender Groups and Prison Sentence Imposed

Number of Post-Criterion Events	Low P Base N	Low P Cum. Pctg.	Low NP Base N	Low NP Cum. Pctg.	Moderate P Base N	Moderate P Cum. Pctg.	Moderate NP Base N	Moderate NP Cum. Pctg.	High P Base N	High P Cum. Pctg.	High NP Base N	High NP Cum. Pctg.
1	14	56.0%	30	44.8%	20	47.6%	12	60.0%	31	41.9%	8	40.0%
2	3	68.0%	12	62.7%	7	64.3%	3	75.0%	16	63.5%	4	60.0%
3-5	5	88.0%	18	89.6%	9	85.7%	4	95.0%	20	90.5%	5	85.0%
6 or more	3	100.0%	7	100.0%	6	100.0%	1	100.0%	7	100.0%	3	100.0%
TOTAL	25		67		42		20		74		20	

was for a white collar, a drug related crime, or a violent crime (see Table 3.9). It is difficult to draw strong conclusions from this analysis because the number of cases in each of these crime categories is relatively small. Nonetheless, these data also suggest that the influence of imprisonment on future criminal behavior is not very large. For each of the no prison and prison samples in the three groups, the "other" crime category, which includes family, weapons, public peace, gambling, and immigration offenses, makes up the largest grouping, followed by white collar offenses. There are relatively small differences as well in the proportions of offenders in the prison and no prison samples that fall in each of these offense categories.

Prison and White Collar Criminals

We find little evidence of any deterrent effect of imprisonment. Though some differences are found between prison and no prison samples when we simply examine the proportion of the offenders who fail and their time to failure, in our main analyses (taking into account problems of censoring) prison and no-prison samples evidence similar models of recidivism. When differences are found between the groups, as was the case for the high probability comparison of frequency of offending, it is in the direction of "backfire" rather than deterrence. Before discussing our results, we want to reiterate some of the limitations of our analyses and what those limitations might mean in terms of the findings we gain.

3.9 **Type of Crime for first Post Criterion Offense for those who Reoffend by Prison Sentence Imposed and Offender Groupings**

	Low				Moderate				High			
	P		NP		P		NP		P		NP	
	Base N	Cum. Pctg.	Base N	Cum. Pctg.	Base N	Cum. Pctg.	Base N	Cum. Pctg.	Base N	Cum. Pctg.	Base N	Cum. Pctg.
WCC	6	24.0%	24	35.8%	10	23.8%	6	30.0	24	30.8%	7	35.0%
Drug	4	16.0%	7	10.5%	4	9.5%	2	10.0%	7	9.0%	1	5.0%
Violent	1	4.0%	7	10.5%	4	9.5%	1	5.0%	12	15.4%	2	10.0%
Other	14	56.0%	29	43.2%	24	57.1%	11	55.0%	35	44.8%	10	50.0%
TOTAL	25	100.0%	67	100.0%	42	100.0%	20	100.0%	78	100.0%	20	100.0%

Only a true experimental design can rule out the influence of unmeasured factors that are systematically different between the groups examined. In this case we relied on a quasi-experimental design to place offenders in like comparison groups. The basis of our allocation procedure was a multivariate correlational model of the likelihood of receiving imprisonment. We recognize at the outset that judges may be taking into consideration factors that are not assessed in our correlational model, and thus our prison group for example may have traits that lead to harsher sanctions which we miss in our study. Accordingly, the appearance of small backfire effects in the sample may reflect a bias toward offenders likely to reoffend in the prison comparison groups.

While we recognize that such biases cannot be ruled out in our study, there are good reasons for assuming such biases are not very large. In the first case the Wheeler et al., (1982) model of imprisonment was developed from an interview study of judges. It takes into account a series of factors which judges argued influenced the imprisonment decision (see Weisburd et al., 1991). Beyond this, the fact that we could find little difference between prison and no prison samples when examining a series of relevant background and criterion offense characteristics (see Table 3.4 earlier), suggests that they do indeed provide comparable samples for examination.

The fact that we find that the prison and no prison samples are similar across a range of recidivism comparisons, leads us to conclude that prison does not have an important impact on either

the likelihood, type or intensity of future criminality of the offenders we study. But having concluded this, it is important to raise the question of why a sanction that is looked at as so serious in the criminal justice system has so little impact upon those who receive it (Wheeler, Mann and Sarat, 1988).

One important fact to note is that prison may have very important impacts on other aspects of the lives of these criminals that are not assessed in our study. For example, we believe it is likely that imprisonment would affect the occupational or personal histories of offenders (see Waring, Weisburd and Chayet, in press), though, of course, criminal history information provides little evidence of these very central features of their lives. Other studies suggest that criminal interventions that are deemed as failures in regard to their influence on recidivism, may in fact have significant impacts on the quality of life, as measured by employment or personal stability, of those studied (Rossi, Berk and Lenihan, 1980; Berk, Lenihan, and Rossi, 1980).

Moreover, though it would seem that imprisonment should affect the future conduct of prisoners, and policy makers often assume this to be the case (e.g. see Schlegel, 1990), as we noted in chapter one there is little evidence of deterrent effects in previous recidivism studies (e.g. see Schlegel, 1990; Makkai and Braithwaite, 1991). The focus on incapacitation, or the crime control benefits gained through dangerous offenders being isolated from the community, has developed in part because so little evidence exists that imprisonment deters those sanctioned from

future offending (Clarke and Weisburd, 1993). Nonetheless, it is often noted that there is not a specific deterrent effect for street criminals either because they have so little to lose from contact with the criminal justice system (Mann et al., 1980; Pollack and Smith, 1983) or they are at the outset unlikely to act rationally in their decisions about criminality (Geis, 1982a; Braithwaite and Geis, 1982). The white collar criminals we examine, provide an important case study precisely because they address this concern. The fact that deterrence fares no better here than for more common offenders, provides a strong challenge to those that posit any specific deterrent effect of imprisonment.

These data provide some evidence of backfire effects of sanctioning. However, they also challenge those who claim that such impacts will be very large for those convicted of white collar crimes. It has long been argued that prison may provide a training ground for criminality (Goldfarb, 1975). The labelling effects of imprisonment have been assumed, as well, to restrict the legitimate opportunities of offenders in the community (Gove, 1980; Lemert, 1984; Tittle, 1988), a factor which may be particularly significant for those who work in white collar occupations (see Waring, et al., in press). Nonetheless, as Michael Benson (1985b) suggests, the prison experience may only provide a marginal impact on such offenders, whose experience with the criminal justice system up until time of sentencing may provide the major deterrent effect of

the criminal justice process.[36] We believe that a closer understanding of the offenders who fail in our sample and the nature of their criminal careers can provide important insight into why imprisonment does not have either a consistent deterrence or backfire effect.

As we saw in chapter two, many offenders in our sample do not fit common stereotypes of criminality. They are often conventional people who confront some special crisis or opportunity that leads them to temporarily cross the line and commit crime. These people, who we have tentatively described as opportunity takers and crisis responders, are not committed to deviant behavior. Indeed they evidence a high degree of stability both in their professional and personal lives. Such offenders may be likely to be strongly impacted by the process of punishment (Feeley, 1979; Benson, 1982; Wheeler, Mann and Sarat, 1988). And there are many cases in the pre-sentence investigations where such people appear to be shocked at what has befallen them. Take for example the following perjury and FIDC offender as described in the pre-sentence investigation:

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[36] One judge cited in Wheeler, Mann and Sarat (1988), Sitting in Judgement indicates:

> There is no doubt about the fact that in most white-collar crimes as such the return of the indictment is much more traumatic than even the sentence...There is no question about the fact that that is much more severe on the white-collar criminal than it is on the blue collar defendant (145-146).

> Regretfully, I did not tell the Grand Jury the complete truth of the matter. Under the stress and panic I was under I could not remember the details and facts as I ordinarily would. Even to the fact that immediately after leaving the Grand Jury, I called my wife at her place of employment and asked if I could speak to Mrs. ---, her previously married name....I will regret this action for the rest of my life. These past six months have been a living hell not only for me but for my wife and those closely associated with me.

We agree with Benson that a short prison stay, the main type of prison sanction evidenced in our sample, is not likely to provide more than a marginal impact beyond the experience of prosecution, conviction and sentencing itself. Whatever specific deterrence is gained may be produced before the imprisonment sanction is imposed.

For those in our sample who are more committed to criminality, described as opportunity and deviance seekers in Chapter 2, we again think it understandable that short prison stays have relatively little impact on future reoffending. Overall the time to failure for those in our sample is relatively long. More than half of those who did fail during the follow-up period go more than three years without a subsequent rap sheet arrest. It seems to us exceptional to expect that a prison sentence of a few months would guard against future crimes that occur years down the road.

It may be that opportunity seekers, who we have defined as approaching crime in a calculating fashion, would be influenced by particularly long prison experiences. This assumes, of course, that for these offenders a long prison stay has a special impact beyond the stigma of criminal justice processing and prison punishment. While we cannot examine this question with our data, we believe it reasonable that opportunity seekers, as we have

described them, might decide that the rewards of continued criminal behavior are offset by the experience of a long prison stay. However, it is important to note that it is very rare for white collar offenders, or indeed any offenders in the federal system not convicted of violent or drug crimes,[37] to be sentenced to prison terms of even a few years in length.

In regard to those we described as deviance seekers--people who evidence significant personal and occupational instability--such an effect would not be likely. Their life experiences generally are consistent with those described by Gottfredson and Hirschi (1990) in their portrait of criminality. These offenders evidence low self-control and an inability to delay gratification. There is no reason to expect that imprisonment years in their past would prevent them from seeking short term gratification in the present.

Conclusions

It has often been assumed by scholars and policy makers that white collar offenders will be particularly affected by imprisonment. Our study provides strong evidence that this assumption is wrong, at least as regards those convicted of white collar crimes in the federal courts. The most serious legal sanctions do not affect the likelihood of recidivism for the offenders we studied, nor the form of their overall criminal careers. Our analyses suggests that society will gain little

[37] U.S. Sentencing Commission, 1991, Volume 2.

specific deterrent benefit from the imprisonment of white collar offenders.

Chapter 4

The Correlates of Recidivism

Having concluded that prison sanctions do not influence the criminal careers of those convicted of white collar crimes, we are led to ask what other factors account for variation in the form of offending for those we study. For example, in the study of street crime, prior record, gender and age are seen as major correlates of reoffending (see Schmidt and Witte, 1988). If white collar criminal careers can be understood in ways similar to that of more common offending, then such factors should also explain variation in the models of recidivism for white collar criminals. In prior chapters, we suggested that measures of social stability and conventionality are strongly related to the criminal histories of white collar offenders. Following this argument, such factors should also influence the distribution of reoffending in the period subsequent to the criterion offense. In this chapter we examine these issues in the context of a multivariate survival model.

Creating a Multivariate Model of Recidivism

Developing a model that can help us to predict whether and when offenders recidivate is one of the basic goals of

criminological research. This task presents a number of challenges. The first is that recidivism can be conceptualized in two ways, either as a dichotomous variable indicating whether or not an individual will ever reoffend[38] or as a continuous variable focusing on the time it takes for an individual to reoffend (Schmidt and Witte, 1988).[39] As was described in Chapter 3, collecting data to estimate either one of these conceptualizations of recidivism is complicated by the fact that any data collected will be censored. We cannot know with certainty whether individuals who had not recidivated at the time data was collected would have been recorded as recidivists if a longer follow up period had been used. The problem of censoring is further complicated by the fact that offenders may die, emigrate or be removed for other reasons from the risk pool. As noted in chapters one and three, we made a strong effort to capture censoring of our sample members as a result of death.[40]

Censoring is a problem that cannot be overcome in analyses such as standard multivariate regression techniques, although in the past researchers have tried, in various ways, to adapt

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[38] The mean of this variable indicates the proportion of the sample that will ever recidivate.

[39] This leads to a focus only on those offenders who do recidivate and describes the timing of the recidivism. This can be operationalized as either summary measures such as the mean and standard deviations of the time to recidivism or as "hazard" of failing during a fixed time period (such as the first month or year following the initial offense).

[40] Information on emigration and disability is not generally available from our sources.

particular time interval.[42]

We were interested in developing a model which would allow us to use covariates to predict the time until recidivism for offenders. To do this we use a statistical technique called accelerated failure time analysis. This analysis assumes that the predicted failure time is a function of both the covariates and the time from which the predicted value is calculated. The dependent variable in the model is the natural logarithm of the median predicted failure time. A constant and individual covariates contribute to this analysis in the same way that they would in an ordinary regression-type equation. However, predicted time to failure can be calculated from any starting time and estimates the failure time for those individuals at risk at the starting time if none are censored. Thus the predicted time until

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[42] Three related approaches to the analysis of censored data are life table analysis, proportional hazard models and accelerated failure time models. Each of these approaches allows analysis of censored data. Implicit in most of these approaches is that the nature of the relationship between time and the probability of failure will be specified. The exception here is the proportional hazard approach which eliminates the need to specify the relationship between time and failure by assuming that this relationship is the same for various groups. For the other approaches, the specification can take a wide variety of forms, including exponential, loglogistic, gamma, Weibull, Gompertz and others (Schmidt and Witte, 1988; Maltz, 1984; Kalbfleish and Prentice, 1980). Some of these assume that all subjects will eventually "fail" (i.e. eventually recidivate) or have non-trivial hazards, while others do not. The latter may be used to estimate the probability of being in the group of offenders who will never fail, although the former may be used to approximate these things by using very high values in the calculation (e.g. the probability of recidivating within 50 years of the initial event). This is an ad hoc rather that theoretical solution to the estimation problem. Some also allow a calculation of the predicted time to "failure" for a subject with a given set of values of covariates (Σ_B).

failure for everyone at risk at time=0 can be calculated and will generally be different from the predicted time until failure of those at risk at 12 months into the study period. This is analogous to the calculation of life expectancies of newborns, one-year-olds, 18-year-olds and 60-year-olds.

