



Rick Ruddell

AMERICA BEHIND BARS

Trends in Imprisonment, 1950 to 2000

Criminal Justice

Recent Scholarship

Edited by
Marilyn McShane and Frank P. Williams III

A Series from LFB Scholarly

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America Behind Bars

Trends in Imprisonment, 1950 to 2000

Rick Ruddell

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Preface

This study used a longitudinal research design to examine the underlying political, cultural, and social factors that contributed to the growth in incarceration rates in the United States from 1952 to 2000. Controlling for the influences of economic stress, violent crime, unemployment, direct outlays for assistance, the percentage of population that is Black, and the percentage of males aged 15 to 29 years, this study examined the influences of political disaffection, civic disengagement and social disruption on adult imprisonment trends. Net of the other factors, political disaffection was strongly associated with three of the dependent variables, and civic disengagement was positively associated with two of the dependent variables.

In addition to examining the main effects of these variables this study also examined whether violent crime and economic stress condition the effects of political disaffection, civic disengagement or social disruption on the use of imprisonment. Consistent with the hypothesis was the finding that violent crime and economic stress condition the effects of political disaffection and civic disengagement such that these variables exert a stronger positive impact on the time served of prison inmates when economic stress or violent crime are increasing. Contrary to the hypotheses, however, the analyses demonstrated that political disaffection, social disruption, and civic disengagement exert a stronger negative influence upon imprisonment rates and prison admissions when rates of violent crime or economic stress are increasing. Implications for future research, as well as theoretical development about formal social control are discussed.

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Mass Imprisonment

At yearend 2002, there were 2.1 million inmates residing within American jails and prisons (Harrison and Beck, 2003), in addition to a further 4.7 million individuals under some form of community control—either on probation or parole (Glaze, 2003). For every 100,000 residents in the population, 700 inhabited beds in increasingly overcrowded jails or prisons. The scale of imprisonment is unparalleled in the history of democratic nations. In fact, European nations typically imprison less than 150 inmates per 100,000 residents in the population (Walmsley, 2003). As Bonczar (2003:1) observes, “If imprisonment rates remain unchanged, 6.6 percent of persons born in 2001 will go to prison at some point in their lifetime.” David Garland (2001) described these conditions as mass imprisonment—an experiment in social control with substantial economic, social, and individual costs that are seldom considered.

America’s use of high rates of imprisonment is a relatively recent phenomenon. Between 1920 and 1970, independent of economic conditions, wars or changing crime rates, the United States used a relatively stable amount of punishment (Blumstein, 2003; Blumstein and Cohen, 1973; Blumstein, Cohen, and Nagin, 1977; Blumstein and Moitra, 1979). During this era, the imprisonment rate ranged from 100 to 150 persons per 100,000 residents in the population (Caplow and Simon, 1999). In fact, it was proposed that correctional populations were so stable that they were self-regulating (Blumstein and Cohen 1973; Blumstein and Moitra, 1979) and incarceration rates of approximately 125 persons per 100,000 residents in the population were considered the optimum use of imprisonment (Blumstein, et al. 1977). In fact, this more or less constant use of punishment was one of the few stable features of American criminal justice systems. Both the police and courts—the other two elements of criminal justice

systems—underwent a host of challenges and reforms that changed the nature of both policing and the rights that offenders had before the courts.¹

During the mid-1970s, however, the use of incarceration started to increase, as outlined in Figure 1-1. This growth in correctional populations has continued unabated—at yearend 2002, for example, the nation's prison population had increased 2.6 percent from the previous year (Harrison and Beck, 2003). Penologists have come up with a number of explanations for these changes in the use of imprisonment (Austin, 2001; Miller, 1996; Tonry, 1999; Zimring, Hawkins, and Kamin, 2001). Most troubling, however, is that the economic and social conditions from the mid-1970s until the present closely paralleled those of the era from the 1920s to the 1970s—America experienced economic booms and busts, social and political upheaval, as well as cultural changes and wars. Moreover, crime rates also oscillated throughout this era, with rates of violence peaking between 1991 and 1992, and then dropping substantially. By yearend 2002—the height of the imprisonment boom—rates of violent crime reached their lowest point since the 1950s (Rennison and Rand, 2003).

Understanding the factors that contributed to the use of imprisonment appears relatively simple—we punished more offenders, and we punished them more severely. Yet, we have very little understanding about the underlying factors that contributed to the increased use of punishment. As we enter the 21st century understanding the motives that influence the use of punishment deserves special attention due to the rising financial and social costs of punitive law and order policies. Imprisoning over two million offenders has tremendous costs that extend far beyond the annual outlay for a correctional bed. And if the “brakes” are not applied on our punitive social control policies, what are the upper limits of punishment? Alfred Blumstein and his colleagues in the 1970s speculated that incarcerating 125 inmates per 100,000 residents in the population represented the optimum use of prison—and if we are imprisoning more than 700 offenders today—then we must ask, “How much is enough punishment?”

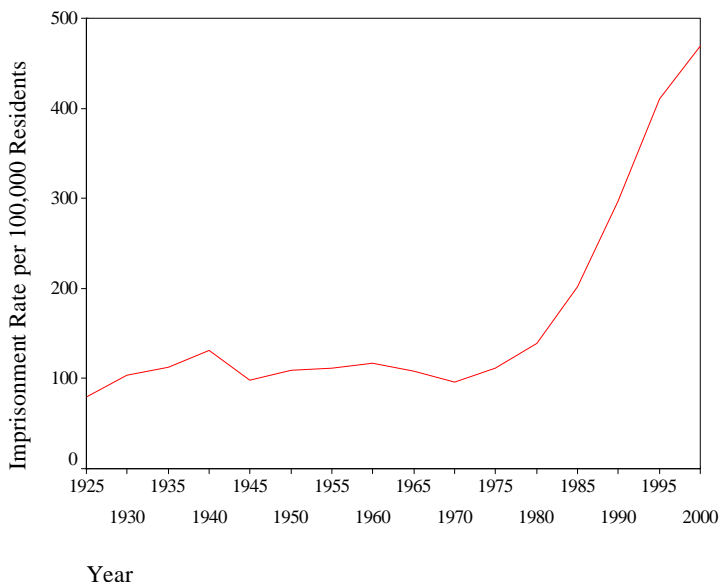


Figure 1-1. Imprisonment rate (includes federal and state inmates). Source: Maguire and Pastore, 2003

There is an intuitive conceptual appeal to the notion that crime and imprisonment are directly and positively related: as crime increases, so should the imprisonment rate (Gottfredson and Hindelang, 1979; McGarrell, 1993). A review of crime statistics and incarceration trends, however, does not support this hypothesis. Savelsberg (1994: 919) noted that:

The steepest and steadiest increase in incarceration rates began in 1980, when the crime rate had already been leveling out during the preceding four years...the incarceration rate increased by more than 50 inmates per 100,000 population between 1980 and 1984 without any change in the crime rate.

Some of the expanded use of punishment is a consequence of increases in the rates of violent crime from the late 1970s until the early 1990s. Yet, it is difficult to explain the totality of increases in the use of imprisonment based only on changes in the numbers of violent crimes. While violent crime doubled, the use of incarceration quadrupled.

A number of empirical studies have confirmed the observation that violent crime explains only a modest proportion of changes in imprisonment rates (Inverarity and Grattet, 1989; Inverarity and McCarthy, 1988; Jankovic, 1977; Lessan, 1991; Michalowski and Carlson, 1999; Myers and Sabol, 1987) and property crime explains almost none of the increased use of imprisonment (Cappell and Sykes, 1991; D'Alessio and Stolzenberg, 1995; Jacobs and Helms, 1996). Moreover, trends in rates of crime based on reports to the police (Federal Bureau of Investigation, 2003) and victimization surveys (Rennison and Rand, 2003) document how overall crime has generally decreased to the lowest levels since the National Crime Survey was initiated in 1973. Increasing use of imprisonment at the same time as decreasing crime rates presents a significant public policy dilemma (Bauman, 2000; Beckett, 1997; Beckett and Sasson, 2000; Blumstein 1998; Irwin, 1996; Lynch and Sabol, 2000; Nagin, 1998; Zimring and Hawkins, 1991).

Despite these empirical contributions to the literature, however, there is little scholarly agreement about the underlying factors that contributed to the expansion in the use of imprisonment in America. For over six decades it had been proposed that increases in unemployment rates would lead to higher imprisonment rates (Rusche, 1933; Rusche and Kirchheimer, 1939). Scholars also examined the relationships between other economic or demographic conditions and imprisonment (Inverarity and Grattet, 1989; Lessan, 1991; Taggart and Winn, 1993). Yet, these studies seemed to miss the underlying sources of punitive social policies. As Garland (1990) observes, punishment is a complex social phenomenon, not easily explained by single causes. Consequently, a number of punishment scholars have argued that we need to focus on an array of cultural, political, and social factors in the study of imprisonment (Garland, 1990; Jacobs and Helms, 1996).

Better understanding the motivations or sources behind the use of punishment is important for a number of reasons. From a strictly economic perspective, imprisonment is a costly intervention to criminal behavior. For the cost of maintaining a single prison bed, for instance, many offenders can be supervised closely in the community. If public safety is not compromised by an expansion of the use of probation or parole, then it seems to be a responsible alternative (Clear and Cadora, 2003). Yet, politicians are unwilling to be considered "soft on crime" so few openly advocate reductions in prison spending (Tonry, 1999a).

During the current era of economic stress, however, many states are revisiting their use of imprisonment (Wool and Stemens, 2004).

From a social justice perspective the foundation of American criminal justice systems is built upon the principle of equality before the law. If extra-legal variables—factors that are not related to an actual offense or an offender's criminal history—such as racial composition or economic conditions influence the use of imprisonment, then our responses to crime are cast into disrepute. Many suggest, for instance, that our “wars” on crime and drugs have contributed to a cynicism about criminal justice systems—especially amongst minority populations (Mauer, 1999; Miller, 1996). Moreover, as Tyler (1990) observes, reductions in the perceptions of a fair and unbiased justice system are essential if we expect citizens to uphold the law.

Lastly, we must also consider the harms that imprisonment has on individuals, families, and communities. Imprisoning an offender eliminates their ability to commit crimes in the community. But, imprisonment is a temporary remedy—even with increases in sentence severity, most inmates serve less than three years (Harrison and Beck, 2003). Consequently, we return over 600,000 offenders to the streets each year (Travis and Lawrence, 2002). For many of these offenders, their imprisonment has created a barrier to future employment as well as legitimate opportunities (Irwin and Austin, 2001; Chambliss, 1999). Released with few funds to enable their reintegration back into the community, nor marketable skills, many offenders re-offend, or are returned to prison for technical violations of their parole within the first year after their discharge from prison (Langan and Levin, 2002).

PRISON NATION

Mass imprisonment is a uniquely American response to crime amongst developed, first-world nations (Blumstein, 1998; Irwin, 1996; Tonry, 1999b). Only Russia and South Africa have similarly high rates of incarceration (Walmsley, 2003) and these developing nations experienced significant transformations in their political, legal, social, and economic systems (Savelsberg, 1994). In fact, recent empirical studies have demonstrated that state formation is a source of imprisonment. Fragile or emerging governments are more likely to use imprisonment than their more established counterparts (Ruddell, 2005). Inconsistent with the experiences of other nations, however, the United

States expanded correctional populations during eras of economic growth and prosperity (Tonry and Petersilia, 1999).

Table 1-1 reveals the variance in imprisonment between the G8 nations. In a recent British Home Office study of cross-national imprisonment, Walmsley (2003) found that the average imprisonment rate in some 200 independent countries and dependent territories ranged from 25 to 700 residents in the population. Within a 140 nation sample of these nations, there was an average of 160 inmates for every 100,000 residents in the population (Ruddell and Urbina, 2004). Considering that rates of crime in developed nations are generally quite similar (see Barclay, Tavares, and Siddique, 2001), then other factors must influence the use of incarceration.

Table 1-1. Imprisonment rates per 100,000 residents in the population in G8 nations

Nation	Imprisonment Rate
Canada	102
France	85
Germany	96
Italy	95
Japan	48
Russia	638
United Kingdom	139
United States	700

Source: Walmsley, 2003

There is some variation in the prison population dynamics within the G8 nations listed below. While American rates of imprisonment are still increasing, most of the G8 counterparts are experiencing more stability in the use of punishment, and Russia, as well as many of the former Soviet satellite nations, are actually decreasing their reliance upon punishment. Struggling with democracy and conditions of economic stress, they are choosing to punish less. In fact, Ruddell and Urbina (2004) found that levels of development in a sample of 140 nations did influence the use of punishment: net of other factors, richer nations tend to punish more than their less developed counterparts. As one of the richest nations in the world, the United States also leads the world in the use of punishment.

In addition to being a world leader in the use of imprisonment, the United States is one of the few remaining first world nations that still

impose the death penalty on offenders. While many developing nations rely upon justice through corporal or capital punishments (see Killias, 1986; Neapolitan, 2001), most developed nations have abolished capital punishment (Amnesty International, 2003). In fact, the European Economic Community has made the abolition of the death penalty a condition of membership. By contrast, there were 3,557 inmates on death rows within the United States at yearend 2001 (Bonczar and Snell, 2003). Urbina (2003) found that the persons we sentence to death are typically the same as those imprisoned, members of minority groups who happen to be poor.

Ruddell (2005) found that nations with high imprisonment rates were also likely to retain use of the death penalty. Thus, it is possible that some nations are more punitive than their counterparts who share similar legal systems, economic and social conditions—as well as similar crime rates. Similar results have been found in intra-national studies (see Davey, 1998). By better understanding the reasons for the variation in the use of imprisonment, we may be better able to control its use. One important reason for controlling the use of punishment are the costs involved, both the obvious economic costs of incarcerating over two million offenders, but also the long-term hidden and opportunity costs.

Bauer and Owens (2004) found that American taxpayers paid approximately 57 billion dollars to imprison offenders in 2001. In addition to the obvious or direct costs of mass imprisonment policies, there are a host of hidden costs that are seldom considered. Many scholars have speculated that America's experiment with mass imprisonment will result in long-term harms: straining race relations, damaging individuals, families, and communities, as well as reducing the legitimacy of criminal justice systems—which may in turn contribute to increased crime rates—the very problem that we are trying to solve. The following pages outline three hidden costs of mass imprisonment practices, and suggest that these conditions might actually contribute to increased long-term crime rates.

DISPROPORTIONATE MINORITY IMPRISONMENT

Christie (1994) observed that imprisonment has been used primarily to control the poor—regardless of which nation's penal policies are examined. Moreover, prison inmates tend overwhelmingly to be young males (Harrison and Beck, 2003). Current prison statistics also reveal

that minority populations are more likely to be imprisoned, contrasted against members of the mainstream culture. Previous studies have established that members of minority groups are disproportionately policed (Kane, 2003; Liska and Chamlin, 1984), arrested (Holmes, 2000; Liska and Chamlin, 1984; Walker, Spohn, and DeLone, 2003), incarcerated (Chiricos and Crawford, 1995; Mauer, 1999; Miller, 1996; Tonry, 1995), and are subjected to more severe punishment (Steffensmeier and Demuth, 2000; Walker et al., 2003; Urbina, 2003).

Within the United States, rates of imprisonment have disproportionately been distributed amongst minority groups. Harrison and Beck (2003) reported that rates of Black male imprisonment, for instance, are almost eight times higher than their White counterparts—while Latino men are imprisoned at a rate nearly 2.6 times the rate of White males. Black women fared somewhat better than Black males—the rate of Black female imprisonment was approximately 5.5 times the White female imprisonment rate, while the Latina imprisonment rate was about 2.3 times their White female counterparts (Harrison and Beck, 2003). Table 1-2 reveals the distribution of imprisonment by race for federal and state prison inmates in 2002.

Table 1-2. Imprisonment rate of federal or state prisoners by race per 100,000 residents of each group

Gender and Race	Imprisonment Rate
Males – Total	912
White	450
Black	3437
Latino	1176
Females – Total	61
White	35
Black	191
Latina	80

Source: Harrison and Beck, 2003

Bonczar (2003:1) estimates that about “one in three Black males, one in six Latino males, and one in 17 White males will go to prison in their lifetimes if current incarceration rates remain unchanged.” Such statistics may reflect the fact that American policing has focused its enforcement efforts on inner-city areas, and has not addressed occupational, or “white collar” crimes (see Reiman, 2004). Yet, it has

also been suggested that the types of offenses that are being enforced may contribute to high imprisonment rates of minority populations (Mauer, 1999; Miller, 1996; Tonry, 1995).

Pettit and Western (2004) observe that poor and working class minority members are more likely to be incarcerated than their middle class counterparts. Examining the lifetime chance of imprisonment, Pettit and Western (2004: 29) found that, "imprisonment has become a common life event for recent birth cohorts of Black non-college men." Their analyses suggest that prison has become a typical rite of passage for poor Black males. Considering that it is more costly to imprison an offender than to provide them with a college education, many suggest that our high imprisonment practices are both short-sighted and destructive (Irwin and Austin, 2001; Chambliss, 1999).

Scholars who have closely examined the issue of race and imprisonment argue that disproportionate minority confinement was a predictable consequence of the war on drugs waged primarily upon inner-city populations (Mauer, 1999; Miller, 1996; Tonry, 1995). Yet, we understand little about the underlying motives that made us declare wars on crime and drugs. More importantly, having recognized the destructive elements of our drug policy for over a decade, we allow the punishment to continue unabated. The following paragraphs outline how punitive crime control policies create additional hidden costs to individuals, families and communities.

INDIVIDUAL, FAMILY AND COMMUNITY DISRUPTION

It has been argued that high imprisonment policies may contribute to crime over the long-term by corroding the social fabric of communities (Chaiken, 2000) and exacerbating social disorganization (Rose and Clear, 1998). The consequences of high imprisonment practices have the largest effect on the individual imprisoned, but these effects ripple through families and communities as well. Typically, however, we do not factor these unanticipated costs when calculating the true costs of high imprisonment policies (Piehl, 2004).

Those imprisoned, especially during times of high unemployment, may be effectively removed from legitimate labor market opportunities. Released prisoners, for instance, are often unable to obtain meaningful employment, as reductions in social capital (the relationships and trust we build through positive social networks) restrict the individual's ability to re-enter the legitimate labor market (Coleman, 1990;

Freeman, 1991; Grogger, 1994). Even though ex-prisoners are typically optimistic about their chances of legitimate employment prior to their release from prison, their previous convictions, drug use, and imprisonment make it difficult for them to successfully reintegrate into society (Urban Institute, 2004).

One factor that has made it more difficult for these ex-offenders to successfully restore their lives is that they are increasingly vulnerable to a host of punitive community sanctions (Sentencing Project, 1998). Many jurisdictions, for instance, make it more difficult for ex-convicts to reintegrate into the community by placing restrictions on employment, making them ineligible for public housing, placing restrictions on educational funding, as well as enforcing lifetime bans on receiving welfare benefits for some drug offenders (Mauer and Chesney-Lind, 2002). These sanctions have been labeled invisible or collateral consequences. While these strategies are intended to deter potential criminals, they effectively restrict the ability of some ex-offenders—particularly women with children—from pursuing legitimate opportunities (Mauer and Chesney-Lind, 2002; National Center for Institutions and Alternatives, 2000). A recent analysis of collateral consequences has found, however, that these punishments have changed over time—placing less emphasis on political sanctions (such as voting, or participation on a jury) to policies intended to enhance public safety—such as sex offender registries (see Buckler and Travis, 2003).

Serving a term of imprisonment also disrupts family relationships. A number of scholars have argued that mass imprisonment practices that have targeted minority populations have had a number of negative impacts upon families (Meares, 2004). Miller (2003) observes that since half the men incarcerated are fathers, their children receive less male closeness, involvement or contact. Loss of contact and closeness also effect the stability of marital relationships, and long-term incarceration may contribute to higher rates of separation and divorce. Higher rates of divorce, in turn, contribute to social disorganization within communities, and may also lead to increased crime (Bursik and Grasmik, 1993).

Lengthy periods of imprisonment often place considerable financial stress on the families of those incarcerated. Eliminating one wage from the family's income as well as the cost of maintaining contact with the incarcerated spouse create economic obstacles, especially considering the relative disadvantage of many of these

families in the first place. In a survey of 75 women visiting spouses or significant others in a California prison, Grinstead, Faigles, Bancroft, and Zack (2003: 292) report that the average woman spent \$292.00 per month to maintain contact. These expenditures included the travel costs for visits, mailing packages, and telephone calls. These resources are being diverted from the family and the community. Yet, a number of studies have demonstrated that family visits actually increase successful community reintegration, and reduce recidivism (see Hairston, 1991). Clearly, we have very little understanding about the long-term costs of mass imprisonment policies on communities (see Lynch and Sabol, 2004).

Miller (2003) also identifies the difficulties in raising children without the other parent present. Loss of the male role model may, for instance, contribute to higher rates of acting-out behaviors in children (Gabel, 2003). Braman (2002) observes that loss of parental role modeling due to imprisonment might also have a long-term intergenerational effect on families, and weaken communities as well. Women are also included in the imprisonment binge. Figure 1-2 demonstrates the changes in male and female imprisonment from 1925 to 2000—while male imprisonment underwent a six-fold increase, female incarceration by 2000 reveals a ten-fold increase.

To illustrate the scope of the problem, Chesney-Lind (2002:81) observed that the numbers of females imprisoned within the United States is approximately ten times that of all of the Western European nations combined—a group of nations that has approximately the same population as America.

Consequently, prison systems have had to respond to incarcerating larger numbers of female inmates, who are primarily non-violent offenders. The family-connection difficulties reported above for imprisoned males are increased when mothers are taken away from their children. Moreover, since there are comparatively fewer women's prisons (in smaller states there may only be one women's prison) females are often imprisoned far away from their families, increasing the economic costs of visits, and reducing their frequency. Again, fewer visits further reduces family integration, an important consideration when approximately three-quarters of the women imprisoned are mothers (Richie, 2002).

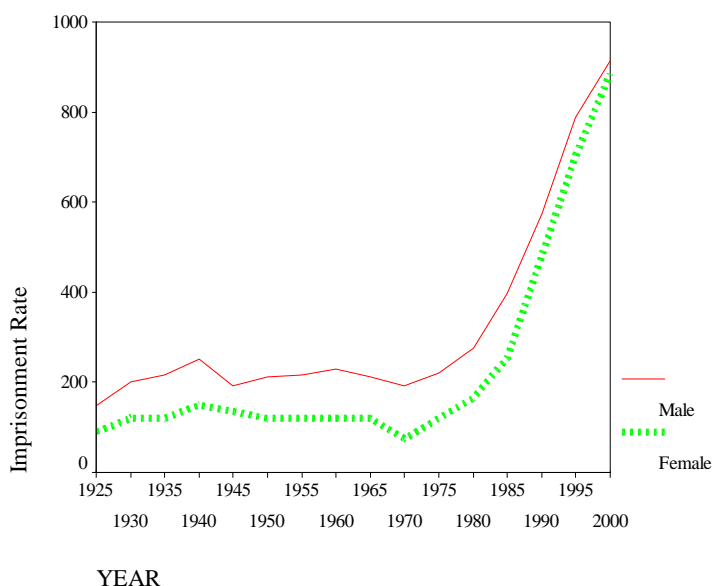


Figure 1-2. Imprisonment rates for males and females (female imprisonment multiplied by 15 to better demonstrate the trend). Source: Maguire and Pastore, 2003

If imprisonment has damaging economic and social effects on individuals and families, a number of scholars have also suggested that mass imprisonment also influences community dynamics. While there is an attractive appeal to the notion that decreases in the number of offenders within the community will enhance social organization and decrease crime rates, a number of scholars disagree. Clear (2002) and Rose and Clear (1998) argue that communities effected by high imprisonment practices actually suffer from reduced informal social control. Informal social control represents the efforts of families, neighbors, or community members to control unacceptable behavior through persuasion, encouragement, or other means—without resorting to use of the police or other authorities. Clear (2002: 193) observes that, “high levels of incarceration concentrated in impoverished communities has a destabilizing effect on community life, so that the most basic underpinnings of informal social control are damaged.”

When families are disrupted and unstable, it becomes harder for individuals to maintain informal social control. Sampson, Raudenbush, and Earls (1997) labeled these informal methods of social control as collective efficacy, and found that neighborhoods with lower levels of collective efficacy had higher crime rates.

PUNISHMENT AND LEGITIMACY OF CRIMINAL JUSTICE SYSTEMS

High imprisonment policies may also exacerbate mistrust in criminal justice systems, and reduce their legitimacy amongst the minority social groups most affected by these crime-control practices (Butler, 1995; Tyler, 1990). Members of minority groups believe that the war on crime and drugs has been deliberately used to control them—many scholars agree. Tyler and Huo (2002:1) observe that,

Public opinion polls suggest that Americans' trust in the police and the courts is low. These same polls also reveal a disturbing racial divide, with minorities expressing greater levels of distrust than whites. Practices such as racial profiling, zero-tolerance policing, the use of excessive force, and harsh punishment for minor drug crimes all contribute to low trust and confidence in the police and courts—i.e. to a crisis of legitimacy.

Sherman's (2002) observations about trust in criminal justice systems reveal a similar racial divide between perceptions of White and non-White respondents. In 2003, for instance, Gallup Polls revealed that 24 percent of Whites reported very little or no confidence in the criminal justice system, while 42 percent of Blacks had the same response. (Maguire and Pastore, 2003). More important, perhaps, is the finding that five percent of Blacks expressed no confidence in criminal justice system, contrasted to only one percent of White respondents (Maguire and Pastore, 2003).

Clear (2002) has observed that an "us versus them" approach to justice has developed in many inner-city neighborhoods. This observation is evident in the percentages of persons who report having low or no confidence in the honesty of ethical standards of police—while five percent of White respondents expressed this belief, 19 percent of their Black counterparts had the same feelings (Maguire and

Pastore, 2003). Sampson and Bartusch (1999) suggest that high levels of “legal cynicism” will in turn result in less law abiding behavior.

Butler (1995) sees this mistrust of criminal justice systems as a factor that is contributing to the increased incidence of jury nullification. Jury nullification occurs when a defendant is clearly guilty, but the jury refuses to convict them—usually because they perceive the law or the administration of justice as unjust (Conrad, 1998). There is some anecdotal evidence to suggest that some Black jury members are very reluctant to send another Black youth or adult to prison, especially for non-violent offenses. Consequently, our policies of mass imprisonment may reduce the perceived legitimacy of the law, and increases in “legal cynicism”.

Altogether there are a number of hidden costs of mass imprisonment that directly influence the social and economic viability of individuals, families and communities. These costs might exacerbate problems with family relationships, and result in higher rates of divorce. Higher rates of divorce and economic stress may in turn contribute to neighborhood decline—especially since many of those imprisoned are from poor minority neighborhoods. Finally, these conditions may reduce collective efficacy, or increase social disorganization—which may also result in increased crime rates in these communities. If assessments of these community-level dynamics are correct, our mass imprisonment policies may create a continuing vicious cycle of future offenses and the continued need for punishment.

OPPORTUNITY COSTS OF MASS IMPRISONMENT POLICIES

Crime control policies based on mass imprisonment are an outcome of policy priorities set by legislators (Feeley and Simon, 1992; Ruggerio, South, and Taylor, 1998; Simon and Feeley, 1995; Tonry, 1999a). But there are costs and benefits to each set of public policies. Several scholars have, for instance, observed that high imprisonment policies contributed to the crime drop in America (Dilulio, 2000). Yet, there are also unanticipated or unforeseen costs with any social policy. What if, for example, high imprisonment policies actually contribute to long-term increases in crime?

Mass imprisonment policies already have had serious economic consequences that threaten America’s long-term social well-being (Christie, 1994; Hagan and Dinovitzer, 1999). First, imprisonment is a costly crime-control measure where the costs extend far beyond the

average \$21,400 to keep an offender in prison in 2000 (Camp and Camp, 2002). Unprecedented growth of correctional budgets has forced legislators to reduce investments in health, education or welfare programs (Irwin and Austin, 2001; Irwin, Schiraldi, and Ziedenberg, 2000). In Maryland, for example, there are more persons in correctional facilities than in state colleges (Schiraldi, 1998) and in California from 1984 to 1994 the prison system received a 209 percent increase in funding while state universities received 15 percent during the same era (Macallair, Taqi-Eddin, and Schiraldi, 1998).

In terms of national expenditures, from 1977 to 2001 spending on state and local corrections increased 1101 percent (Bauer and Owens, 2004). Bauer and Owens (2004:4) found that during the same era, government services increased by the following: hospitals and health care, 482 percent; education, 448 percent; interest on the debt, 543 percent; and public welfare, 617 percent. If the true sources of crime are related to family dysfunction, substance abuse, substandard education, and families who are economically deprived, is the money being spent on corrections a good investment?

Economists and public policy analysts often consider the opportunity cost of government action where alternatives to government interventions are weighed (Hagan and Dinovitzer, 1999). Opportunity costs are seldom, however, considered in the political debate over the use of imprisonment (Irwin and Austin, 2001). By investing in the expansion of incarceration, we have fewer dollars to spend on the conditions that contribute to community disorder and crime. Investments in inner cities, social programs, or vocational training, for example, may ameliorate the need for incarceration (Hagan and Dinovitzer, 1999).

By reducing rates of imprisonment by half, almost 28.5 billion dollars a year could be diverted to enhance social programs targeting the communities with the greatest disorder and highest crime rates. Even after reducing correctional populations by one-half, however, the United States would still be a world leader in the use of imprisonment. Americans might choose to invest in mass imprisonment policies, but the true costs of these programs—the hidden costs, as well as the opportunity costs—clearly need to be known to all (see also Miller, 1996).

UNDERSTANDING IMPRISONMENT TRENDS

Tonry (1995) argues that legislation and policies that lead to high rates of American incarceration are not accidental: they are deliberate policy choices, and have predictable outcomes. Developing mass imprisonment policies is a consequence of relying upon criminal justice solutions to tackle long-term social problems such as the decay of inner cities, homelessness, mental illness, substance abuse and unemployment (Dyer, 2000; Reiman, 2004). Many argue that criminal justice systems are ill-suited to confront such problems (Irwin and Austin, 2001, Beckett, 1997; Mauer, 1999; Miller, 1996) and that we might expect long-term harmful effects from these interventions (Beckett, 1997; Chambliss, 1999; Rose and Clear, 1998). Imprisonment is a costly method of crime control, and the expansion of correctional programs has come at the expense of health, education and welfare programs that are better able to respond to long-term social problems in a less damaging manner than criminal justice systems (Hagan and Dinovitzer, 1999). As a result, the short-term costs of imprisoning over two million offenders in the United States may be inconsequential compared to the long-term opportunity costs when we consider the damaging effects of imprisonment on individuals, families and communities.

Despite the acknowledgement of the high costs of mass imprisonment policies, we understand very little about the political, social, economic, and cultural factors that contribute to the use of imprisonment. Two decades of empirical tests, as well as a growing body of scholarly argument suggests that decisions about the use of punishment are inherently political (Garland, 2001; Tonry, 1995). Yet, we have seldom considered political factors in the study of imprisonment. This study responds to several gaps in the empirical literature to create alternative ways of examining the underlying causes of mass imprisonment policies from 1952 to 2000.