The results can also be used to describe the "shape" of the timing of failure by describing the estimated hazard for each time period and the survival function (the proportion of those at risk initially who survive until the start of the current time interval).[43] This figure is different from the proportion of the sample which has failed by the start of the time interval because it excludes those who have been censored (e.g. because of death) from both the numerator and the denominator of the calculations for the time intervals during which they are no longer at risk.

Covariates

We selected a number of covariates for our model predicting recidivism. From the criminal career literature we drew variables describing the dimensions of an individual's prior criminal history. These include the number of events prior to the event defining the sample, the age of onset of offending (as measured by the date of the first event on the rap sheet), and the seriousness of the prior record.[44] Finally, we included a set

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[43] This is equivalent to 1-the cumulative hazard function.

[44] This is the same seriousness score used in the original Wheeler et al. sentencing model (1981) and subsequently in Weisburd et al., 1991).

of variables indicating the statutory category of the criterion offense. Prior research on the Wheeler et al. data set (Weisburd et al. 1991) indicates that there are important differences between both the types of offenses and the types of offenders convicted under each of these statutes even though they all fall under the general rubric of white collar crime.

Previous research on recidivism (e.g. Schmidt and Witte, 1988), as well as our initial investigation of the nature of the offenders we study (described in Chapter 2), led to the inclusion of several variables reflecting prior deviant behavior (excluding arrests) and conventionality. These include two variables indicating the presence or absence of alcohol problems and drug use and a measure of whether any problems with school performance were noted in the pre sentence investigation for the criterion offense.[45] Following our discussion in Chapter 2 we also include a set of variables indicating social stability. These include marital status, home ownership, number of children (see Schmidt and Witte, 1988), and community reputation as indicated by whether or not the probation officer for the criterion offense stated that the offender had a positive reputation in the community.

A set of variables reflecting the formal and informal

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[45] In chapter 2 we discussed two variable describing offenders' school experiences: school adjustment and school performance. The variables have similar distributions, although a somewhat higher proportion of offenders had school performance problems than had school adjustment problems recorded. In order to avoid problems of multicollinearity only one measure was used in the multivariate model.

sanctions imposed on the offender were also incorporated in the model. Formal sanctions measured include whether the offender was sentenced to a period of incarceration, whether a fine was imposed, and the number of months of probation to which the offender was sentenced.[46] We have already seen in chapter 3 that prison sanctions do not influence recidivism, though here we can examine this question in a somewhat different methodological context. While the literature on the effects of probation suggests a "backfire" effect on time to failure (Farrington et al., 1986; Petersilia and Turner, 1986), there is comparatively little analysis to date on the relationship between fines and recidivism (Coffee, 1985; Kennedy, 1985). We believe that is particularly important to take into account fines in our model, because such penalties are likely to be used more often for white collar crimes than common crimes.

Informal sanctions include whether an individual lost his or her job as a result of the offense, whether there was a business or personal bankruptcy around the offense or its prosecution, and whether there was any mention of family suffering as a result of the offense.[47] Whether the defendant expressed remorse for the offense was also included. All of these were drawn from the Wheeler et al. data set. While it is sometimes suggested that

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[46] This variable ranges from 0 to 60. Approximately 17% of the offenders were sentenced to more than 60 months probation, these values were rounded down to 60.

[47] The source of the report of family suffering could be the probation officer, family members or the offender.

secondary sanctions provide a potent deterrence for white collar criminals, as noted in Chapter 1, restrictions on legitimate opportunity caused by such sanctions may actually increase rather than decrease the likelihood of future criminality (see Waring et al. in press).

Finally three background variables which are commonly used in criminal justice research--race, gender and age--and two measures of social status--years of education and social class--were incorporated in the model. Many previous studies have found that gender is a powerful predictor of recidivism, with females much less likely to reoffend than males.[48] Others have found that racial differences in recidivism risk are also present, with whites less likely to recidivate (Schmidt and Witte, 1988). The general relationship between age and the risk of offending--specifically, the phenomenon of "aging-out" in which after a certain age the likelihood of criminal behavior decreases--is well known and other studies of recidivism have supported the hypothesis that the risk of reoffending decreases with the age of the offender (Wilson and Herrnstein, 1985). Measures of social status are not often used in recidivism research but, because of the large degree of variability in the backgrounds of those convicted of white collar crimes (Weisburd et al., 1991), they have particular relevance for our study. It could be argued that such variables relate both to the potential costs and benefits of

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[48] However, Hagan and Parker (1985) and Benson (1985) did not include gender in their analysis; this is due to the paucity of females available in these specific samples.

criminal behavior and to the future opportunities for conformity and crime.

Findings

Table 1 presents the results of an accelerated failure-time analysis of recidivism using a lognormal distribution.[49] The lognormal model has two parameters. The first is the constant, μ, which indicates the expected value of the natural log of time until failure at which 50% of the sample would have failed if none were censored (and the overall effect of the covariates is constrained to 0).[50] In this model the constant is 4.912, which

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[49]The first component of the findings of an accelerated failure time analysis is the distribution that best describes the error term, and thus describes the shape of the distribution over time. For this analysis, it was determined, based on the comparison of log likelihoods for a number of possible distributions, that the best specification of the time effect is the lognormal distribution. In a lognormal distribution, the monthly risk of recidivism increases with time immediately following the offense, peaks, and then decreases with time. The log-normal distribution is one that has frequently been found to fit recidivism data well. Schmidt ant Witte (1988), for example, find that it fits their data on the time until return to custody for released North Carolina prisoners. The effects of covariates did not differ substantially between specifications. Other distributions tested include log-logistic, Weibull and Gamma distributions. Software to estimate multivariate incomplete failure distributions such as Gompertz described in chapter 3 are not presently available with covariates. As is the case in chapter 3, there is no reason to suspect that the overall conclusions gained would be very different between the log normal and incomplete failure solutions.

[50] The lognormal distribution takes the form:

$$f(x) = \left(\frac{1}{x\sqrt{2\pi}\sigma}\right) \exp\left[\frac{-(lnx-\mu)^2}{2\sigma^2}\right]$$

The μ in this distribution represents the mean and median of the normal distribution on which the lognormal is based. The mean of

is equivalent to an expected median time to failure for the entire sample of 139.9 months.[51] The second parameter, σ, represents the "shape" of the distribution. In the case of the lognormal distribution, σ represents the degree of variation in the distribution of failure times. It accounts for the effect of time on the distribution of the residuals from the model with covariates.

Covariates

The overall parameter estimates for the model are given in Table 4.1. Predicted median time until failure for specific values of the significant covariates when all other covariates are constrained to 0 are given in Table 4.2.[52] These are

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the lognormal distribution is represented by the following:

$$\mathcal{E}[x] = \exp[\mu + .5\sigma^2]$$

See Mood, Graybill and Boes (1963:540) or Johnson and Katz (1970a; 1970b) for more details about this distribution.

[51] This is calculated by taking e^{μ}.

[52] We want to caution the reader that the estimates gained here assume a specific baseline. Although it is useful to examine the impact of individual categories on the predicted time to failure when all other variables are constrained to 0 it is important to understand that the size of the impact of assignment to a given category on the predicted time until failure is conditioned on the values of all other variables. This is because the dependent variable in the model is ln(time to failure) and the effect of a unit change in a log of a variable on the variable is greater if the base number is a larger number. For example $e^2=7.4$ and $e^{2.1}=8.2$ for a difference of .8 due to a positive change of .1 when the starting number is 2. However, $e^5=148.4$ and $e^{5.1}=164.0$ for a difference of 15.4 due to a positive change of .1 when the starting

Table 4.1

SAS Lifereg Procedure Results

Dependent Variable=Log(Expected Time Until Failure from Time=0)

Variable	Estimate
Contant	4.91226967***
Normal Scale Parameter	2.05392075
Female	0.86792531***
Non-White	-0.4553744
Number of Prior Events	-0.1024818 *
Years of Education	0.06900658
Most Serious Prior	-0.1645851
Age at First Offense (months)	0.00232705
Age at Yale Offense (months)	0.00169555
Remorse	0.38853526
Offense	
Antitrust	-0.7018765
Bank Embezzlement	-0.3660097
Bribery	-0.4610506
Credit Fraud	-0.9301127*
False Claims	-0.2032054
Mail Fraud	-0.6749272
Securities Fraud	-1.3440651**
(Tax)	
Any Drug Use	-0.6355755*
Alchohol Abuse	-0.5575767
Poor School Performance	-0.099342
Lost Job	-0.350922
Class	
Manager	-0.169451
Officer	0.69593114
Owner	-0.5349995
Sole Proprieter	-0.6801773
(worker)	
Positive Reputation in the Community	0.39087169
Marital Status*	
Formerly Married	0.02393739
Married*	0.70695988
(Single)	
Number of Children	-0.0273353
Home Owner	0.14157135
Family Suffering	-0.462584
Bankruptcy	0.34196176
Prison Sentence Imposed	0.03503681
Months of Probation Sentence Imposed	-0.0082525
Fine Imposed	0.72198879**

Noncensored Values= 251 Right Censored Values= 607
Log Likelihood = -771.1070302

* significant at p = .05
** significant at p = .01
*** significant at p = .001

Table 4.2 Predicted Median Months to Failure by Categories of Significant Independent Variables

Predicted months= exp(constant+ΣXB)

		Predicted Months to Recidivism	Difference from Baseline
baseline (all variables=0)		139.9418	
	Male	139.9418	
	Female	333.3364	193.3945
	No events	139.9418	
	One event	126.3107	-13.6310
	Two events	114.0074	-25.9344
	Three events	102.9024	-37.0393
	Seven events	68.2962	-71.6456
	No drug use	139.9418	
	Drug use	74.1175	-65.8243
	Single	139.9418	
	Divorced	143.3321	3.3903
	Married	283.7764	143.8346
	No Fine	139.9418	
	Fine	288.0735	148.1316

calculated by determining the predicted natural log (time to failure) using the survival equation and then taking the exponent of the results.

Of the covariates drawn from the criminal career literature only the number of events prior to the criterion offense is a statistically significant predictor. As expected, as the number of prior events increases, the natural log of the predicted time until recidivism decreases. As Table 2 illustrates, if all other variables are constrained to 0, the predicted median months until failure for a person with no prior events is 13.6 months longer than that for a person with one prior event, 37 months longer than that for a person with three prior events and more than 712 months long than an offender with seven prior events. While not statistically significant, the direction of seriousness and age of onset are in the expected direction with those who commit less serious offenses and those who begin criminality at an earlier age evidencing somewhat shorter time to failure. The statutory

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number is 5. That is why, for example, in Table 2 the effect of a change from 20 to 30 years of age at the time of the criterion offense is a change of 46.5 months in predicted time to failure while a change from 50 to 60 years of age yields a change of 87.3 months until predicted failure.

From Table 2 we also know that, everything else constrained to 0, women have a predicted median failure time 193 months longer than that for men. Because this effectively sets their baseline higher than that for men, the effect of changes in other independent variables will be larger than the effect of the same change on males. Although the model presented includes no interactions it is important to understand this conditional nature of effect size on the dependent variable of interest, predicted time until failure.

category of the criterion offense did not have an overall statistically significant effect. However, tax offenders had the longest time until failure and differed significantly from both credit fraud and securities fraud offenders.

Of the variables that indicate the presence or absence of social stability or self control, two were statistically significant: a history of drug use and marital status. With all other variable constrained to 0, a history of drug use decreases the predicted time until failure by more than 65 months (five and a half years). At the same time a person who is married has a predicted median time until failure 143 months (12 years) longer than one who is single (with all other covariates constrained to 0). This effect is similar to those found in other recidivism models for common crime offenders (e.g. see Schmidt and Witte, 1988). The other factors measured here have somewhat contradictory, though not significant, impacts upon recidivism. For example having a positive reputation in the community and being a homeowner increased the predicted time until failure while having reported alcohol problem or poor school performance decreased it. Number of children has a small and a negative relationship with the predicted time until failure.[53]

Of the variables indicating the nature of formal sanctions imposed on offenders neither prison nor probation have a

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[53] This may be because the number of children may be an indicator of conventionality for older, married, employed offenders and of unconventionality for young, unmarried, unemployed offenders.

statistically significant impact time to failure. As regards prison, this result confirms and reinforces the findings of our quasi-experimental analysis in chapter 3. The only formal sanctioning variable to have a significant effect is the imposition of a fine, which, on average, is related to a predicted value 148 months greater than that for those who did not have a fine imposed (all else constrained to 0). The fact that fines are strongly correlated with increased time until reoffending, even after controlling for other social and sanctioning factors, is not predicted in the prior literature on recidivism, though as we discuss later in the chapter it is consistent with what we know about the fine sanction and assumptions about who is most likely to be influenced by sanctions.

None of the measures of informal or secondary sanctions had a statistically significant effect on the time to failure, suggesting collateral consequences of punishment are not major factors in understanding recidivism. Looking at the direction of these effects it is clear that a complex group of factors come into play. For example, while a personal or business bankruptcy recorded at the time of sentencing increases the predicted failure time, losing a job as a result of an offense decreases the predicted failure time by three and a half years. At the same time, the expression of remorse about an offense is associated with an increase in the predicted time until failure and family suffering is associated with a decrease. Although these results

seem somewhat ambiguous they may reflect the complex interplay of a number of factors including potential deterrent, backfire and stigmatization effects of sanctions and the complex interplay of attitudes toward illegitimate offending and access to opportunities for both offending and conformity (Waring, Weisburd and Chayet, in press).

Of the demographic or background variables only gender has a strong effect on the predicted time until recidivism. Women have a predicted median failure time more than 190 months (greater than 15 years) larger than men when other variables are constrained to 0. Neither race nor age have an effect that is statistically significant, although whites and older offenders have a predicted failure time that is longer than others.

Two measures of social position were included in the model: social class and years of education. Neither had statistically significant relationships with predicted time until failure though both are in the expected direction. As years of education increases so does the median predicted time until failure. Officers have the longest predicted time until failure of the social class groupings.

Time at Risk and Recidivism

Although the comparison of predicted time until failure is a useful way to understand the effect that a specific variable has on the risk of recidivism, it is not the only way to examine this issue. Indeed, the focus on the predicted median failure time may

in some circumstances lead to misleading interpretations because both the cumulative effect of many small differences or one large difference during a particular time period may lead to the same large difference in predicted time until failure. We focus on two alternative methods of interpretation: the probability that an offender at risk at the beginning of a time interval will fail during that interval (e.g. the probability that a person who survives month 12 will fail during month 13) and the proportion of offenders who have "survived" (i.e. not recidivated) until a given time. The former is also known as the hazard function and the latter as the cumulative survival function.[54] By examining these two functions we can better understand the ways that different values of an independent variable lead to differences in predicted recidivism and how those differences change with the passage of time. In this section we examine these results for the variables which were statistically significant in the multivariate model.

For each of the variables two graphs are presented. The first is the predicted cumulative survival function. Whatever model is used to control for the impact of time--e.g exponential, Weibull, loglogistic--on recidivism this function cannot increase over time. In the case of the lognormal, it always decreases and

[54] The cumulative survival is the complement of the cumulative hazard. That is, if all of the hazards for each of the time periods until the start of the time period in question are added together and the difference between that number and 1 is calculated, the result would be the cumulative survival.

gets closer and closer to 0 as time at risk approaches infinity[55]. When the cumulative survival function reaches a value of .5 it means that half of the population has failed; that point is the median survival time for this model. The second is the predicted monthly hazard of recidivating, which is equivalent to the derivative of the cumulative survival function at that month. Thus a hazard of 0 indicates 0 risk of failure in that month and that the cumulative survival function for that month is flat (that is, unchanged from the previous month). It can take a variety of shapes, but in the case of the lognormal distribution it first increases and then decreases.

Figures 4.1 and 4.2 represent the survival and hazard functions for three hypothetical groups of offenders with, respectively, 0, 1 and 7 prior arrests and all other covariates are constrained to 0. As can be seen in both figures, the largest gap is between those with 0 prior events and those with one prior event. Figure 4.1 illustrates the differences in predicted median time until failure for the groups; this gap is clearly apparent, as it was in Table 4.2. Figure 4.2, however, shows that the crucial differences between the three hypothetical groups of offenders occur in the first 60 to 80 months of time at risk. Those with prior offenses start with much higher hazards of recidivism and then move sharply upwards in the very early months following the offense. Their hazards then drop off quickly, much more sharply than does that for those with no priors. The

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[55] This means that as time goes on fewer and fewer people survive.

Figure 4.1

Cumulative Survival

By Number of Prior Events

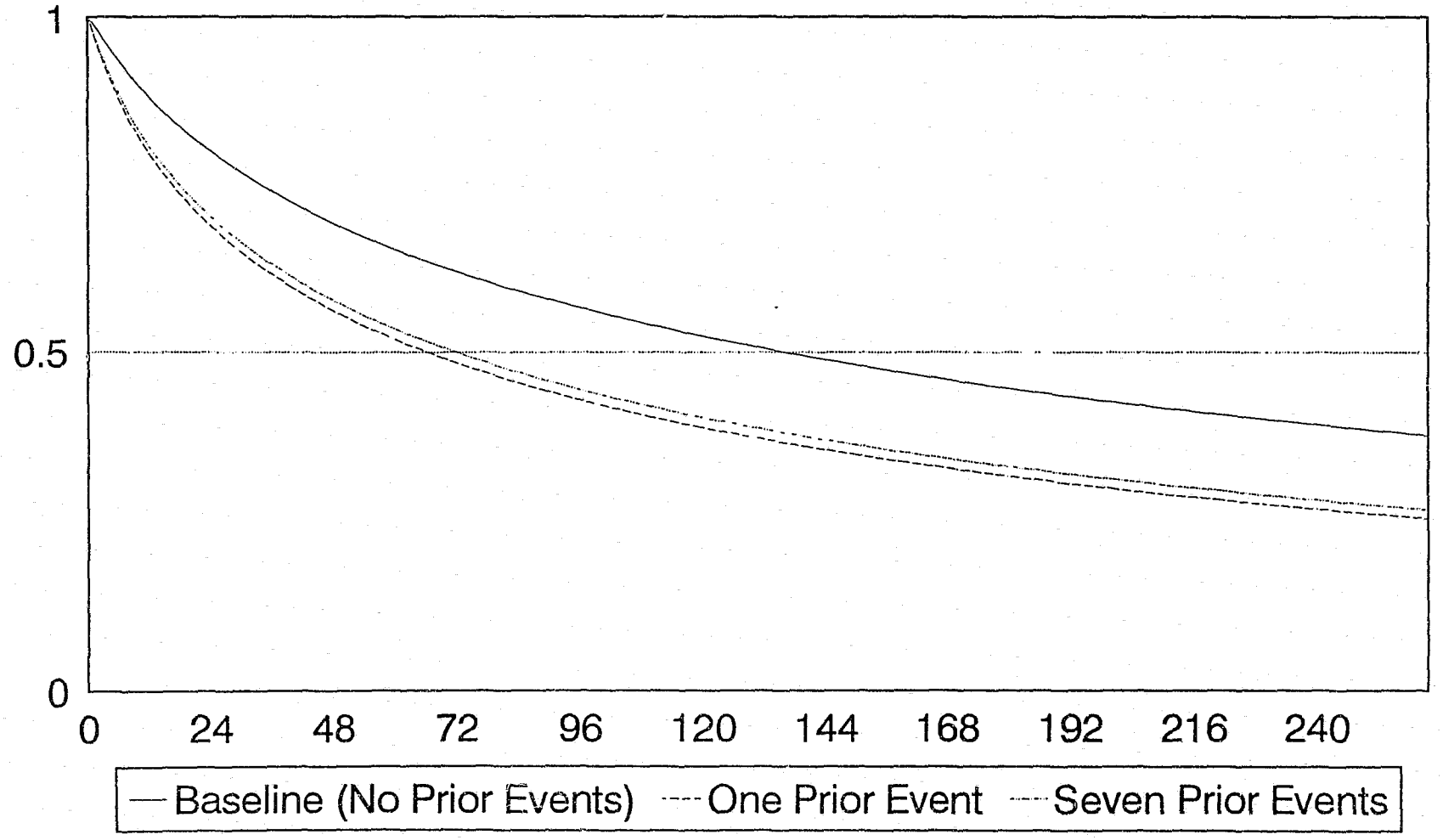
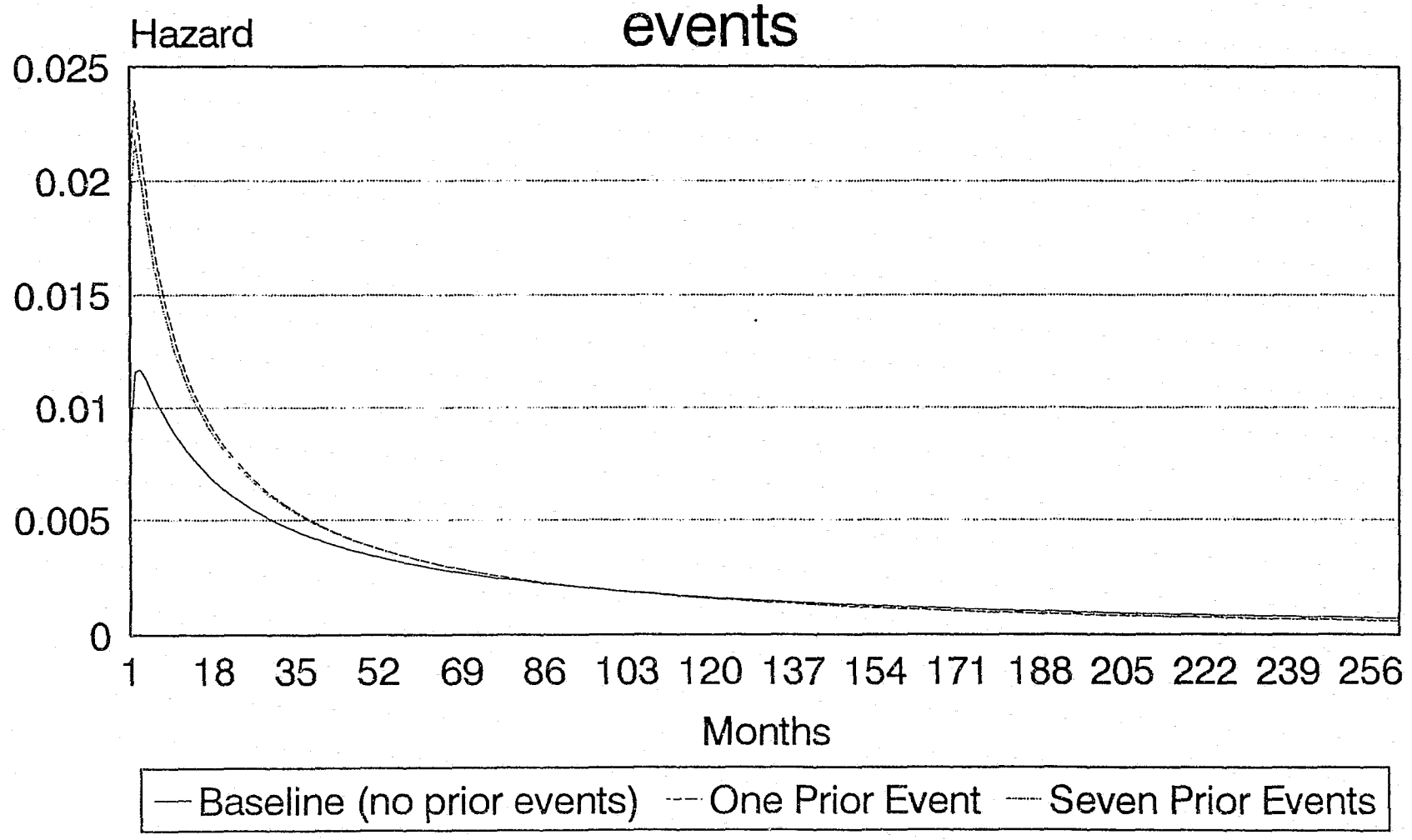


Figure 4.2

Hazard of Recidivating

No prior events versus one prior event and seven prior events



hazards for the three groups then move increasingly close together so that by 80 months there are no discernable differences between the three groups. What this means is that while the three groups differ overall, for those individuals who have not failed by the eightieth month, those differences have disappeared. The importance of this result is reinforced when we consider that the median predicted time to failure for the sample is over 10 years.

Figures 4.3 and 4.4 show the same functions for males and females. Figure 4.3 illustrates the long term differences between the two groups. Figure 4.4 indicates that the sharpest differences occur in the first year, with the male hazard rate being almost three times that for females. The gap closes over time however. By 36 months the male rate is less than double the female rate. By 84 months (7 years) the rates are very close and by 120 months, they are almost identical. Although ten years is a long period, the fact that the male and female rates ever become close is in itself noteworthy.