A number of theories have been used to better understand the use of punishment, including incarceration. Most of these approaches, however, relate the use of imprisonment to a single social factor. In most cases, these theories examine the relationships between extra-legal factors and the use of incarceration. These extra-legal factors include changes in the racial composition of America, or economic conditions such as the relationship between increasing unemployment and the use of imprisonment. This study introduces a number of

sophisticated variables that are indicators of macro economic, political, cultural, and social changes to the study of imprisonment. The effects of these variables of interest are examined on three different dependent variables. Including a larger number of dependent variables than normally examined is important to determine whether the effects of these explanatory variables are consistent across all of these indicators of imprisonment.

SOCIAL CONTEXT OF THE IMPRISONMENT BINGE

The increased use of imprisonment starting in the mid-1970s has to be understood within changing social conditions that shook the foundation of long-standing social relationships. Since the 1950s America has experienced a series of cultural, social, political, and economic changes that have challenged the *status quo*. Specific changes included the influence of the civil rights movement, an unpopular war in Vietnam, changes in the political roles of 18 to 20 year-olds, women and minority groups, as well as increasing divorce rates (Gitlin, 1987; Levy, 1998; Steigerwald, 1995). In addition, people became less socially connected and this caused reductions in informal social control. Lastly, advancements in technology made the pace of these changes unparalleled (Toffler, 1970).

Concurrent with these social and cultural changes, the public became increasingly disenchanted with their political representation after the Watergate scandal (Steigerwahl, 1995) and the number of political protests increased throughout this era (Myers, 1997; Olzak, Shanahan, and McEneaney, 1996). Collectively, these events reduced public trust in political institutions and respondents in national surveys expressed pessimism about their future prospects (Putnam, 2000). Despite the fact that several million 18 to 20 year-olds were added to the voting rolls, eligible voter turnout decreased, signifying a reduction in formal political participation.

Throughout this era, respondents to a number of national surveys reported increasing alienation and distrust of governments. For instance, in 1958 forty-three percent of respondents in the National Elections Study (NES) survey reported that “a lot” of the people in government waste tax money. By 1998, however, this figure had increased to 61 percent. When the NES survey questioned whether governments were run for the benefit of all in 1964, 29 percent of respondents reported that government was run for the benefit of “a few

big interests.” By 1994, however, 76 percent of respondents reported that government was run for the benefit of these big interests. These sentiments of alienation and mistrust are not isolated, and self-report items in the NES, Gallup, General Social Survey (GSS), and Harris Polls have consistently established that alienation and disaffection increased between 1952 and 2000. Perhaps the highest rate of self-reported alienation and disaffection occurred during 1974—the height of the Watergate scandal, an energy crisis, the unsuccessful resolution of the Vietnam War, and increasing economic turmoil.

The 1970s were also characterized with increasing economic stress in the forms of inflation, rising consumer and corporate bankruptcies, increasing labor problems, unstable levels of employment, and the transformation from an industrial to a service economy. In the span of a few years Gallup Poll respondents identified the most important problem facing America as domestic issues, in sharp contrast to the focus on foreign policy that had dominated American interest since World War 2 (Putnam, 2000).

There is some suggestion in the political science literature that disaffection is not a distinctly American phenomenon. Public confidence in leaders and governments has decreased throughout North America, Europe, and Asia for the past three decades (Pharr and Putnam, 1999). A number of factors have been hypothesized as relating to the increase in disaffection including: greater demands for equality and participation in political processes, the collapse of traditional values, increased social mobility, the effects of regionalism, the end of the post World War 2 economic boom, the decline of political parties, and race and ethnicity as sources of disaffection (Pharr and Putnam, 1999).

While the increases in political disaffection were not isolated to America, there are distinctly American processes that may have contributed to the use of imprisonment to respond to political disaffection, civic disengagement and social disruption. First, European criminologists have long observed that American political processes are different than their European counterparts (Melossi, 1993; Savelsberg, 1994; Windlesham, 1998). European democracies have long-established bureaucratic traditions that can mitigate the influence of public opinion on changes in public policy—including the influences of punitive cultural values (Jacobs and Kleban, 2003).

Second, American politicians have been more willing (at least historically) to use the issue of crime as a politically popular election

platform. Within any public policy debate there is some question whether politicians lead or follow public opinion (Baumgartner and Jones, 1993; Jones, 1994). In the case of punishment and crime control, a number of scholars argue that American politicians have created a public demand for punishment (Beckett, 1997; Beckett and Sasson, 2000; Tonry, 1999a, 1999b). This position rejects the democracy in action hypothesis where public interest drives political action (Beckett and Sasson, 2000).

Increasing domestic political uncertainty required some type of government response to increase the legitimacy of political institutions (LaFree, 1998) and it has been argued that formal social control has expanded in order to bolster the state's legitimacy (Beckett, 1997; Chambliss, 1999; LaFree, 1998; Melossi, 1993; Tonry, 1999a).² In addition, the combined effects of political protests, changing of economic, social and political relationships and crime may have created a political environment where it was necessary to "hold the center" (Levy, 1998). As Gitlin (1987:5) observes,

Affluence, civil rights, the Cold War, Vietnam; Kennedy, Johnson, Nixon; the assassinations of Kennedy, Malcolm X, King, and another Kennedy; worldwide upheavals seeming to promise the founding of a new age in the ashes of the old. From social tensions came a tumult of movements aiming to remake virtually every social arrangement America had settled into after World War 2.

In an attempt to maintain American class relationships and political legitimacy, formal social control was used to regulate these increasingly insubordinate populations. The end result of these policies was a five-fold increase in the use of imprisonment (Caplow and Simon, 1999).

Parenti (2000) traced the relationship between increasing political uncertainty and the use of formal social control within the United States. Parenti (2000:3) argues that politicians used the issues of crime to demonstrate social policy success during a time when many thought that very few things were going right within the nation:

How bleak the world must have been for those with political and economic power during the late sixties and early seventies. Order seemed to be unraveling: massive anti-war protests on the Mall; a war effort bogged down and

hemorrhaging in the mud of Southeast Asia; economic stagnation and declining profit rates; and, in the cities, skyrocketing crime coupled with some of the most violent riots since the Civil War.

One solution to this social and political unrest was to use criminal justice systems to respond to these unruly or insubordinate populations. Crime, historically a local-level problem, became the concern of state and federal politicians (Tonry, 1999a). Along with this increased interest in crime came a substantial increase in the size of enforcement, which in turn, contributed to the increased use of imprisonment. The Americans who now found themselves behind bars have been described by a number of derogatory labels, including: “social junk”, “social dynamite”, “underclass”, and the “dangerous class” (see Kane, 2003: 269). Regardless of their label, these groups were perceived as threatening to the *status quo*, and needed to be controlled.

Justice Systems and Punishment

A number of legislative factors have been identified as being responsible for the growth in the use of imprisonment, including mandatory minimum sentences, truth-in-sentencing guidelines, and three-strike policies. These sentencing schemes were all highly associated with the war on drugs. Parallel with the introduction of these sentencing factors, however, two significant changes in correctional practices—the declining use of parole for early releases, and the switch from indeterminate to determinate prison sentences—reduced the flexibility of correctional systems to discharge inmates who demonstrated some type of rehabilitative progress, or to control prison overcrowding. Moreover, mass imprisonment became a profitable commodity for a number of stakeholders, including corporations who provided services to prisons, contractors who operated prisons on behalf of governments, unions (or associations) of correctional officers, and politicians who also benefited from “tough on crime” policies. The following paragraphs provide a short history of both the war on drugs, and the legal mechanisms that were used to create conditions of mass imprisonment. Having discussed the importance of these social conditions, this study explains the underlying political, social, and economic factors that influenced the increased use of these mechanisms of punishment.

WAR ON DRUGS

A national war on drugs initiated during the 1980s is responsible for the greatest increase in persons arrested and sentenced to prison (Blumstein and Beck, 1999). Drug offenders represented nearly 57 percent of all federal prisoners and 20 percent of their state counterparts in 2000 (Harrison and Beck, 2002). The number of state inmates sentenced on drug offenses, for example, approaches all those sentenced for property

crimes such as burglary, auto-theft, and larceny. Placed in perspective, the current rate of drug imprisonment is now greater than the entire imprisonment rate used from the 1920s to the 1970s (Blumstein and Beck, 1999).

The inmates sentenced on drug offenses are disproportionately comprised of members of minority groups (Mauer, 1999) and it has been suggested that this war on drugs was really a war on African-Americans and Latinos (Mauer, 1997; Mauer and Huling, 1995; Miller, 1996) with entirely predictable consequences (Tonry, 1995). Blumstein and Beck (1999) disaggregated prison populations from 1980 to 1996 and found that imprisonment rates of Latinos increased by 235 percent, African-Americans by 184 percent while White imprisonment increased by 164 percent. Even more surprising was the 364 percent growth in the rate of female imprisonment (Blumstein and Beck, 1999). The disproportionate minority confinement of both genders contributed to the perceptions widely held amongst minority populations, that criminal justice systems are unfair, unjust, and biased.

Sentences for drug offending can be very severe—in fact, Durose and Langan (2003: 3) found that while the average federal prison sentence for drug possession was 81 months, the average federal murder sentence was 94 months. Equating drug possession with homicide, in terms of punishment, was one mechanism that increased the numbers of offenders in state and federal prisons. In 2002, over half of all federal prisoners were serving sentences for drug-related offenses, while about one-fifth of their state counterparts served similar sentences (Durose and Langan, 2003). Despite the lengthy sentences and millions of persons imprisoned over the past two decades, a recent study found that street drug prices have stayed the same, or *decreased* since 1988—suggesting that the supply of illegal drugs has not been reduced at all (Abt Associates, 2000).

One explanation for the disproportionate imprisonment of minorities reported in Chapter 1 relates to the types of drugs targeted in the war on drugs. Because of its relatively inexpensive street price, crack cocaine was the drug of choice for African Americans living in inner city areas. In fact, 85 percent of the defendants sentenced on federal crack cocaine offenses in 2000 were Black (US Sentencing Commission, 2002). Chemically very similar to powder cocaine—a more middle class drug—crack was associated with a number of high profile fatalities, including college basketball star Len Bias in 1986 (Berndt, 2003). In fact, within a few months of Bias' death, the war on

drugs was being championed by politicians and law enforcement alike. Moreover, there was a popular perception that crack use contributed to high rates of violence and harmful prenatal effects (US Sentencing Commission, 2002)—the so called crack babies. In response to growing public and political concern about crack cocaine, the federal government imposed a 100:1 sentencing ratio for crack cocaine to powder cocaine—for every gram of crack an offender possessed, federal courts would impose a penalty equivalent to possession of 100 grams of powder cocaine.

While scholars did find an association between rates of crack use and robbery (see Baumer, Rosenfeld, Lauritsen, and Wright, 1998), the US Sentencing Commission (2002: 2) found that by 2000, “three quarters of federal crack cocaine offenders had no personal weapon involvement, and only 2.3 percent discharged a weapon.” Moreover the effects of crack on prenatal development were found to be identical to that of powder cocaine. In response to these findings, as well as the recognition that African Americans were being imprisoned on lengthy sentences, the US Sentencing Commission recommended that the 100:1 sentencing ratio be reduced (US Sentencing Commission, 2002). This recommendation was, however, ignored by policymakers—just as a similar recommendation in 1995 was also disregarded.

The impact of a 100:1 sentencing ratio for crack cocaine ensured that minority drug users received sanctions far in excess of their White counterparts who used powder cocaine. Findings such as this make it difficult to convince members of minority groups that they are not being discriminated against. Consequently, disproportionate minority confinement might be an outcome of the drug policies reported above, as well as increased policing in the inner city areas that are the source of many prison inmates (Kane, 2003).

Yet, there may be some other sources of high rates of minority confinement. Hart and Rennison (2003:3), for example, found that “overall violence against Black victims (49%) was reported at a significantly higher percentage than violence against White victims (42%) and at a somewhat higher percentage than violence against Asian victims.” Thus, one additional reason for enhanced law enforcement in areas populated by minorities is the response to calls for service. It is plausible that higher rates of calls for service in inner city communities may be related to more crime. But, reliance upon agents of formal social control to solve disputes may also be a consequence of reduced informal social control. As discussed in Chapter 1, family and

community disruption caused by high incarceration rates have resulted in less informal neighborhood control (see Bursik and Grasmick, 1993) and collective efficacy (Sampson et. al., 1997).

MANDATORY MINIMUM SENTENCES

Mandatory minimum sentences specify an obligatory fixed prison sentence without the possibility of a plea bargain for certain types of offenses. Early examples included the famous 1973 Bartley-Fox legislation in Massachusetts that made persons illegally carrying firearms subject to an automatic one-year prison sentence. By 1987 the federal government established sentencing guidelines that reduced the range of possible sentences and abolished discretionary parole (Santos, 2003; Walker, 2001). Mandatory minimum sentences were a popular response to a widely-held belief that judges were sentencing too many offenders to short prison sentences. More likely was the case that judges were using their discretion to punish severely those offenders who were repeat or violent offenders, while giving first-time or property offenders shorter jail or prison terms, or community-based probationary sentences.

In some cases, mandatory minimum sentences are based upon classification grids that outline the penalty for an offender based on the nature of offense and their prior criminal history. These classification grids provide a range of sentences judges are required to consider, and deviations from the minimum range must be justified. Prosecutors, by contrast, are not required to defend their decisions about charging offenders, nor are their plea arrangements subject to question—except to the public in elections. In fact, it has been suggested that the politicization of the prosecutor's role has also lead to the increased use of punishment (Miller, 1996). The net effect of such sentencing policies is that discretion has been removed from judges (Marvell and Moody, 1996; Mauer, 1999; Tonry, 1995).

Ironically, the imposition of mandatory minimum sentencing schemes made the punishment differential for a repeat property or drug offender and a violent criminal indistinguishable (von Hirsch, 1999). The American Bar Association (1999:1) observes that:

mandatory minimums produce an inflexibility and rigidity in the imposition of punishment that is unfitting to a system that touts itself as a justice system. To insist that all criminals who

fall within the mandatory minimums be lumped into the same category and be penalized under such minimums creates a situation in which the unjustness of a sentence in particular circumstances must be ignored.

Until recently, federal judges could use some discretionary ability to reduce the lower limit of mandatory sentences. But even this use of discretion is threatening to those politicians who are strongly invested in winning the three-decade long wars on crime and drugs. On July 28, 2003, for instance, the Attorney General sent a directive to federal prosecutors to collect information about federal judges who sentenced defendants to prison terms less than the mandatory minimum. Ostensibly, these lists would be used to initiate appeals—especially if these judges departed from the sentencing guidelines on a regular basis. Yet, there is no evidence to suggest that departures from mandatory sentences were anything but rare. Many federal judges, however, resent the inability to depart from mandatory sentences when appropriate. Recently, a number of Supreme Court Justices have openly protested the inability of Judges to depart from mandatory minimum sentences when they are inconsistent with the aims of justice.¹

TRUTH IN SENTENCING LEGISLATION

Historically, few offenders have ever served their entire sentences—most were paroled after serving a portion of their sentence in prison, and the remainder under supervision in the community. Langan and Levin (2002) estimated that prisoners released in 2000, for instance, served approximately 55 percent of their sentence in prison. Excluding those sentenced to life without parole or the death penalty, the average sentence for felons sentenced in 2000 was approximately 4.5 years, and the average offender served about 2.5 years of that sentence (Langan and Levin, 2002).

There is some evidence to suggest that the percentage of time-served is variable, but depends on era examined (see Langan, 1991). Durose and Langan (2003:1) recently found that, “average sentence length to state prison has decreased since 1990 (6 ¼ years versus almost 5 years) but felons sentenced in 1998 were likely to serve more of that sentence before release.” One possible reason for the increases in the length of sentence served is the introduction of truth in sentencing (TIS) legislation. Many policy-makers oppose the early-

release of offenders as being “soft on crime.” Consequently, there was a movement to enact legislation that would hold offenders for a greater percentage of their prison term. Washington State was the first jurisdiction to enact such legislation in 1984. TIS typically requires an offender to serve a substantial portion of their sentence—usually about 85 percent—before they are eligible for parole or early release (Sabol, Rosich, Kane, Kirk, and Dubin, 2002).

In order to enable states to increase the length of sentence served by prison inmates, the federal government provided funds for prison construction through the Violent Crime Control and Law Enforcement Act of 1994. In order to receive the federal funding, however, felons convicted of a violent Part 1 index crime (i.e., homicide, rape, robbery, and aggravated assault) would have to serve 85 percent of their sentence before release. Ditton and Wilson (1999: 2) found that 27 States and the District of Columbia met these federal requirements for this federal funding for prison construction.

On the face, TIS legislation appears to be very practical—detaining violent offenders for longer sentences prior to release should enhance public safety. Yet, establishing the same release date for all prison inmates also reduces their incentive to participate in rehabilitative programming while in prison. Consider the following scenario: Two offenders are sentenced to the same violent offense on the same day and are imprisoned in the same facility. One offender might choose to serve their sentence through cursory participation in prison programs while the other participates in rehabilitative programs, earns college credits through extension or correspondence classes during the evenings, and works within the prison’s vocational program. Despite the fact that one offender has made a more substantial contribution to their own rehabilitation, both prisoners will be returned to the community on the same day (see Santos, 2003).

Because TIS legislation were typically enacted some two decades after prison populations first started to increase suggests that these schemes were not responsible for the initial increased use of imprisonment. In fact, in their comprehensive study of the influences of TIS on state prison populations, Sabol et al. (2002) found that since violent crime had been decreasing during the years that many TIS were enacted, it had little overall effect on prison populations. Recent empirical tests that examined the introduction of these sentencing guidelines found that they were not significantly associated with the

increase of prison admission or imprisonment rates at the state level of analysis (Sorenson and Stemen, 2002).

THREE STRIKES AND YOU'RE OUT!

On March 5, 2003 the US Supreme Court in the *Ewing v. California* decision ruled that a 25-year sentence was not cruel and unusual punishment for the theft of three golf clubs. The subject in this case, Gary Ewing, was a repeat offender with a lengthy criminal record, and while this theft could have been prosecuted as a misdemeanor, it was instead prosecuted as a felony. Since this was Ewing's "third strike", this offense resulted in a 25-year sentence of imprisonment. First enacted by Washington State in 1993, three-strike sentencing schemes were intended to ensure that repeat felony offenders would be severely punished. Three-strikes legislation became very popular with both the legislators and the public, and by 2000, 26 states had enacted similar legislation (Zimring, et al., 2001).

Punishing repeat offenders with lengthy prison sentences is not a new phenomenon. Tonry (1999b) observes that such sanctions have been present since the 18th century. A generation ago these statutes were labeled "habitual offender" laws, and did not have to be associated with violent offenses. In fact, in *Rummel v. Estelle*, the US Supreme Court found that a mandatory life sentence imposed on an offender in 1973 for his third felony (for fraud or obtaining money through false pretenses) did not violate the 8th Amendment's prohibition of cruel and unusual punishment—despite the fact that Rummel's entire criminal history he victimized his fellow Texans for a total of \$228.75 in bad checks. Many would suggest that three-strikes legislation is a good criminal justice policy for violent offenders, but recent research suggests that other types of offenders are sentenced on these statutes as well.

In their analysis of three-strikes legislation—Zimring et al. (2001) found that while 26 states had enacted similar legislation, only a few actually used these sentencing mechanisms for the wholesale imprisonment of offenders. To date, California has both the strictest three-strikes legislation, and it is frequently applied. An examination of recent California Department of Corrections (CDC) data reveals, for instance, that as of September 30, 2003, there were 7,243 three-strike offenders imprisoned—but less than 42 percent were imprisoned for violent crimes (CDC, 2003a). In fact, of the non-violent majority

imprisoned, most were for property or drug offenses, but also included 43 offenders imprisoned for 25 years for driving while under the influence. Recent analyses have found that enactment of three-strikes legislation had no impact on California's crime rate (see Greenwood and Hawken, 2002). These imprisoned populations represent a substantial future cost. California Department of Corrections (2004) statistics, for instance, reveal that the annual cost of imprisoning an offender in California is \$30,929 but in 25 years this amount will increase to \$50,742 (assuming a constant two percent inflation rate).

Similar to the TIS reported above, the enactment of three-strikes legislation in some jurisdictions, such as California, may have influenced prison populations after 1994 but do little to explain increased incarceration in the two decades prior to the enactment of the legislation. For a better understanding of the visible causes of the increased use of imprisonment over time, we have to look at changes in the use of parole and the transformation from indeterminate to determinate sentencing. These reforms reduced the flexibility of prison systems to regulate their populations (see Caplow and Simon, 1999).

INDETERMINATE TO DETERMINATE SENTENCING

Rehabilitation was an important correctional goal in the first half of the century and the public was generally supportive of treatment-oriented programs (Cullen, Fisher, and Appelgate, 2000). Sentences throughout the 1960s and 1970s, for instance, were often indeterminate, and offenders could reduce the length of their sentence by demonstrating rehabilitative progress. While some have questioned whether correctional rehabilitation was ever given a realistic chance to succeed (see Palmer, 1992, 1994) it had virtually disappeared as a primary goal of corrections in most states by the 1980s (Zimring and Hawkins, 1995).

The objective of rehabilitative programs in prisons is to provide offenders with the opportunity to reduce their risk of recidivism through vocational opportunities, counseling, education or training. The end of the rehabilitative era was ushered in by a number of publications that questioned the usefulness of correctional rehabilitation. Martinson (1974) asked the question, "what works?" in correctional treatment, and then argued that "nothing works." Such a finding seems inconsistent with the results published by Lipton, Martinson, and Wilks (1975) that found that 48 percent of prison rehabilitation programs were effective

(Schlosser, 1998). Despite these positive findings, many policy-makers seized the more pessimistic perspective that correctional rehabilitation programs were never successful, so the rationale for imprisonment shifted from rehabilitation to incapacitation, or the “warehousing” of prison inmates.

Along with a philosophical shift from rehabilitation to incapacitation, legislators enacted laws that changed the nature of sentencing. For most of the 20th century, prison terms were indeterminate in nature—judges sentenced an offender to a minimum and maximum prison term. The prisoner was then eligible for parole after they had served the minimum term. Thus, prisoners had some incentive to demonstrate positive change to parole boards—which they most often did through participation in rehabilitative programs. Many policy-makers, however, criticized these types of sentencing schemes as they were not uniform—two offenders could commit identical offenses, for instance, and one could be released much earlier than the other. While indeterminate sentencing still exists in a few states, it has largely been replaced by determinate sentences (Ditton and Wilson, 1999). Despite these changes, determinate sentences typically enable a prisoner to shorten their sentence through earning “good time” credits. In the federal prison system, for instance, inmates receive 58 days of “good time” credits each year (Santos, 2003).

As incapacitation became the primary rationale for imprisonment, it has been argued that correctional systems are now oriented towards the management and control of high-risk populations (Feeley and Simon, 1992; Simon and Feeley, 1995). This change represents a philosophical shift from the incapacitation of offenders who present the most serious risk to public safety (Auerhahn, 1999, 2003; Chaiken and Chaiken, 1984; Gottfredson and Gottfredson, 1987; Greenwood and Abrahamse, 1982; Visser, 1987) to a wholesale warehousing of high-risk populations (Irwin and Austin, 2001; Bauman, 2000; Zimring et al., 2001). As mentioned in Chapter 1, many of these high-risk populations are increasingly non-White and non-violent offenders (Blumstein and Beck, 1999).

CHANGES IN PAROLE

Changes from indeterminate to determinate sentences, as well as mandatory minimum, three-strikes, and TIS legislation also occurred at the same time as changes in the ways that justice systems managed

parole. Parole is the term for the supervised early release of prisoners into the community. As outlined above, parole was historically granted to offenders who were making some type of rehabilitative progress. According to Ditton and Wilson (1999: 2),

States generally permitted parole boards to determine when an offender would be released from prison. In addition, good-time reductions for satisfactory prison behavior, earned-time incentives for participation in work or educational programs, and other time reductions to control prison crowding resulted in the early release of prisoners. These policies permitted officials to individualize the amount of punishment or leniency an offender received and provided the means to manage the prison population.

Important to understand is the individualized nature of imprisonment prior to the era of mass imprisonment. Parole boards considered both individual factors and potential community resources for the prison inmate prior to their release. Consequently, a prisoner who had promises of work or family support—which are both associated with lower recidivism—would be released earlier than their counterparts who had fewer community resources (see Petersilia, 2003).

Ditton and Wilson (1999:3) report that by 1998 fourteen states had abolished their parole boards, while many others tightened parole requirements, especially for violent offenders. States that retained parole often place very high expectations on prisoner behavior while in the community. In fact, increased rates of parole revocation have also contributed to higher incarceration rates (Petersilia, 1999). Some states have very high rates of parole revocation—which may be a consequence of strict community supervision. In California, for instance, 85,551 parolees were returned to prison in 2002, although only 14,363 had a new offense that generated additional prison terms—all the others were returned for technical violations of their parole (CDC, 2003b:1). Thus, while we do return offenders to the community, we also return parole violators to prison at a very high rate as well. One important question that we have to ask, however, is why so many inmates are failing to abide by the conditions of their parole and returning to prison—is it enhanced levels of supervision within the community (Little Hoover Commission, 2003) or a lack of proper

preparation for community release (Petersilia, 2003)—or some combination of these two factors?

Despite the fact that some states have dismantled their parole programs (Ditton and Wilson, 1999; Petersilia, 1998, 1999), there were approximately 753,000 persons on parole in 2001 (Glaze, 2003). Consequently, it is evident that parole remains an important safety valve for correctional systems to respond to prison overcrowding. It is possible that changes in both determinate sentencing and parole are responsible for the increased use of imprisonment over time. Yet these philosophical and legislative changes did not materialize out of thin air. Instead, these changes in the ways that correctional systems dealt with prisoners were a product of legislative change.

PUNISHING FOR PROFIT

Not everybody opposes mass imprisonment policies. The 57 billion dollar cost of imprisoning 2.1 million offenders has created a number of interest groups that actively support or promote the use of punishment for profit. Neither high-imprisonment policies nor a bloated correctional infrastructure are likely to be abandoned without fierce opposition (Austin, 1990; Lilly and Deflem, 1996; Lilly and Knepper, 1993). Communities that house prisons as well as stakeholders such as correctional officer unions (or associations) and the corporations that supply goods and services to these facilities have a financial stake in maintaining these programs (Chambliss, 1999; Christie, 1994). These correctional stakeholders lobby their political representatives to ensure that these prisons operate at capacity (Chambliss, 1999; Warren, 2000). The expanding correctional-industrial complex may be just as difficult to downsize as the military-industrial complex once employees, communities, and corporations rely upon these revenues (Greene and Schiraldi, 2002; Lilly and Deflem, 1996; Wilhelm and Turner, 2002).

Schlosser (1998) identified how the expansion in the use of imprisonment was championed by a number of interest groups that benefit when rates of incarceration are high. To respond to the problem of prison overcrowding in the 1970s and 1980s, a number of corporations began to deliver correctional services—from the provision of food and medical services to a proposal made by the Corrections Corporation of America (CCA) in 1997 to operate the entire Tennessee state prison system (Parenti, 2000). The penetration of these multinational firms in criminal justice systems and the close

relationships they share with federal and state officials has created considerable concern amongst punishment scholars.

A number of scholars have addressed whether the delivery of punishment should be a profit-motivated venture (see Coyle, Campbell, and Neufeld, 2003). And if punishment is profitable, will this profit ensure that prisons remain full even if the need for high imprisonment has passed? As Herivel and Wright (2003: 137) observe:

Whether private versus public prisons are “better” is largely immaterial and irrelevant....But, at least in public prisons, when prisoners are raped due to inadequate staffing, transport vans burst into flames killing the occupants due to no maintenance, or prisoners are held past their release dates, no one can say prison officials did so to line their own pockets and personally profit from the misery of others. With private prisons, most shortcomings can be traced to a conscious decision to enhance the company’s bottom line. After all, the purpose of private prison companies is to make money for their owners, and not to promote public safety, rehabilitate prisoners, protect the public, or ensure a safe working environment for their staff and the safekeeping of their charges.

Despite this bleak perspective about private prisons, a number of advocates of these facilities believe that taxpayers benefit when prisons are operated more efficiently (see Logan, 1990).

In 2002 there were some 93,771 federal and state inmates housed in private prisons (Harrison and Beck, 2003). While representing only a small percentage of the total number of inmates confined, these prisons are located primarily in the West and the South. Harrison and Beck (2003:6) report that, “Five states—New Mexico (43%), Alaska (31%), Wyoming (30%), Montana (29%), and Oklahoma (28%) had at least 25% of their prison population housed in private facilities.” The federal government also relies on private prisons, and many immigrants held prior to deportation, for instance, are housed in privately operated detention facilities. The use of privately operated prisons seems to be relatively constant over time. One plausible reason for this stability is that states are finding that privatizing prison beds has not been as cost effective as first hoped (see Pratt and Maahs, 1999).

In addition to privately operated prisons there are a host of corporations who partner with government to provide services to

prisons. These services range from providing meal service, medical care, and psychological counseling. Moreover, these large prisons—often housing thousands of inmates—require considerable raw materials in the form of food, health supplies, paper products, and cleaning supplies. In addition, a broad array of services, from health and psychiatric care to telephone services, are also delivered to prisons. Supplying these goods and services to prisons can be a profitable venture (Logan, 1990).

While privatization became a popular topic of discussion in the early 1990s as a mechanism to make prisons more economically efficient, again this interest post-dated the rise in the use of incarceration. Now that private operators are entrenched in providing these services, however, they may be very difficult to remove—especially given their ability to lobby politicians. Yet, since these services have only recently expanded, they are not solely responsible for the rising use of imprisonment starting in the 1970s.

POLITICAL NATURE OF IMPRISONMENT

A number of scholars have suggested that the subject of crime and punishment was a relatively unimportant electoral issue prior to the 1970s. Controlling crime was perceived as a local or state issue that was not politically important, especially at the national level (Tonry, 1999b). It has been argued, however, that Southern Republicans started to use the issue of crime to lure white voters to their party in the 1970s (Tonry, 1999a). By making crime and punishment a national matter, many politicians were able to seize upon an almost ideal issue: what politician would argue that criminals should be provided with due process protections, rehabilitation programs, or safe and humane prison conditions?

From a similar perspective, Beckett and Sasson (2000) argue that in order to promote a law and order agenda—that included both the use of enhanced enforcement and mass imprisonment—politicians had to convince the public that crime was rampant and that everyone was at risk. The media, in turn, sensed that the public was interested in crime, and responded by producing more crime-related entertainment—that ranged from dramas to programs such as *COPS* or *America's Most Wanted*—that convinced middle class White America that they were in jeopardy of victimization. Typically this victimization portrayed on television was from strangers (Tunnell, 1997), but we are actually more

at risk of being assaulted or killed by our acquaintances and family members (Rennison and Rand, 2003).