Figures 4.5 and 4.6 present similar analyses for the impact of fines, figures 4.7 and 4.8 for marital status and figures 4.9 and 4.10 for drug use. For each analysis it becomes apparent that although the differences between predicted failure times are large the monthly differences in risk of recidivism become close over time. How soon they become close is an alternative measure of how much impact the variable has. The most important differences occur early in the time period following the event,

Figure 4.3

Cumulative Survival

Males versus Females

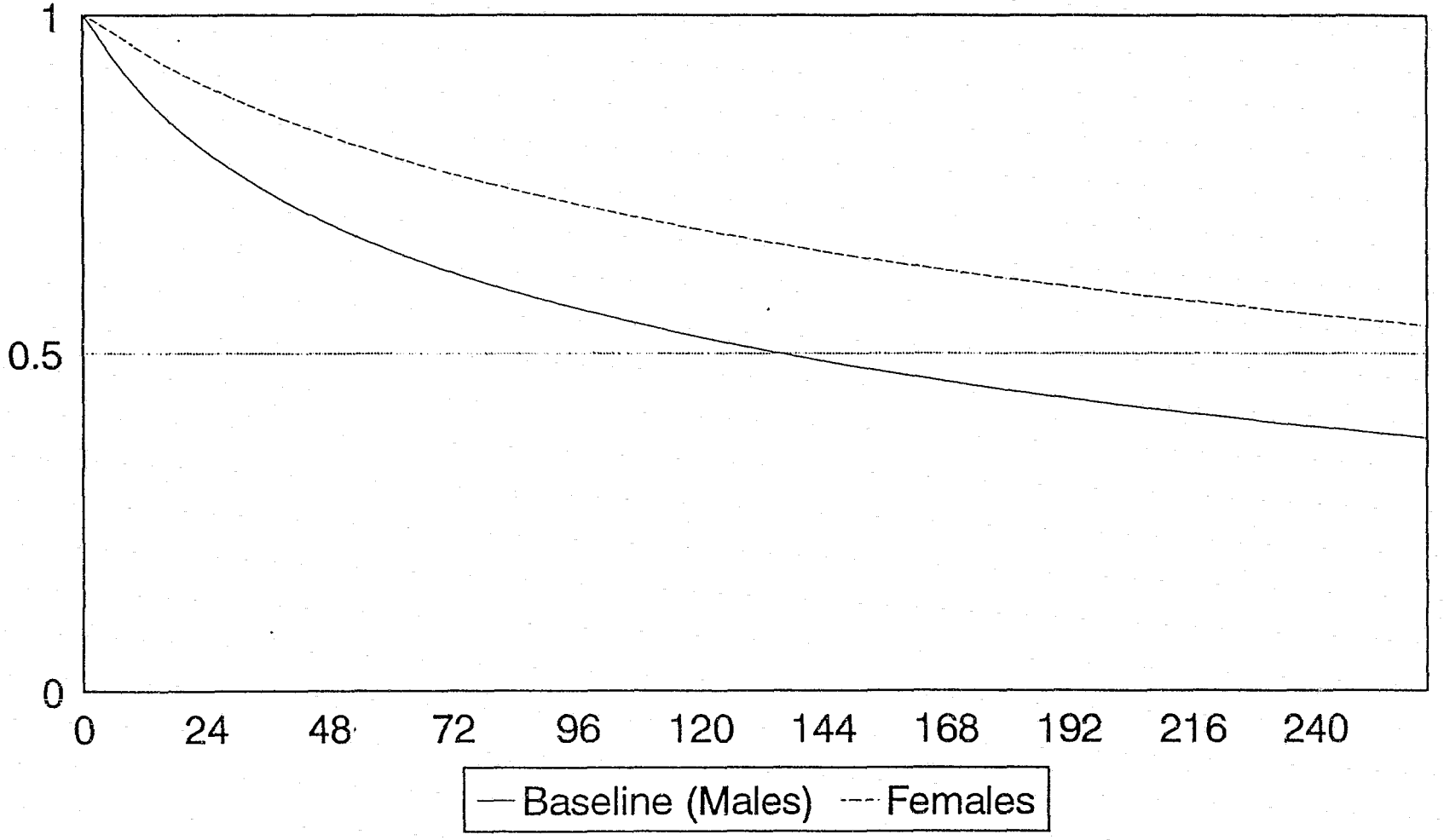


Figure 4.4

Hazard of Recidivating

Males versus Females

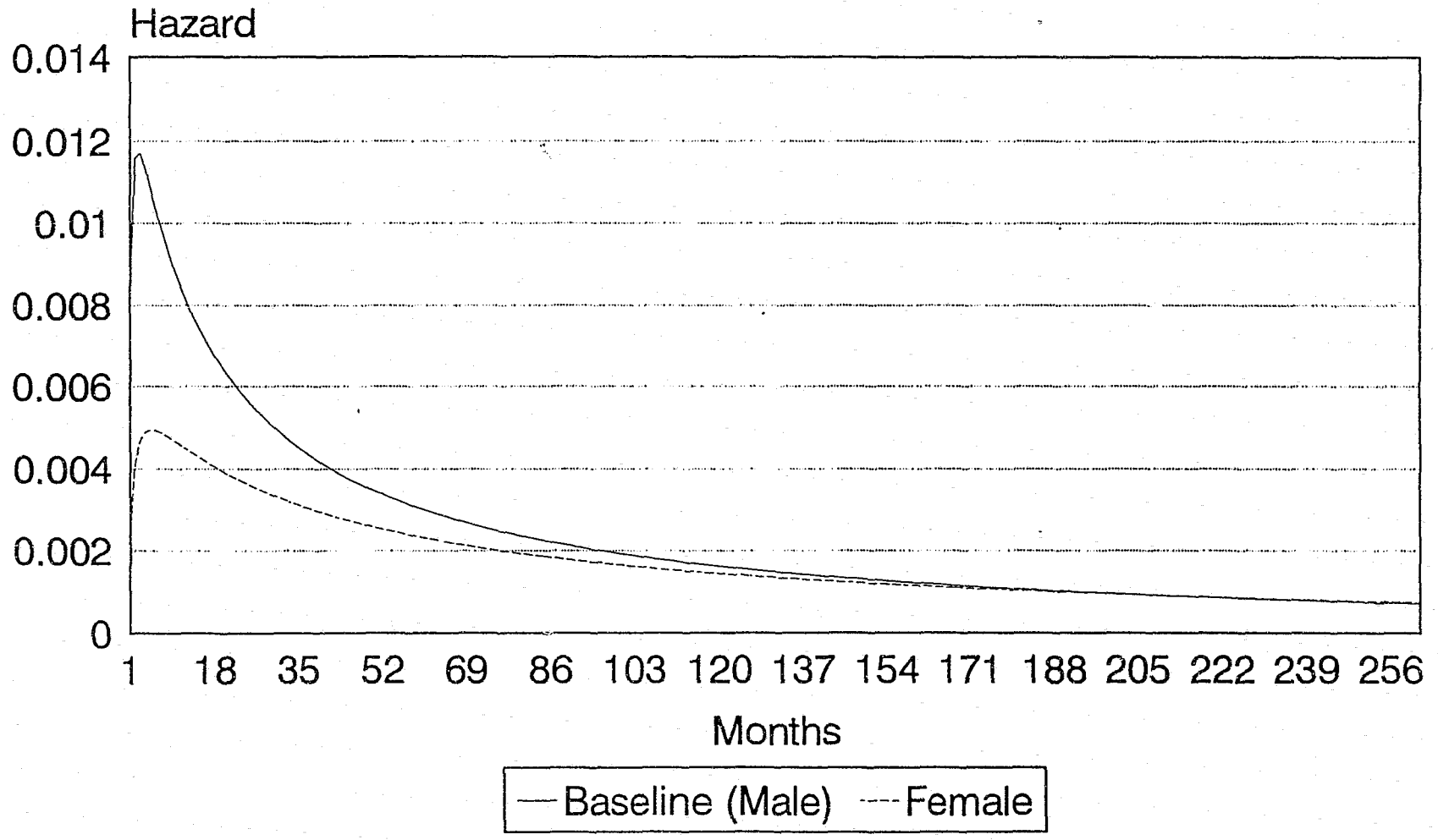


Figure 4.5

Cumulative Survival

No Fine Imposed versus Fine Imposed

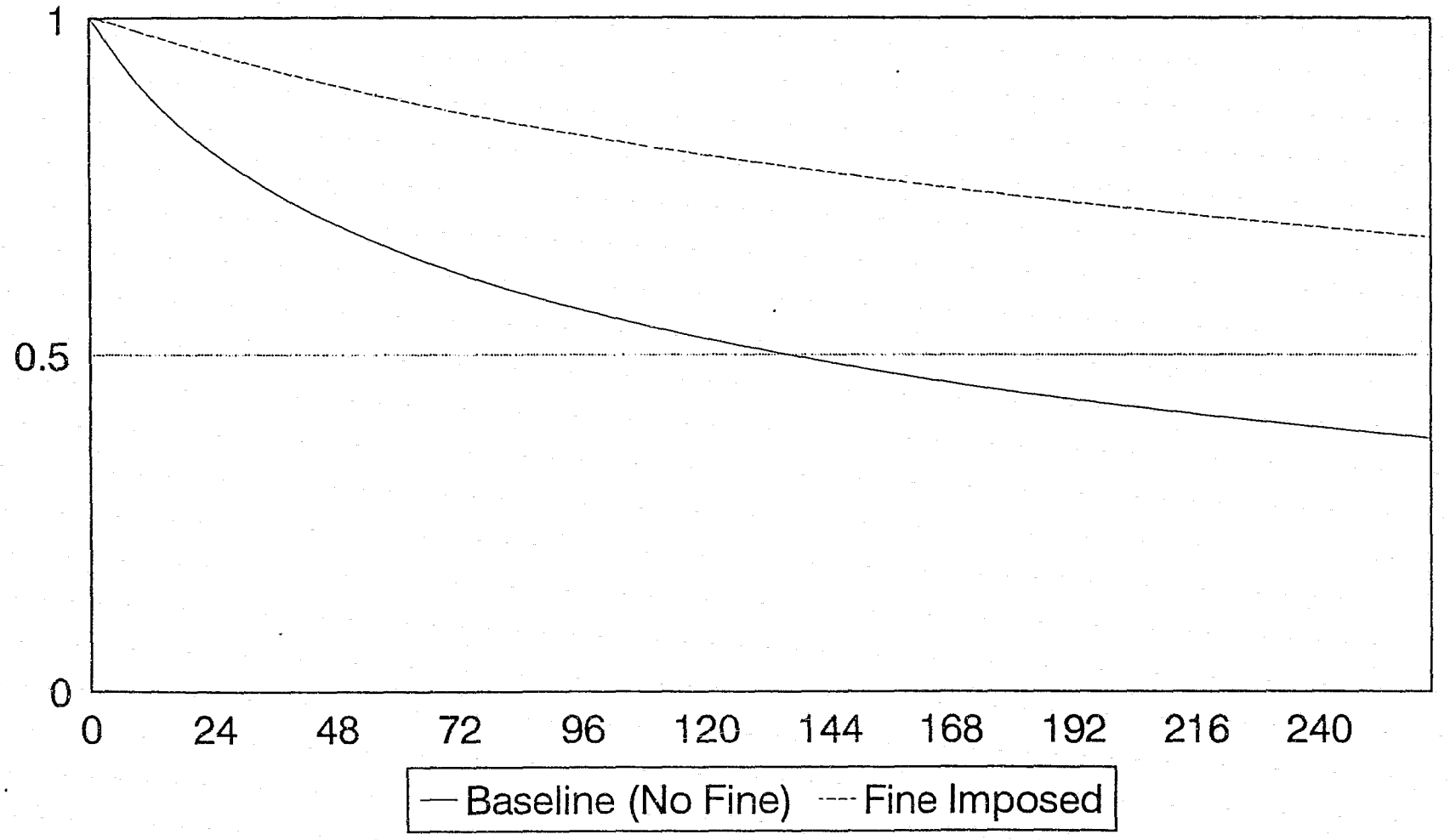


Figure 4.6

Hazard of Recidivating

No Fine Imposed versus Fine Imposed

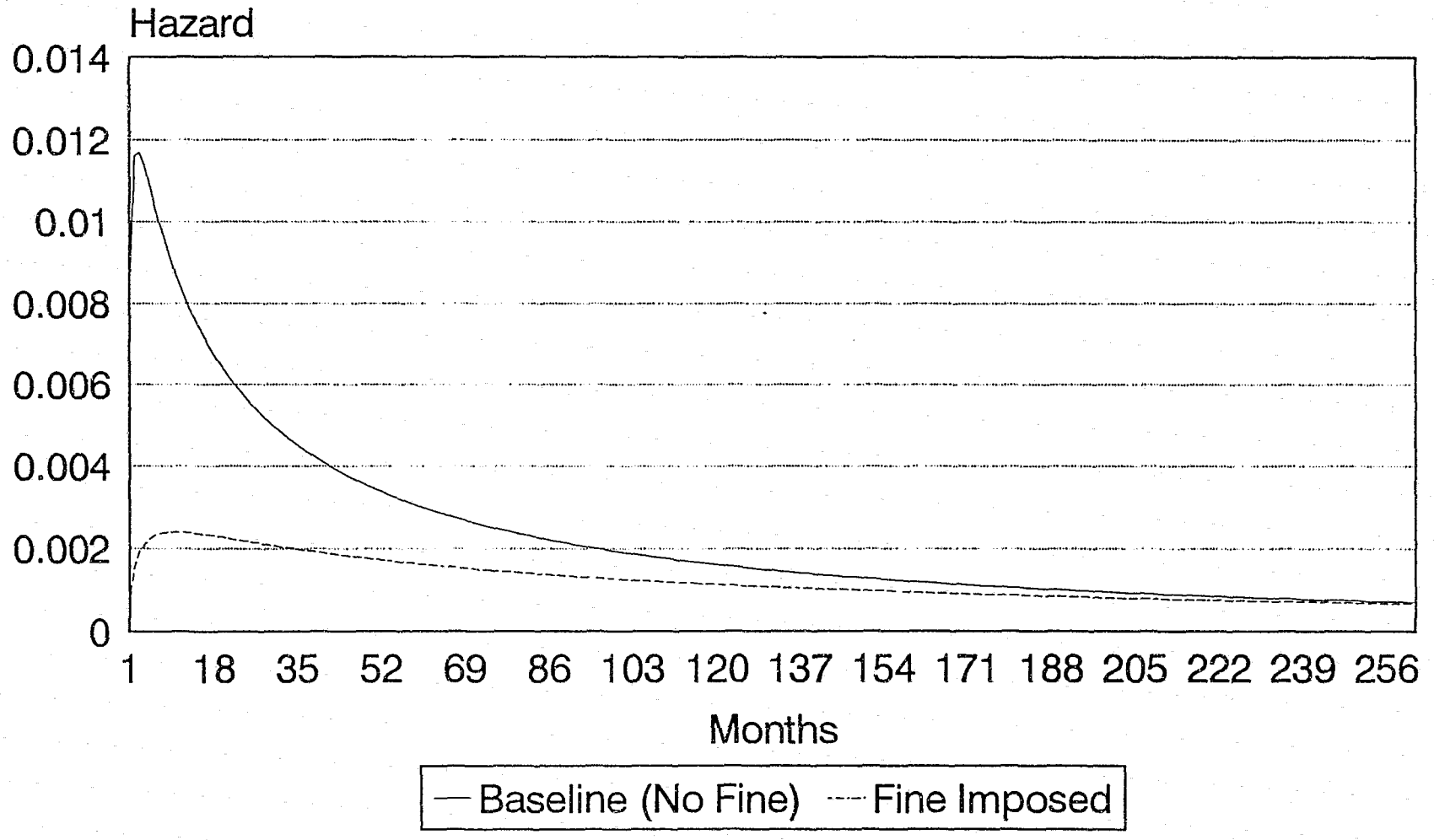


Figure 4.7

Cumulative Survival

Never Married versus Married

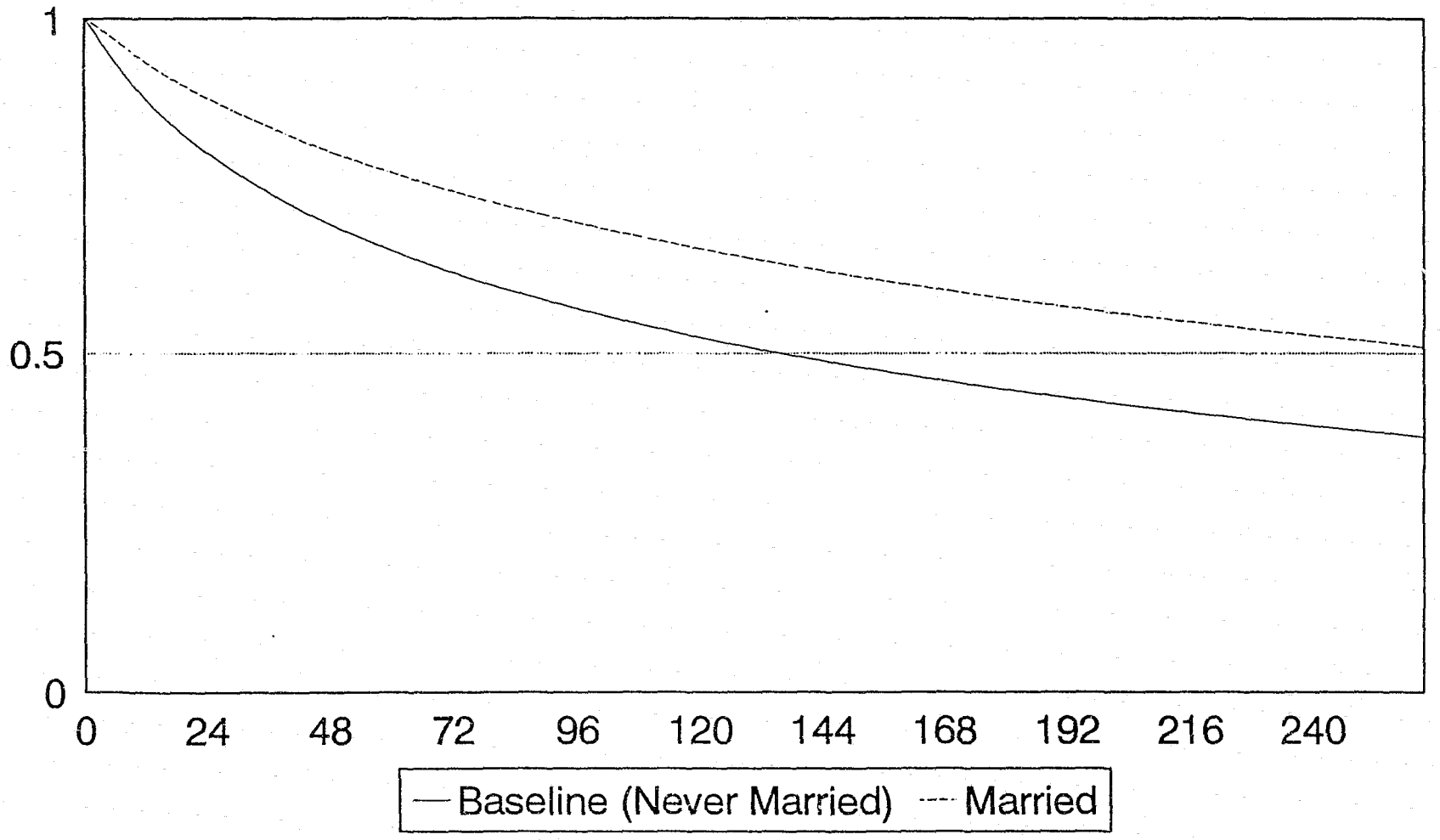


Figure 4.8

Hazard of Recidivating

Never Married versus Married

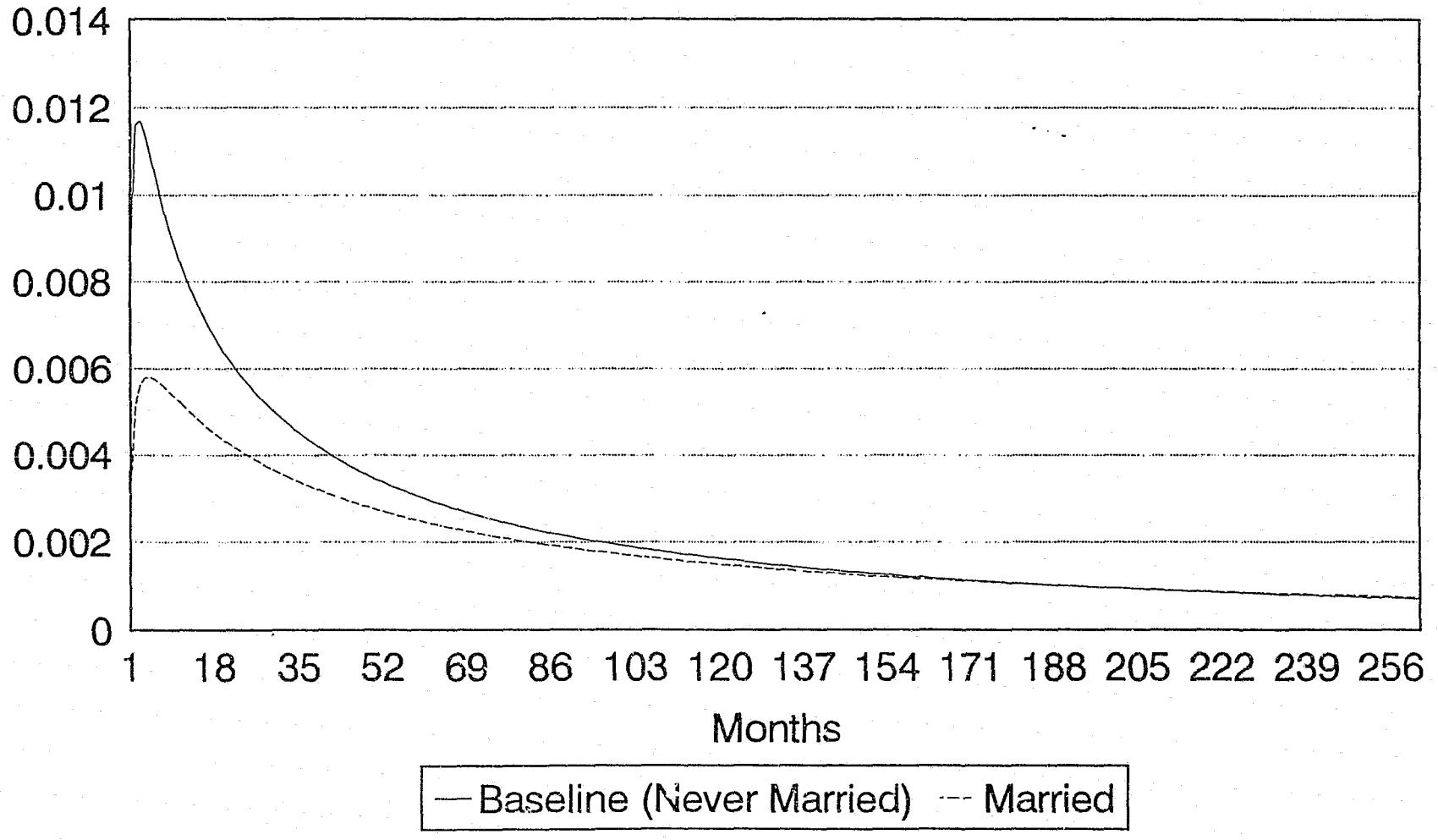


Figure 4.9

Cumulative Survival

Any Drug Use versus No Drug Use

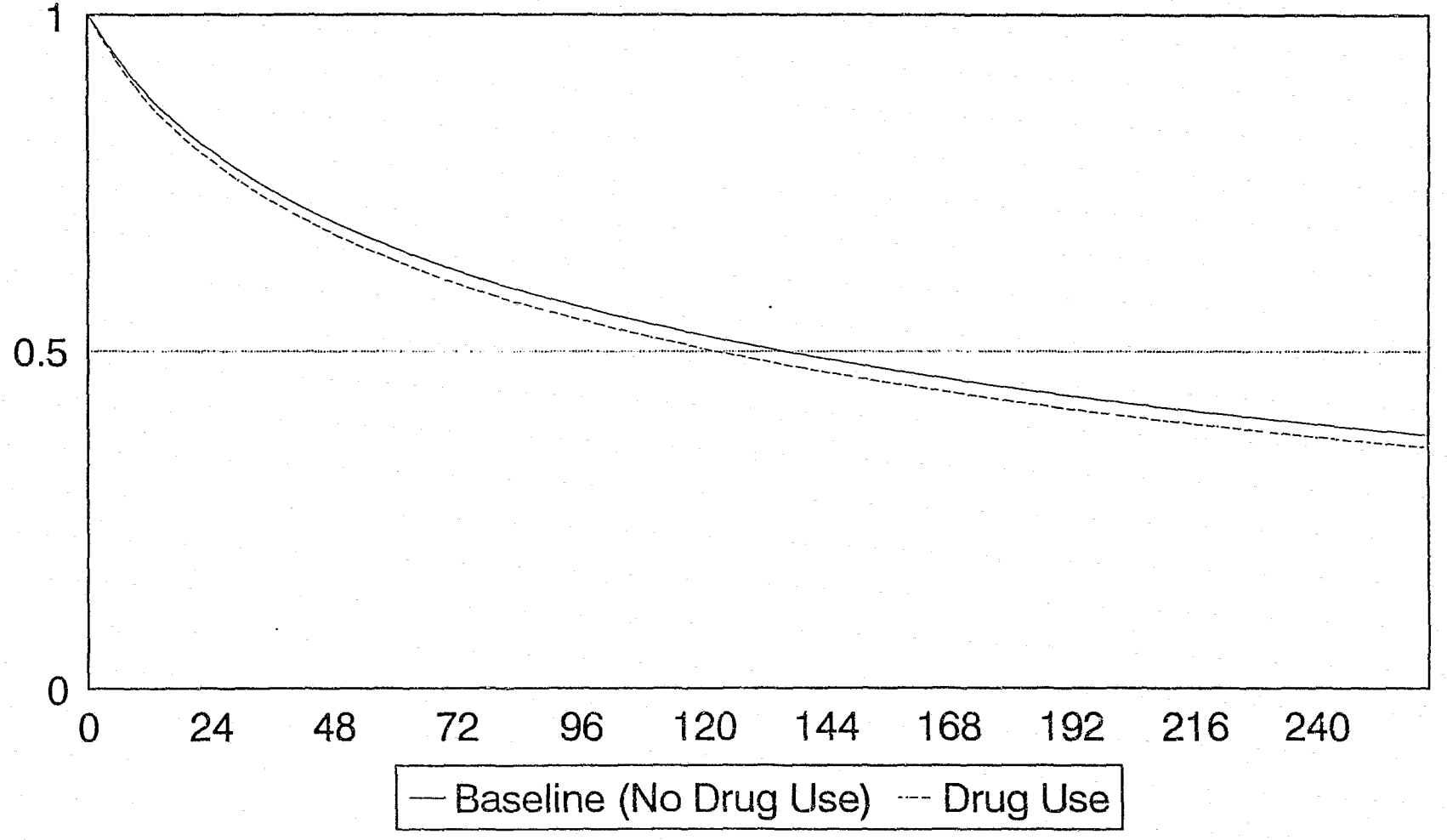
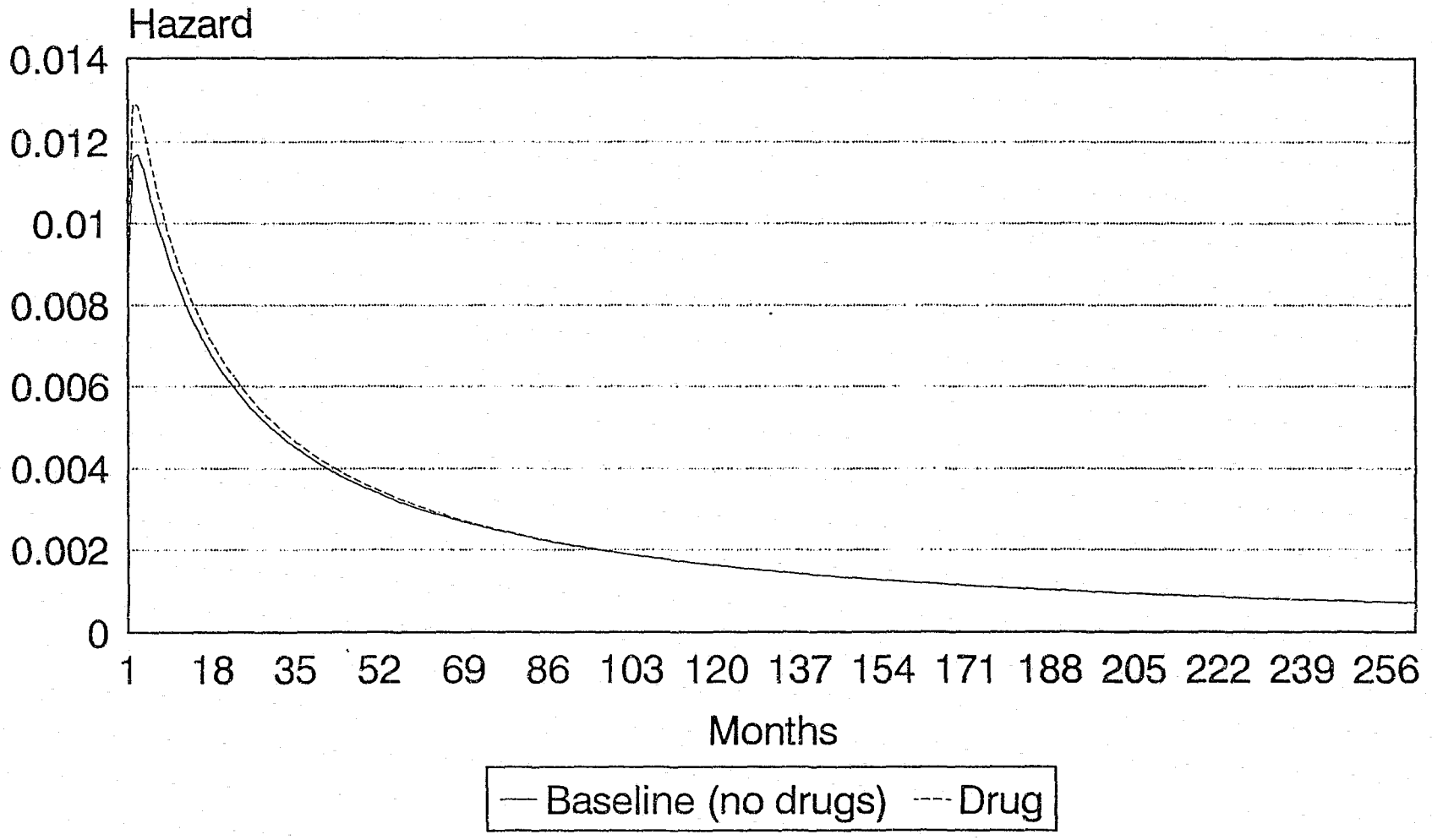


Figure 4.10

Hazard of Recidivating

Any Drug Use versus No Drug Use



which illustrates both the dangers of relying on short follow up periods to assess the size of an effect and the importance of those early months. The relatively small size of these differences when viewed over the entire time period also indicates why some of the seemingly large effects in table 2 are not statistically significant.

Discussion

The multivariate models of recidivism described above lead to three general conclusions about recidivism in a white collar crime sample. Turning to the specific factors that influence failure, our findings reinforce those derived from other research on crime. For example, prior record is a significant and important factor in predicting recidivism, as is gender. These are not surprising findings, and merely confirm two common empirical findings about criminality. Women as compared to men, are much less likely to become involved in crime, and once involved are much less likely to commit multiple or serious offenses (Maher and Waring, 1990). Similarly, prior evidence of criminality is often viewed as the best predictor of subsequent offending (Blumstein et al., 1986). What is perhaps most interesting in these analyses is that gender is a more important factor in explaining recidivism than is prior criminality.

While our model suggests similarities in the criminal careers of convicted white collar offenders and other criminals, it also provides confirmation of our emphasis on notions of

conventionality and respectability in understanding white collar criminal histories. Two variables that we identified as indicators of this dimension in Chapter 2 strongly influence recidivism. Those who are married take longer to reoffend. Those who are identified as having a history of drug use, are likely to fail much more quickly. Additionally, we suspect that our finding as regards the imposition of fines reflects this dimension of an offender's social record rather than any deterrent effects of a fine sanction itself.

Our reasoning here derives in part from the fact that we find it unlikely that fines have a very strong impact on reoffending, while more punitive sanctions, such as prison, do not. One would have to assume that fines increase the perceived costs of offending while avoiding the stigmatizing elements and potential crime learning effects of a prison sentence. Taking a closer look at how judges impose fines provides a very different interpretation of this finding, and one that is consistent with our more general understanding of which offenders are likely to develop more lengthy and serious criminal records. Fines in this sample provide a kind of summary of an offender's economic and social record as perceived by judges at time of sentencing. They appear more as an overall estimate of the judges view of the stability of the offender, and thus his or her ability to pay a fine, than as an indication of punitiveness or punishment. This is the conclusion that Weisburd et al. come to in examining the imposition of fines in a multivariate context, and their findings

are suggestive of the relationship between social stability and offending that we raised earlier:

> Overall, our analysis of the imposition of fines provides a contrast with our results concerning imprisonment. Many of the characteristics which lead to more severe prison sanctions have precisely the opposite influence on fines. We cannot attribute these distinctions to the assumption that fines are an alternative to prison, since our multivariate analysis already controls for this variable. Nor can we attribute this finding to the fact that judges may be using fines as an alternative to probation, since our data show that there is little relation between these two sanctions once other characteristics of offense and offender have been taken into account.
>
> What then can we say about our results? Judges in our sample appear to assess fines through stereotypes of those who are most likely to be able to pay. Those with the most money available are most likely to be fined. But irrespective of their actual ability to pay (as reflected in their net worth), white defendants, those with more impeccable records, and those who have higher class positions are more likely to be fined. (Weisburd et al., 1991: 156-157)

Our final conclusion derives from our investigation of how these specific factors influence recidivism over time. Whatever the importance of specific factors such as prior record or drug use in understanding recidivism overall, their impacts decline as the period from the criterion crime lengthens. While this result is consistent with findings from criminal career studies of common offenders (e.g. see Blumstein et al., 1986; 1988), it has particular importance in study of white collar crime. As we discussed in Chapter 3 the average time to failure for those who do fail is very long in our sample. This finding is reinforced in this chapter where our predicted median time to reoffending is more than ten years. Moreover, most offenders do not fail in the follow up period. What this means is that the effects we do find

in our study have relevance only for a relatively small number of white collar criminals. For many of those who will reoffend over the life course, the variables we identify provide comparatively little discrimination.

Conclusions

The correlates of recidivism for those convicted of white collar crimes are in many ways similar to those reported for other offenders. Basic characteristics like gender and prior record strongly influence the distributions of reoffending in our sample. However, we also find that factors reflecting conventionality and social stability are important in describing the distribution of recidivism. These factors reflect in part variation in the nature of offenders in our sample described in Chapter 2. Whatever the specific effects that allow us to discriminate between those who do or do not reoffend in our sample, the impacts of these factors decline over time. This finding is particularly important given the fact that the average time to recidivism is a very long for those we study. Combined with our earlier conclusion that prison sanctions have little impact on subsequent offending, our study suggests that there is little possibility for intervention at time of sanctioning in ways that would affect the long term criminality of white collar offenders.