To illustrate the prevalence of media coverage of crime, a study by the Center for Media and Public Affairs (1997:1) found that:

Since 1993 crime has been the most heavily covered topic on the network evening news with 7448 stories, or 1 out of every 7 stories on all topics.....News about murders rose even more sharply. During 1990-92 murder coverage averaged 99 stories per year. Since 1993 the coverage increased to 714 stories per year, a jump of 721% at a time when the real world homicide rate was dropping.

It has been hypothesized that increasing media attention about crime, especially high profile offenses such as the O.J. Simpson case, might make Americans more punitive and therefore more likely to support crime control policies based on mass imprisonment. Yet, these increased media reports of crime occurred long after the imprisonment binge had started. Consequently, we have to examine long-term economic, social, and cultural conditions for the sources of America's punitive criminal justice policies.

Empirical tests of the relationships between politics and punishment have reported inconsistent findings. In their study of the influence of political parties, for instance Jacobs and Helms (1996) found that Republican Party governance was positively associated with increases in prison admission rates from the post World War 2 era until 1990. In a more recent study, however, Nicholson-Crotty and Meier, (2001) found that Democratic Party governance was highly associated with increases in federal imprisonment. Such contradictory findings might be caused by examining different eras—the Jacobs and Helms (1996) study, for instance, did not include the period of the Clinton presidency—which was associated with continuous growth in correctional populations.

A side benefit of the politicization of imprisonment was the involvement in stakeholders contributing to the campaigns of state and federal politicians. The California Correctional Peace Officers Association (CCPOA), for instance, was the largest contributor to the Democratic candidate in the 1998 gubernatorial race (Warren, 2000). The close relationship between the former California governor and the CCPOA might be one reason why in the midst of cutbacks to all other programs, the California Department of Corrections funding remained

stable, and CCPOA members received a 37 percent raise (Ho, Anderson, Fernandez, Molina, and Smith, 2003).

In the preceding pages a number of visible (or manifest) causes of changes in the use of imprisonment were outlined, including the introduction of punitive mandatory minimum sentences, sentencing schemes intended to severely punish repeat offenders, and truth-in-sentencing guidelines. Yet many of these legislative changes came decades after imprisonment rates had started their increases. More proximate causes of mass imprisonment were changes in the parole practices of states, and the shift from rehabilitation to incapacitation, as well as the change from indeterminate to determinate prison sentences. Some of these punitive crime control policies were associated with the war on drugs (Blumstein and Beck, 1999), the increasing politicization of crime, and stakeholders who profit when we pursue mass imprisonment policies. To understand these changes, however, we have to examine the underlying economic, social, and cultural sources of punishment. The following paragraphs outline the strategies that other scholars have used to explain changes in the use of imprisonment.

UNDERSTANDING THE UNDERLYING SOURCES OF MASS IMPRISONMENT

As outlined in Chapter 1 the direct cause of high imprisonment rates is easy to determine—we punished more offenders, and we sentenced them to longer sentences. But this approach to understanding imprisonment trends is overly simplistic. Societies have always had offenders in the community, but prior to the mid-1970s we found other mechanisms to confront criminal behavior. The intent of this study is to find the underlying factors, or motivations, that contributed to criminal justice policies based on high rates of incarceration. It is difficult, for instance, to understand the reasons why the United States has so readily embraced punitive policies that have resulted in high imprisonment rates. Scholars have long proposed that a variety of factors in addition to crime influence the use of imprisonment (Beccaria, 1764; Bentham, 1789; Mead, 1917; Rusche, 1933; Rusche and Kirchheimer, 1939). The following paragraphs outline five theoretical perspectives that have influenced most of the empirical examination of the use of imprisonment. These models are explained more comprehensively in Chapter 3.

Functionalist approaches suggest that there is a positive relationship between crime and imprisonment rates: as crime rates increase, so does the use of formal social control (Gottfredson and Hindelang, 1979; McGarrell, 1993). Durkheim (1900) proposed that the experience or ceremony of punishment bonds members of society together in their condemnation of deviance, increasing social solidarity and group cohesiveness. Increasing social solidarity, in turn, leads to informal social control, and therefore reduces crime. As a result, punishment has a functional role for the person being punished, the persons who punish, as well as society (Garland, 1990, 1991). This position was extended by Alfred Blumstein and his colleagues who suggested that imprisonment was largely a self-regulating process that was important for the preservation of the social order (Blumstein, 2003; Blumstein and Cohen, 1973; Blumstein, et al., 1977; Blumstein and Moitra, 1979).

Conflict theorists argue, by contrast, that imprisonment is used by powerful economic and social groups as a mechanism to perpetuate inequality in market economies (Holmes, 2000). It has long been hypothesized that capitalist systems use penal sanctions to control populations when living standards decrease, or unemployment increases (Rusche, 1933; Rusche and Kirchheimer, 1939). Accordingly, studies that have explored the relationship between unemployment and imprisonment (UI) have dominated the empirical literature (i.e., Chiricos and DeLone, 1992), but the findings are often ambiguous (D'Alessio and Stolzenberg, 1995; Jacobs and Helms, 1996; Michalowski and Carlson, 1999).

Social or minority threat theories² extend the conflict approach and propose that imprisonment is used by dominant social groups to formally control the conduct of racial, social or ethnic minorities (Holmes, 2000; Liska, 1992; Liska and Chamlin, 1984). Liska (1992: 18) observes how "the greater the number of acts or people threatening to the interests of the powerful, the greater the level of deviance and crime control." According to Jacobs and Wood (1999) inter-group stress is exacerbated by economic and political competition. As minority groups compete for employment, scarce resources, and political legitimacy they threaten the *status quo*. As a result of the threat posed by these economic and social transformations, dominant economic and social groups support the coercive control of minorities to maintain their social position (Kane, 2003).

The conduct of threatening groups may also be regulated through social welfare systems (Piven and Cloward, 1993). Groups perceived to be threatening are regulated with either the “carrot” of welfare payments or the “stick” of arrest and imprisonment (Spitzer, 1975). Minority threat hypotheses have some appeal when one considers the disproportionate imprisonment of Americans of color (Mauer, 1999; Miller, 1996; Tonry, 1995). Recent studies of imprisonment have found empirical support for the minority threat hypothesis (i.e., Beckett and Western, 2001; Greenberg and West, 2001; Ruddell and Urbina, 2004; Urbina, 2003; Yates, 1997).

The relationships between informal and formal social control may also influence the use of imprisonment. Scholars have recognized that there has been a significant shift in the nature of individual and community relationships (Putnam, 2000). Americans are less likely today to vote, participate in community activities, voluntary associations, labor unions or religious groups than they did a generation ago. As a result, people are removed from social networks and are increasingly isolated (Putnam, 2000). In addition to reducing the amount of social capital individuals can use for pursuing social or employment goals (Coleman, 1990) this civic disengagement is likely to reduce the ability of neighborhoods or communities to control crime informally (Bursik and Grasmick, 1993; Rosenfeld et al., 2001; Sampson, et al., 1997).

Civic disengagement may also influence fear of crime and punitive feelings towards others (Roberts and Stalens, 1997). Tonnies (1995, 2001) recognized that community participation and involvement influences both individual behavior as well as the development of law. Tonnies (2001:218) observed that formal social control developed after “individuals were emancipated from all ties of family, country and home town, of belief and superstition, of inherited tradition, custom and duty.” In a parallel argument, Black (1976) identified how there is an inverse relationship between the use of formal and informal social control. During times of little informal social control, there is a corresponding increase in formal social control. When societies lose the ability to regulate behavior through informal mechanisms, they are likely to develop more formal methods of punishment (Morris and Rothman, 1995).

Lastly, it has been observed that punishment is a complex social institution, and the reasons for punishment extend beyond single causal variables such as the influence of the economy (Beckett, 1997; Beckett

and Sasson, 2000; Garland, 1990, 1991, 2001). As a result, a number of different scholars have attempted to explain the use of imprisonment as a consequence of a number of social, political or cultural factors (Inverarity, 1992; Savelsberg, 1994; Tonry, 1999a). These scholars have generally identified the causes of high rates of incarceration as a function of uniquely American cultural values and beliefs (see Garland, 2001; Mead, 1917). These propositions are intuitively appealing as policy responses to crime involve many community and political stakeholders – some of whom may be pursuing competing or divergent goals.

Previous studies have generally overlooked the relationships between imprisonment and public opinion (Taggart and Winn, 1993). Variables such as trust in government, pessimism about the future, attitudes towards minority groups, adaptations to social change or political conservatism have been identified as potentially fruitful in the study of imprisonment (Caplow and Simon, 1999; Garland, 1990, 1991; Savelsberg, 1994; Tonry, 1999a). Despite the fact that these concepts have been identified as relevant to the study of imprisonment these political variables have received only cursory examination in longitudinal research designs (D'Alessio and Stolzenberg, 1995; Greenberg and West, 2001; Inverarity and Grattet, 1989; Jacobs and Helms, 1996; Taggart and Winn, 1993). The introduction of the variables of political disaffection, civic disengagement, and social disruption are therefore empirically important to the imprisonment literature because they are more comprehensive, and more likely to explain the use of punishment, rather than focus upon a single issue.

PREVIOUS STUDIES OF IMPRISONMENT

Over the past two decades, many scholars have attempted to identify the variables responsible for variation in imprisonment rates using cross-sectional research designs at the state or county level of analysis (Arvanites, 1997; Arvanites and Asher, 1998; Carroll and Doubet, 1983; Colvin, 1990; Davey, 1998; Galster and Scaturro, 1985; Jacobs, 1978; McCarthy, 1990; Taggart and Winn, 1993). These cross-sectional research designs have produced ambiguous findings regarding the predicted relationships between imprisonment rates and economic or demographic variables such as unemployment, inflation, population heterogeneity, and crime. Many of these studies were limited, however, by their conceptualization or operationalization. Design limitations of

these cross-sectional studies include: using only one measure of imprisonment, a lack of precision in the explanatory variables considered, the temporal eras studied, and the unit of analysis examined (Chircos and DeLone, 1992; Jacobs and Helms, 1996; Michalowski and Carlson, 1999).

Longitudinal studies of imprisonment, by contrast, are able to identify the factors that contributed to changes in correctional populations over time. Longitudinal research has demonstrated that changes in rates of violent crime can explain only a moderate percentage of the growth in rates of incarceration (Greenberg and West, 2001; Inverarity and Grattet, 1989; Inverarity and McCarthy, 1988, Jacobs and Helms, 1996; Jankovic, 1977; Lessan, 1991, Michalowski and Carlson, 1999; Myers and Sabol, 1987) and property offenses are unlikely to make a substantial contribution to increased imprisonment rates (Cappell and Sykes, 1991; D'Alessio and Stolzenberg, 1995; Jacobs and Helms, 1996). One limitation in these studies is that few have considered the impact of drug offenses (see Blumstein and Beck, 1999) and this is a consequence of a lack of reliable and valid data about drug imprisonment, especially during the 1950s and 1960s. If changes in rates of violent or property crime can only explain a small proportion of the growth of correctional populations in the United States, then extra-legal factors must also influence the use of incarceration.

In addition to considering the relationships between crime and imprisonment, previous time series studies also have examined the relationships between imprisonment and inflation (Lessan, 1991), income inequality (Jacobs and Helms, 1996), unemployment (Chiricos and DeLone, 1992; D'Alessio and Stolzenberg, 1995), population age-structure (Chiricos and Crawford, 1995; Inverarity and McCarthy, 1988; Jacobs and Helms, 1996; Marvell and Moody, 1997), stages of capitalist accumulation (Michalowski and Carlson, 1999), welfare spending (Inverarity and Grattet, 1989; Lessan, 1991), family breakdown (Jacobs and Helms, 1996), racial composition (Beckett and Western, 2001; Greenberg and West, 2001; Yates, 1997), military service (Cappell and Sykes, 1991; Inverarity and Grattet, 1989), the influence of the Republican Party governance (Inverarity and Grattet, 1989; Jacobs and Helms, 1996) and collective action such as riots (Jacobs and Helms, 1999).

While these longitudinal studies have contributed to our understanding of incarceration trends, substantial gaps in the literature

still remain. Despite repeated calls for examination of political, cultural, and social variables in imprisonment research (Inverarity, 1992; Savelsberg, 1994; Tonry, 1999a) these factors have been neglected or have received only cursory examination (Jacobs and Helms, 1996, Nicholson-Crotty and Meier, 2001; 2003). The current study responds to the lack of research that has closely examined the underlying causes of policies that promoted high imprisonment rates. Of particular interest are the relationships between the use of imprisonment and political disaffection, civic disengagement, and social disruption.

Theories of Formal Social Control

Scholars and philosophers have attempted to explain the use of punishment for hundreds of years (i.e., Beccaria, 1764; Bentham, 1789). Of interest to these scholars were the social objectives of punishment, the limits to punishment, and the benefits (and costs) to societies for using different mechanisms of control. There are three traditional theoretical approaches that explain the use of formal social control, including: Durkheim's (1900) functional model, the Rusche-Kirchheimer (1939) economic model and the conflict theories that emerged from this perspective, and Black's (1976, 1989) sociological theory of law. In addition, the minority threat model is also outlined, as this proposition extends control models (see Holmes, 2000; Liska, 1992; Ruddell and Urbina, 2004). Each approach suggests that extra-legal factors influence the use of punishment within a society. These traditional approaches to explaining the use of formal social control, such as imprisonment, are similar in that they typically rely upon a single causal variable. While these traditional theories help us understand the use of punishment, they are somewhat limited because they define formal responses to crime from very narrow theoretical perspectives.

Garland (1990) argues that the phenomenon of punishment is a complex social process, and that it can't easily be explained by a single cause. There are, for example, multiple stakeholders who have an interest in punishment, and some of these stakeholders could have competing or contradictory goals. In response to the inability of these approaches to fully explain the use of imprisonment, the second section of this chapter introduces three integrated theories of formal social control. These approaches build on this traditional theoretical work, and include social, political, and cultural variables to explain changes in the use of imprisonment within the United States from 1952 to 2000.

Of the theoretical models outlined in this chapter, two have dominated the empirical study of imprisonment: Durkheim's (1900) functional model and Rusche-Kirchheimer's (1939) economic or conflict model. Recent scholarly argument that identified declining American participation in social networks and social capital (Putnam, 2000) has also increased the appeal of sociological theories that explain the relationship between decreasing social engagement and increasing formal social control (Black, 1976, 1989; Tonnies, 1995, 2000). Accordingly these three models are reviewed, and their relationships to imprisonment trends within the United States are outlined in the following pages.

FUNCTIONAL MODELS OF FORMAL SOCIAL CONTROL

Durkheim (1900) proposed that crime was a normal and predictable response to social decline or change. Punishment, in turn, was used as a collective response to the violation of norms to ensure social solidarity (Lilly, Cullen, and Ball, 1995). According to this perspective, punishment is a process that is used to maintain and reinforce the collective conscience, or shared social values. Breaches in the moral order can be restored through condemnation, which in turn, increases solidarity (as well as informal social control) and thus results in less crime.

Durkheim (1900) also observed that a number of groups benefit from punishment: individuals who are punished receive society's moral denunciation, those who punish reinforce society's normative expectations, and onlookers who are deterred from similar offenses. In addition to the general and specific deterrence achieved by formal responses to crime, punishment has social and moral significance beyond its use as a method of crime control. Durkheim (1900: 32, 44) offered two broad observations about penal evolution: "The severity of punishment is greater where societies are of a less advanced type and where the central power is more absolute in character," and; "Punishments consisting of deprivations of liberty, and then only for periods of time that vary according to the gravity of the crime, tend increasingly to become the normal type of repression." Consistent with this analysis, Elias (1978) found that punishments have become more civilized over time.¹

Winfrey and Abidinsky (1996:205) outline how Durkheim and other structural functionalists saw crime as important for social

solidarity, and suggest that crime fulfills four important objectives. First, crime defines the boundaries of acceptable behavior, and our responses to crime provide lessons to the rest of society. Second, crime signals impending social change as more members of society practice “unlawful behavior.” Third, crime is a signal to the rest of society about impending social disequilibrium. While a certain amount of crime is necessary for society to function, a functionalist approach proposes that too much creates a risk for the entire society. Finally, crime and criminals create a social cohesive for the remainder of society to rally around.

Using the four objectives outlined above one can see how American society in the 1970s was challenged from within, as different social groups pushed the boundaries of acceptable behavior further than previously tolerated. In response to this increasing disequilibrium, there was a corresponding increase in the use of formal social control. Durkheim’s (1900) model proposes that law enforcement and punishment are products of both social consensus and a requirement for social solidarity. These propositions were extended by Alfred Blumstein and his colleagues to explain how the use of imprisonment in the United States was historically a homeostatic, or self-regulating process (see Blumstein, 2003). Blumstein and Cohen (1973) found that while the amount of crime varied somewhat over time, the imprisonment rate was relatively stable from the 1920s to the 1970s. Blumstein (2003: 257) outlines how this hypothesis was based on “shifting thresholds. As crime rates went up, the threshold of the seriousness of the offense or of the offender’s prior criminal history (or other attributes) would be raised in order to avoid imposing an excessive burden on the prison system.” Similarly, when crime decreased, the threshold for imprisonment would be lowered—and offenses that previously received a community sanction (or no sanction) would result in imprisonment. When prison overcrowding occurred, prison administrators and bureaucrats used emergency release provisions and parole to regulate these populations (Berk, Rauma, and Messinger, 1982).

The notion that the amount of punishment is self-regulating is clearly inaccurate as federal and state prison inmates have increased five-fold since 1975 (Caplow and Simon, 1999) and neither correctional managers nor bureaucrats have been able to decrease these populations (Lynch and Sabol, 2000). Blumstein (2003) suggests that prison populations have become somewhat more uniform, and that we

might be entering a new era of stability of punishment—albeit with rates of federal and state imprisonment many times their previous levels. The empirical literature suggests, however, that only a proportion of the growth in correctional populations is due to changes in crime (Inverarity and Grattet, 1989; Inverarity and McCarthy, 1988; Jacobs and Helms, 1996; Jankovic, 1977; Lessan, 1991, Michalowski and Carlson, 1999; Myers and Sabol, 1987). If crime explains only a proportion of the changes in the use of imprisonment, then other extra-legal factors must also influence the use of punishment in the United States.

CONFLICT MODELS OF FORMAL SOCIAL CONTROL

Conflict perspectives also suggest that imprisonment has functions beyond the control of crime. Conflict theories propose that punishment is used to fulfill the instrumental and collective needs of government or ruling classes (Marx, 1867). While Marx (1867) generally ignored issues of crime and punishment, his theoretical contributions identified the importance of economic relationships and class conflict. Conflict models suggest that religious, social, political, and cultural institutions are designed to perpetuate a class system based on economic domination. Punishment is used to control the social classes that represent the greatest threat to the social order (Spitzer, 1975). Kane (2003: 269) recently outlined how these different groups have been given various labels throughout time, such as “social junk, the underclass, social dynamite, and the dangerous classes.” The one common element that these labels demonstrate is the potential threat that these groups pose to the social order. If the “dangerous classes” represent a small fraction of the population, they pose little threat to the economic or social system—but as they grow, there is an increased need for some dimension of formal social control to respond to these increased threats.

Rusche (1933: 62) observed that the use of imprisonment was tied to the social structure, a nation’s history and economic conditions:

An extremely high capacity for resistance is expected of the lower strata, of whom large masses are regularly deprived of their livelihood by long, severe winters, inflation and crises, and the spiritually and physically weakest are thrown into the path of crime. If penal sanctions are supposed to deter these

strata from crime in an effective manner, they must appear even worse than the strata's present living conditions...All efforts to reform the punishment of criminals are inevitably limited by the situation of the lowest socially significant proletarian class which society wants to deter from criminal acts.

Rusche (1933) also argued that imprisonment was used as a mechanism to maintain the political and economic interests of capitalist economies. This theoretical work was extended when Rusche and Kirchheimer (1939) proposed that modes of production influence penal strategy, the selection of punishments is political, and that surplus labor populations are deterred from crime through the use of imprisonment (see Michalowski and Carlson, 1999). While offering theoretically intriguing hypotheses, these contributions were generally overlooked until a new edition of Rusche-Kirchheimer's 1939 book was published in 1968 (Michalowski and Carlson, 1999).

Current contributions to conflict theory suggest that failures within capitalist economies (i.e., unemployment, inflation or periods of recession) threaten the legitimacy of the economic system itself (Chircos and DeLone, 1992; Lessan, 1991; Michalowski and Carlson, 1999). High levels of unemployment, for instance, create surplus labor pools (Chiricos and DeLone, 1992; Spitzer, 1975). While the availability of surplus labor is important in suppressing wages in competitive markets, these populations are perceived as potentially dangerous (Spitzer, 1975). The state responds to increases in surplus labor and the threat they pose (either real or imagined) by increasing the severity of sanction for rule-violation (Liska, Chamlin, and Reed, 1985). As a result, incarceration reduces the number of unemployed persons in the population, decreases the threat that surplus labor poses through general deterrence, as well as protects the economic and social interests of the economic classes that own the means of production (Weiss, 2001).

Empirical tests of the UI relationship were first considered in the 1970s (Jankovic, 1977) and a meta-analysis of studies completed in different nations throughout the 1970s and 1980s has confirmed that there is a consistent significant positive relationship between these variables (Chiricos and DeLone, 1992). Scholars have extended these models, and have proposed that other forms of economic stress or failure within market systems are associated with increased use of

incarceration, including inflation (Lessan, 1991) and income inequality (Jacobs and Helms, 1996; Killias, 1986; Western, Kleykamp, and Rosenfeld, 2003; Wilkins, 1991). Michalowski and Carlson (1999) also demonstrated that the use of imprisonment varies with stages of capitalist accumulation, and that incarceration is more likely to be used during times of decreasing state social-welfare interventions (see Beckett and Western, 2001; Greenberg and West, 2001). Like the functionalist approach, conflict theories suggest that imprisonment is useful for society. While functional theories propose that punishment reinforces social norms and satisfies moral outrage, conflict approaches suggest that powerful social groups in market economies use punishment to reinforce and secure their status (Holmes, 2000).

The conflict approach is able to explain some of the changes in prison populations throughout the 1970s. After two decades of post-World War 2 economic growth, for example, the 1970s was an era characterized by high rates of inflation and unemployment at the same time (a condition labeled ‘stagflation’ by economists). Moreover, the economic dominance of the US was being threatened by oil shortages, and increasing trade deficits with European and Asian nations. These economic changes occurred at the same time as the failure of some domestic industrial sectors, such as the steel industry and heavy manufacturing. Taken together, the conflict models described above have an intuitive appeal in explaining changes in the use of imprisonment. Growing surplus labor and increasing economic insecurity resulted in an increased use of imprisonment to increase the “cost” of crime, and to ensure domestic stability.

MINORITY THREAT MODELS OF FORMAL SOCIAL CONTROL

For most of the 20th century, conflict theorists argued that dominant groups within market economies use penal sanctions to control populations when their interests are threatened (see Quinney, 1977; Rusche, 1933; Rusche & Kirchheimer, 1939; Spitzer 1975; Urbina, 2003). These conflict approaches, however, focused almost exclusively on economic relationships between different social groups—typically the most destitute and the powerful. The presence of these populations, however, is both a byproduct of capitalism (i.e., concentrated poverty for those least able to compete) as well as a necessary prerequisite for capitalist economies (i.e., the need for surplus labor to maintain low

wages). In response to the potential threat that these populations might pose to the economic system, conflict theories proposed that powerful groups support the development and implementation of sanctions to minimize challenges to the powerful social groups that form economic elites (see Urbina, 2003).

Minority threat hypotheses extend conflict approaches by proposing that growing minority populations are perceived as dangerous and represent a threat to the *status quo* (Blalock, 1967; Jackson, 1989; Liska, 1992; Liska and Chamlin, 1984; Spitzer, 1975). Minority populations typically differ on the basis of race, ethnicity, language or religion. There is a growing body of scholarly work that has identified how minority groups are disproportionately policed (Liska and Chamlin, 1984; Kane, 2003), arrested (Holmes, 2000; Liska and Chamlin, 1984), and incarcerated (Chiricos and Crawford, 1995; Mauer, 1999; Miller, 1996; Tonry, 1996; Wacquant, 1999, 2001). Moreover, these groups are subject to more severe punishment than members of dominant social groups within the United States (Steffensmeier and Demuth, 2000; Urbina, 2003) and beyond our borders (Jacobs and Kleban, 2003; Ruddell, 2005; Ruddell and Urbina, 2004).

Minority threat theories propose that as the ethnic and racial landscape of a given country begins to change, so does the nature of punishment (Blalock, 1967; Liska, 1992; Spitzer, 1975; Turk, 1969; Urbina, 2003). As the size of racial or ethnic minority groups increases, they also contest existing social relationships. Not only are these groups more visible, but as they get bigger they also compete for economic and political power (see Jacobs & Wood, 1999). Dissatisfied with their subordinate status, these groups also seek to enhance their social standing (Kane, 2003). This competition for scarce resources and legitimacy, however, poses a threat to long-standing social arrangements (Bonilla-Silva, 2000). The minority threat approach suggests that these challenges to the *status quo* are met with the increased use of formal social control. Along with race and ethnicity, increases in factors like religious or cultural diversity will also result in a corresponding change in the ways that criminal and juvenile justice systems respond to crime (Jackson, 1989; Ruddell and Urbina, 2004).

It should be emphasized that the threats posed by these minority groups are not restricted to a given country or era. Bonilla-Silva (2000) observed that racial minorities

throughout the Western world are increasingly subjected to discrimination, violence, and restrictions on migration. According to Bonilla-Silva (2000), such changes are a result of majority group economic insecurity, restructuring, transnationalism, and new political alignments. Taylor (1999) adds that as cultural differences increase, political practices within nations become more exclusionary. These exclusionary practices include enhancing the use of punishment for those defined as the *other* (i.e., the “outsider,” the “stranger,” or “suitable enemy”—see Urbina, 2003; Wacquant, 1999).

In short, minority threat seems to be greatly influenced by minority size. Concerns regarding social disorganization and cultural differences, and questions of sociopolitical and economic dominance become more pressing as the size of subordinate groups increase. Blalock (1967), for instance, observes that at certain times and places it is feasible or necessary to treat certain individuals harshly, either because the supply is plentiful or because it is economically and politically rational to do so. Hence, racial and ethnic minorities and anyone who is out of favor with the dominant groups are frequently seen and treated as a surplus population. According to Quinney (1977:136), “a way of controlling this unemployed surplus population is simply and directly by confinement in prisons.” Minority threat theorists argue that over time the focus of punishment has changed from these surplus labor populations to groups that are racially, culturally, or ethnically different. It is possible that minority populations have now replaced the unemployed as the primary threat to mainstream cultural or economic conditions.

Myers and Talarico (1987:238) summarize the rationale for more severe punishment of minority offenders:

Black offenders may appear particularly threatening where income inequality and racial inequities are pronounced, where Blacks constitute a significant proportion of the population, and where crime problems are serious. This greater threat could provide the stimulus for disproportionately harsher treatment of Blacks in these contexts.

Minority groups are also regulated with other forms of quasi-formal control including placement in psychiatric hospitals (Liska,

Markowitz, Whaley, and Bellair, 1999) and by regulating social welfare benefits (Piven and Cloward, 1993).

While not an explicit minority threat hypothesis *per se*, Black (1976, 1989, 1993) suggests that higher rates of minority confinement are entirely predictable. Black (1989) suggests that as the social distance between the parties involved in a dispute increases, so does the formality of legal intervention. Black's (1989) model explains variation in the use of law, and how the disproportionate imprisonment of the poor and minority groups across cultures is a function of increased social distance. Individuals who have equal status and power rarely use the formal law when engaged in a conflict, relying instead upon less formal methods of dispute resolution, such as conciliation. Black (1989, 1993) proposes that individuals or social groups that hold more social, political, and economic status are more likely to use law as a mechanism to resolve disputes with those who have less status. Social groups that possess the greatest status are almost immune to formal social control, while those who have the least social and economic power have traditionally had the least access to the law.

A number of scholars have argued that African-American males have been targeted for punishment by American criminal justice systems (Mauer, 1999; Tonry, 1995). Similar to conflict approaches, Miller (1996) suggests that there was an inverse relationship between social welfare and criminal justice spending: social welfare expenditures were reduced and replaced with increased criminal justice spending. Through the social construction of a drug problem (the creation of a problem where no serious problems existed), African-Americans became the social group that fed this growing criminal justice enterprise. Miller (1996) proposes that in order to target criminal justice attention on African-Americans the White, middle class majority had to be convinced that they were in danger. Playing on White, middle class insecurities about crime and race, political claim-makers socially created a crime and drug problem that required a criminal justice, rather than a social welfare intervention. Recent studies of imprisonment trends that included minority threat variables have produced empirical support for these propositions (Beckett and Western, 2001; Greenberg and West, 2001; Yates, 1997).²

Tonry (1995) provides a parallel argument about minority threat, suggesting that the increased use of imprisonment for African-Americans was an entirely predictable consequence of conservative crime control policies promoted by political opportunists. Tonry (1995)

observes how politicians have used racial stereotypes to promote middle-class fear of African-Americans. Racial divisiveness and fear resulted in increases in the size and scope of criminal justice systems to fight a war on drugs at the expense social spending. The use of formal social control on inner-city populations has resulted in increased social disorder and higher crime rates (Rose and Clear, 1998). Theoretical propositions that support a minority threat hypothesis have some intuitive appeal considering the disproportionate numbers of minority prisoners. Historically these groups have wielded the least social, economic and political power in America (Christie, 1994; Mauer, 1999; Mauer and Huling, 1995; Miller, 1996; Reiman, 2004; Tonry, 1995). In fact, African-Americans and Latinos are the two populations that experienced the greatest growth in imprisonment during the 1980s and 1990s (Blumstein and Beck, 1999).

Minority threat propositions can also explain changes in the use of imprisonment since World War 2. A number of scholars have identified how Blacks and Latinos increased their competition for economic and political status throughout the 1960s (see Urbina, 2003). This competition was not always peaceful, and there were an increasing number of race riots throughout this era (see Jacobs and Helms, 1999; Olzak et al., 1996). Supporters of this theory suggest that the combination of protest and competition created an increased demand for punishment of these groups. Parenti (2000) argues that this punishment was fulfilled through a war on drugs.

THE RELATIONSHIP BETWEEN INFORMAL AND FORMAL SOCIAL CONTROL

Black (1976) proposed that there is an inverse relationship between formal and informal social control. When alternative forms of social control are weak, individuals are more likely to rely upon formal mechanisms of social control, including law. Black (1976: 108/109) finds that the structure of modern societies leads to loosely coupled relationships—family, religious control, and community control are reduced when our participation in these institutions decreases:

In modern societies such as America, however, family control is weaker than in more traditional societies. With modernization it has weakened everywhere, and everywhere law has correspondingly increased....Law also varies with

every other kind of social control. Thus it varies across the centuries, growing as every kind of social control dies away—not only in the village, church, workplace and neighborhood.