REFERENCES

Allison, Paul D. 1984. Event History Analysis: Regression for Longitudinal Event Data. Beverly Hills: Sage Publications.

Andenaes, Johannes. 1974. Punishment and Deterrence. Ann Arbor, MI: The University of Michigan Press.

Belair, Robert R. 1985. Data Quality of Criminal History Records. Prepared for the U.S. Department of Justice by SEARCH Group Inc.

Benson, Michael. 1982. Collateral Consequences of Conviction for a White Collar Crime. Unpublished dissertation, Ann Arbor, MI: University Microfilms International.

Benson, Michael. 1985. Denying the Guilty Mind: Accounting for Involvement in a White-Collar Crime. Criminology 4:583-607.

Benson, Michael. 1985. White-Collar Offenders Under Community Supervision. Justice Quarterly 2:429-438.

Benson, Michael and Francis T. Cullen. 1988. The Special Sensitivity of White-Collar Offenders to Prison: A Critique and Research Agenda. Journal of Criminal Justice 16:207-215.

Benson, Michael and Elizabeth Moore. 1991. Are White-Collar and Common Offenders the Same?: A Test of a Recently Proposed Theory of Crime. Unpublished manuscript: University of Tennessee.

Benson, Michael and Elizabeth Moore. 1992. Are White-Collar and Common Offenders the Same? An Empirical and Theoretical Critique of a Recently Proposed General Theory of Crime. Journal of Research in Crime and Delinquency 3:251-272.

Benson, Michael and Esteban Walker. 1988. Sentencing the White-Collar Offender. American Sociological Review 53:294-302.

Berk, Richard A. 1987. Causal Inference as a Prediction Problem. In Prediction and Classification, edited by Don M. Gottfredson and Michael Tonry, 183-200. Chicago: University of Chicago Press.

Berk, Richard A., Kenneth J. Lenihan and Peter H. Rossi. 1980. Crime and Poverty: Some Experimental Evidence From Ex-Offenders. American Sociological Review 45:766-786.

Beyleveld, Deryck. 1980. A Bibliography on General Deterrence Research. Westmead, England: Saxon House.

Block, Michael K., Frederick C. Nold and Joseph G. Sidak. 1981. The Deterrent Effect of Antitrust Enforcement. Journal of Political Economy 89:429-445.

Blumstein, Alfred, Jacqueline Cohen and David P. Farrington. 1988. Criminal Career Research: Its Value for Criminology. Criminology 26:1-36.

Blumstein, Alfred, Jacqueline Cohen with Paul Hsieh. 1982. The Duration of Adult Criminal Careers. Final Report to the National Institute of Justice, June.

Blumstein, Alfred, Jacqueline Cohen, Jeffrey A. Roth and Christy A. Visher, eds. 1986. Criminal Careers and "Career Criminals". Washington, D.C.: National Academy Press.

Braithwaite, John. 1982. Challenging Just Deserts: Punishing White-Collar Criminals. Journal of Criminal Law and Criminology 73:723-760.

Braithwaite, John.1985. White Collar Crime. Annual Review of Sociology 11:1-25.

Braithwaite, John and Gilbert Geis. 1982. On Theory and Action for Corporate Crime Control. In On White Collar Crime, edited by Geis, Gilbert, 189-210. Lexington, MA: D.C. Heath and Co.

Braithwaite, John and Toni Makkai. 1991. Testing an Expected Utility Model of Corporate Deterrence. Law and Society Review 1:7-39.

Bridges, George S. and James A. Stone. 1986. Effects of Criminal Punishment on Perceived Threat of Punishment: Toward an Understanding of Specific Deterrence. Journal of Research in Crime and Delinquency 3:207-239.

Burgess, Robert, L. 1980. Family Violence: Implications from Evolutionary Biology. In Understanding Crime, edited by T. Hirschi and M. Gottfredson. Beverly Hills: Sage.

Chaiken, Jan M. and Marcia R. Chaiken. 1982. Varieties of Criminal Behavior. Santa Monica: The Rand Corporation.

Clarke, M.J. 1978. White Collar Crime, Occupational Crime, and Legitimacy. International Journal of Criminology and Penology 6:121-136.

Clarke, Ronald V. and David Weisburd. 1993. Diffusion of Crime Control Benefits. Crime Prevention Studies Volume II. Monsey, N.Y.: Criminal Justice Press.

Clinard, Marshall and Peter Yeager. 1980. Corporate Crime. New York: Free Press.

Coffee, J. 1980. Making the Punishment Fit the Corporation: The Problem of Finding the Optimal Corporate Sanction. Northern Illinois University Law Review 1:3-36.

Cohen, Jacob. 1977. Statistical Power Analysis for the Behavioral Sciences. New York: Academic Press.

Cohen, Jacob. 1988. Statistical Power Analysis for the Behavioral Sciences. Second Edition. New York: Academic Press.

Cohen, Jacqueline. 1986. Research on Criminal Careers: Individual Frequency Rates and Offense Seriousness. In Criminal Careers and "Career Criminals", edited by Blumstein, Alfred, Jacqueline Cohen, Jeffrey A. Roth and Christy A. Visher. Washington, D.C.: National Academy Press.

Coleman, James W. 1992. The Theory of White-Collar Crime: From Sutherland to the 1990s. In White-Collar Crime Reconsidered, edited by Kip Schlegel and David Weisburd. Boston: Northeastern University Press.

Cooper, Lynne Eickholt, Mark E. Tompkins and Donald A. Marchand. 1979. An Assessment of the Social Impacts of the National Crime Information Center and Computerized Criminal History Program. Columbia, SC: Bureau of Governmental Research and Service.

Cressey, D.R. 1980. Employee Theft: The Reasons Why. Security World October:31-36.

Criminal Justice Information Policy. 1988, November. Public Access to Criminal History Record Information. NCJ-111458. Washington, D.C.: SEARCH Group, Inc.

Cullen, Francis, Gregory A. Clark, Bruce G. Link, Richard A. Mathers, Jennifer Lee Niedospial and Michael Sheahan. 1985. Dissecting White-Collar Crime: Offense Type and Punitiveness. International Journal of Comparative and Applied Criminal Justice 1:15-28.

Daly, Kathleen. 1989. Gender and Varieties of White-Collar Crime. Criminology 27:769-793.

Department of Health and Human Services. 1981. User's Manual: The National Death Index. Hyattsville, MD: Department of Health and Human Services.

Edelhertz, Herbert. 1970. The Nature, Impact and Prosecution of White Collar Crime. Washington, D.C.:USGPO.

Edelhertz, Herbert and Thomas D. Overcast, eds. 1982. White Collar Crime: An Agenda for Research. Lexington, MA: D.C. Heath and Co.

Elliot, D.S. and S.A. Ageton. 1980. Reconciling Race and Class Differences in Self-Reported and Official Estimates of Delinquency. American Sociological Review 45:95-110.

Farrington, David P., Lloyd E. Ohlin and James Q. Wilson. 1986. Understanding and Controlling Crime. New York: Springer-Verlag.

Feeley, Malcolm. 1979. The Process is the Punishment: Handling Cases in a Lower Criminal Court. New York: Russell Sage Foundation.

Fishman, Laura T. 1990. Women at the Wall: A Study of Prisoner's Wives Doing Time on the Outside. Albany, N.Y.: State University of New York Press.

Geis, Gilbert A., ed. 1982a. On White Collar Crime. Lexington, MA: D.C. Heath and Co.

Geis, Gilbert A. 1982b. A Research and Action Agenda with Respect to White Collar Crime. In White Collar Crime: An Agenda for Research, edited by Edelhertz, Herbert and Thomas D. Overcast, 175-202. Lexington, MA: D.C. Heath and Co.

Geis, Gilbert A. 1984. White-Collar and Corporate Crime. In Major Forms of Crime, edited by Robert F. Meier, 137-166. Beverly Hills: Sage Publications.

Geis, Gilbert A. 1992. White-Collar Crime: What Is It? In White-Collar Crime Reconsidered, edited by Kip Schlegel and David Weisburd. Boston: Northeastern University Press.

Geis, Gilbert A. and Thomas R. Clay. 1982. Criminal Enforcement of California's Occupational Carcinogens Control Act. In On White Collar Crime, edited by Gilbert Geis, 103-124. Lexington, MA: D.C. Heath and Co.

Geis, Gilbert A. and Ezra Stotland, eds. 1980. White-Collar Crime: Theory and Research. Beverly Hills, CA: Sage.

Gelber, Richard D. and Marvin Zelen. 1985. Planning and Reporting of Clinical Trials. In Medical Oncology: Basic Principles and Clinical Management of Cancer, edited by Calabresi, Paul, Philip E. Schein, and Saul Rosenberg. New York: MacMillan.

Glueck, Sheldon and Eleanor Glueck. 1968. Delinquents and Nondelinquents in Perspective. Cambridge, MA: Harvard University Press.

Goldfarb, Ronald. 1975. Jails: The Ultimate Ghetto. New York: Anchor Press/Doubleday.

Gottfredson, Stephen D. 1980. Exploring the Dimensions of Judged Offense Seriousness. Unpublished Manuscript: Rutgers University.

Gottfredson, Michael and Travis Hirschi. 1990. A General Theory of Crime. Stanford, CA: Stanford University Press.

Gove, Walter R. 1980. The Labelling Perspective: An Overview and Postscript. In The Labelling of Deviance: Evaluating a Perspective, edited by Walter R. Gove. Second Edition. Beverly Hills, CA: Sage.

Greenwood, Peter. 1985. The Incapacitative/deterrent role of Increased Criminal Penalties. Proceedings of the Attorney-General's Crime Conference 1985. Sacremento, CA: California Department of Justice.

Hagan, John and Kristin Bumiller. 1983. Making Sense of Sentencing: A Review and Critique of Sentencing Research. In Research and Sentencing: The Search for Reform, edited by Alfred Blumstein, Jacqueline Cohen, Susan Martin and Michael Tonry. Volume 2. Washington, D.C.: National Academy Press.

Hagan, John and Patricia Parker. 1985. White Collar Crime and Punishment: The Class Structure and Legal Sanctioning of Securities Violations. American Sociological Review 50:302-316.

Harris, Carl M., Ali R. Kaylan and Michael D. Maltz. 1981. Recent Advances in the Statistics of Recidivism Measurement. In Models in Quantitative Criminology, edited by James A. Fox, 61-79. New York: Academic Press.

Hindelang, Michael, Travis Hirschi and Joseph Weis. 1975. Self-Reported Delinquency: Methods and Substance. Proposal submitted to the National Institute of Mental Health, Department of Health, Education, and Welfare, MH27778.

Hindelang, Michael, Travis Hirschi and Joseph Weis. 1979. Correlates of Delinquency: The Illusion of Discrepancy between Self-Report and Official Measures. American Sociological Review 44:995-1014.

Hindelang, Michael, Travis Hirschi and Joseph Weis. 1981. Measuring Delinquency. Beverly Hills: Sage.

Hirschi, Travis and Michael Gottfredson. 1987. Causes of White Collar Crime. Criminology 4:949-974.

Hopkins, Andrew. 1980. Controlling Corporate Deviance. Criminology 2:198-214.

Horney, Julie and Ineke Haen Marshall. 1992. An Experimental Comparison of Two Self-Report Methods for Measuring Lambda. Journal of Research in Crime and Delinquency 1:102-121.

Johnson, N.L. and S. Kotz. 1970a. Distributions in Statistics: Continuous Univariate Distributions--1. New York: Wiley.

Johnson, N.L. and S. Kotz. 1970b. Distributions in Statistics: Continuous Univariate Distributions--2. New York: Wiley.

Kalbfleisch, J.D. and R.L. Prentice. 1980. The Statistical Analysis of Failure Time Data. New York: John Wiley and Sons.

Kandel, Denise, B. 1978. Longitudinal Research on Drug Use. Washington, D.C.: Hemisphere.

Katz, J. 1979. Legality and Equality: Plea Bargaining in the Prosecution of White-Collar and Common Crime. Law and Society Review 13:431-459.

Kennedy, C. 1985. Criminal Sentences for Corporations: Alternative Fining Mechanisms. California Law Review, March:443-482.

Lamb, H. Richard and Victor Goertzel. 1974. Ellsworth House: A Community Alternative to Jail. American Journal of Psychiatry 1:64-68.

Lawless, J.F. 1982. Statistical Models and Methods for Lifetime Data. New York: John Wiley and Sons.

Lemert, Edwin M. 1974. Beyond Mead: The Societal Reaction to Deviance. Social Problems 221:457-468.

Lewis-Beck, Michael. 1980. Applied Regression: Statistical Package for the Social Sciences. Newbury Park, CA: Sage.

MacKenzie, Doris L., Phyllis Jo Baunach and Roy R. Roberg, eds. 1990. Measuring Crime: Large-Scale, Long-Range Efforts. Albany: State University of New York Press.

Maher, Lisa and Elin Waring. 1990. Beyond Simple Differences: White-Collar Crime, Gender and Workforce Position. Phoebe 2:44-54.

Makkai, Toni and John Braithwaite. 1991. Criminological Theories and Regulatory Compliance. Criminology 2:191-220.

Maltz, Michael D. 1984. Recidivism. Orlando, FL: Academic Press.

Maltz, Michael D. 1989. Surfit: Survival Fitting and Analysis Software for Industrial, Biomedical, Correctional, and Social Science Applications. Chicago: Author.

Maltz, Michael D. and Richard McCleary. 1977. The Mathematics of Behvioral Change: Recidivism and Construct Validity. Evaluation Quarterly 1:421-438.

Maltz, Michael D. and Richard McCleary. 1978. Comments on 'Stability of Parameter Estimates in the Split Population Exponential Distribution'. Evaluation Quarterly 2:650-654.

Maltz, Michael D., Richard McCleary and Stephen M. Pollock. 1979. Recidivism and Likelihood Functions: A Reply to Stollmack. Evaluation Quarterly 3:124-131.

Maltz, Michael D. and Stephen M. Pollock. 1980. Artificial Inflation of a Delinquency Rate by a Selection Artifact. Operations Research 3:547-559.

Mann, Kenneth. 1992. Procedure Rules and Information Control: Gaining Leverage over White-Collar Crime. In White-Collar Crime Reconsidered, edited by Kip Schlegel and David Weisburd. Boston: Northeastern University Press.

Mann, Kenneth, Stanton Wheeler and Austin Sarat. 1980. Sentencing the White-Collar Offender. American Criminal Law Review 17:479-500.

McDermott, Martin F. 1982. Occupational Disqualification of Corporate Executives: An Innovative Condition of Probation. The Journal of Criminal Law and Criminology 2:604-641.

Meier, Robert F. and Gilbert Geis. 1982. The Psychology of the White Collar Offender. In On White Collar Crime, edited by Gilbert Geis. Lexington, MA: D.C. Heath and Co.

Meier, Robert F. and James F. Short Jr. 1981. Consequences of White-Collar and Corporate Crime. In White-Collar Crime, edited by Edelherz, Herbert and Thomas D. Overcast. Lexington, MA: D.C. Heath and Co.

Mood, Alexander, M., Franklin A. Graybill and Duane C. Boes. 1963. Introduction to the Theory of Statistics. Third Edition. New York: McGraw-Hill.

Nettler, G. 1974. Explaining Crime. New York: McGraw-Hill.

Patterson, John and Robert Bilgrad. 1985. The National Death Index Experience: 1981-1985. Record Linkage Techniques--1985: Proceedings of the Workshop on Exact Matching Methodologies. Department of the Treasury, Internal Revenue Service, Statistics of Income Division, December, Publication 1299:2-86.

Petersilia, Joan and Susan Turner. 1990. Intensive Supervision for High-Risk Probationers: Findings from Three California Experiments. Santa Monica: The Rand Corporation.

Petersilia, Joan and Susan Turner. 1986. Prison Versus Probation in California. Santa Monica: The Rand Corporation.

Peterson, Mark and Harriet Braiker. 1980. Doing Crime: A Survey of California Prison Inmates. Santa Monica: The Rand Corporation.

Piliavin, Irving, Rosemary Gartner, Craig Thornton and Ross L. Matsueda. 1986. Crime, Deterrence, and Rational Choice. American Sociological Review February:101-119.

Pollack, Harriet and Alexander B. Smith. 1983. White-Collar v. Street Crime Sentencing Disparity: How Judges see the Problem. Judicature 4:175-182.

Reiss, Albert, J., Jr. 1975. Inappropriate Theories and Inadequate Methods as Policy Plagues: Self-Reported Delinquency and the Law. In Social Policy and Sociology, edited by N.J. Demarath III, et al. New York: Academic Press.

Rossi, Peter H., Richard A. Berk and Kenneth J. Lenihan. 1980. Money, Work, and Crime: Experimental Evidence. New York: Academic Press.

Sampson, Robert, J. 1987. Urban Black Violence: The Effect of Male Joblessness and Family Disruption. American Journal of Sociology 93:348-382.

Sapsford, R.J. and D.D. Smith. 1979. Predicting Sentence Length and Time Actually Served in Prison. British Journal of Criminology 19:164-167.