Certainly, these observations are consistent with Tonnies (1995, 2001)—a contemporary of Marx—who identified that the move from agrarian to industrial societies created a need for different types of social control. As social relationships became more anonymous and less interdependent, the amount of formal social control increased to compensate for the reductions in the influence of close-knit family and community to regulate deviant behavior. The conversion from traditional styles of life (i.e., communal and agrarian) to industrial economies also resulted in other social changes, such as urbanization, the proliferation of the nuclear family, and the displacement of rural populations. Again, these changes resulted in reductions in the use of informal social control (see also Felson, 1994).

A number of scholars have argued that transformations in the US population have continued throughout the post World War 2 era. Putnam (2000) has recently observed how Americans are increasingly disconnected from historical mechanisms of informal social control. Our participation in political, social, kinship, and cultural pursuits has decreased over time. As a result we are able to exert less informal social control within our families, neighborhoods, and communities. These social changes may be due to a number of factors, including a greater participation of women in the adult work force and a lack of neighborhood socialization (Guest and Wierzbicki, 1998). Higher crime rates are a consequence of decreasing community control (Bursik and Grasmick, 1993; Rosenfeld, et al., 2001) and collective efficacy (Sampson, et al., 1997). As our informal mechanisms of social control become attenuated, we rely upon a greater use of formal social control. As Black (1976: 136) observes:

Increasingly, people circulate from one organization to another. The organizations live on, but the life span of membership grows shorter and shorter. Less and less do people give their lives to organizations; in their conduct, they have less and less loyalty...(Historically) organization was temporary but strong. In the future, if trends continue, it will be permanent but weak. People may again live most of their lives without it.

Not all scholars agree with Putnam's argument that Americans have decreased their civic involvement (Boggs, 2001; Paxton, 1999). However, there is some empirical support to the notion that reductions in collective efficacy resulted in increased crime (Rosenfeld, et al. 2001; Sampson, et al., 1997). These findings support the notion that decreased civic involvement contributes to increased use of punishment, at least indirectly.

Again, this approach may be able to explain some of the increases in the use of punishment during the period of the Cold War. As people became more disengaged from their families, schools, neighborhoods, and communities, there was a corresponding decline in the prevalence of informal social control. As informal social control failed to reduce crime and delinquency, there was an increased use of formal social control.

Minority threat, economic domination, the sociological theory of law or the consensus models all attempt to locate the cause for prison expansion as a consequence of relatively few causal factors. As proposed, each of these models can explain some of the changes in the use of punishment in the post World War 2 era. In some respects, however, these theories fail to account for the complexity of modern social systems (Garland, 1990, 1991). For instance, a number of stakeholders participate in the administration of justice. The objectives of these stakeholders are not, however, consistent. The police, for instance, may have vastly different goals than the judiciary, or community interest groups. Moreover, the correctional system might have an agenda independent of the other components of criminal justice systems. Consequently, it is unlikely that there is a single unifying variable that explains the use of imprisonment.

Acknowledging these different (or competing) goals, a number of scholars have developed more comprehensive approaches to explaining the use of punishment. The following section outlines the need for theories of punishment that include a larger number of causal factors. While more complex, such theories are required to better understand the relationships between imprisonment and social, cultural or political factors.

INTEGRATED THEORETICAL APPROACHES

Theoretical approaches that explain the use of punishment based upon a single causal factor such as minority threat or economic conditions

such as unemployment are criticized as being too simplistic to explain fully the use of imprisonment, a complex social phenomenon (Cappell and Sykes, 1991; Garland, 1990, 1991). Consequently, several scholars have proposed that increased imprisonment is an outcome of a number of social variables, as well as the interaction of these economic, political, and cultural variables (Beckett, 1997; Beckett and Sasson, 2000; Caplow and Simon, 1999; Garland, 2001; Savelsberg, 1994). While few of these approaches have been empirically examined, they are theoretically appealing: complex social institutions, such as the delivery of punishment, have multiple stakeholders in addition to fulfilling a host of economic, social and political functions—some of which may be unrelated to crime. In order to enhance our understanding of the use of punishment, this section introduces three integrated theoretical approaches to the study of imprisonment trends: political disaffection, civic disengagement, and social disruption (throughout the text these approaches are also labeled the ‘variables of interest’).

It has recently been argued that the interaction between political culture, public policy, and institutional organization result in higher incarceration rates (Caplow and Simon, 1999). Three prerequisites to high rates of imprisonment are identified by these scholars: crime control as a privileged mode of governing, the consequences of a war on drugs and a lack of reflexivity in the penal system. Caplow and Simon (1999) propose that crime control has become an increasingly important political issue in the past two decades, and that successful political candidates must support severe consequences for offenders. Criminal justice issues became politicized after confidence in public policy initiatives declined throughout the 1970s. Federal politicians promoted crime control because the issue was politically safe and non-divisive. This proposition has been supported in a growing body of scholarly argument that has identified the political nature of American crime control (Beckett, 1997; Beckett and Sasson, 2000; Chambliss, 1999, Tonry, 1999a).

Caplow and Simon (1999) suggest that criminal justice legislation and policies intended to control drugs have increased the pool of possible offenders. Even though crime (Federal Bureau of Investigation, 2003) and victimization have decreased (Rennison and Rand, 2003), drug offenders have provided politicians with an almost endless supply of arrestees (Blumstein and Beck, 1999, Miller, 1996; Tonry, 1995). Lastly, Caplow and Simon (1999:72) suggest that the

weakening of forces that limit or “put the brakes” on correctional populations has resulted in greater use of imprisonment, and define this relexivity of penal systems as the “limitations on the operations of courts, community supports, community sympathy for some lawbreakers and the ideologies of the organizations that process lawbreakers.” Parole and early release have historically been used by correctional systems to regulate prison populations. In states where parole and early release are still in place, however, probationers and parolees are frequently returned to prison for violating the conditions of their release (Blumstein and Beck, 1999; California Department of Corrections, 2003; Travis and Lawrence, 2002). As a result, some offenders are frightened of participating in community-based sanctions due to the high probability of failure (Petersilia, 1999; Santos, 2003; Wood and May, 2003).

Savelsberg (1994) offers a similar theoretical argument, observing how crime rates only account for a percentage of those incarcerated, and that punishment is mediated by changing belief systems. Savelsberg (1994) suggests that American criminal justice systems are vulnerable to changing public values and punitive public opinion. While punitive cultural values exist in other nations, their bureaucratic traditions and professional knowledge provides some insulation against populist beliefs that crime is an urgent social problem (Potter and Kappeler, 1998). Jacobs and Kleban (2003) recently found that first world nations that are more democratic typically have higher imprisonment rates because politicians are more sensitive to demands for punishment. Beckett and Sasson (2000:120) challenge this “democracy in action” thesis and argue that the public “takes its cues (about crime and punishment) from politicians and the media—not the other way around.”

Garland (2001) recently has proposed that changes in the use of imprisonment are a function of changing cultural beliefs and the social structure of late modernity. According to this approach, imprisonment is embedded in cultural changes that rejected the penal-welfare state—an approach that had dominated social and criminological interventions until the 1970s—in favor of a more punitive conception of justice. According to Garland (2001:163) the following conditions lead to a culture obsessed with matters of crime and justice; “the recognition of high crime rates as a normal social fact, widespread and intense emotional investment in crime, the politicization of crime control, the perpetual view of the criminal justice system as inadequate or

ineffective, the proliferation of private security, and a crime consciousness that is imbedded in the media, popular culture and environment.”

Many of the cultural prerequisites of high imprisonment rates identified by Garland (2001) have a basis in historical cultural values and beliefs about crime, justice, and punishment (see Mead, 1917). Yet, it took the combined forces of the mass media and political claimsmakers to embed these punitive values so deeply into our culture. Few can deny, for instance, the media’s obsession with crime (Beckett, 1997; Center for Media and Public Affairs, 1997). In addition, the notion that punishment is an inherently political activity is also theoretically appealing as all policy initiatives are the outcomes of political processes (Inverarity, 1992).

Some scholars have identified how crime control has been used to bolster the political capital of the Republican Party (Beckett, 1997; Beckett and Sasson, 2000; Chambliss 1999; Inverarity, 1992; Jacobs and Helms, 1996; Taggart and Winn, 1993; Tonry, 1999a). Prior to the 1970s the issue of crime was generally ignored by federal politicians. Tonry (1999a) argues that Republicans have used a crime control platform since the 1970s to lure white Southern voters away from the Democratic Party. Tonry (1999a) also suggests that the reluctance to be labeled “soft on crime” has created an environment where it is politically dangerous to criticize any crime control policy, regardless of party affiliation. As a result, even Democrat politicians are associated with high levels of punishment (see Nicholson-Crotty and Meier, 2001).

POLITICAL DISAFFECTION, CIVIC DISENGAGEMENT, AND SOCIAL DISRUPTION

Punishment scholars such as Garland (1990, 2001), Simon and Caplow (1999), Tonry (1999a), and Inverarity (1992) have all advocated for the development of more complex theoretical models to better understand the use of imprisonment. In order to better understand the use of punishment through multiple causation models, this study introduced more sophisticated measures of economic conditions, as well as indicators of political, social, and cultural values to the imprisonment literature. Variables that measure these concepts are used to examine whether changes in the political and cultural context throughout the 1960s and 1970s precipitated some type of government response to

preserve the legitimacy of the state (LaFree, 1998; Kilias, 1986) and “hold the center” (Levy, 1998; Parenti, 2000). In addition, this research examined whether the effects of changes in political disaffection, civic disengagement, and social disruption were conditioned by changes in the amount of violent crime or economic stress.

The concept of political disaffection incorporates theoretical contributions from the minority threat, social control, and conflict models. Political disaffection is characterized by a growing distrust of politicians and bureaucracy. There has been a growing dissatisfaction with the manner that the state responds to public policy issues, and many individuals feel alienated, or that their government does not speak for them (Boggs, 2001; Pharr and Putnam, 1999). In the 1960s and 1970s governments confronted many problems seemingly beyond their control, such as: reliance upon external energy sources, spiraling inflation rates, and the transformation from an industrial to service economy. Concurrent with these economic crises, there was a demand for change in the social relationships between males and females, between ethnic minorities and a mainstream White majority, as well as a generation of baby boomers who challenged the domestic and foreign policies of their elders. In response to this political disaffection, the state emphasized punitive crime control as a manner of re-establishing legitimacy.³

Civic disengagement is a measure of decreasing community participation or civic involvement (Putnam, 2000). It has been argued that as individuals become more socially isolated, they are less willing to engage in informal dispute resolution and instead rely upon more formal methods of social control (Black, 1976, 1989). In addition, there is a growing body of empirical work that suggests that reductions in collective efficacy are associated with higher crime rates (Bursik and Grasmick, 1993; Rosenfeld et al., 2001; Sampson et al., 1997). Moreover, one might also speculate that communities that have a higher level of social integration or civic involvement may be more responsive to the notion that ex-offenders require employment and other forms of social support, making their integration into the community more successful.

Social disruption, as defined in this study, incorporates theoretical contributions from the minority threat and conflict models. Concern over social change, the threat of increasing urban riots, and growing unrest or protest created significant changes in the *status quo*. Social disruption increased throughout the 1960s and 1970s and affected

almost every sphere of American life. Workplaces, college campuses, and main-streets became battlefields over a clash of ideas: labor went on strike, students “sat-in,” and women and minority groups protested. These elements of social disruption resulted in a demand from politicians, policy-makers and the press to “hold the center” (Levy, 1998; Parenti, 2000) or otherwise maintain the *status quo*.

Many industrialized nations encountered a similar set of social problems and protests during this era. Threatened with economic upheaval and social disruption, many of these developed countries chose social welfare interventions to change the nature of social relationships (Melossi, 1993). Many of these protests, after all, were a function of economically or politically disadvantaged groups who were rebelling against existing social and economic relationships—and competing for political, social, and economic power. Rather than using social welfare responses to these long-term social problems American policy-makers chose criminal justice responses.

These social, political, and cultural changes occurred at the same time as economic stagnation and stress. This study also introduced the concept of economic stress to the imprisonment literature, extending previous theory about the relationship between UI in market economies (Rusche, 1933; Rusche and Kirchheimer, 1939). Closer examination of this early work demonstrates that these theorists were also concerned about the influences of other economic factors on imprisonment, including inflation (Rusche, 1933). Compared to prior research, this study used a more comprehensive indicator of economic dysfunction in market economies that included the influences of inflation on urban populations, rising consumer debt and bankruptcies, increasing economic inequality, and volatility in the stock market.

GAPS IN THE FORMAL SOCIAL CONTROL RESEARCH

There are three main gaps in the existing empirical literature about the factors that contributed to the growth in the use of imprisonment. First, longitudinal studies of imprisonment have produced inconsistent results in identifying the factors that are significantly associated with increases in the imprisonment rate. Some reasons for these inconsistent outcomes include the selection of the dependent variables or the specification of the explanatory variables (Chiricos and DeLone, 1992; Jacobs and Helms, 1996), the temporal era being studied (Michalowski and Carlson, 1999), and the level of analysis examined (D'Alessio and

Stolzenberg, 1995). A longitudinal study that ends its analysis of prison populations at the end of the 1970s, for instance, would probably find a significant relationship between imprisonment and young males as this era captures the demographic influence of the “baby boomers.” Moreover, one might expect to find different outcomes in studies of jail populations, as the factors that influence short-term detention and imprisonment of misdemeanants might be different than the factors that influence the incarceration of felons. Lastly, imprisonment rates are a consequence of both the number of prison admissions as well as the time served of these inmates. Accordingly, the processes—and criminal justice system decision-makers—that might influence prison admissions may be different than those that lead to changes in time served.

There are three basic indicators of imprisonment—the annual number of prison admissions, the average (or median) sentence length, and the overall imprisonment rate. Prison populations are comprised of the number of persons admitted in a given year, and their length of stay. Using more than one dependent variable is important to better understand the stock and flow of correctional populations (see Sparks, 2003). To account for some of the limitations of past research, this study examined three different measures of punishment as dependent variables: the annual prison admission rate, imprisonment rate, and a measure of the estimated time served.

In addition, the study used more sophisticated specifications of explanatory variables such as economic stress, civic disengagement, social disruption, and political disaffection than are typically used in imprisonment research. By considering more complex indicators of public mood and behavior, for instance, measurement error is reduced. Moreover, by examining the component parts of imprisonment rates, by contrast, the study extends our understanding about the sources of imprisonment. An important question addressed in this study is whether the factors that are significantly associated with prison admissions are identical to those associated with the time served by prison inmates, or overall imprisonment rates?

Decisions about the use of imprisonment are inherently political (Jacobs and Helms, 1996; Tonry, 1999a) yet the relationships between imprisonment and political behavior or public opinion have received only cursory study in the empirical literature. D’Alessio and Stolzenberg (1995:356) suggest that the “Rusche and Kirchheimer thesis be broadened to include ideological, political and religious

factors along with economic factors in explaining penal policies and practices.” But, even when political measures were considered in cross-sectional strategies (Taggart and Winn, 1993) or time series designs (Jacobs and Helms, 1996, 1999), the measurement of these constructs are of questionable validity. Measures of Republican Party governance, for instance, were used as indicators of political conservatism in these studies, and these variables were positively associated with imprisonment (Jacobs and Helms, 1996; Taggart and Winn, 1993). Is Republican Party governance by itself a valid measure of political conservatism—especially considering that all political party memberships have declined over time (Putnam, 2000)? Members of Libertarian, Reform or Independent parties may have greater conservative political beliefs not captured by Republican Party membership. Consequently, some scholars have advocated for the use of more sophisticated indicators of political values when studying imprisonment (D’Alessio and Stolzenberg, 1995; Jacobs and Helms, 1996, 1999; Taggart and Winn, 1993).

A second limitation of previous studies is the fact that multiplicative models are rarely considered in imprisonment research, despite the fact that such techniques have been identified as theoretically relevant (Chiricos and DeLone, 1992; Colvin, 1990; Inverarity, 1992; Liska and Chamlin, 1984). Sutton (1987), for instance, used interaction terms to demonstrate that prison reforms, such as implementation of parole, had different effects in states with higher population density and industrialization in his study of state-level imprisonment from 1890 to 1920. Sutton (2000, 2001) also found that interaction effects were helpful in understanding the changes in the use of imprisonment in cross-national imprisonment research. In recognition of these promising strategies, this study considered whether economic stress or violent crime conditioned the effects of social disruption, civic disengagement, and political disaffection on the use of imprisonment. In other words, are the effects of these variables of interest more powerful when economic stress or violent crimes are increasing?

A third limitation of imprisonment research has been the specification of explanatory variables. It has long been proposed that penal strategies are used to compensate for failures in capitalist economies (Rusche, 1933; Rusche and Kirchheimer, 1939). To date, most of these studies have attempted to determine the relationship between UI (Chiricos and DeLone, 1992). One potential flaw in

previous research designs is that unemployment is a symptom of instability in market economies, and most previous studies have not considered other indicators of economic stress, such as bankruptcy rates, inflation, stock market volatility, consumer debt, and inequality on imprisonment rates. In order to develop a more sophisticated indicator of economic stress, principle components analysis was used to combine these variables into a single index of economic stress.

Examination of the social stress literature suggests that social disruption influences individual, collective and legislative behavior (Linsky, Bachman, and Straus, 1995; Linsky and Straus, 1986). Linsky et al. (1995) reported that the amount of economic, family and community stressors increased substantially from 1976 to 1982. This era is theoretically important because it is approximately the same time that correctional populations started their expansion. Selke and Andersson (2003), for example, recently used a social stress model to explain the increased use of imprisonment within US states. In response to these findings, this study uses factor analysis and an algorithm to develop sophisticated indicators of political disaffection, civic disengagement, and social disruption.

UNDERSTANDING IMPRISONMENT TRENDS

Using a longitudinal research design, this study responded to the gaps in the imprisonment literature by examining how changes in social, economic, cultural, and political factors influenced the use of incarceration in the United States from 1952 to 2000. This era is important theoretically because changes in social relationships, protest, and unrest started with the civil rights movements in the 1950s and continue to the present day. This era is also empirically important, as few national-level studies have examined whether the influences of macro social, economic, political, and cultural factors contributed to changes in the use of imprisonment into the new millennium. Controlling for violent crime, economic stress, racial composition, direct outlays for welfare, and population age-structure, this research addressed three general empirical questions about the relationships between imprisonment, and cultural, political, and economic factors.

The first hypothesis addressed the main effects of three variables of interest that represent new integrated theories of punishment—political disaffection, social disruption, and civic disengagement on imprisonment trends. First, net of a number of control variables

theoretically or empirically associated with the use of punishment, is there a positive relationship between social disruption, represented by the number of urban collective actions (riots), changes in public perceptions of threat, labor unrest, and changes in imprisonment trends? Further, is there a positive relationship between changes in political disaffection, represented by self-reported trust in government, political efficacy, government responsiveness, pessimism about the future, anger at government, and changes in imprisonment trends? Moreover, is there a positive relationship between changes in civic disengagement, represented by decreasing civic involvement, and changes in imprisonment trends?

A. Hypothesis about the relationship between social disruption, social isolation, political disruption, and imprisonment trends

Controlling for economic instability, violent crime, minority threat, the number of males aged 15 to 29 years, unemployment, and the direct outlay for welfare, there is a positive relationship between political disaffection, social isolation, social disruption and changes in the imprisonment rate, annual admissions rate, and time served.

The second and third hypotheses questioned the extent to which of violent crime and economic stress condition the effects of the three variables of interest. Are the effects of social disruption, civic disengagement or political disaffection on adult imprisonment trends stronger during periods of increasing economic stress? Further, are the effects of social disruption, civic disengagement or political disaffection on adult imprisonment trends stronger during periods of increasing violent crime?

B. Hypothesis about the conditioning effects of economic instability on imprisonment trends and sentence severity

The effect of changes in social disruption, social isolation or political disaffection on changes in the imprisonment rate, annual admissions rate, and time served is greater during periods of high or increasing economic instability.

C. Hypothesis about the conditioning effects of violent crime on imprisonment trends and sentence severity

The effect of changes in social disruption, social isolation or political disaffection on changes in the imprisonment rate, annual admissions

rate, and time served is greater during periods of high or increasing violent crime.

A number of indicators of American cultural values, beliefs, and behaviors were developed in this study. In contrast to other studies that make use of a small number of indicators of complex concepts, the data considered in this research represent multiple indicators of well-defined theoretical constructs. Many of these data are obtained from longitudinal self-report studies that have been conducted in the United States either annually or biannually. In order to create the three variables of interest—social disruption, civic disengagement, and political disaffection—this study made extensive use of factor analyses. In addition, this research used Stimson's dyad ratio algorithm to develop a longitudinal indicator of political disaffection.

The control variables in this study were selected on the basis of theory and previous empirical work. These variables include measures of violent crime, population age-structure (the percentage of males aged 15 to 29 years of age), racial composition (the percentage of the population that is Black), an indicator of economic stress, unemployment, and direct outlays for welfare (as a percentage of the gross domestic product). Again, exploratory factor analysis was used to construct several of these variables, including the violent crime variable, economic stress, and the unemployment variable. There are several advantages to using factor analyses. Many of these variables are highly correlated, for instance, and factor analysis reduced the number of control variables, which was an important consideration in a time series design with only 49 observations. Another advantage of combining these data is the reduction of measurement error inherent in any one indicator (Greene, 2000).

Lastly, few studies of imprisonment trends have evaluated more than one dependent variable. This research, by contrast, examined three different measures of imprisonment: the annual rate of prison admissions, imprisonment rates, as well as time served by state and federal prison inmates. Adding these additional dependent variables is empirically and theoretically important. A meta-analysis of imprisonment studies, for instance, found that the selection of a dependent variable determines significance of the independent variables (Chiricos and DeLone, 1992). But, if a theoretical approach is valid, the effects of the independent variables should be consistent regardless of the level of analysis or dependent variables examined (Land et al., 1990). This observation suggests that inconsistencies in

previous studies of imprisonment may have been influenced by the specification of the independent variables. Alternatively, there may be more than one set of decision-makers whose actions influence the numbers of prison admissions or the length of time served by inmates (see Blumstein and Beck, 1999; Durose and Langan, 2001). Consequently, this study also evaluated whether the three dependent variables reflect the same underlying processes. Using three different indicators of punishment also enable an investigator to examine the dynamic relationships between these different indicators of the stock and flow of prison populations (Sparks, 2003).

GOALS OF THE STUDY

To evaluate the influences of political disaffection, civic disengagement, and social disruption on adult imprisonment trends, this study addressed three general empirical questions outlined above. The first hypothesis examined the main effects of the three variables of interest. Is there, for example, a positive relationship between social disruption, the imprisonment rate, annual prison admissions and time served? Changes in the nature of social relationships, the number of riots and political demonstrations, increasing labor problems, and perceived social upheaval contributes to disruption within the culture. Increasing social disruption threatens the stability and profitability of market economies. As a result, the greater the degree of disruption, the more likely that formal social control will be used to reduce uncertainty through specific and general deterrence.

Second, net of other variables, do changes in political disaffection influence the imprisonment rate, annual prison admissions or the time served by prison inmates? Changes in self-reported trust in government, decreasing faith in the ability of government to respond to social problems, and pessimism about the future increase political uncertainty, and reduce confidence in elected officials and their perceived legitimacy. In a political environment where citizens perceive that their governments do not speak for them, and governments are generally unwilling or unable to confront long-term domestic social problems such as poverty, racism, or inner-city decay, criminal justice systems are used to demonstrate to the public that governments are responsive and legitimate.

Moreover, does the amount of civic disengagement influence changes in the imprisonment rate, the prison admissions rate or time

served? Decreasing community participation or civic involvement reduces the likelihood of becoming involved in informal dispute resolution. In addition, increasing civic disengagement may reduce collective efficacy, which might lead to higher crime rates. Lastly, as communities become socially isolated, individuals might be more fearful of crime, and more likely to support punitive crime control initiatives—or the politicians who propose them.

In addition to exploring the main effects of social disruption and political disaffection, this study examined several interactions, including whether changes in economic stress and violent crime condition the effects of political disaffection, civic disengagement, and social disruption on imprisonment trends. It is hypothesized that social disruption, civic disengagement, and political disaffection are more strongly associated with increased use of punishment during years characterized by higher levels of economic stress or violent crime.

Selection of the explanatory variables used in this study are a product of the multiple causation models outlined above, as well as a review of the empirical literature that follows. Chapter 4 examines how previous longitudinal research of imprisonment trends identified gaps in our understanding, as well as some promising strategies that are used in the present study.

Prior Imprisonment Research

There has been considerable recent interest in identifying the factors that contributed to the changing use of punishment in the United States (Jacobs and Carmichael, 2001; Jacobs and Helms, 1996, 1999; Michalowski and Carlson, 1999; Nicholson-Crotty and Meier, 2001, 2003). Many of these studies focused upon the relationships between changes in economic variables and imprisonment rates in tests of conflict hypotheses—using the nation as a unit of analysis. While this study of adult imprisonment trends from 1952 to 2000 asked similar questions, it departs from prior research in three important ways.

First, this study was responsive to calls in the empirical literature to include indicators of political and cultural beliefs or behaviors in the study of imprisonment (D'Alessio and Stolzenberg, 1995; Inverarity, 1992; Taggart and Winn, 1993). Jacobs and Helms (1996) suggest that including political variables is an important consideration in longitudinal studies of imprisonment, and recommended that more sophisticated measures be considered in future research. As a result, this study used responses from self-report surveys, such as the GSS, NES, Gallup and Harris Polls as barometers of American cultural values and political beliefs. Because there are no longitudinal self-report indicators that encompass the years 1952 to 2000 an algorithm was used to combine data from different national-level polls to construct the political disaffection variable.

In addition, the explanatory variables used in this study are more sophisticated than earlier research. Most empirical tests of imprisonment trends have focused upon the threat that surplus labor poses to market economies (Chiricos and DeLone, 1992). This study, by contrast, includes other indicators of economic stress including changes in the consumer-price index for urban consumers, increases in the bankruptcy rate and consumer debt, income inequality and stock

market volatility. Factor analysis was used to examine the degree to which these variables are valid and reliable indicators of one dimension of economic stress. In addition to reducing multicollinearity in regression models, such techniques are important in reducing the number of explanatory variables. Factor analysis is also used to develop exploratory indicators of unemployment, violent crime, social disruption, and civic disengagement.

Second, two of the hypotheses that were tested included interaction terms to consider the combined effect of two variables in the time series equations. Scholarly argument suggests that poor economic conditions or high levels of violence may moderate or condition the effects of these variables of interest on imprisonment rates (Inverarity, 1992; Savelsberg, 1994). Interaction terms have rarely been used in the imprisonment literature (see Sutton, 1987, 2000, 2001) and this study examined how political disaffection, civic disengagement, and social disruption are conditioned by economic stress and violent crime

Third, while the rate of imprisonment is commonly used as a dependent variable, it is really a function of annual prison admissions and the length of those sentences. As a result, this study examined the annual admissions and imprisonment rates as well as the time served. This is a departure from most incarceration studies, as indicators of sentence severity have generally been overlooked as a dependent variable (Blumstein and Beck, 1999). Adding an indicator of sentence severity also enables us to look at prison population dynamics—or the stock and flow of prison populations—increasing our understanding about the relationships of time served and total imprisonment rates.

This chapter provides an overview of previous cross-sectional and longitudinal imprisonment studies. While cross-sectional research designs focus upon reasons for variation in the use of imprisonment—rather than changes in the use of imprisonment over time—these studies also influenced the selection of independent variables in this study. Results from panel research, meta-analyses, and imprisonment research in other nations are also briefly reviewed. Lastly, findings from other social control literature were cited when appropriate. Results from empirical tests within the law enforcement literature, for instance, guided the selection of indicators for the social disruption model (i.e., Liska and Chamlin, 1984).

While examination of punishment has been of recent empirical interest, the study of both corrections and the practice of incarceration have historically been relegated to the periphery of criminological

inquiry (Tonry and Petersilia, 1999). The earliest commentary about correctional systems was made by philosophers and social theorists (Beccaria, 1764; Bentham, 1789) but there was little correctional research until the mid-1900s. Most of the early correctional studies examined offender rehabilitation and recidivism (Lipton, Martinson, and Wilkes, 1975). As prison populations increased throughout the 1970s and 1980s and imprisonment became a major state expenditure (Bauer and Owens, 2004; Stephen, 1999) the empirical examination of incarceration became broader based and more comprehensive. One of the first in-depth studies of imprisonment trends found that most American jurisdictions relied upon fairly consistent use of imprisonment - approximately 100 to 150 persons per 100,000 residents in the population (Blumstein and Cohen, 1973).

Many scholars have questioned the social justice of placing over two million Americans in prison with an additional four million offenders under some form of community supervision during eras of decreasing crime rates (Irwin and Austin, 2001; Bauman, 2000; Blumstein, 1998; Irwin, 1996). Other public policy analysts have questioned the opportunity costs of high imprisonment practices, and whether these expenditures could better be used in community programs that reduce criminality (Hagan and Dinovitzer, 1999; Irwin and Austin, 2001). These factors have increased our desire to better understand the use of punishment and the social objectives that it fulfills (Foucault, 1977; Garland, 1990, 1991). The following pages review the key findings from a number of cross-sectional studies of imprisonment.

CROSS-SECTIONAL STUDIES OF IMPRISONMENT

Many scholars have relied upon cross-sectional research designs using ordinary least squares regression models (OLS) to examine the variation in imprisonment rates at the county or state level of analysis (Arvanites, 1997; Arvanites and Asher, 1998; Carroll and Doubet, 1983; Colvin, 1990; Davey, 1998; Galster and Scaturro, 1985; Jacobs, 1978; McCarthy, 1990; Ouimet and Tremblay, 1996; Taggart and Winn, 1993). These studies have produced ambiguous findings regarding the relationships between social structural variables such as unemployment, inflation, population heterogeneity, crime, and imprisonment. Significant associations between these variables often depend upon the type of dependent variables used in the research,

whether the research examined state or county level effects, the operationalization of the variables, and the temporal era studied (Chiricos and DeLone, 1992; Michalowski and Carlson, 1999).

Using rates of imprisonment as a dependent variable at the state level of analysis, Jacobs (1978) reported that economic inequality had a significant positive association with prison admissions for burglary (see also Jacobs and Helms, 1996, Western, 2000, 2001). Using prison admission rates as a dependent variable at the state level of analysis, by contrast, Carroll and Doubet (1983) found a significant positive association between imprisonment and violent crime, southern states, median education level, and a significant negative association between imprisonment and population size. Galster and Scaturro (1985) however, were unable to identify consistent effects of crime, unemployment, and imprisonment.

Taggart and Winn (1993) found a significant positive association between imprisonment rates, violent crime and political beliefs, using a nine-point scale to measure moralist political culture. Acknowledging the limitations of cross-sectional research designs, Taggart and Winn (1993) called for future longitudinal analyses of imprisonment rates to consider the dynamic nature of imprisonment. Their recommendation for using time series models for imprisonment research has both a theoretical and empirical appeal. Changes in the explanatory variables, such as the size of African-American populations over time, may lead to increased perceptions of minority threat. These dynamic changes are, however, difficult to estimate in cross-sectional research designs.

Using prison admission rates as a dependent variable at the county level of analysis, Arvanites (1997) found that the percentage of the non-White population was the most consistent correlate of imprisonment. It may be difficult, however, to separate the effects of imprisonment, race, and poverty. Colvin (1990) used a different strategy to account for economic conditions, and found a significant positive association between prison admissions and industrial development, the percentage of persons below the poverty line, and crime in a sample of industrial urban counties. Colvin (1990) also reported that counties with lower industrial development were negatively associated with imprisonment. Outcomes of these county-level findings may be an artifact of urban and rural differences as Arvanites (1997) analyzed both urban and rural counties, while Colvin (1990) examined only urban counties.

Very few studies have examined imprisonment at more than one level of aggregation, or have considered more than one dependent variable. Arvanites and Asher (1998) found a significant positive association with total crime, inequality, and the percentage of young persons in a population when examining total federal, state and county imprisonment trends. Examining different levels of analysis, however, may result in inconsistent outcomes. Arvanites and Asher (1998) also reported that violent crime was not significantly associated with jail imprisonment rates, but was positively associated with state imprisonment. In her study of California jail and prison imprisonment, McCarthy (1990) also found that unemployment and violent crime had different effects on county and state rates of imprisonment.

Davey (1998) analyzed state-level prison expansion from 1972 to 1992 and reported that neither crime, population structure, economic nor demographic factors significantly accounted for the variation in the use of imprisonment. This study provided a partial test of the minority threat hypothesis, but the findings were inconclusive. Davey (1998) observed that contiguous states with similar demographic, social, economic and crime had far different imprisonment practices. North and South Dakota, for instance, share social, demographic, and economic characteristics—and their crime rates are almost identical—yet South Dakota imprisons far more inmates per 100,000 residents in the population than their Northern neighbors. As a result of such observations, Davey (1998) concluded that law and order policies of governors were the best predictors of high imprisonment rates.

Studies at different levels of aggregation and using different dependent variables result in inconsistent findings over time (Chiricos and DeLone, 1992; Jacobs and Helms, 1996). Researchers are more likely to find a significant positive relationship between UI using imprisonment rates, rather than prison admissions as a dependent variable (Chiricos and DeLone, 1992). As a result of these inconsistent findings, it has been proposed that different analytical strategies be considered to more accurately assess the relationships between imprisonment and economic or social variables (Chiricos and DeLone, 1992; Inverarity, 1992; Liska and Chamlin, 1984). Scholarly argument also suggests that some factors may moderate or condition the effects of these variables (Chiricos and DeLone, 1992; Inverarity, 1992; Liska and Chamlin, 1984). Interaction effects, however, have only rarely been considered in the study of imprisonment trends (Sutton, 1987, 2000, 2001).

LONGITUDINAL STUDIES OF IMPRISONMENT

Several studies over the past two decades have attempted to evaluate which extra-legal factors contributed to the growth of correctional populations. Early longitudinal research examined the stability of imprisonment at the national (Blumstein and Cohen, 1973; Blumstein, et al., 1977, 1978; Blumstein and Moitra, 1979) and state levels (Berk et al., 1982). These studies focused upon the relationships between imprisonment, crime, and criminal justice processing and generally did not consider other economic, demographic, or political variables.

There has been considerable recent interest in the longitudinal study of imprisonment (Greenberg and West, 2001; Jacobs and Helms, 1999, 2001; Michalowski and Carlson, 1999, 2000). Controlling for crime, most of these studies have examined the demographic, cultural, and economic factors that influence the use of imprisonment. The results of such prior research are important because they guided the selection of variables in this study. The following pages summarize these longitudinal studies and the major findings in their temporal order.

In an early study, Jankovic (1977) used OLS models to examine prison admissions and imprisonment rates from 1926 to 1974, finding a significant positive association between UI. While including measures of county, state, and federal prison populations in his models Jankovic (1977) used few control variables, limiting the comprehensiveness of these analyses. Jankovic's research was also limited by studying eras of significant economic and social transformation such as the depression years and World War 2. Examination of these war eras in tests of the UI relationship is also problematic as many individuals who might otherwise be unemployed serve in the military or are involved in war production. Despite these limitations, Jankovic's (1977) study clearly demonstrated the relationships between extra-legal variables and long-term imprisonment trends.

Inverarity and McCarthy (1988) examined the relationship between prison admissions and unemployment from 1948 to 1984 in the United States using GLS models. The following independent variables were considered in this research: per capita release rate (as a measure of organizational capacity), the Uniform Crime Report (UCR) Part 1 index crimes, labor force unemployment rate as well as percentage of males of crime-prone age (ages 15 to 19). These investigators found significant positive associations between prison

admissions and unemployment, crime, and prison release rates. Surprisingly, this study found a significant negative association between males of crime-prone ages and imprisonment but the researchers discounted this finding as an artifact of the post-war baby boomer generation.

Inverarity and McCarthy (1988) critiqued their previous findings and suggested that national-level data may obscure the relationship between state labor market changes and imprisonment. Another limitation of this study is the use of all UCR Part 1 Index offenses. Including property offenses that typically result in probation or a short jail sentence may obscure the effects of comparatively rare violent offenses that are likely to result in lengthy state or federal incarceration. Moreover, the high rate of property offenses contrasted against violent crimes, which occur less frequently, might also obscure the relationship between crime and imprisonment. Thus, it may be important to isolate violent crime in longitudinal studies of formal social control.

In a follow-up study of prison admissions from 1948 to 1985, Inverarity and Grattet (1989) controlled for unemployment, mental hospital admissions, population age structure, military enlistment, the robbery and index crime rate (less larceny) as well as the rate of welfare recipients. Using an autoregression model and examining several structural equation models, Inverarity and Grattet (1989) again found a significant positive association between prison admissions and unemployment, crime, and prison release rates. This contribution to the literature is important for a number of reasons. First, these scholars identified the Republican Party use of crime and punishment as a political platform. Second, these investigators also hypothesized that robbery was a good control measure as it is a crime of the dangerous classes, representing both minority threat and disorder.

Lessan (1991) used ARIMA models to assess the influence of economic stress on American imprisonment rates from 1948 to 1985. Using national and state imprisonment rates this study considered the following explanatory variables: unemployment, aid to families with dependent children benefits (AFDC), violent index crimes, prison capacity (represented by the ratio of prisoners to released populations), and the population aged 18 to 29 years. Lessan (1991) found a significant positive association between imprisonment and changes in unemployment (both White and Black male), the prisoner to release ratio, and inflation. Lessan (1991:188) also found a significant negative association between imprisonment and violent crime, and she

interpreted this as an example of how the “system-overload retards the processing of violent offenders.” Such findings suggest that the use of all violent index offenses may not be an effective strategy in analyzing long-term imprisonment trends. Long-term changes in the reporting of aggravated or sexual assaults, for instance, may influence these findings.

Cappell and Sykes (1991) included the population of males aged 15 to 44 years, the unemployment rate, military service rate and the crime rate (homicide, assault, rape, robbery, burglary and auto theft) in their study of state prison admissions from 1933 to 1985. Using ARIMA models Cappell and Sykes (1991) found a consistent positive effect between UI, while the age-structure effect was inconsistent. This research also produced ambiguous results regarding the relationship between index crimes and imprisonment. There was a significant negative association between military service and imprisonment during World War 2, and this finding demonstrates the sensitivity of these war years in studies of imprisonment trends. These investigators also examined the direct and indirect effects of unemployment, finding that the relationship between unemployment and state prison commitments was direct. Based on these findings Cappell and Sykes (1991) suggested that future theoretical development include additional social and economic correlates of imprisonment.

Time series analysis has also been used in county-level studies of jail imprisonment trends. D'Alessio and Stolzenberg (1995) used ARIMA models to demonstrate that unemployment did not have a significant association with pretrial confinement in Florida from 1986 to 1992. Controlling for arrest, jail capacity, as well as court processing variables, these investigators reported that none of these explanatory variables explained pretrial imprisonment at the county level. D'Alessio and Stolzenberg (1995) suggest that their seven-year analysis did not accurately capture the UI relationship, and speculate how disaggregating offense types or social groups may be fruitful in future analyses of county-level imprisonment trends.

Jacobs and Helms (1996) used GLS models to estimate the effects between political and social-structural variables and state and federal prison admissions from 1950 to 1990. This study controlled for a number of political conditions, including a dummy variable for years with Republican Presidents multiplied by the percentage of Republicans in the House and Senate, and the percentage of respondents who identified themselves as Republicans in national

Gallup Polls. In addition to including this political measure, the following social-structural characteristics were also estimated: income inequality (gini), unemployment, economic growth (per capita GDP), family instability (characterized by out-of-wedlock births lagged 19 years), and UCR crime rates squared to account for perception of risk. These investigators reported that out-of-wedlock births, the squared crime rate and variance of incomes had a significant positive association with prison admissions in all equations. Republican strength also had a significant positive association with prison admissions.

Jacobs and Helms (1996, 1997, 1999, 2001) have made important contributions to the longitudinal study of formal social control. Jacobs and Helms (1999) used GLS models to examine the relationships between correctional spending and collective outbursts, unemployment, family breakdowns, and the percent of the male population between 14 and 25 years from 1952 to 1989. Net of other factors, the most consistent significant positive association with correctional spending was the presence of collective outbursts or riots. Jacobs and Helms (1999) argued that this finding provides tentative support for the minority threat hypothesis.

Jacobs and Helms (1996, 1999) also found a direct positive relationship between imprisonment and a lagged family disruption variable. But this observation may be limited somewhat as family disruption may more accurately predict crime, rather than imprisonment (Land et al., 1990). Jacobs and Helms (1999) also used correctional spending as a dependent variable, but this variable may obscure the true prison populations due to the changing role of rehabilitation from 1952 to 1989. Correctional populations could increase as rehabilitative spending decreased (see Cullen and Gendreau, 2000). As a result, correctional systems could maintain stable funding while increasing their populations. This observation highlights the importance of examining a larger number of dependent variables in the same study and assessing whether the effects of the independent variables are consistent.

The time series analyses of Jacobs and Helms (1996, 1999), Inverarity and Grattet, (1989), as well as cross-sectional studies of Taggart and Winn (1993) and Inverarity (1992) are examples of incarceration research that have considered the relationships between imprisonment, public opinion, and political variables. Research that examines the relationships between cultural and political values and

incarceration are difficult to operationalize. Republican Party governance, for example, has been used as a measure of the level of state conservatism in cross-sectional research designs (Inverarity, 1992; Taggart and Winn, 1993) and time series analysis (Inverarity and Grattet, 1989; Jacobs and Helms, 1996, 1999). Such political measures may also lack precision: in the Jacobs and Helms studies, for example, the Republican Party governance was multiplied by a dummy variable for years with Republican Presidents. As a result, all of the years with Presidents who were Democrats had values of 0, despite the fact that in most of these years, the Democrats controlled both the Senate and House of Representatives. The temporal era studied may also influence the effect of politics on imprisonment. Studies by Jacobs and Helms (1996, 1997, 1999, 2001) typically end before the Clinton Presidency, and it is questionable whether a positive significant relationship between imprisonment and party affiliation would remain once these eight years are considered (see Nicholson-Crotty and Meier, 2001).

Marvell and Moody (1997) examined prison admissions from 1971 to 1994 and reported that age-structure had a significant positive association with prison admissions after controlling for employment, personal income and the poverty rate. The percentage of the population aged 18 to 24 years is a typical measure of crime-prone ages. Marvell and Moody (1997), reported that the percentage of the population aged 25 to 34 years was also positively associated with imprisonment during this era, and asserted that this variable be considered in future research.

Michalowski and Carlson (1999) extended the sophistication of previous studies of the UI hypothesis by controlling for different stages of economic growth. Using prison admissions as a dependent variable, these investigators used autoregression models to demonstrate that neither unemployment nor violent crime was significantly associated with incarceration during the years from 1967 to 1973. Their findings suggest that periods of economic development may influence the relationship between UI. Thus, one weakness in any longitudinal study are the temporal eras examined in the research.

Nicholson-Crotty and Meier (2001) also used GLS models to analyze the effect of public opinion and issue attention on federal prison admissions, federal average sentence length, and parole decisions from 1950 to 1998. This study used the percentage of Gallup Poll respondents who identified crime or drug use as the most important problem facing America as an indicator of public concern about crime. These researchers also measured issue attention by

calculating the number of times crime was reported in the *Public Papers of the President*. Nicholson-Crotty and Meier (2001) found a significant association between Black poverty and both the federal commitment rate and average sentence length. Inconsistent with previous research (i.e., Jacobs and Helms, 1996, Taggart and Winn, 1993), Democratic presidential years were significantly associated with higher rates of prison admissions—but this finding may be a consequence of using federal imprisonment statistics.

In a recent follow-up study Nicholson-Crotty and Meier (2003) also examined federal justice system imprisonment trends from 1950 to 1998. These investigators examined a number of factors theoretically and empirically associated with imprisonment research, and found that the average sentence of convicted prisoners, and the number of parolees are associated with federal imprisonment trends. Ultimately, Nicholson-Crotty and Meier (2003:119) argue that “current sanctions are determined by past agency behavior.” Yet, the federal system might not be representative of all imprisonment trends as a vast majority of federal inmates are serving sentences for drug possession or sales (Harrison and Beck, 2003). Moreover, the number of federal prison inmates pales in comparison to the state prison populations. Thus it might be fruitful to extend such analyses to both federal and state prison populations.

PANEL STUDIES OF IMPRISONMENT

Researchers have also used other strategies to examine the factors that contribute to the growth of correctional populations. Panel models, for instance, have been used to examine the relationship between crime and imprisonment over time (i.e., Beckett and Western, 2001; Greenberg and West, 2001; Hochstetler and Shover, 1997; Ouimet and Tremblay, 1996). Yet, focusing on change in prison populations within a decade (Hochstetler and Shover, 1997; MacKenzie, Tracy and Williams, 1986) or the focus on a single state (MacKenzie et al., 1986) do not provide much evidence about the factors that relate to growth in national correctional populations over a period of decades.

Chiricos and DeLone (1992) used meta-analyses to examine 44 studies from the United States, England and Wales, France and Canada. These researchers found that there was a consistent relationship between UI after controlling for crime in cross-sectional and time series research designs. Chiricos and DeLone (1992) observed that significant

positive associations between UI are more likely to occur in longitudinal research. In addition, research that disaggregates populations to include males, Blacks and the young have consistently found a significant relationship with imprisonment. These findings provide empirical support for both the minority threat and conflict models. It is important to note, however, that Chiricos and DeLone (1992) also found that the selection of dependent variables also influenced the findings, and that time series studies examining annual admissions were more likely to find a positive UI relationship than imprisonment rates. Thus, it may be fruitful to include more than one dependent variable in studies of imprisonment trends.

Chiricos and Crawford (1995) considered the relationship between race and imprisonment in their meta-analysis of 38 studies published from 1975 to 1991. Most of these studies used cross-sectional research designs or single state-level analyses. Controlling for crime seriousness and prior record, this study suggests that extra-legal factors such as region (i.e., Southern states), the percentage of the population that is Black, percent of the urban populations that are Black, and unemployment in the region contribute to more severe punishment (Chiricos and Crawford, 1995). Consistent with Colvin's (1990) results, these scholars suggest that the community or social context contributes to a greater use of imprisonment.

Hochstetler and Shover (1997) also used a panel research design to examine a sample of 269 urban counties to assess the change in imprisonment from 1980 to 1990. Using residual-change regression analysis Hochstetler and Shover (1997) found a significant positive association between imprisonment and unemployment, violent crime, and the male population aged 20 to 34 years. This research did not, however, find a significant association between property crime and imprisonment. One limitation of these findings is that the investigator's models explained only a small percentage of the variation in imprisonment rates ($r^2 = .14$)—suggesting that the 1980 imprisonment rate largely determined the 1990 rate. This study is also limited by excluding other economic data such as county-level industrialization or inequality (see Colvin, 1990).

Beckett and Western's (2001) panel study, by contrast, revealed that changes in state imprisonment were positively associated with the percentage of the population that was Black in the state population, poverty, and violent crime, but negatively associated with welfare benefits (an additive scale that summed AFDC, unemployment

benefits, education, food stamps, supplemental security income and Medicaid). Beckett and Western (2001) also reported that the Black population had a strong and significant conditioning effect on the use of imprisonment.

Jacobs and Helms (2001) also used a pooled time series design to examine the relationships between political factors such as Republican Party strength, political ideology and state imprisonment rates for 1970, 1980 and 1990. This study also included an indicator of minority threat, the percentage of the population that was either Latino or Black. Controlling for violent crime, unemployment, inequality, determinate sentencing laws, religious fundamentalism, percent of the population living in urban areas and mean income, Jacobs and Helms (2001) found that Republican Party strength had a significant positive association with increases in the use of imprisonment.

By using measures of religious values and political influence, Jacobs and Helms (2001) again extended the study of imprisonment trends. A significant weakness in their study, however, is that Republican Party strength is not evaluated past 1990, and one might speculate that this measure may not be statistically significant if the decade up to 2000 were included in this series. In addition, as previously discussed, Republican Party governance alone might not be a valid indicator of conservative beliefs or values (especially as this variable was specified in the Jacobs and Helms studies).

Greenberg and West (2001) evaluated changes in state prison populations in 1971, 1981, and 1991 using a pooled time series design. Consistent with more recent studies of imprisonment, Greenberg and West (2001: 616) examined the cultural values of state populations, including "religious composition, the political beliefs of its residents, and its poverty policy to the explanation of its imprisonment practices." These investigators reported that there was a significant association between imprisonment and racial composition (percentage of the population that is Black), violent and drug crime and unemployment. This study is important as the researchers included measures of religious fundamentalism and political conservatism. Religious fundamentalism was defined as the percentage of the state population belonging to fundamentalist Christian churches (that follow a literal interpretation of the bible). Political conservatism, by contrast, was measured by pooling self-report data from a series of CBS-*New York Times* polls from 1974 to 1982. Greenberg and West (2001) also included a dummy variable for region (coding 14 states as Southern).

Like indicators of economic or social development, the effects of population age-structure and racial composition had a positive association with state incarceration rates (MacKenzie et al., 1986; Taggart and Winn, 1993). When all of these variables are considered in multivariate equations, however, the findings are often ambiguous. Variables significantly associated with imprisonment are subject to some variance over time and depend upon the unit of analysis examined and the dependent variable selected for the study. Greenberg (1989:188) observed that

Theoretically, there had been little reason to expect prison populations to remain stable over very long periods of time. On the contrary, one might expect the sorts of social change associated with immigration, unemployment, urbanization, wealth, inequality, and political repression to result in changes in the size of the incarcerated population.

The preceding pages outline that the best analytical strategy to measure the impact of these dynamic social, economic, and political changes is a time series research design that includes explanatory variables guided by both theory and previous empirical study.

CONTRIBUTION OF THIS STUDY

The choice of analytical strategies, data, explanatory, control, and dependent variables in this study are a product of the five theoretical models outlined in Chapter 3 as well as the empirical studies summarized above. The inability of cross-sectional or panel studies to account for the dynamic changes in explanatory variables over extended periods of time make time series analysis of imprisonment the preferred method of examining national-level imprisonment trends.

This study extended the temporal eras examined and considers a number of additional explanatory variables, including measures of cultural values and beliefs. Recent time series analyses are limited by the temporal eras studied: Jacobs and Helms (1996, 1997, 1999) did not extend their analysis of imprisonment past 1992. Michalowski and Carlson (1999) also ended their analysis of the relationship between imprisonment and social structures of accumulation at 1992. This research, by contrast, examines the years from 1952 to 2000, the era where correctional populations increased fivefold (Caplow and Simon, 1999).

Both cross-sectional and longitudinal research designs have produced ambiguous findings about the relationships between imprisonment and racial composition, population age structure, unemployment, and crime (either violent or property). It was hypothesized that adding political or cultural values will produce more theoretically consistent results (Greenberg and West, 2001; Jacobs and Helms, 1996, 2001; Nicholson-Crotty and Meier, 2001; Taggart and Winn, 1993). Consequently, this research extended these previous empirical studies of imprisonment trends by including measures of self-reported cultural and political values from 1952 to 2000. Moreover, this study evaluated whether the effects of the independent variables are consistent across the three dependent variables. Lastly, this research makes a contribution to the formal social control literature by considering the effect of interaction terms. One important question addressed in this study is whether the effects of social disruption, civic disengagement, and political disaffection are stronger during periods of increasing economic stress or violent crime.

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Economic, Social, and Political Trends

Responding to a number of gaps in the empirical literature, this study examined the relationships between imprisonment and measures of self-reported political disaffection, civic disengagement, social disruption, as well as economic stress, unemployment, direct outlays for welfare, population age structure, racial composition, and violent crime. GLS regression models were used to identify the factors that have a significant association with the growth of incarceration at the national level of analysis from 1952 to 2000 using three dependent variables; annual prison admissions, the imprisonment rate, and the time served by prison inmates. Dependent and explanatory variables were selected based on the theoretical models and empirical studies outlined in the previous chapters.

This study used methodological approaches which are not commonly used in previous studies of imprisonment trends. First, in order to include as many explanatory variables as possible in the GLS models, this study made extensive use of exploratory principle components analysis to reduce the regressor space between different indicators (Dunteman, 1989; Long, 1983). As a result, a number of unique explanatory variables are developed, including social disruption, civic disengagement, unemployment, violent crime, and economic stress factors. In addition to lowering the number of variables in a longitudinal study with only 49 observations, this technique also reduces multicollinearity (Greene, 2000). Multicollinearity occurs when the explanatory variables in multiple regression models are highly correlated, essentially measuring the same underlying factor.

Second, an algorithm was used to combine 19 self-reported public opinion indicators from different time series into one index of political

disaffection. Like principle components analysis, the dyad ratio algorithm enables researchers to combine poll data from different sources into a single scale that represents a dimension of public mood. Unlike principle components analysis, however, algorithms are able to account for missing data within a series, as well as include short series of only two or three observations—common limitations in a series of poll data. The NES, for instance, is a biannual study where some questions are asked only occasionally through the series.

Third, in addition to examining the main effects of political disaffection, civic disengagement, and social disruption, this study examined whether economic stress or violence conditioned the effects of the three variables of interest. It was hypothesized that the effect of changes in social disruption, civic disengagement or political disaffection are greater during periods of high or increasing economic stress or violent crime. Interaction effects have only rarely been examined (see Sutton, 2000, 2001) and use of this methodological technique is an extension of the imprisonment literature.

There is some scholarly debate about the most appropriate level of analysis for the study of imprisonment (Chiricos and DeLone, 1992; Colvin, 1990; Greenburg and West, 2001; Hochstetler and Shover, 1997; Jacobs and Helms, 2001). Most previous research designs have examined variation between state imprisonment rates in cross-sectional or panel research designs (Arvanites, 1997; Arvanites and Asher, 1998; Becket and Western, 2001; Carroll and Doubet, 1983; Davey, 1998; Greenberg and West, 2001; Taggart and Winn, 1993). States are the basic unit of government and decisions about education, law, and welfare are made at this level of analysis (Linsky et al., 1995). States are also a source of identity and pride for residents—and the cultural dimensions of states are unique—even neighboring states are considered different (Davey, 1998; Linsky and Straus, 1986; Selke and Andersson, 2003).

The state level of analysis, however, has been criticized as relying upon broad political regions that aggregate rural-agricultural and urban-industrial regions and populations (Blalock, 1989). State-level studies have also been criticized as uniform statistics are often used to study prison populations comprised primarily of urban residents (Hochstetler and Shover, 1997). Moreover, while decisions about punishment are made by state officials they are generally enforced by criminal justice agents at the neighborhood or municipal levels of analysis (Hochstetler and Shover, 1997). Consequently, some incarceration studies have

examined the influences of economic and demographic variables using data from a single state (Myers and Talarico, 1987; Myers and Sabol, 1987), samples of counties (Arvanites and Asher, 1998; Chiricos and Bales, 1991; Colvin, 1990) as well as local imprisonment trends (D'Alessio and Stolzenberg, 1995; McCarthy, 1990).

Recently, it has been argued that crime control trends be examined longitudinally at the national level of analysis (LaFree, 1998). Longitudinal analysis is preferred because major changes in the use of imprisonment over time may be lost using cross-sectional research designs. The goal of this research, by contrast, was to identify the cultural and political correlates of these subtle changes over time. It is also plausible that the relationships between imprisonment and cultural beliefs, values and behavior may be more pronounced when viewed from a higher level of abstraction—and are not easily discerned at the local or state levels of analysis. Garland (2001: viii) observed that:

structural patterns...simply do not become visible in localized case studies focused upon a single policy area or particular institution. Only by observing the field as a whole can we hope to discover the strategies, rationalities, and cultures that give the field its distinctive structure and organization.

One alternative manner of studying change in the use of national imprisonment is the study of all individual states for the same time series. Unfortunately comprehensive political, cultural, and civic disengagement data are not available at the state level of analysis. Most self-report data, such as the Harris, NES, GSS or Gallup Polls, for example, are taken from national, rather than state samples.

Studies of imprisonment at different levels of analysis and focusing upon different temporal eras have resulted in inconsistent findings. For instance, previous empirical study has generally identified a significant positive association between unemployment and incarceration in national studies (Chiricos and DeLone, 1992), but these outcomes are sensitive to the era examined (Michalowski and Carlson, 1999). Regardless of scholarly disagreements about the proper level of analysis for imprisonment research, general theories should be valid at both the micro and macro-social units of analysis (Parker, McCall, and Land, 1999). Whether one studies imprisonment at the state or national level of analysis the results should be consistent if a theoretical perspective is valid. Accordingly, one might extrapolate that one reason why scholars have failed to consistently find significant associations in

different studies is due to a lack of methodological precision. Even relatively simple concepts, such as the specification of joblessness or unemployment are subject to considerable debate (Chamlin and Cochran, 2000; Chiricos and DeLone, 1992). Should, for instance, seasonally-adjusted unemployment rates be used, or their non-adjusted counterparts? Chamlin and Cochran (2000), for example, argue that long-term unemployment is a more valid predictor of criminality than the seasonally adjusted mean unemployment rate. Long term or persistent unemployment may also be more closely associated with the underclass—making this indicator more theoretically appropriate in the study of punishment.

Conflict scholars have long speculated that high unemployment rates threaten capitalist economies (Rusche, 1933; Rusche and Kirchheimer, 1939). Rusche (1933) however, observed that economic conditions such as inflation are also correlates of both crime and imprisonment. This study expanded the definition of threats to market economies to include a comprehensive indicator of economic stress. It was proposed that the sophistication of the instability and unemployment factors provides a more effective indicator to evaluate these conflict hypotheses.

National studies are a standard unit of analysis in recent empirical studies of formal social control (Carlson and Michalowski, 1997; Jacobs and Carmichael, 2002; Jacobs and Helms, 1996, 1997, 1999, 2001; Michalowski and Carlson, 1999, 2000; Nicholson-Crotty and Meier, 2001, 2003). Consistent with these other national studies, this research examined growth in the national rates of incarceration from 1952 to 2000. The dates involved in this longitudinal study of imprisonment are theoretically important. The era prior to the mid-1970s was characterized by such stability in imprisonment that these processes were described as homeostatic (Blumstein and Cohen, 1973). Including these years is important to better understand the changes in the effects of political disaffection, civic disengagement, and social disruption starting in the 1950s. National studies essentially average out the state differences in trends, and an important task for future research is to explore the variation between the states. These studies will be limited, however, by a lack of available data—especially data that measures changes in social, political and cultural influences over time.

There are some methodological barriers to the study of cultural values and self-reported attitudes over a fifty-year era, even at the national level of analysis. While imprisonment and economic data are

generally available for the past five decades, long-term self-report data that captures cultural attitudes, beliefs, and behavior are more difficult to obtain. Gallup Polls are the exception to this trend, and some Gallup series, such as public support for capital punishment, provide data about self-reported values and beliefs back to the 1930s. One of the first long-term national self-report series where scholars have monitored the reliability and validity of the instruments and methods is the NES, which is first available, albeit on a limited basis, in 1948.

DEPENDENT VARIABLES

There has been a tremendous growth in correctional populations in the United States since 1952. Figure 5-1 outlines the changes in imprisonment rates, annual admission rate, and time served (the latter values are multiplied by 75 to better demonstrate the changes over time in the same figure). Most studies of imprisonment trends have typically focused on the relationship between a number of explanatory variables and one dependent variable, usually imprisonment rates. Yet, imprisonment rates are a function of the number of prison admissions and the time that inmates serve in prison. Throughout the era of this study the three dependent variables have all increased. But, controlling for the other factors, do political disaffection, social disruption, and civic disengagement have the same effect on these different dependent variables? It is plausible, for instance, that different decision-makers influence the use of prison admissions or time served. Consequently, different processes may influence the number of admissions to prison, or the length of time an inmate will serve.

Selection of the most appropriate dependent variable in imprisonment research is an important consideration. Previous meta-analysis of the UI relationship (Chiricos and DeLone, 1992) demonstrate how the dependent variables selected for imprisonment research influence the outcomes of these studies. Most empirical studies of imprisonment trends, for instance, have relied upon the use of either annual prison admissions or the imprisonment rate. Seldom do imprisonment studies examine more than one variable.

Recently, correctional spending expressed in constant dollars has been advocated as an alternative to prison population rates (Jacobs and Helms, 1999) but this measure may also be problematic as it may not accurately account for the effect of reductions in rehabilitative spending throughout the 1970s and 1980s. A prison system could, for instance,

substantially reduce rehabilitative programs and increase correctional populations while maintaining consistent spending. Similar problems are encountered by including jail populations as these data, even from the 1970s and 1980s were inconsistently collected (see also Holleran and Spohn, 2004). As a result, only those offenders admitted or incarcerated in state and federal prisons since 1952 were included in this study.