Schlegel, Kip. 1990. Just Deserts for Corporate Criminals. Boston: Northeastern University Press.

Schlegel, Kip and David Weisburd, eds. 1992. White-Collar Crime Reconsidered. Boston: Northeastern University Press.

Schmidt, Peter and Ann Dryden Witte. 1978. Determinants of Criminal Recidivism: Further Investigations. Report to the North Carolina Department of Correction.

Schmidt, Peter and Ann Dryden Witte. 1979. Models of Criminal Recidivism and an Illustration of their Use in Evaluating Correctional Programs. In The Rehabilitation of Criminal Offenders: Problems and Prosects, edited by L. Sechrest, S. White and E. Brown. Washington, D.C.: National Academy of Sciences.

Schmidt, Peter and Ann Dryden Witte. 1980. Evaluating Correctional Programs: Models of Criminal Recidivism and an Illustration of their use. Evaluation Review 4:585-600.

Schmidt, Peter and Ann Dryden Witte. 1984. An Economic Analysis of Crime and Justice: Theory, Methods and Applications. Orlando, FL: Academic Press.

Schmidt, Peter and Ann Dryden Witte. 1988. Predicting Recidivism Using Survival Models. New York: Springer-Verlag.

Schwartz, Richard D. and Sonya Orleans. 1967. On Legal Sanctions. The University of Chicago Law Review 2:274-300.

Scott, Joseph E. 1974. The Use of Discretion in Determining the Severity of Punishment for Incarcerated Offenders. Journal of Criminal Law and Criminology 65:214-224.

Sellin, Thorsten and Marvin Wolfgang. 1964. The Measurement of Delinquency. New York: John Wiley and Sons.

Shapiro, Susan P. 1980. Thinking About White Collar Crime: Matters of Conceptualization and Research. Washington, D.C.: National Institute of Justice.

Sherman, Lawrence W. and Richard A. Berk. 1984. The Specific Deterrent Effects of Arrest for Domestic Assault. American Sociological Review April:261-271.

Sherman, Lawrence W. and Barry D. Glick. 1984. The Quality of Police Arrest Statistics. Police Foundation Reports. Number 2, August. Washington, D.C.: Police Foundation.

Sherman, Lawrence W., Patrick Gartin, David Doi and Susan Miler. 1986. The Effects of Jail Time on Drunk Drivers. Presentation to the American Society of Criminology, Atlanta, GA, November.

Shryock, Harry, Jacob Siegel and Associates. 1980. The Methods and Materials of Demography, Volume 2. Washington, D.C.: USGPO.

Simon, Rita J. 1975. The Contemporary Woman and Crime. Washington, D.C.: USGPO.

Simpson, Sally and Christopher S. Koper. 1992. Deterring Corporate Crime. Criminology 3:347-375.

Smith, Douglas A. and Patrick R. Gartin. 1989. Specifying Specific Deterrence: The Influence of Arrest on Future Criminal Activity. American Sociological Review February:94-105.

Steffensmeier, Darrell. 1989. On the Causes of "White-Collar" Crime: An Assesment of Hirschi and Gottfredson's Claims. Criminology 2:345-358.

Stotland, Ezra, Michael Brintnall, Andre L'Heureux and Eva Ashmore. 1980. Do Convictions Deter Home Repair Fraud? In White Collar Crime:Theory and Research, edited by Gilbert Geis and Ezra Stotland, 252-265. Beverly Hills: Sage.

Sutherland, Edwin H. 1940. White Collar Criminality. American Sociological Review 5:1-12.

Sutherland, Edwin H. 1949. White Collar Crime. New York: Holt, Rinehart and Winston.

Sviridoff, M. and J.E. McElroy. 1985. Employment and crime: A Summary Report. New York: Vera Institute of Justice.

Thomas, Charles, W. and Donna M. Bishop. 1984. The Effects of Formal and Informal Sanctions on Delinquency: A Longitudinal Comparison Labelling and Deterrence Theories. Journal of Criminal Law and Criminology 4:1222-1245.

Tillman, R. 1987. The Size of the 'Criminal Population': The Prevalence and Incidence of Adult Arrest. Criminology 25:561-580.

Tittle, Charles R. 1988. Two Empirical Regularities (Maybe) in Search of an Explanation: Commentary on the Age/Crime Debate. Criminology 26:75-85.

Tuma, Nancy B., Michael Hannan and L.D. Groeneveld. 1979. Dynamic Analysis of Event Histories. American Journal of Sociology 84:820-854.

United States Bureau of Census. 1977. Statistical Abstracts of the United States. Washington, D.C.: U.S. Bureau of Census.

United States Sentencing Commission. 1987. Sentencing Guidlines and Policy Statements. Washington, D.C.: USGPO.

United States Sentencing Commission. 1991. The Federal Sentencing Guidelines: A Report on the Operation of the Guidelines system and Short-term Impacts on Disparity in Sentencing, Use of Incarceration, and Prosecutorial Discretion and Plea Bargaining. Washington, D.C.: U.S. Sentencing Commission.

Vera Institute of Justice. 1977. Felony Arrests: Their Prosecution and Disposition in New York City Courts. New York: Vera Institute of Justice.

Visher, Christy A. and Richard L. Linster. 1990. A Survivial Model of Pretrial Failure. Journal of Quantitative Criminology 2: 153-184.

Waring, Elin, David Weisburd and Ellen Chayet. (in press). White Collar Crime and Anomie. Advances in Criminological Theory, Volume 6.

Watkins, John C., Jr. 1977. White-Collar Crime, Legal Sanctions and Social Control. Crime & Delinquency 3:290-303.

Weisburd, David and Joel Garner. 1992. Experimentation in Criminal Justice: Editor's Introduction. Journal of Research in Crime and Delinquency 29:1.

Weisburd, David, Lawrence Sherman and Anthony Petrosino. 1990. Registry of Randomized Criminal Justice Experiments in Sanctions. Sponsored by Rutgers-The State University and Crime Control Institute. Los Altos: Sociometric Corporation, Data Resources Program of the National Institute of Justice.

Weisburd, David, Elin Waring and Stanton Wheeler. 1987. Examining Opportunity Structures in White Collar Crime. Paper presented at the American Society of Criminology, Montreal, Canada.

Weisburd, David, Elin Waring and Stanton Wheeler. 1990. Class, Status, and the Punishment of White-Collar Criminals. Law & Social Inquiry 2:223-243.

Weisburd, David, Ellen F. Chayet and Elin Waring. 1990. White-Collar Crime and Criminal Careers: Some Preliminary Findings. Crime & Delinquency 3:342-355.

Weisburd, David, Stanton Wheeler, Elin Waring and Nancy Bode. 1991. Crimes of the Middle Classes. New Haven: Yale University Press.

West, Donald and David Farrington. 1973. Who Becomes Delinquent? London: Heinemann.

Wheeler, Stanton. 1992. The Problem of White-Collar Crime Motivation. In White-Collar Crime Reconsidered, edited by Kip Schlegel and David Weisburd. Boston: Northeastern University Press.

Wheeler, Stanton, Mann, Kenneth and Austin Sarat. 1988. Sitting in Judgment: The Sentencing of White Collar Offenders. New Haven: Yale University Press.

Wheeler, Stanton and Mitchell Lewis Rothman. 1982. The Organization as Weapon in White Collar Crime. Michigan Law Review 80:1403-1426.

Wheeler, Stanton, David Weisburd and Nancy Bode. 1982. Sentencing the White Collar Offender: Rhetoric and Reality. American Sociological Review 47:641-659.

Wheeler, Stanton, David Weisburd and Nancy Bode. 1985. Study of the Convicted Federal White-Collar Crime Defendants. National Archives of Criminal Justice Data. The Inter-University Consortium for Political and Social Research. Ann Arbor: University of Michigan.

Wheeler, Stanton, David Weisburd and Nancy Bode. 1988. Study of Convicted Federal White-Collar Crime Defendants. National Archives of Criminal Justice Data. The Inter-University Consortium for Political and Social Research. Ann Arbor: University of Michigan.

Wheeler, Stanton, David Weisburd, Elin Waring and Nancy Bode. 1988. White Collar Crimes and Criminals. American Criminal Law Review Winter:331-357.

Wilkins, Leslie T. 1965. Social Deviance: Social Policy, Action, and Research. Englewood Cliffs, N.J.: Prentice-Hall, Inc.

Wilkins, Leslie T. 1985. The Politics of Prediction. In Prediction in Criminology, edited by David Farrington and R. Tarling. Albany: State University of New York Press.

Wolfgang, Marvin E., Robert M. Figlio, Paul E. Tracy and Simon I. Singer. 1985. The National Survey of Crime Severity. Washington, D.C.: USGPO.

Wolfgang, Marvin E., Robert M. Figlio and Thorsten Sellin. 1972. Delinquency in a Birth Cohort. Chicago: University of Chicago Press.

Zeitz, D. 1981. Women who Embezzle or Defraud: A Study of Convicted Felons. New York: Praeger.

Zimring, Franklin E. and Gordon J. Hawkins. 1973. Deterrence: The Legal Threat in Crime Control. Chicago: University of Chicago Press.

Appendix A

Number of Individuals in the Basic Sample, by Offense and District

Offense	District							
	Southern New York	Maryland	Northern Georgia	Northern Texas	Northern Illinois	Central California	Western Washington	Total
ank Embezzlement	30	29	22	30	30	30	30	201
ax Fraud	30	30	30	30	30	30	30	210
redit Fraud	30	6	22	30	16	30	24	158
ail Fraud	30	30	30	30	30	30	10	190
ecurities Fraud	30	0	0	5	1	30	1	67
alse Claims	30	8	25	24	14	30	26	157
ribery	30	11	0	8	16	17	2	84
ntitrust	15	4	6	0	0	2	0	27
l White-Collar Crimes	225	118	135	157	137	199	123	1,094
ommon Crimes	30	30	30	30	30	30	30	210

Note: The sampling design is discussed in chapter 1. Unless otherwise noted, the sample of white-collar criminals here is used whenever we discuss white-collar criminals as a group. This sample of common criminals is used throughout.

(Source: Weisburd et al., 1991:196.)

Appendix B

Logistic Regression Model of Whether a Rap Sheet was Received from the F.B.I.

Variable	Parameter Estimate	Standard Error	Pr > Chi-Square
Intercept	-3.6933	0.4778	0.0001
Age*	0.0598	0.0075	0.0001
Arrests**	-0.1295	0.0382	0.0007
Prison	-0.5721	0.1655	0.0005
Statutory Category of Criterion Offense			
Antitrust	0.0112	0.4073	0.9780
Securities	-0.4400	0.3495	0.2081
Mail Fraud	-0.2745	0.3253	0.3988
Bribery	0.0392	0.3669	0.9150
Bank Embezzlement	-0.4810	0.3424	0.1601
Tax	0.0515	0.3028	0.8651
False Claims	-0.0162	0.3272	0.9606
District of Conviction for Criterion Offense			
California	-0.2352	0.3451	0.4955
Texas	-0.3019	0.3707	0.4155
Washington	-0.00676	0.3775	0.9857
New York	0.6155	0.3117	0.0483
Illinois	0.8473	0.3391	0.0125
Maryland	0.6742	0.3612	0.0620
Other District	0.5807	0.3954	0.1419
Male	0.5456	0.2620	0.0373
Non-white	-0.1811	0.2372	0.4451

Number of Observations: 1254

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
-2 Loglikelihood	331.836	1127.420	204.415 with 19 DF (p=0.0001)

*Current age as recorded on the presentence investigation.
**Number of arrests prior to the criterion offense.

Appendix C

Reduced Logistic Regression Model Used to Predict the Likelihood of Imprisonment of the Offenders in the Yale White Collar Crime Sample

Variable	Beta	Chi-Square
Intercept	-5.20	26.57
Act-Related Variables		
Dollar Victimization	0.17	22.41
Offense Complexity	0.10	4.96
Geographic Spread of Illegality	0.25	6.62
Maximum Exposure to Imprisonment	0.15	34.28
Actor-Related Variables		
Duncan Socioeconomic Index	0.01	10.69
Impeccability	-0.13	4.87
Number of Prior Arrests	0.09	9.64
Most Serious Prior Arrest	0.24	5.92
Role in Offense		
Middle	-1.03	5.13
Minor	-0.90	11.19
Missing	-0.41	3.58
Legal Process Variables		
Statutory Offense		
Bank Embezzlement	-0.34	1.49
Tax Violations	0.82	9.15
Mail Fraud	-0.39	1.81
Securities Violations	0.12	0.07
False Claims	-0.60	4.38
Bribery	-0.78	3.71
Antitrust	-0.94	2.00
Other Variables		
Sex	-1.13	21.39
Age	0.08	3.19
Age Squared	-0.001	5.01
Judicial District		
Central California	0.33	1.26
Maryland	0.65	4.00
Southern New York	-0.07	0.07
Northern Texas	1.05	11.87
Northern Illinois	0.67	4.82
Western Washington	0.41	1.69

N of cases=989
Model Chi-Square=305.08 with 27 degress of freedom
-2 log likelihood=1058.30 P,.0001
Note: All Variables are significant at least at the .05 level.

(For a complete description of the variables in this model, see Wheeler, Weisburd and Bode, 1992).