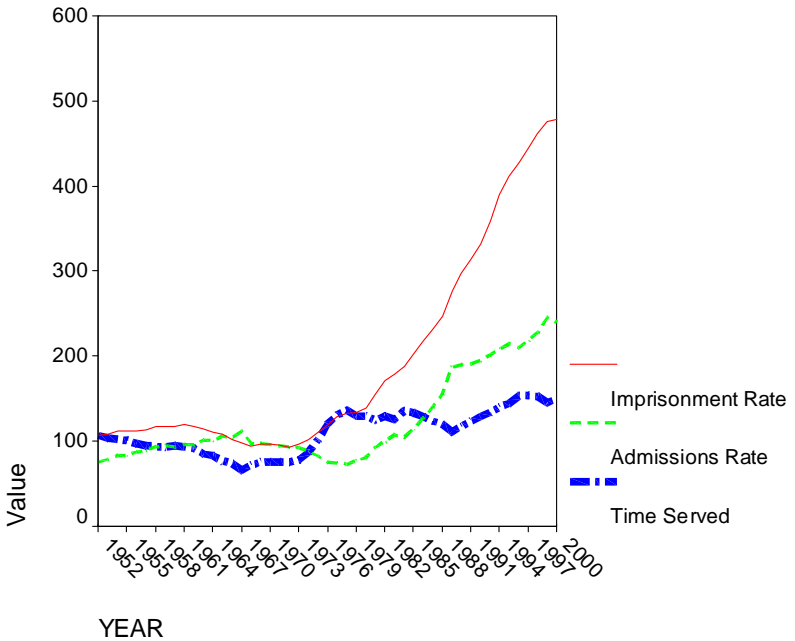


Figure 5-1. Trends in imprisonment rates, prison admissions and time served: 1952-2000 (Time Served multiplied by 75 to better illustrate the trend)

Due to the limitations of inaccurate jail population counts or correctional spending as measures of formal social control, this study examined three different measures of imprisonment: the annual prison admission rate per 100,000 persons, the overall imprisonment rate per 100,000 persons, and the estimated time served (the ratio of prison population to admissions). The use of three dependent variables is empirically important, as few studies have considered more than one

dependent variable. In addition, this study makes an important theoretical contribution by determining whether the effects of independent variables are consistent with three indicators of punishment. Estimating a number of dependent variables is also theoretically important to determine whether the factors that are associated with annual prison admissions or imprisonment rates are different than those that influence the time served. The following pages outline the characteristics of the variables used in this study, and where these data were acquired.

ANNUAL PRISON ADMISSIONS RATES

Annual state and federal prison admission data have been collected by the Bureau of Justice Statistics (BJS) since 1926. These data were originally disaggregated into male and female admissions, and these data were combined into one indicator for this study. These data were then converted into the rate per 100,000 persons in the population (using census data that included every member of the resident population)—to make this variable consistent with other measures of imprisonment.

The number of prison admissions used in this study is the total of all prisoners admitted; all new court commitments, as well as parole violators or escapees returned to custody, those returned from appeal or bond or returned by court order. Despite the large number of categories included in these totals, the classification of new court commitments represents the largest classification of the total admissions. Blumstein and Beck (1999) note, however, that the fraction of new court commitments has been declining over time as the number of persons admitted to prison for parole violations have increased.

The rationale for using the sum of all admissions is that this statistic is the most valid and consistently reported over time. Throughout the series, the number of states participating in these reports, as well as the definition of admissions changed continually. Prior to 1971, for instance, juveniles charged as adults were not included in these admissions rates, although they were included afterwards. In addition, the latter years of the series are characterized with a greater number of distinctions and sub-categories. Accordingly, an escaped inmate returned to prison in 1977 may have been classified as a new court commitment or as a returning inmate. Reporting changes since 1978, by contrast, distinguish between these different

classifications—but only if the state reporting these differences distinguished between the two classifications in the first place.

As a result of these changes in reporting, classification, and participation of states in the time series, this study used the total admissions rate as a dependent variable. In this series data from 1968 to 1973 were unavailable. These missing data were replaced with the average of the 1966, 1967, 1974 and 1975 annual admissions. This method of replacing missing data has support in the econometric literature (i.e., Greene 2000). It is important to note that the era when these data were mean-replaced was typically homeostatic. In fact, the numbers of prisoners actually declined somewhat between the years 1966 - 1967 and 1974-1975. Despite the need to mean-replace these years, empirical analysis of BJS prisoner statistics over time has established that these data are both valid and reliable indicators of imprisonment trends (Langan, 1999).

Prison admissions data from 1952 to 1975 were compiled by the BJS and obtained from the Inter-university Consortium of Political and Social Research (ICPSR). Annual prison admissions data from 1976 to 1998 were obtained directly from the BJS and annual admissions data for 1999 and 2000 were obtained from the National Institute of Corrections. These data are expressed as the rate per 100,000 persons in the total population. This practice may reduce the validity of the data somewhat as national populations are also estimated, and the true population rate remains an estimate (Shyrock and Siegal, 1976) although this is unlikely to be much of a problem with national-level data.

For the entire series, the rate of annual admissions for state and federal imprisonment ranged from a low of 74.04 in 1952 to a high of 244.94 in 2000. The average annual admission rate for the series is 128.17 per 100,000 persons in the population. Over the entire series the distribution is skewed somewhat, but these data were not log-transformed in order to minimize the number of manipulations to the data, especially since most of these trend data will be first-differenced in the GLS models (see below).

ANNUAL IMPRISONMENT RATES

Like the rate of annual admissions, the imprisonment rate per 100,000 persons in the population is commonly used in imprisonment trend research. There are, however, some limitations to using this measure

(Langan, 1999). Rates per 100,000 residents in the population have been measured inconsistently over time. Some jurisdictions, for instance, have relied upon either one-day snapshots or averages of yearly counts. The imprisonment rate per 100,000 residents in the population also lacks some theoretical validity as this measure does not enable the researcher to assess the severity of sanctions. Some jurisdictions, for example, may have a relatively high imprisonment rate, but rely upon very short sentences, reducing the measure's utility as an indicator of punitiveness or punishment. Consistent with the annual prison admissions rates, the precision of this variable is contingent somewhat on annual population estimates. Overall, however, Langan (1999) found that the limitations of this measure are outweighed by its strengths over time. Moreover, Holleran and Spohn (2004) advocate for using this indicator, compared to the total imprisonment rate that includes jail populations.

Imprisonment rates are based on fewer guidelines than either the sentence severity or annual admissions—being a function of the total number of offenders imprisoned on December 31 and divided by the estimated national population. Accordingly, this may be the most reliable and valid measure of imprisonment over time because this statistic is likely to have been reported more consistently over time. Despite the apparent simplicity of the measure, however, there is some variation in the way that inmates may be counted. Some jurisdictions may use different methods than this one-day total, including averages of annual totals. All of the rates reported in this study, for instance, are based on jurisdiction counts, which vary somewhat from custody counts (Maguire and Pastore, 2001). But, as the same method is consistently used throughout this series, this distinction is not important.

The imprisonment data were obtained from the *Sourcebook of Criminal Justice Statistics* 2001 in Table 6.27. Within the series of 1952 to 2000 the imprisonment rate per 100,000 persons ranged from a low of 73.04 in 1972 to a high of 469.00 in 2000. The mean for this series is 193.33 and the median is 120.00. While the data were somewhat skewed, these data were not log-transformed in order to minimize the number of manipulations to the data.

ESTIMATED TIME SERVED

While the amount of punishment expressed in sentence length may be important for theoretical reasons—especially considering Durkheim’s functionalist approach—the time served may be more important to understand the stock and flow of correctional populations. If an offender is sentenced to 45 months, but only serves one-half of that total prison sentence before their parole, these early releases influence the imprisonment rate. Accordingly, changes in parole practices, including increasing the rate of revocation of parole, or early releases, contribute to changes in imprisonment rates (Blumstein and Beck, 1999; Caplow and Simon, 1999; Tonry and Petersilia, 1999).

There is some evidence to suggest that the length of state sentences, for example, have remained relatively consistent over time, but that offenders are now serving a greater percentage of their sentence (Langan, 1991). Hughes, Wilson and Beck (2001:5) observed how the “time-served by state prison inmates increased from 22 months in 1990 to 29 months in 1999.” As a result, the actual sentence length may be more important theoretically, while the time served may be more important empirically. The distinctions between the actual prison sentence imposed, and the term actually served is a consequence of different decision makers. While judges sentence offenders, parole boards or prison bureaucrats (at least historically) determined the amount of time in prison that an inmate served.

There are considerable limitations to finding a valid measure of average sentence length for state correctional populations (Biderman, 1995; Blumstein and Beck, 1999; Langan, 1991). A major problem is that validity of the data decreases as one moves closer to 1952 because fewer states consistently reported data to the BJS. Despite these limitations, however, it is important both theoretically and empirically to develop a measure of sentence severity. Following Blumstein and Beck (1999) this study used the ratio of imprisonment rates to the annual admission rate. This ratio provides a measure of sentence, or time served.

Blumstein and Beck (1999:34) note that this measure has several advantages over the time served until first release because;

This measure takes into account time served by prisoners who have not been released and by those who may never be released. This measure also includes in the prisoner counts people recommitted as parole violators with or without a new

sentence and technical violators. As such, this measure includes the time served by a growing segment of state prisoners.

Throughout the era of 1952 to 2000 the ratio of annual admission rate to the imprisonment rate varied from a low of .88 in 1967 to a high of 2.04 in 1997. The mean ratio for the series was 1.47 while the median was also 1.47. Consistent with the observations of Blumstein and Beck (1999) this variable shows an increase over time, demonstrating that imprisonment rates—or correctional populations—are a function of both a greater number of annual admissions as well as inmates serving longer sentences.

EXPLANATORY VARIABLES

Controlling for economic stress, unemployment, racial composition, violent crime, direct outlays for welfare as a proportion of gross domestic product (GDP), and population age-structure, this research examines the relationships between social disruption, political disaffection, and civic disengagement and adult imprisonment trends. The following pages outline the explanatory and control variables used in the study.

SOCIAL DISRUPTION

Social disruption was defined in this research as an indicator of social transformation, upheaval, social change, and perceived disruption. It was hypothesized that increasing social disruption is significantly associated with changes in the use of imprisonment. As the social context became more unstable throughout the 1960s and 1970s, there was a desire to “hold the center” through crime control (Levy, 1998; Parenti, 2000), which resulted in the use of imprisonment as a method of restoring or maintaining state legitimacy (see LaFree, 1998; Kiliyas, 1986).

A number of indicators, from a variety of sources, are used to measure the level of social disruption between 1952 and 2000. Foremost among these variables are the annual number of urban ethnic riots (Olzak et al., 1996). Large numbers of organized or spontaneous violent protest indicate dissatisfaction with mainstream political processes and frustration with the *status quo*. Data were obtained from

Olzak et al. (1996) study of urban ethnic demonstrations, riots, and protests from 1954 to 1992. Olzak et al. (1996) gathered these data by using media reports from the *New York Times* Index. These data were updated using the *New York Times* on-line archives using the same methodology as the original study. Data from 1952 and 1953 were not available, so values from 1954 were used for these years. The number of riots in this series ranged from 1 in 1955 to a high of 246 in 1960. The average number of urban ethnic riots, protests, and demonstrations throughout the era from 1952 to 2000 was 60.68.

Self-report data obtained from annual Gallup Polls were also used as indicators of social disruption. Since the 1940s, researchers from the Gallup Corporation have asked a national sample of Americans about their perceptions about the most important problem facing the nation. Respondents to this open-ended question gave a wide variety of answers, but in any given year, a number of respondents suggested that social change, upheaval or transformation was the most important problem facing the nation. Examples of such responses included civil rights protests, racial problems, state's rights, religious problems such as lack of faith, segregation, prejudice, apathetic or complacent attitudes of the American people, demonstrations or moral decline. Responses from each annual survey were coded and counted. Despite the fact that a wide variety of responses were used to indicate social disruption, the annual percentage of persons who identified social disruption as the most important problem facing the nation ranged from two percent in 1954 to a high of 60 percent in 1964. The mean self-reported degree of social disruption, however, was 16.96 percent and the median 11.5 percent.

Responses in the Gallup Poll tended to fluctuate according to media attention and current events. A large number of Americans, for instance, felt that the most important problem facing the nation in 1958 was the 1957 launch of the Sputnik satellite and the space race, yet this issue disappeared entirely in subsequent years. Despite these anomalies in the public interest Americans typically responded that economic matters, such as employment and financial well-being were most important problems facing the nation. Regardless of the fact that economic issues tended to dominate this survey, a percentage of respondents each year reported that some indicator of social disruption was the most important problem facing the nation.

Lastly, the number of work stoppages of firms with more than 1000 employees was obtained from the Bureau of Labor Statistics

(BLS). While issues of wages are often the precipitating factor in labor unrest, there is a literature that has identified the organized labor movement as a leader in promoting social issues such as occupational health and safety, working conditions, recognition of seniority, and more formalized grievance procedures (Licht, 1988). There is also a theoretical appeal to the notion that the protests, riots, demonstrations, and labor unrest are highly correlated. Disadvantaged groups may model the protest behavior of trade unions, or vice versa. Examination of correlations between these three variables confirmed this hypothesis that they were highly correlated. Throughout this series, the number of work stoppages ranged from a low of 17 in 1999 to a high of 470 in 1952. The average for the series is 196.16 work stoppages in firms with more than 1000 workers. One limitation of this indicator is that it does not capture the protest behavior of the organized labor movement in smaller firms, presumably in smaller communities.

Principle components analysis was used to reduce the regressor space between these three indicators of social unrest, transformation and change.¹ One clear factor emerged from this procedure, and had an eigenvalue of 1.933 of a possible of 3.0. This factor loaded very highly on the Gallup indicator of social disruption (.868), ethnic urban protests (.860), and work stoppages (.663). Altogether, this variable reflects social upheaval—self-reported concern over social change, as well as indicators of urban social unrest and labor protest. This variable was labeled social disruption in all of the analyses.

CIVIC DISENGAGEMENT

In addition to measures of social disruption, a number of annual indicators of civic behavior were used to form a variable called civic disengagement. Putnam (2000) found that Americans have reduced their levels of social or civic involvement since World War 2. This disengagement has resulted in decreased participation in nearly every dimension of community life, from sports and recreation to voting. Putnam (2000) hypothesized that this decreased civic involvement has increased the degree of political and social alienation Americans experience.

While some scholars have critiqued Putnam's work (Boggs, 2001; Paxton, 1999), a number of criminologists have argued that increased civic disengagement may lead to reduced informal social control, and increased criminality (Bursik and Grasmick, 1993; Rosenfeld, et al.,

2001; Sampson, et al., 1997). In addition, persons who are socially isolated, and have fewer social connections may be more likely to rely upon mechanisms of formal rather than informal social control (Black, 1976, 1989; Tonnies, 1995, 2000). Persons who are spending more of their time watching television, commuting from the suburbs, and working longer hours have less time for civic participation. A routine activities approach would also support the proposition that “cocooning” within the home and spending less time engaged in community activities decreases informal social control (Felson, 1994).

In his recent study of American social behavior Putnam (2000) provided numerous examples of civic and social disengagement over time, including reductions in religious, civic, voluntary, and professional organizations. Unfortunately, most of these data are not available for the series examined in this study. Consistent with Putnam’s observations, however, a number of annual indicators, including church membership, participation in labor unions, the national Parent-Teacher-Association (PTA) membership rate, and the average number of hours of television viewed per household were obtained. Principle components analysis suggested that these four indicators formed a single factor, which is labeled as civic disengagement. The following paragraphs outline the trends of these individual indicators.

Putnam (2000) observed that as the amount of television watched increased, participation in social networks decreased. The A.C. Nielson Corporation has tracked the average amount of television watched since the 1950 season. From 1952 to 2000 the average hours of television viewed per household has increased substantially, from a low of 4.72 hours per day in 1952 to 7.48 hours in 2000. The mean number of hours for the series is 6.19 hours, while the median is 6.23 hours per day. It is likely, for instance, that when people watch more hours of television, they are interacting less with friends, families, neighbors, and community organizations—whether formal or informal.

Annual membership data for the national PTA were obtained from their national office. This series reveals a clear trend of declining membership over time. Membership ranged from a high of 12.13 million members in 1961, to a low of 5.28 million members in 1981. These membership statistics were converted into a rate per 1000 persons in the population. The mean membership rate was 39.16 members per 1000 population, with the highest membership rate occurring in 1959 with 67.07 while the lowest rate was in 1981, with a

rate of 23.05 persons per 1000 residents in the population. In order to be consistent with the other indicators that were used in the principle components analysis, PTA membership was reverse-coded as the non-PTA membership per 1000 persons.

A measure of union membership over time was also included in the development of the civic disengagement variable. In addition to participation in workplace activities, unions have had a historical interest in electoral and community activities (Brecher 1997). Accordingly, higher rates of union membership may demonstrate an increased likelihood of advocating for community interests as well as workplace issues. All union membership data were obtained from the BLS but the data from 1952 to 1976 were initially collected by the Directory of National Unions and Employee Associations. The data from 1977 to present, by contrast, were collected by the US Bureau of the Census in their Current Population Survey.

Consistent with Putnam's (2000) observations, these data demonstrate that union membership has declined over time. In 1953, for instance, union members represented 26.9 percent of the labor force, and by 2000 this percentage was reduced to 13.50 percent. The mean for this series is 20.43 percent and the median is 20.40 percent. Boggs (2001) has observed that one reason for decreasing union membership is that industrial blue-collar jobs declined over this era, although in Putnam's (2000) defense, trade unions have not been able to attract labor from the service industries that replaced industrialized jobs. In order to be consistent with the other indicators that were used in the principle components analysis, union membership is expressed as the percentage of the workforce who are non-union members.

Putnam (2000) reported that Americans are less likely to participate in formal religious organizations over time. There are a number of organizations that have collected data about the religious behavior of Americans. This study used biannual data from the NES, and the missing years were mean-replaced by the average of the previous and the subsequent years (see Greene, 2000). The number of persons who reported that they did not attend any formal religious meeting was gathered from 1952 to 2000, and these data ranged from a low of five percent in 1956 to a high of 34.00 percent of respondents in 1992. The mean for this series was 15.34 percent while the median was 13.00 percent.²

Together these four indicators demonstrate the decreasing participation in voluntary, workplace, and community organizations. It

was hypothesized that increasing civic disengagement contributes to reduced informal social control and, in turn, the demand for more formal methods of social control (Black, 1989; Tonnies, 2000). These four indicators are highly correlated and principle components analysis was used to create a single indicator of civic disengagement. One dominant factor emerged from this procedure, and this variable had an eigenvalue of 3.543 of a possible of 4.0. This high value suggests that one factor captures most of the common elements of these four indicators. All of the four variables loaded highly with the values ranging from a low of the percentage who didn't attend church (.895) to a high for the indicator of non-union membership (.976).

POLITICAL DISAFFECTION

Political disaffection was defined as the degree of trust in government, perceived legitimacy of politicians, and perceptions of whether politicians act in the public, or their own self-interest. In this study increasing antipathy and distrust of governments are indicative of political disaffection. Increases in political disaffection indicate both alienation and dissatisfaction with the government's ability to speak on behalf of the individual. It has been hypothesized that governments recognized their increasing distance from the populace (LaFree, 1998). In order to demonstrate some form of public policy success, crime became a political issue to galvanize public support (Tonry, 1999b). Both federal politicians and their state counterparts supported a war on crime (Tonry, 1995, 1999a) to increase the legitimacy of the state (LaFree, 1998; Killias, 1986).

Measuring the degree of national political disaffection, however, is difficult because there were few annual surveys of political beliefs, values or cultural attitudes prior to the 1970s. In response to the problems of incomplete data series, a number of political scientists have advocated for the use of algorithms to capture long-term public opinion (Kellstedt, 2000; Stimson, 1999, 2000). Algorithms create a single measure of public mood by incorporating several different data sources that ask respondents similar questions about a policy issue over time. To construct this algorithm self-report data from a number of sources were collected. Indicators of these cultural and political values were obtained from the NES, GSS, Harris and Gallup Polls, and a number of ABC-*Washington Post* and CBS-*New York Times* surveys.

For a comprehensive list of the questions used in the construction of the algorithm, see Figure 5-1.

The NES is a biannual survey of political and social values conducted from 1948 to 2000, surveying approximately 2000 persons during election years. The NES collects data about the social characteristics of respondents, religion, and religious preferences, political partisanship and involvement, and most importantly for the study, opinion towards public policy issues. Self-reported support for the political system including trust in government, efficacy of government, and government responsiveness were also used in this study. The NES is an important survey, as it has provided a long-term barometer of American political and social opinion. According to the NES (2002:4), the data has been used for

Studies of electoral change, support for third party candidates, change in partisan attachments, alteration in the importance the American public assigns to national problems, change and continuity in the public's views on race, the ebb and flow of conservatism, and fluctuations in the American public's participation in political life.

The following eight NES questions were used in the development of the algorithm: Is the government run for the benefit of all? (1964-2000); Do people in government waste tax money? (1958-2000); Are government officials crooked? (1958-2000); People don't have a say in what the government does? (1952-2000); Whether the respondent believes that public officials don't care what people think? (1952-2000); Overall trust in the Federal Government? (1958-2000); How much does the government listen to the people? (1964-2000) and; Whether the respondent believes that elections make the government pay attention? (1952-2000).

The indicators used in this research reveal a declining trust in government, and increasing alienation over time. For instance, in 1958, forty-three percent of respondents reported that "a lot" of the people in government waste tax money. By 1998, however, this figure had increased to 61 percent. Moreover, when questioned whether government was run for the benefit of all, 29 percent of respondents in 1964 reported that government was run for the benefit of "a few big interests" but this figure had increased to 76 percent by 1994. These trends are similar with all of the NES questions used to construct the algorithm.

The GSS is also used to capture self-reported cultural and political values from 1972 to 2000. The GSS is a survey that has been conducted on an annual and biannual basis since 1972, surveying approximately 750 to 1,500 Americans about their beliefs on a wide range of topical social issues, such as attitudes towards law, justice or religion, as well as attitudes towards social policy and governments. The GSS is widely used in criminological and criminal justice research (i.e., Baumer, Rosenfeld, and Messner, 2000). Although there are limitations in any form of survey research, the GSS is regarded as a reliable and valid indicator of trends of national public opinion (Smith, 1980; Tourangeau, Rips, and Rasinski, 2000; Wentland and Smith, 1993).

The GSS questions used in this study solicited respondents' support for the following: Officials are not interested in the average man (1973-1998); Confidence in the executive branch of the federal government (1973-1998), and; Confidence in congress (1973-1998). Respondents to these questions demonstrate that public confidence in formal government institutions is eroding, and respondents are increasingly alienated from the federal government. In 1973, for instance, 18.6 percent of respondents reported that they had "hardly any" faith in the executive branch of government—by the year 1996, by contrast, 43.6 percent of respondents reported that they had "hardly any" faith in executive government.

Data from Harris Polls were also used to construct the public mood algorithm. From 1966 to 1998 the Harris organization surveyed Americans to determine an index of alienation. This index used data from five questions that measured the self reported support for the following statements: the rich get richer and the poor get poorer, what you think doesn't count very much any more, most people with power try to take advantage of people like yourself, the people running the country don't really care what happens to you, and you're left out of things going on around you. Overall, during this time series, the Harris data demonstrates an increasing amount of alienation—from a low score of 29 in 1966 to a high score of 67 in 1998.

Self-report data obtained from annual Gallup Polls were also used as an indicator of political disaffection. Since the 1950s, researchers from the Gallup Corporation have asked a national sample of Americans about their perceptions of the most important problem facing the nation. Respondents to this open-ended question gave a wide variety of answers, but in any given year, a number of respondents suggested that corruption, political misadventure, or incompetence in

political leaders was the biggest problem facing the nation. All of these responses were used as indicators of political disaffection.

Responses from each annual survey were coded and counted. Despite the fact that a wide variety of responses were used to indicate political disaffection, the annual percentage of persons who identified some dimension of political disaffection as the most important problem facing the nation ranged from 0 to 26 percent. The mean of annual respondents, however, was 6.1 percent and the median was five percent. Overall, responses in this survey tended to fluctuate according to well-reported events, such as the Watergate hearings in 1973, but Americans typically reported that economic matters, such as employment, were the most important problem facing the nation.

Lastly, data from several ABC-*Washington Post*, CBS-*New York Times* and Gallup surveys were collected from the *Washington Post/Kaiser/Harvard* (2001) Survey Project on American Values. The survey data used in the development of the algorithm solicited respondents' agreement with a number of statements or questions including: Things in this country were on the wrong track (1973-1998); Feelings toward the federal government (1992-1998); Agreement with the statement that when something was run by government it is usually inefficient and wasteful (1987-98); Agreement whether the government controls too much of our daily lives (1987-1998); Feeling towards the size of government (1976-1996) and; Perceptions about the threat that big government poses to the nation (1965-1995). Many of the respondents who participated in these self-report surveys report an increasing alienation from governments. Americans are more likely today to report that government is wasteful, too controlling, too large and threatening to the nation—concepts very consistent with political disaffection.

The list of the self-report questions used in this study, their sources, dates of the studies and the range of values in these series are outlined in Table 5-1. As there were some missing data about the numbers of respondents in these self-report questions, and these national polls all surveyed approximately the same number of persons—typically less than 1500 respondents—these data were not weighted.

Table 5-1. Survey items used to construct the index of political disaffection

Sources of Data	Years	Range	
Harris Alienation Index ^a	1966-98	29	
NES ^b – Govt. Officials are Crooked?			
NES – Govt. wastes ‘a lot’ of tax money			
NES – Trust Fed. Govt. ‘none’ of the time	1958-00	0	4
NES – People ‘don’t’ have a say in Govt.	1952-00	27	56
NES – Govt. officials don’t care	1952-00	26	66
NES – Govt. run for big interests	1964-00	29	75
NES – Govt. listens a good deal	1964-00	7	32
NES – Elections do not make Govt. pay attention	1964-00		
GP – Most important problem facing US ^c	1952-00	0	26
GP – Govt. controls too much	1987-98	18	37
GP – Govt. is biggest threat to country	1965-98	33	64
GSS – Hardly any confidence – Executive	1973-98	14	43
GSS – Officials not interested common man	1973-94	58	74
GSS – Hardly any confidence in Congress	1973-98	16	44
ABC – Country on ‘wrong track’	1973-98	57	83
ABC – Angry – Fed. Govt. works	1992-98	10	23
ABC – Govt. inefficient and wasteful	1987-98	19	36
CBS – Want smaller Govt. and less services	1976-96	40	61

- (a) The Harris Alienation Index measured the self reported support for the following statements: The rich get richer and the poor get poorer; What you think doesn’t count very much any more; Most people with power try to take advantage of people like yourself; The people running the country don’t really care what happens to you, and; You’re left out of things going on around you.
- (b) NES = National Election Studies; GP = Gallup Poll; GSS = General Social Survey; ABC = ABC/ Washington Post Poll; CBS—CBS/New York Times Poll.
- (c) Most important problem facing the nation: Respondents to this open-ended question gave a wide variety of answers, but in any given year, a number of respondents suggested that corruption, political misadventure, or incompetence in political leaders was the biggest problem facing the nation.

A statistical program named WCALC was obtained from Stimson (2000). The WCALC program enables self-report data from different series and different temporal eras to be combined into one series that represents an index of policy mood. The WCALC program uses a regression model to extract common elements in the different series

that are highly correlated. The program examines both the number of items in the series, as well as the length of the series for each item. The final product for each year is a value that represents one dimension of policy mood. The outcome of the algorithm in this study produced a range of values from a low of 19.79 (in 1958) to a high of 50.91 (in 1974). The mean value in the series was 30.38 and the median is 30.36. The political disaffection indicator, as well as the other two variables of interest, are illustrated in Figure 5-2.

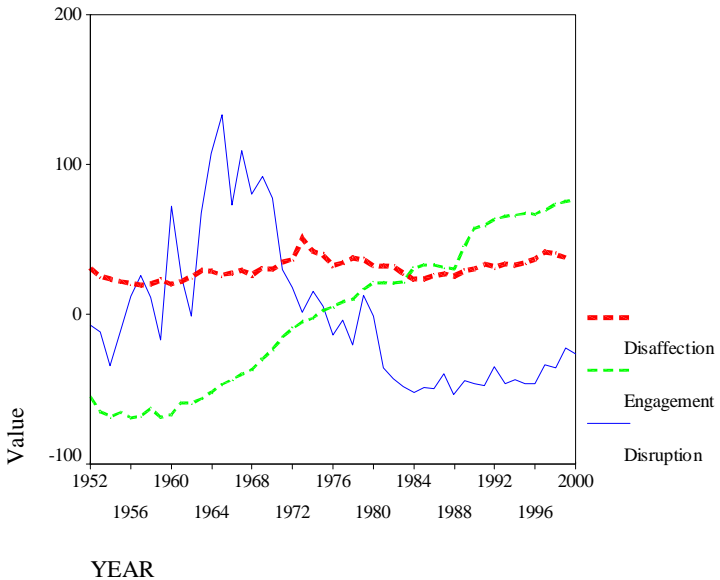


Figure 5-2. Political disaffection, civic disengagement and social disruption changes from 1952 to 2000 (civic engagement and social disruption multiplied by 50 to better demonstrate the changes)

The outcome of the WCALC estimation is a variable that is named political disaffection. This variable is exploratory in nature and there are no statistical methods to test the validity of the measure throughout the entire series. Yet it appears as though the ebb and flow of political disaffection is consistent with American political trends. In 1958, the low mark for the series, support for government was high, economic growth was consistently positive and there was a sense of national

prosperity. By 1974, the high mark for the series, America was mired in the Watergate scandal, the loss of the Vietnam War, an energy crisis, the aftermath of a lengthy period of political and campus protests, as well as significant economic stagnation. Certainly the era from the early to mid 1970s is representative of the greatest era of political disaffection in the latter half of the 20th century. The annual values in this algorithm demonstrate increasing political disaffection throughout the 1990s. The widespread public demonstrations that occurred in Seattle in 1999 and continuing throughout the last two years are indicative of increasing alienation and decreasing satisfaction with government, and are entirely consistent with the findings of this indicator of political disaffection.³

CONTROL VARIABLES

A number of other variables were also used in this study to control for factors that other scholars have identified as being positively associated with imprisonment trends. Accordingly, the following variables are considered: an unemployment factor, an economic stress factor, the direct outlays for welfare, racial composition, population age structure, and a violent crime factor. The following pages outline the types of data used, their sources, characteristics of the data and address any potential methodological limitations.

Economic stress

Economic stress was defined in this study as those economic factors that reduce certainty in market economies. Rusche (1933) initially identified inflation and lower standards of living as correlates of imprisonment, and Lessan (1991) found a positive association between inflation and imprisonment trends. Yet, other factors in market economies, such as income inequality, stock market volatility, business and personal bankruptcies as well as consumer debt also contribute to instability and uncertainty. As these indicators are highly correlated, principle components analysis was used to form one indicator of economic stress. Another advantage of combining these data is the reduction of measurement error inherent in any one indicator.

Initial analyses revealed that all of these five measures of instability demonstrated an upward trend throughout the period of

interest. From 1952 to 2000 inflation, income inequality, stock market volatility, consumer debt, consumer and corporate bankruptcies all increased along with imprisonment. This study evaluated whether an indicator that combines these measures is associated with adult imprisonment trends. The following paragraphs outline the characteristics of the variables that were used to construct the economic stress variable.

Inflation data were obtained from the BLS Consumer Price Index (CPI) report for urban consumers. All values in this series are standardized where 1982-1983 is equal to 100. Throughout this time series, the CPI ranged from a low of 26.5 in 1952, to a high of 168.8 in 2000. These inflationary trends are perhaps most harmful to surplus labor populations or members of the underclass, as these groups have fewer opportunities to compensate for these economic conditions—having little control over prices, the value of their labor, or any government assistance payments they receive. Using CPI data for urban consumers is therefore theoretically relevant, as these are the social groups more likely to come into contact with the criminal justice system (Miller, 1996; Tonry, 1995).

Annual numbers of individual and corporate bankruptcy petitions filed were obtained from the U.S. Bankruptcy Court. Throughout the era being studied, bankruptcies increased from 40,087 in 1952 to a high of 1,429,451 in 2000. Bankruptcies were converted into the rate per 100,000 persons in the population. The average bankruptcy rate for this series is 182.0 per 100,000 persons, and ranged from a low of 25.44 in 1952 to a high of 533.81 in 1997. It is noteworthy that 21,539,613 personal and corporate bankruptcies occurred during this era. This large number of bankruptcies reflects a significant degree of financial uncertainty for many individuals. Those living closest to the poverty line have little immunity from the harms of bankruptcy after the small-businesses that employ them close or after the collapse of their financial institutions.

Throughout this era the national consumer debt, or outstanding consumer credit, increased from 24 billion dollars in 1952 to 1,429 billion dollars in 2000. Predictably, there is a strong bivariate correlation ($r = .977$) between consumer debt and bankruptcies. Consumer debt data were obtained from Table G19 from the United States Federal Reserve and were converted to the outstanding debt per person. The average per capita consumer debt for this series is 1,614.15 dollars, ranging from a low of 157.42 in 1952 to a high of 5,178.61 in

2000. Increasing consumer debt and bankruptcies are an indicator of increasing social stress and uncertainty.

Annual income inequality data for families were obtained from Table F4 of the USCB Current Population Survey. Gini ratios measure the degree of inequality on a scale of 0 to 1.00. Values close to 1.00 are indicative of perfect inequality, while values close to 0 are indicative of perfect equality. Throughout the 49 years in this time series, the gini index for families varied from a low of .348, in 1968 to a high of .430 in 2000. Increasing inequality has previously been associated with imprisonment trends (Jacobs and Helms, 1996) and has a theoretical association with both crime (Messner and Rosenfeld, 1997) and imprisonment (Chambliss, 1999; Jacobs and Helms, 1996; Killias, 1986).

A measure of stock market volatility was also included in the construction of the economic stress variable. Dow Jones Industrial Index (DJIA) data were collected from Global Financial Data, an economic research firm. The standard deviation of the DJIA was calculated on an annual basis to indicate the degree of market fluctuation. The DJIA is perhaps the most conservative measure of market volatility because this index is comprised of “blue chip” stocks, and is far less volatile than the NASDAQ stock market (Schwert, 1998, 2002).

Economists have long debated whether the causes of market volatility are a function of market psychology or predictable oscillations (Schiller, 1989, 2000; Schwert, 1998, 2002) but regardless of the cause, the consequences of market volatility are well established. While increasing market volatility impacts individual investors, its effects on corporations are more theoretically relevant. Market volatility increases the risk of failure of corporations, businesses and financial institutions. There is a “trickle-down” effect of market failures, and those with the least resources are more vulnerable to market volatility.

Economists have identified a number of methods of calculating market volatility, although using some form of standard deviation variation in an index are widely used (Schwert, 2002). It is significant to note that the measure of market volatility used in this study also has a significant relationship ($r = .324$) with market bubbles—years when there was a three percent drop in the market values (Marathe and Renshaw, 1998). Market volatility is also positively associated with decreasing price to earnings ratios ($r = .737$) suggesting that investors

engaged in increasingly speculative behavior over time (Schiller, 1989, 2000). From 1952 to 2000 the degree of market volatility increased steadily. While some of this variation is attributed to the tremendous growth in the value of the market, there were also significant downturns. Of the 35 largest decreases in the percentage of the value of the DJIA from 1885 to 1997, for instance, all occurred in the 1980s and 1990s (Schiller, 2000). From 1952 to 2000, the annual standard deviation ranged from a low of 27.44 in 1952 to a high of 1,884.03 in 1999 and the standard deviation was 346.68.

These five economic indicators were included in a correlation matrix and they were highly correlated. Factor analysis was conducted to examine the degree to which these variables are valid and reliable indicators of one or more dimensions of economic stress. One factor emerged from the principle components analysis data reduction strategy, and this variable is labeled economic stress. This variable had an eigenvalue of 4.652 of a possible of 5.0, which suggests that the one factor captures most of the common elements of these different indicators. A review of the component matrix was completed, and the loadings ranged from a low of the Dow Jones Index volatility (.902) to a high of the per capita debt (.993). This variable, as well as the other control variables, are illustrated in Figure 5-3.

This economic instability factor captures a number of indicators of economic stress, including increasing market volatility, bankruptcies, debt, and inequality during an era when inflation eroded the wages of urban consumers. All five of these factors contribute to economic stress, which has a profound effect on the underclass. Because the underclass are typically in a poor position to negotiate wages, and often are more vulnerable to the negative economic effects of debt and bankruptcy, higher rates of economic stress may be associated with both increased crime and punishment. Consequently this variable was labeled as economic stress in all subsequent analyses.

Unemployment factor

There is some scholarly argument about the most appropriate measure of unemployment when evaluating the relationships between unemployment and either crime or punishment (Chamlin and Cochran, 2000; Chiricos and DeLone, 1992). Perhaps the most theoretically appropriate measure of unemployment for imprisonment studies is the percentage of individuals who have dropped out of the job market entirely.

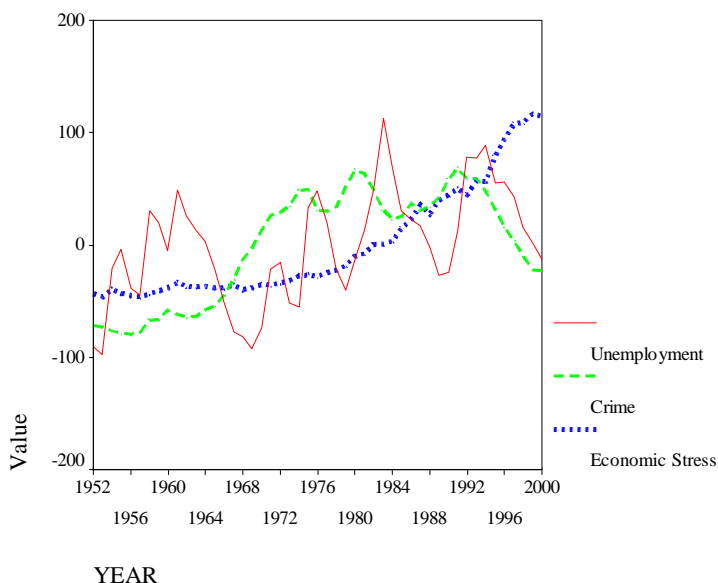


Figure 5-3. Unemployment, violent crime and economic stress factors (all factors multiplied by 50 to better display the changes)

Conflict theorists argue that these surplus labor populations are targeted by crime-control practices such as imprisonment (see Spitzer, 1975). Unfortunately, these unemployment data did not become available until the 1970s.

There are a number of unemployment indicators, however, that do capture long-term unemployment more effectively than seasonally adjusted unemployment statistics. The two indicators of unemployment used in this study were the percentage of persons unemployed over 15 weeks, and the average number of weeks unemployed. Both of these indicators were obtained from the BLS Geographic Profile of Employment and Unemployment. These data are collected in the US Bureau of the Census Current Population Survey. In terms of those unemployed over 15 weeks, the range was from 11.5 percent in 1953 to 39.3 percent of all unemployed in 1983. The mean was 25.18 percent and the median is 25.2 percent for this series.

The average number of weeks unemployed, by contrast, ranged from a low of 7.8 weeks in 1969 to a high of 20 weeks in 1983. The mean number of weeks unemployed was 13.2 weeks, and the median is 13.4 weeks for this series. These data are highly correlated ($r = .968$) and exploratory factor analysis was used to combine both of these indicators into one variable. One factor emerged from the factor analyses, which loaded equally high on both indicators. This variable was labeled unemployment severity in the analyses. Higher levels of unemployment severity should create a greater demand for harsh punishments to deter potential offenders.

Violent crime factor

Every study of imprisonment trends has included some type of crime variable, and typically these are indicators of violent crime. Including a measure of violent crime is theoretically important as these are the types of offenses that contribute to the public's fear of crime, and demand for punishment. This study included indicators of two serious violent crimes, robbery and homicide expressed in their rate per 100,000 persons in the population. Unlike property or public order offenses, robbery and homicide offenses tend to be accurately reported (Federal Bureau of Investigation, 2003; Rennison and Rand, 2003). Data about robbery and homicide rates were collected from the UCR. It is important to note that not all police organizations participated in the UCR, nor were all of these agencies able to accurately report their crime statistics—especially throughout the 1950s and 1960s. These violent crime statistics are, however, the most valid and reliable crime data available over the era examined in this study.⁴

Arrest data, by contrast, shows very little variation throughout the era being examined. From 1971 to 1994, for instance, robbery arrests ranged from a low of 58.9 to a high of 80.9 per 100,000 persons in the population. At the same time, however, the robbery rate increased from 187 to 272 per 100,000 persons (the bivariate correlation between reported robberies and robbery arrests was $r = .470$). One might extrapolate, however, that public fear of violent crime is driven primarily by actual offenses, and reports of these crimes, rather than arrests. Arrests may not, for example, be widely reported nor the perpetrators known to the community—especially in urban areas.

Robbery is an appropriate control measure in the study of imprisonment as it has been described as a crime of the dangerous classes, representing both minority threat and disorder (Inverarity and

Grattet, 1989). Throughout the era of the study, the robbery rate per 100,000 persons in the population, ranged from a low of 31.68 in 1957 to a high of 272.7 in 1991. The median robbery rate was 186.1, while the mean rate was 161.1 per 100,000 persons in the population in this time series. The homicide rate, by contrast, ranged from a low of 4.0 in 1957 to a high of 10.2 in 1980. The mean homicide rate was 7.25 and the median is 7.9 per 100,000 persons in the population in this series. Robbery and homicide are highly correlated ($r = .987$) and principle components analysis was used to combine these two violent crimes into one variable. The factor that emerged loaded equally high on both values (.974). This factor is labeled violent crime factor throughout this study.

Direct monetary outlays for assistance as a percentage of the gross domestic product

Consistent with several recent studies of imprisonment trends this study also controlled for welfare spending (Beckett and Western, 2001; Greenberg and West, 2001). Conflict scholars have long argued that welfare benefits are a mechanism of social control (Piven and Cloward, 1993). Where arrest and imprisonment represents the “stick” of formal social control, social welfare benefits represent the “carrot” to manage surplus labor (Chambliss, 1999; Piven and Cloward, 1993; Spitzer, 1975).

Both Beckett and Western (2001) and Greenberg and West (2001) used actual welfare expenditures controlled for inflation. Consistent with Marvell and Moody (1996), however, this study uses the direct outlays for public assistance paid to individuals—as a percentage of GDP. As public assistance is expressed as a percentage of GDP, there was no need to control for inflation. These data were obtained from the Bureau of Economic Analysis (BEA) from Table 34SA. During this era, outlays for public assistance ranged from a low of 2.5 percent of GDP in 1953 to a high of 10.3 percent of GDP in 1983. The mean rate was 7.07 percent of GDP, while the median rate for this series was 8.4 percent. This indicator, as well as two other demographic statistical controls, is outlined in Figure 5-4.

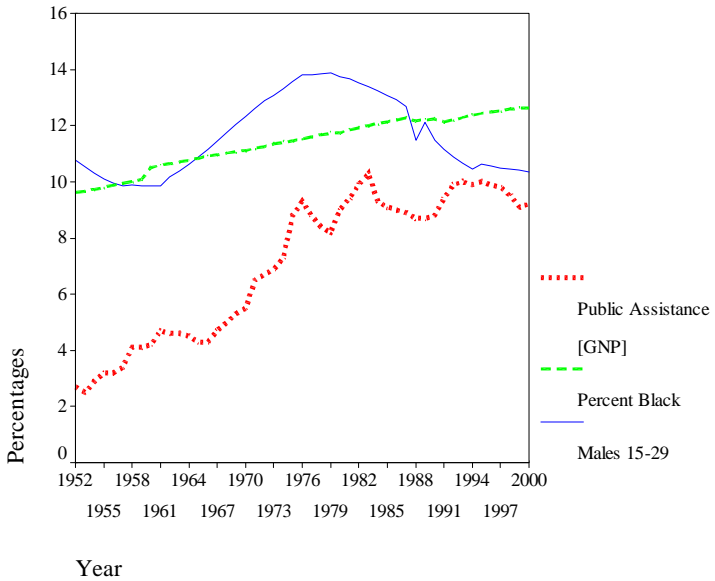


Figure 5-4. Percentage of total GNP outlays for public assistance, percentage of the population that are Black, and the percentage of the population that are males aged 15-29 years

Minority threat—percent population Black

An indicator of racial composition is also included in this study as a control variable. It is been proposed that the percentage of the population that are Black is a proxy for social or minority threat (Holmes, 2000; Jackson, 1989; Kane, 2003; Ruddell and Urbina, 2004). These theoretical approaches suggest that increasing non-white populations lead to a perceived threat—especially as these groups compete for more social, political, and economic power—which in turn leads to increases in the amount of formal social control to control these populations (Blalock, 1967; Jackson, 1989; Liska, 1992; Urbina, 2003).

A number of scholars have identified the disproportionate imprisonment of minority populations (Blumstein and Beck, 1999; Walker et al., 2003) and many have attributed these populations as casualties of the war on drugs (Mauer, 1999; Miller, 1996; Tonry,

1995). There is some recent empirical support that supports the proposition that changes in the Black population are positively associated with increases in imprisonment rates (Beckett and Western, 2001; Greenberg and West, 2001, Yates, 1997). As a result this study also includes the percent of the population that is Black as a control variable.

There are some limitations to understanding the true population of African Americans within the United States (see Farley, 1983). Despite these limitations, the US Bureau of the Census data are the most reliable and valid available. The data in this study are expressed as a percentage of the total of the entire national population, and ranged from a low of 9.62 percent in 1952 to a high of 12.63 percent in 2000. The mean percentage of the population that are Black was 11.39 and the median is 11.54 for this series ($sd = .91$).

Population age structure

A number of scholars have suggested that net of other factors, increases in the numbers of young males in the population will result in a corresponding increase in the number of offenses (i.e., Braithwaite, 1989, Felson, 1994). Increased rates of offending will result in changes in the rates of imprisonment (Gottfredson and Hindelang, 1979; McGarrell, 1993).⁵ In addition, it is plausible that politicians perceive changes in the population age structure (i.e., larger numbers of males in the population) as threatening and advocate more punitive crime control when this occurs.

A number of studies have found a positive association between the numbers of young males in the population and changes in the rates of prison admissions or imprisonment (Carroll and Doubet, 1983; Marvell and Moody, 1997). Yet this finding seems to be inconsistent over time—Jacobs and Helms (1996) found a negative relationship between prison admissions rates and the population of males aged 15 to 24 years. These ambiguous findings may be a function of the demographic influences of the baby boom. Imprisonment and admissions rates increased at the same time as the baby boomers aged (Carroll and Doubet, 1983) but when the numbers of these young males declined imprisonment rates still increased.

Because of the theoretical and empirical support for the relationship between changes in the percentage of young males in the population and imprisonment trends, this study also included a measure of the young male population aged 15 to 29 years as a control variable.

These data are expressed as a percentage of the entire national population, and ranged from a low of 9.85 percent in 1960 to a high of 13.87 percent in 1979. The mean percentage of males aged 15 to 29 years in the population was 11.63 and the median is 11.17 for this series ($sd = 1.41$).

In conclusion, this study examined three dependent variables and nine independent variables that were included in a number of different GLS regression models. In addition to examining the direct effects, this study also examines the multiplicative or interaction effects of economic stress and both violent crime and social disruption. Prior to the specification of any models, a number of descriptive statistics were conducted with these data.

MEANS, STANDARD DEVIATIONS, AND CORRELATIONS

The means, standard deviations and correlations of the 12 variables used in this study are outlined in Table 5-2. All three of the measures of punishment are correlated and exploratory factor analysis revealed that there was one underlying element of punishment. Despite these shared relationships, however, the time served was not as highly associated with the two other measures. This may indicate that this variable represents a different dimension of punishment. Accordingly, the variables that are significantly associated with imprisonment or annual admission rates may be different than the variables associated with time served.

Initial examination of the variables found that, with few exceptions, most of the explanatory variables were strongly associated with the three dependent variables. This finding is consistent with both previous empirical work and theory, and suggests that the variables that are included in the study have been correctly specified. The economic stress factor, for instance, was strongly associated with all of the measures of punishment—the bivariate association with imprisonment rates, for instance, was a very strong $r = .986$. Economic stress is strongly associated with all of the independent variables, which might suggest that changes in the magnitude of economic stress are associated with violent crime, direct outlays for assistance, unemployment as well as political disaffection.

The civic disengagement factor was also strongly associated with all of the dependent variables. Again, there is a theoretical appeal to the notion that as individuals spend less time actively involved with their

communities there will be decreases in the collective efficacy (Sampson et al., 1997) and capable guardianship (Felson, 1994). Isolated individuals are also more likely to rely upon formal social control in response to deviant behavior rather than informal methods (Black, 1976, 1989; Tonnies, 1995, 2000). The social disruption variable has a strong significant relationship with all three dependent variables, but the direction is contrary to expectations. In fact, the social disruption variable had a *negative* association with all 12 of the dependent and independent variables used in this study.

The political disaffection variable does not have a consistent strong bivariate relationship with the three dependent variables. If one examines the political disaffection trends illustrated on a graph, the greatest degree of political disaffection occurred in the mid-1970s—the same era that correctional populations started their increase. One might extrapolate that a greater use of imprisonment may have led to decreasing political disaffection. A popular argument in the recent criminological literature is that politicians became “tough on crime” to appease voters (or at the very least, to construct an issue that most voters would support) and generally demonstrate some type of policy success after a number of foreign policy setbacks, such as the loss of the Vietnam War, and the seeming inability to resolve many domestic problems, such as the economy in the mid-1970s (see LaFree, 1998).

Parallel with the propositions of UI theorists, unemployment is also positively associated with the dependent variables (Chiricos and DeLone, 1992; Rushe, 1993; Rusche and Kirchheimer, 1939). Conflict theorists also suggest that net of other factors, assistance to the poor should be negatively associated with imprisonment trends (Spitzer, 1975). As social disruption or political disaffection increase, governments may respond by providing better income security to make the conditions of the poor less severe, and less threatening (Piven and Cloward, 1993; Spitzer, 1975) or they may use formal social control in lieu of social welfare expenditures (Beckett and Western, 2001; Greenberg and West, 2001). The bivariate correlations reported in this table provide support for Spitzer’s (1975) hypothesis that penal sanctions are used during times of unemployment severity.

Table 5-2. Correlation matrix, means and standard deviations of the variables used in the study of adult imprisonment trends from 1952-2000

	1	2	3	4	5	6	7	8	9	10	11	Mean	S.D.
Imprisonment Rate	—											193.3	122.6
Prison Admissions	.97*	—										290.8	157.2
Time served	.79*	.62*	—									1.5	.3
Assistance (% GDP)	.66*	.58*	.76*	—								7.1	2.6
Violent Crime	.32*	.28*	.44*	.86*	—							.0	1.0
Percent Black	.75*	.71*	.70*	.95*	.79*	—						11.4	.9
Percent Males 15-29	-.27	-.36*	.10	.49*	.71*	.37*	—					11.6	1.4
Economic Stress	.99*	.95*	.80*	.73*	.41*	.82*	-.14	—				.0	1.0
Unemployment	.46*	.37*	.59*	.61*	.33*	.49*	.01	.45*	—			.0	1.0
Political Disaffection	.32*	.24	.35*	.50*	.51*	.47*	.42*	.37*	.00	—		30.8	6.7
Civic Disengagement	.84*	.78*	.80*	.94*	.77*	.96*	.27	.89*	.48*	.52*	—	.0	1.0
Social Disruption	-.57*	-.44*	-.79*	-.63*	-.46*	-.51*	-.14	-.59*	-.55*	-.17	-.64*	.0	1.0

* $p < .05$

Consistent with minority threat theories, the relative size of the Black population is also positively associated with all three of the dependent variables. The percentage of the male population aged 15 to 29 years, by contrast, revealed more ambiguous results. There was a negative relationship between the young male population and admissions rate ($r = -.355$) but a positive relationship with time served ($r = .327$). These contradictory findings suggest that there is more than one underlying dimension of punishment.

As these nine explanatory variables are highly correlated there is the possibility of multicollinearity within the GLS models. Highly correlated variables are a significant problem because subsequent findings will be biased, essentially reducing the explanatory value of the results. There are two general strategies for addressing the problem of multicollinearity: increasing the number of observations or reducing the number of explanatory variables. To a large extent the explanatory data within these models has been reduced through exploratory principle components analysis. Increasing the number of cases, by contrast, is not possible due to the lack of reliable and valid data prior to 1952. While some of the nine variables could have been excluded, there is a risk of omitted variable bias (Greene, 2000; see also Jacobs and Helms, 1999).

Initial examination of the four equations in OLS regression models demonstrated high levels of multicollinearity, indicated by very high condition indexes (i.e., values in excess of 55.00) and condition indexes in excess of 20.00 are indicative of multicollinearity (Greene 2000). After the non-stationary variables were first-differenced, however, these condition indexes decreased to acceptable levels (less than 4.0) when subsequent regression models were estimated.

ANALYTICAL STRATEGY

This study uses GLS regression models to examine the changes in independent variables on three indicators of imprisonment trends from 1952 to 2000. The selection of statistical methods in this research are limited somewhat by the fact that there are only 49 cases and the need to include a number of explanatory and control variables in the regression models that evaluate the hypotheses. Because time series typically violate the condition of correlated error terms, OLS regression models are not generally appropriate to examine time series data. As a result, there is an extensive precedent for the use of GLS models in the

study of punishment (i.e., Jacobs and Carmichael, 2001, 2002; Jacobs and Helms, 1996, 1997, 1999, 2001). As these are annual data—over a relatively short era—other techniques, such as the use of ARIMA models, are not appropriate as these methods require a greater number of observations.

GLS models place restrictions on the independent and dependent variables prior to estimating the models. A critical first step in the identification of GLS models is the estimation of the zero-order correlations among the change-scores of annual prison admissions, imprisonment rate, time served and the nine independent variables. There are a number of statistical tests to assess the degree of autocorrelation between the variables. Greene (2000: 538) observed that, “These tests are based on the principle that if the true disturbances are autocorrelated, this is revealed through the autocorrelations of the least squared residuals.” Two statistical tests, the Durbin-Watson (DW) and Dickey-Fuller (DF) are the accepted methods of assessing autocorrelation. Kennedy (1998: 150) noted how “the DW is biased towards not finding autocorrelated errors whenever a lagged value of the dependent variable appears as a regressor.” The regression models, however, only lag the independent variables, so the DW is a reliable method of measuring autocorrelation in this study.

For instance, Model 5 in Table 6-5 (see Chapter 6) evaluates the relationships between social disruption, civic disengagement and political disaffection and the annual imprisonment rate, net of six control variables. OLS regression of these variables finds that the DW statistic is .627. If the residuals in this equation were not autocorrelated, the DW statistic would have a value from 1.8 to 2.0. Values less than 1.8, such as our DW statistic of .627, demonstrate positive correlation. In order to control for autocorrelation, each variable in the equation must be assessed to determine whether they are stationary.

In Chapter 6, unit root tests are completed on all of the variables using an Augmented Dickey Fuller test. Variables that are not stationary are first or second differenced (Anderson, 1971; Greene, 2000; Raffalovich, 1994) and this approach is consistent with other longitudinal studies of imprisonment that used national-level data (Carlson and Michalowski, 1997; Jacobs and Helms, 1996, 1999, 2000; Lessan, 1991; Michalowski and Carlson, 1999, 2000).

An important issue in any statistical test is the ratio of explanatory variables and cases. Jacobs and Helms (1999: 1519) suggest that

exhaustive specification of variables in time series models is preferable, citing Johnson (1984: 262):

It is more serious to omit relevant variables than to include irrelevant variables since in the former case the coefficients will be biased, the disturbance variance overestimated, and conventional inference procedures rendered invalid, while in the latter case the coefficients will be unbiased, the disturbance variance properly estimated, and the inference procedures properly estimated. This constitutes a fairly strong case for including rather than excluding relevant variables in equations. There is, however a qualification. Adding extra variables, be they relevant or irrelevant, will lower the precision of estimation of the relevant coefficients.

In order to include as many explanatory variables as possible exploratory principle component analysis (PCA) was used to reduce the data. PCA enables us to use the least possible number of independent variables by forming inter-related variables from a larger number of independent variables. For example, economic indicators such as unemployment, inflation, consumer debt, bankruptcies and inequality were combined to form two economic variables—unemployment and economic stress—that act as a baseline model for subsequent tests.

Consistent with other recent studies of imprisonment trends (i.e., Jacobs and Helms, 1996, 1997, 1999) the independent variables in this study were lagged. There is considerable precedent for the use of lagged independent variables in political and economic research (Jacobs and Helms, 1996, 1999, 2001). There are also theoretical reasons why lags are appropriate and important to consider. For instance, there is some time between the perception of a threat to the *status quo*, such as increasing inequality, minority threat, labor strife, crime or unemployment, and a social policy response—such as imprisonment (Lichtenstein, Slovak, Fischhoff, Layman, and Combs, 1978). This lag would be more pronounced in state or federal prison populations—as jails may be more responsive to changing community circumstances (Hagan, 1994).

CONTRIBUTION OF THE STUDY

Three decades of imprisonment research have extensively evaluated the UI relationship, but the empirical literature has not generally extended these tests to include other measures of economic stress. This study examined three dependent variables in the study of imprisonment trends: the time served by prison inmates, as well as the annual imprisonment and prison admission rates. By better understanding the factors that are significantly related with these indicators, we gain a better understanding about the composition of correctional populations. Are changes in overall imprisonment rates, for example, influenced more by the number of persons sentenced, or the severity of their sentences?

A more important contribution of this study, however, was the comprehensive explanatory variables introduced in this research. First, this study introduced the variables of social disruption and civic disengagement to the imprisonment literature. These variables were created using exploratory factor analysis. The variable of civic disengagement is a measure that characterizes declining social networks and community participation over time. As a result, there is less effective informal social control (Sampson, et al., 1997) and individuals may be more likely to rely upon the formal use of law (Black, 1976). Social disruption, by contrast, is an exploratory factor that outlines the degree of social upheaval. It was hypothesized that increased social upheaval at the same time as declining social participation resulted in a greater use of formal social control.

Second, this study introduced the variable of political disaffection to the imprisonment literature. An algorithm was used to combine a large number of self-reported indicators of alienation, dissatisfaction and distrust in government from a number of national polls. It was hypothesized that increasing political disaffection forced government to use the criminal justice system to increase its legitimacy (LaFree, 1998). Third, this research included an exploratory factor labeled economic stress, which is a measure of economic instability, inequality and volatility. Rusche (1933) identified economic stress as a correlate of imprisonment, yet despite numerous studies of imprisonment variables other than unemployment have only rarely been examined (Jacobs and Helms, 1996; Lessan, 1991).

Lastly, this research evaluated whether the effects of social disruption, political disaffection, and civic disengagement are stronger or perhaps only evident when violent crime or economic stress are increasing. Multiplicative models are rarely considered in imprisonment research, despite the fact that such techniques have been identified as theoretically relevant (Chiricos and DeLone, 1992; Colvin, 1990; Inverarity, 1992; Liska and Chamlin, 1984; Savelsberg, 1994). Sutton (1987, 2001) for example, has used interaction terms to study changes in state level imprisonment as well as cross-national trends. By overcoming limitations of past research models this study contributes to our empirical as well as theoretical knowledge.

Explaining Imprisonment Trends

This chapter presents results from two series of analyses. First, the main effects of social disruption, civic disengagement, and political disaffection on adult imprisonment trends from 1952 to 2000. Second, statistical interactions were added to the baseline models (from the first series of analyses) to determine whether the effects of the three variables of interest increased during times of high economic stress or violent crime. Consistent with an extensive body of previous empirical work at the national level of analysis, these analyses control for violent crime (Carroll and Doubet, 1983; Inverarity and Grattet 1989), population age structure (Blumstein, et al., 1977; Inverarity and Grattet, 1989; Marvell and Moody, 1997; Michalowski and Pearson, 1990), direct outlays for assistance (Beckett and Western, 2001; Greenberg and West, 2001; Inverarity and Grattet, 1989; Inverarity and McCarthy, 1988), racial composition (Chiricos and Crawford, 1995; Greenberg and West, 2001; Yates, 1997) and unemployment (Chiricos and DeLone, 1992; D'Alessio and Stolzenberg, 1995; Jankovic, 1977). Further, the analyses included an economic stress index that combined measures of inflation, inequality, stock market volatility, bankruptcy, and per capita debt (Arvanites and Asher, 1998; Jacobs and Helms, 1996; Lessan, 1991; Michalowski and Carlson, 1999, 2000).

The study follows a long tradition of imprisonment research by evaluating whether extra-legal variables influence the use of punishment at macro levels of analyses (Berk et al., 1982; Blumstein and Cohen, 1973; Jankovic, 1977). The study departs from previous empirical work, however, by focusing upon the effects of social, political, and cultural factors on the use of imprisonment. A number of scholars have identified these factors as potentially important to the study of imprisonment (Garland, 1990, 1991; Jacobs and Helms, 1996, 1999; Savelsberg, 1994; Taggart and Winn, 1993; Tonry, 1995, 1999a),

but few studies have examined the effects of those factors systematically.

HYPOTHESES

The most basic question examined is whether social disruption, civic disengagement, and political disaffection influenced changes in annual prison admission rates, imprisonment rates, and time served from 1952 to 2000. More specifically, the following hypothesis was tested:

Controlling for other factors is there a positive relationship between social disruption, civic disengagement, political disaffection and adult imprisonment trends?

A number of scholars have suggested that increasing social disruption threatens our social, political, and economic prosperity (Jacobs and Helms, 1999; Levy, 1998; Linsky et al., 1995; Linsky and Straus, 1986). Changes in the nature of social relationships, the number of riots and political demonstrations, increasing labor unrest, and public or political upheaval are posited to contribute to disruption within the culture, which also reduces confidence in government and other social institutions. These analyses examined whether increases in social disruption have contributed to increases in the use of imprisonment.

Putnam (2000) found that Americans have reduced their levels of social and civic engagement in nearly every dimension of community life, from sports and recreation to voting, since the end of World War 2. This decline in civic and social participation may reduce the amount of informal social control, which may in turn increase levels of crime (Rosenfeld, et al., 2001; Sampson, et al., 1997). In addition, persons who are socially isolated may be more likely to rely upon mechanisms of formal rather than informal social control (Black, 1976, 1989; Tonnies, 1995, 2000). It was therefore hypothesized that increases in the amount of civic disengagement are associated with higher rates of imprisonment.

Lastly, the relationship between political disaffection and imprisonment trends was evaluated in a series of GLS regression models. Changes in self-reported trust in government, declining faith in the efficacy of government to respond to social problems, and pessimism about the future create an uncertain political climate, reduce confidence in elected officials, and gives rise to perceptions of illegitimacy. In a political environment in which governments are

generally unwilling or unable to confront long-term domestic social problems such as poverty, racism, or inner-city decay, the criminal justice system often is used to demonstrate to the public that policy-makers are responsive and effective. Net of several control variables, the study evaluated whether increases in political disaffection resulted in changes in the use of imprisonment.

UNIVARIATE AND BIVARIATE ANALYSES

Prior to estimating the multivariate GLS regression models a number of statistical tests were performed to evaluate whether the error terms are serially correlated, to examine the characteristics of the distributions, and to identify the most appropriate lags for the independent variables. These tests are necessary because time series models typically violate the assumptions of OLS regression.

In response to the limitations of OLS regression to effectively estimate time-series equations, GLS regression models were used in the analyses (Kennedy, 1998). GLS regression models weight the variables estimated in time-series models (see Salvatore and Reagle 2002), and the regression equations are then estimated using traditional OLS methods. Statistical software programs such as EVIEWS complete these steps in one operation and reduce the errors associated with conducting numerous data transformations. All of the equations were estimated using the Cochrane-Orcutt procedure, which is the default GLS program in EVIEWS. Prior to estimating the models, several univariate and bivariate tests must be completed, including evaluating the degree of serial correlation in the independent and dependent variables, examining the characteristics of the distributions, and determining the most appropriate lags for the independent variables.

SERIAL CORRELATION

Salvatore and Reagle (2002: 208) observe that autocorrelation or serial correlation is the problem “when error term in one time period is positively correlated with the error term in the previous time period”—a common problem in time-series analysis. Variables that are serially correlated can introduce bias into regression models. A number of statistical tests have been developed to assess the degree of autocorrelation for a variable measured over time. In this study, the Augmented Dickey-Fuller (ADF) test was used to estimate the trends in

all 12 of the independent and dependent variables. The ADF tests for the presence of a unit root, or a non-stationary distribution, which is a common problem in examining longitudinal economic and social data. In its most basic definition, a distribution is said to be stationary if the means of five-year intervals are approximately equal.

Testing revealed that there were unit roots in all of the variables, except the unemployment factor, for which no transformation was needed. These trended variables were first-differenced (see Kennedy, 1998). Examination of these variables after first-differencing demonstrated that the problem of non-stationary distributions was corrected, with the exception of annual imprisonment rates. The annual imprisonment variable was second-differenced, which is a major transformation of the data, but preferable to making inferences based on the analysis of non-stationary data (Raffalovich, 1994). There was no evidence of a unit root after the imprisonment variable was second differenced.

Raffalovich (1994) recommends that caution be used when detrending time series data, and identifies two different types of trends in longitudinal data, deterministic and stochastic. In an empirical test of time series data Raffalovich (1994) found that differencing can result in unintended or unforeseen outcomes if used with stochastic data. The primary focus of this study is the examination of macro economic, political, and social data—which typically exhibit deterministic trends. Again, any transformation of the data should be driven by both theory and previous empirical work, and this study differenced independent and dependent variables in a manner consistent with other recent macro-level studies of punishment (Jacobs and Carmichael, 2002; Jacobs and Helms, 1996, 1999).

DISTRIBUTIONS

Variables that do not have normal distributions are problematic in regression analyses. Data that are skewed, for instance, may reduce the effectiveness of regression models to produce valid and unbiased results. Prior to estimating the GLS regression models, a number of statistical tests are conducted to evaluate the properties of the data. Scatterplots and histograms were estimated for each independent and dependent variable, along with examination of the descriptive statistics. Skewness and kurtosis statistics for each differenced variable used in the analysis were estimated. Two of the distributions, admissions rates

and economic stress, are slightly skewed, but as they both hover around the test statistic of 1.0 they are not log transformed (Tabachnick and Fidell, 1996).

More serious, however, was the finding that the percentage of the population that are Black variable was both skewed (3.106) and exhibited evidence of moderate kurtosis (5.294). In addition, the percentage of males aged 15 to 29 years was also skewed (-1.362) and demonstrated evidence of severe kurtosis (21.688). These limitations were a consequence of first differencing the data, as the untransformed variables were not skewed. Both of these variables were log-transformed in the subsequent analyses, although a series of supplementary analyses with the untransformed variables resulted in findings very similar to those reported below.

The GLS models presented in the study were estimated using EVIEWS statistical software, which uses White's general test for heteroscedasticity. These diagnostic tests were completed for all of the GLS equations estimated. White's general test relies upon a simple approach—it examines the relationships of the error terms against the number of regressors in the equation, including the constant, and reports whether the standard errors are consistent (Greene, 2000).¹

MEANS, STANDARD DEVIATIONS, AND CORRELATIONS (FIRST DIFFERENCED)

The means, standard deviations, and correlations of the 12 variables used in the study were outlined in the previous chapter, but the nature of these relationships changed considerably once they were transformed through differencing. To review, of the 12 variables examined in this study, ten were found to be trended and were first differenced, the imprisonment rate variable was second-differenced and one variable, the unemployment factor, was found to be stationary.

A correlation matrix for the dependent and independent variables used in this study was estimated and is reported in Table 5-2. The transformed variables, by contrast, are presented in Table 6-1. Inconsistent with the results presented in the former table, the bivariate relationships between the variables are not as strong once the variables are differenced, demonstrating the fact that first differencing not only removed autocorrelation, but also reduced the shared relationships between these variables (Raffalovitch, 1994).

Table 6-1. Summary statistics: correlation matrix, means, standard deviations for the dependent and independent variables used in the study of imprisonment trends (no lags)

	1	2	3	4	5	6	7	8	9	10	11	12
1 Imprisonment Rate $2d$	—											
2 Admissions Rate d	.39*	—										
3 Time Served d	-.13	-.63*	—									
4 Assistance % GDP d	.16	-.23	.20	—								
5 Violent Crime d	.16	-.16	-.21	.21	—							
6 Percent Black d, ln	-.06	.30*	.24	-.19	.28	—						
7 Percent Males 15-29 d, ln	.20	-.04	.27	.11	.16	.40*	—					
8 Economic Stress d	.08	.36*	.00	-.08	-.19	.44*	.10	—				
9 Unemployment	-.08	.17	.28	-.02	-.69*	.48*	-.00	.27	—			
10 Political Disaffection d	-.16	-.06	-.06	-.09	.22	.15	.04	-.02	-.14	—		
11 Civic Disengagement d	.21	.06	.09	.12	.34*	.28	.26	.08	-.04	.09	—	
12 Social Disruption d	.01	.14	-.19	-.24	.04	-.05	-.20	.03	-.06	.27	.02	—
Mean	.02	3.42	.00	.14	.00	2.42	2.45	-.00	.00	.01	.01	.00
Standard Deviation	4.82	7.32	.01	.41	.20	.08	.12	.29	1.00	3.74	.01	.54

* $p < .05$; d = first differenced, $2d$ = second differenced, ln = log transformed.

While some of these bivariate relationships remained statistically significant after being differenced (i.e., prison admissions and economic stress), the multivariate results will provide a more meaningful analysis because all of these factors occurred concurrently, rather than independently.

LAGS OF THE INDEPENDENT VARIABLES

One final step before estimating the time series regression models was the selection of the most appropriate lags for the independent variables. There is likely to be a lag between the recognition of a problem and a social policy response (Lichtenstein et al., 1978) such as imprisonment (Blumstein and Beck, 1999). There is considerable precedent for the use of lagged independent variables in studies of formal social control at the national level of analysis (Jacobs and Carmichael, 2001, 2002; Jacobs and Helms, 1996, 1997, 1999, 2001). There are also theoretical reasons why lags are appropriate and important in the study of imprisonment (Lichtenstein et al., 1978). For instance, there is very likely a lag between the perception of a threat to the economy, such as increasing inequality, labor problems and unemployment, and a criminal justice response that increases either the number of prison admissions or the time served. One might speculate that the specification of lags is somewhat contingent upon the level of analysis examined. Jail populations, for instance, may be more responsive to short-term economic, political or social upheaval than populations of state or federal prisons (D'Alessio and Stoltzenberg, 1995; Hagan, 1994).

Specification of the most appropriate lags in the study of imprisonment trends must balance theory, previous empirical work, and methodological considerations. Lags must also be diverse, and the same lag for each independent variable is discouraged (Jacobs and Helms, 1999). The lags for the independent variables in this research were determined entirely by theoretical considerations. While statistical software programs enable a researcher to select an almost unlimited number of lags, this study restricted the number of lags from one to three years. Most hypotheses about the relationships between macro social, political, and economic factors and imprisonment suggest that the effects of these factors upon imprisonment are comparatively short-term in nature (Jacobs and Helms, 1996, 1999). As a result, lags in the order of ten to 20 years are problematic theoretically. A lag of zero, by

contrast, is also problematic, as the processes that lead to changes in imprisonment trends are probably not immediate.

Working within the restriction of one to three year lags, which seems justifiable on the grounds outlined above, the following three theoretical criteria guided the selection of lags of the independent variables. First, both violent crime and the percentage of males aged 15 to 29 years were assigned a lag of one-year as these factors are likely to be highly associated with the short-term use of imprisonment. Increasing rates of violent crime, for instance are likely to lead to increased prison admissions and longer sentences immediately as the offenses that comprised this factor—homicide and robbery—typically result in prison sentences for those offenders apprehended and convicted. Although Jacobs and Helms (1996) used a four-year lag, their measure of crime included non-violent crimes, which are less likely to influence short-term changes in the use of imprisonment.

Net of other factors, the number of young males in the population influences the rate of criminality (Braithwaite, 1989). As a result, increased crime rates will also influence the use of imprisonment, for violent offenses (which are included in the model) as well as non-violent crimes. Alternatively, it is plausible that legislators might advocate for enhancing penalties for law violation when populations of young males increase (see Carroll and Doubet, 1983). Again, a lag of one year was used for this variable, and this measure is consistent with a recent study of national prison admissions (Jacobs and Helms, 1996).

Second, lags of two years were selected for the economic stress and unemployment factors. These variables are associated with conflict-oriented theories that suggest that increases in economic uncertainty or stress influence the use of imprisonment in market economies (Rusche, 1933; Rusche and Kirchheimer, 1939). It was hypothesized that governments are responsive to these short-term economic fluctuations, especially when they impact upon surplus labor or the underclass, which tend to have the highest rates of involvement with criminal justice systems. Jacobs and Helms (1996) used somewhat different economic measures and they used a one-year lag. A one-year lag seems inappropriately short to account for the recognition of a problem, the decision to use the criminal justice system to respond to economic stress, and translating this response into increased prison admissions or the time served by inmates.

Third, lags of three years were selected for the other five variables that represent macro social and political processes. It was hypothesized,

for example, that it would take some time between the recognition of a threat posed by an increasing Black population and a criminal justice response that resulted in a change in the use of imprisonment. The three main variables of interest—political disaffection, civic disengagement, and social disruption—are measures of social transformation, upheaval or change. Jacobs and Helms (1996) suggest that responses to social upheaval work on the basis of a one-year lag, but this almost instant mobilization of formal social control seems overly optimistic. Recognition of these cultural and social changes is a longer-term process (i.e., Caplow and Simon, 1999; Garland, 2001; Savelsberg, 1994). As a result, it would take longer than one year before the recognition of social disruption, the debate amongst policy-makers about the most appropriate intervention, the introduction of more punitive criminal justice policies, and ultimately increases in prison admissions or the length of sentence that prison inmates serve. A more reasonable assumption is that these processes would unfold over a three-year period (see Jacobs and Helms, 1999).

A second step in evaluating the lags was the examination of cross correlations. Cross correlations evaluate the strength of association between the dependent and independent variables and identify correlations at different lags and leads. Cross-correlations were completed to evaluate the relationship between each dependent and independent variable after the theoretically appropriate lags were selected. One consequence of the decision to choose lags based on theory—rather than selecting a lag with the strongest association—is a reduced model fit in the subsequent GLS equations.

MULTIVARIATE RESULTS

Having described the characteristics of the data, Tables 6-2 to 6-4 outline the GLS regression models for the three dependent variables examined in the study. For each of the dependent variables, the baseline model, including the six control variables, was first estimated and then political disaffection, civic disengagement, and social disruption variables were added separately in subsequent models. The final model in each table included all of the independent and control variables. In order to simplify the information presented in the tables, only the unstandardized coefficients were reported.

I. Federal and State imprisonment rates per 100,000 persons in the population

Table 6-2 presents a series of GLS models that evaluated the influence of social disruption, civic disengagement, and political disaffection on imprisonment rates. Model 1 is a baseline model that evaluates the effects of the control variables on imprisonment rates. The adjusted $r^2 = .247$ demonstrates a poor model fit and the DW statistic = 1.787 does not conclusively reject serial correlation. The baseline model reveals that only three of the six control variables are significantly associated with imprisonment rates.

Consistent with other national studies of imprisonment trends, violent crime is positively associated with changes in imprisonment rates (Cappell and Sykes, 1991; Inverarity and Grattet, 1989). Also consistent with other studies of imprisonment is the finding of a strong positive association between the percentage of the population that is Black and imprisonment rates (Beckett and Western, 2001; Greenberg and West, 2001; Jacobs and Helms, 1999). This model also provides empirical support for studies of imprisonment trends that have found a significant negative relationship between the percentage of the population who are young males and imprisonment trends (Inverarity and McCarthy, 1988; Jacobs and Helms, 1996). Jacobs and Helms (1996), for instance, found a significant negative relationship between males aged 14 to 25 years and prison admissions, and attribute this finding to changes in the demographic characteristics of the young male population from 1948 to 1992.

Neither unemployment nor economic stress was significantly related to imprisonment in Model 1. Previous studies about the relationships between UI have resulted in ambiguous findings (Chiricos and DeLone, 1992; Michalowski and Carlson, 1999). It is important to note that this study included an unemployment severity factor and this measure has not previously been evaluated in studies of the UI relationship. This measure has, however, been hypothesized as being more theoretically relevant to the study of crime than seasonally adjusted unemployment rates (Chamlin and Cochran, 2000), yet unemployment is not significantly associated with imprisonment rates, net of other factors. A meta-analysis of studies that examined the UI relationship, for instance, found that unemployment is likely to have a relationship with imprisonment rather than admissions rates (Chiricos and DeLone, 1992).

Table 6-2. GLS regression on federal and state imprisonment rates from 1952 to 2000

	Lags	b	b	b	b	b
Constant		-1.105	-1.273	-1.582	-1.341	-2.203
Assistance	3	-.329	.002	-.936*	-1.410*	-2.013*
Violent Crime	1	7.896*	9.589*	6.554*	7.014*	7.690*
Percent Black	3	176.414*	187.220*	192.859*	273.079*	345.341*
Males 15-29	1	-84.849*	-93.993*	-93.006*	-89.407*	-113.490*
Economic Stress	2	.143	-.006	-1.941	-2.271	-5.727*
Unemployment	2	-.174	.005	-.189	-.179	.066
Disaffection	3	---	.225*	---	---	.331*
Disengagement	3	---	---	11.833*	---	12.924*
Disruption	3	---	---	---	-2.542*	-3.552*
Adj. r^2		.247	.273	.287	.310	.416
DW		1.787	1.747	1.849	1.712	1.633

--- --- Variable was not included in the equation; * $p \leq .05$;

However, there is evidence that these economic effects are contingent upon the era examined (Michalowski and Carlson, 1999, 2000). Michalowski and Carlson (1999) reported, for example, that unemployment was positively associated with annual prison admissions from the 1930s to the 1970s, but negatively associated during the 1980s.

Lastly, Model 1 shows that there was a negative, but non-significant relationship between the direct outlay for assistance as a percentage of GDP and changes in annual imprisonment rates. This outcome was consistent with recent studies of state prison admission trends that included some form of welfare expenditure variable (i.e., Beckett and Western 2001; Greenberg and West, 2001). Inverarity and Grattet's (1989) national-level study also found a negative association between welfare spending and imprisonment rates. These scholars all suggest that negative associations between welfare spending and imprisonment provide empirical support for the conflict perspective.

In Models 2 through 4 of Table 6-2, the main explanatory variables of interest—political disaffection, civic disengagement, and social disruption—were added to the baseline model. The effects of these variables are similar when considered separately or when they are all included in the same model. Model 5 presents the coefficients obtained for the full model. Net of the control variables, Model 5 reveals a positive association between political disaffection, civic disengagement and changes in imprisonment rates as well a strong negative association between social disruption and imprisonment. Thus, consistent with expectations, disaffection and isolation lead to increases in the use of imprisonment. But in contrast, increases in social disruption were associated with a *reduction* in imprisonment rates, at least in the short term. Therefore, the three explanatory variables considered contribute significantly to our ability to explain changes in imprisonment rates. This model demonstrates a stronger model fit (adjusted $r^2 = .416$) compared to the baseline model and the DW statistic (1.632) did not conclusively reject serial correlation.²

With a few exceptions, the effects of the independent variables are generally similar in Models 2 through 5. Consistent with Beckett and Western (2001) and Greenberg and West (2001), there is a significant negative association between direct outlays for assistance and imprisonment rates in Models 3 through 5, but this variable did not have a significant relationship in the other two models estimated. This

may be evidence of a suppression effect (Tabachnick and Fidell, 1996). Examination of the effects of the assistance variable with the other two dependent variables, however, did not reveal any similar trends (see below).

II. Federal and State admissions rates per 100,000 persons in the population

Models 1 through 5 in Table 6-3 present parallel regressions for changes in annual prison admissions rates. Model 1 is a baseline model that includes only the control variables. The adjusted $r^2 = .508$ demonstrated a far better model fit than the equations estimated for imprisonment rates and each of the control variables was significantly associated with admissions rates. With the exception of the size of the young male population, which had a negative association with admissions, all of the variables were in the theoretically expected direction. The DW statistic (2.083) in Model 1 conclusively rejects serial correlation.

Contrary to the results reported in Table 6-2, but theoretically consistent with a number of conflict-oriented theories (Rusche, 1933; Rusche and Kirchheimer, 1939), two control variables—unemployment and economic stress—had a significant positive association with annual prison admissions rates. Interestingly, this suggests that economic downturns promote increases in admissions to prisons. In Models 2 through 4, the main explanatory variables of interest are added to the baseline model.

As was the case with the imprisonment findings, the effects of these variables are similar when considered separately and when they were all included in the same model. Focusing on Model 5 reveals that, unlike the findings for imprisonment rates, civic disengagement, and social disruption are not significantly associated with admissions rates. Inconsistent with theoretical expectations, both civic disengagement and social disruption had a negative non-significant association with these dependent variables.

These non-significant results suggest that changes in civic disengagement or social disruption do not influence changes in the use of prison admissions. This finding is contrary to the hypothesized results, and suggests that prison admissions rates may not be sensitive to these social conditions, but they do affect imprisonment rates.

Table 6-3. GLS regression on federal and state admissions rates from 1952 to 2000

	Lags	b	b	b	b	b
Constant		2.297	2.153	2.348	2.325	2.232
Assistance	3	-3.549*	-3.265*	-3.484*	-3.418*	-3.162*
Violent Crime	1	5.902*	7.349*	6.046*	6.008*	7.660*
Percent Black	3	165.697*	174.936*	163.923*	153.995*	174.808*
Males 15-29	1	-156.796*	-164.563*	-155.917*	-156.225*	-163.489*
Economic Stress	2	5.795*	5.667*	6.020*	6.087*	6.002*
Unemployment	2	2.736*	2.889*	2.738*	2.737*	2.900*
Disaffection	3	---	.192*	---	---	.202*
Disengagement	3	---	---	-1.276	---	-2.303
Disruption	3	---	---	---	.308	-.069
Adj. r^2		.508	.515	.507	.507	.515
DW		2.083	2.008	2.082	2.091	2.005

--- --- Variable was not included in the equation; * $p \leq .05$.

There are several speculative interpretations of this pattern of findings. The lack of association between the variables of interest and annual prison admissions may reflect the misspecification of one or more of these variables—specifically the social disruption index. Further, these findings could reflect the specification of the lags for the different independent variables. These possibilities are reviewed in the summary and conclusions section.

Despite the fact that neither civic disengagement nor social disruption were significantly associated with annual prison admissions, Model 5 demonstrates a good model fit (adjusted $r^2 = .515$) and the DW statistic (2.005) conclusively rejects serial correlation. While the findings within this series were somewhat theoretically inconsistent, political disaffection did have a significant positive association with imprisonment rates, lending some empirical support to the hypotheses outlined in Chapter 4.

III. Estimated time served for state and federal prisoners

Models 1 through 5 in Table 6-4 examined the relationships between political disaffection, civic disengagement, social disruption and time served by inmates in federal and state prisons. Contrary to the findings for the other two dependent variables, the adjusted $r^2 = .205$ demonstrates a poor model fit and the DW statistic = 1.402 suggests that the residuals are serially correlated. Despite the poor model fit, all but one of the control variables are significantly associated with changes in the time served.

The findings reported in Table 6-4 were inconsistent with the results presented for the analyses of admissions and imprisonment rates. These inconsistent findings may reflect the fact that different decision-makers are responsible for determining the amount of time served by prison inmates. Historically, the time served by offenders was determined by persons within the criminal justice systems: judges, correctional officials, and members of parole boards. However, the time served by inmates has increasingly become a function of legislative initiatives. As federal and state legislators introduced mandatory minimum sentences, eliminated parole and ended indeterminate sentencing, the time served by inmates increased (Hughes et al., 2001; Langan, 1991). As a result, it is plausible that legislators may be more sensitive to changes in the amount of civic disengagement or social disruption than correctional officials, members of parole boards or judges.

Table 6-4. GLS regression on time served (Federal and State) from 1952 to 2000

	Lags	b	b	b	b	b
Constant		.033	.030	.024	.032	.019
Assistance	3	.039*	.045*	.028*	.035*	.024*
Violent Crime	1	-.105*	-.079*	-.130*	-.108*	-.109*
Percent Black	3	-3.761*	-3.595*	-3.445*	-3.369*	-2.382*
Males 15-29	1	.824*	.684*	.672*	.805*	.478*
Economic Stress	2	.024	.021	-.015	.014	-.040
Unemployment	2	-.023*	-.020*	-.023*	-.023*	-.020*
Disaffection	3	---	.003	---	---	.004*
Disengagement	3	---	---	.220*	---	.219*
Disruption	3	---	---	---	-.010*	-.024*
Adj. r^2		.205	.226	.254	.208	.286
DW		1.402	1.649	1.480	1.418	1.779

--- Variable was not included in the equation* $p \leq .05$.

Contrary to the findings presented in Tables 6-2 and 6-3, Model 1 in Table 6-4 revealed that there was a positive association between the direct outlays for assistance and the time served. Another inconsistent result was the finding of a significant positive association between the percentage of young males in the population and estimated sentence length. While contrary to the results reported above, this finding is consistent with Marvell and Moody (1997), who found a significant positive relationship between changes in the size of the young males in the population and increased prison admissions.

Table 6-4 also revealed that there is a significant negative relationship between unemployment and time served. Empirical studies of the UI relationships have resulted in ambiguous findings (Chiricos and DeLone, 1992; Jacobs and Helms, 1996; Janovic, 1977; Inverarity and Grattet, 1989). These inconsistent findings may be a consequence of the specification of the unemployment variable (Chamlin and Cochran, 2000), the level of analysis studied (Arvanities and Asher, 1998; D'Alessio and Stolzenberg, 1995), or the dependent variables examined (Chiricos and DeLone, 1992). Lastly, the relationship between unemployment and imprisonment—at least for prison admissions at the national level of analysis—seems to be contingent upon the eras examined (Michalowski and Carlson, 1999, 2000).

Inconsistent with other empirical studies of race and imprisonment (Chiricos and Crawford, 1995), and the results reported in Tables 6-2 and 6-3, there was a strong negative association between percentage of the population that are Black and time served. Thus minority threat appears to lead to increased prison admissions (see Table 6-3), but not the amount of time served. This relationship could be further studied by examining annual Black prison admissions or sentences served by African-Americans, but these data are not available for the full series examined here. Another limitation of these imprisonment data is that the BJS tends to overstate populations of White prisoners (Holman, 2001). Of all the dependent variables examined, the time served model exhibits the worst overall model fit (adjusted $r^2 = .286$) and the DW statistic (1.779) does not conclusively reject serial correlation.

Although not reported in Table 6-4, a series of supplementary analyses were conducted that included a dummy variable that accounted for the introduction of Federal Sentencing Guidelines after 1987 (Benekos and Merlo, 1995). It was hypothesized that adding this variable would substantially increase the model fit for the time served because this era reflects an increasing amount of formal social control.

Another rationale for including this variable is that excluding an indicator of changing legislation is the problem of omitted variable bias (leaving out potentially important variables in regression models). ADF test statistics were estimated, and the variable was first-differenced in order to remain empirically consistent with the other data in the series (see Jacobs and Helms, 1996). This dummy variable was added to Model 5 in Table 6-2. Contrary to expectations, this variable was not statistically significant in either the bivariate or multivariate analyses, and adding this variable to the equation resulted in a modest improvement in the model fit (adjusted $r^2 = .293$). The results were nearly identical even if the dummy variable was not first differenced. Although this finding is unexpected, it is consistent with a recent cross-sectional state-level study that found no association between determinate sentencing, mandatory sentencing or truth-in-sentencing and either prison admissions or imprisonment rates (Sorenson and Stemen, 2002). The findings for the main effects of the variables of interest are summarized in Table 6-5.

ANALYSES OF INTERACTION EFFECTS

The results reported above indicated that political disaffection and civic disengagement are positively associated with time served and overall imprisonment rates; it may be that such effects are even stronger or perhaps only evident when violent crime or economic stress are increasing. On the other hand, social disruption exerts a negative effect on time served and imprisonment rates, which is contrary to expectations. But perhaps the hypothesized positive effect of social disruption is evident only during periods of increasing crime and economic stress. Lastly, civic disengagement and political disruption apparently do not increase prison admissions rates. The analyses presented below evaluated whether a different pattern is found when violent crime and economic stress are increasing.

This section extends the analyses of imprisonment trends by evaluating whether violent crime or economic stress condition the effects of political disaffection, civic disengagement or social disruption on the use of imprisonment. It was hypothesized that high levels of violent crime or economic stress will amplify the extent to which social stress, transformation, disaffection, isolation and change contribute to a public or political willingness to take some form of social policy action that reduces the perceived social stress or disaffection.

Table 6-5. Summary table of significant relationships for Model 5—all independent variables

Variable	Imprisonment Rates	Support Hypothesis	Admissions Rates	Support Hypothesis	Time-Served	Support Hypothesis
Political Disaffection	+	yes	+	yes	+	yes
Civic Disengagement	+	yes	<i>ns</i>	no	+	yes
Social Disruption	-	no	<i>ns</i>	no	-	no
Assistance	-	yes	-	yes	+	no
Violent Crime	+	yes	+	yes	-	no
% Black	+	yes	+	yes	-	no
% Males 15-29	-	no	-	no	+	yes
Economic Stress	-	no	+	yes	<i>ns</i>	no
Unemployment	<i>ns</i>	no	+	yes	-	no

ns = No Significant Association; - = Significant Negative Association; + = Significant Positive Association.

These social policy responses may include increases in the use of punishment such as increasing the number of prison admissions or increasing the length of sentences (Melossi, 1993; Rusche and Kirchheimer, 1939; Savelsberg, 1994).

Statistical interactions, also called multiplicative effects, are the product of two independent variables in an equation, and their use enables the researcher to examine the moderating effect of one variable on another (Jaccard, Turrisi, and Wan, 1990). Multiplicative models have rarely been considered in imprisonment research, despite the fact that such techniques have been identified as potentially fruitful strategies (Chiricos and DeLone, 1992; Colvin, 1990; Inverarity, 1992; Liska and Chamlin, 1984; Savelsberg, 1994). Sutton (1987) used interaction terms to demonstrate that prison reforms, such as implementation of parole, had different effects in states with higher population density and industrialization in his study of state-level imprisonment trends from 1890 to 1920. Expanding this analysis to imprisonment trends in 15 industrialized nations, Sutton (2000, 2001) also found that interaction effects were helpful in identifying how conservative politics contributed to the use of imprisonment. In recognition of these promising strategies, and consistent with the theoretical work outlined in Chapter 4, this research included six product terms in the analyses and examined the extent to which social and political factors combined with economic stress and violent crime rates to drive the use of adult imprisonment from 1952 to 2000.

INTERACTION EFFECT HYPOTHESES

The basic questions these analyses consider are whether economic stress and violent crime condition the effects of political disaffection, civic disengagement and social disruption. More specifically, the following hypotheses were tested:

The effect of changes in social disruption, civic disengagement or political disaffection on changes in the imprisonment rate, annual admissions rate, and time served is greater during periods of high or increasing economic stress, and

The effect of changes in social disruption, civic disengagement or political disaffection on changes in the

imprisonment rate, annual admissions rate, and time served is greater during periods of high or increasing violent crime.

Neither violent crime nor economic stress has previously been used as moderating variables in the study of imprisonment trends at the national level of analysis. There is, however, a theoretical appeal to using variables that tap into the factors that increase public fear. There may be a demand for politicians to make changes in public policy when individuals are more socially isolated, when individuals are more dissatisfied with governments or when the culture itself is disrupted. This demand may be enhanced during times of increasing economic stress or violent crime. There has been considerable empirical precedent to the use of crime variables in the study of imprisonment (Cappell and Sykes, 1991; Inverarity and Grattet, 1989, Jacob and Helms, 1996, 1999). Economic stress has also been positively identified as contributing to the use of imprisonment (Jacobs and Helms, 1996; Lessan, 1991; Rusche, 1933). While these variables have not been used as moderating variables in studies of national imprisonment trends, there is a conceptual appeal to the notion that either increasing economic stress or violent crime could amplify the effects of social disruption, political disaffection or civic disengagement, and in turn result in a more pronounced social policy change—such as increasing the number of annual prison admissions, or increasing the time served by prison inmates—than would occur in times of relatively low crime rates or economic stress.

UNIVARIATE AND BIVARIATE ANALYSES

A number of statistical procedures were completed prior to estimating the 27 GLS regression equations examined in this series of analyses. First, the means, standard deviations, and zero-order correlations of these six multiplicative terms were estimated. Second, the characteristics of these new variables were examined. Third, ADF statistics were used to evaluate whether the six independent variables introduced above were stationary. Finally, the most appropriate lags for the independent variables within these 27 equations were selected. The following paragraphs summarize these univariate analyses.

Consistent with the analyses of the three variables of interest reported above, the characteristics of the additional six multiplicative terms introduced in this section were also examined. It is important to

fully understand the characteristics of the data because regression models are sensitive to data that are skewed (Greene, 2000). As a result, scatterplots and histograms were estimated for the six product terms. The means, medians, and standard deviations of these variables were evaluated along with tests for skewness or kurtosis. While these multiplicative terms typically revealed low values of skewness or kurtosis, the product of violent crime and social disruption was negatively skewed (-1.015) and the product of economic stress and political disaffection variable was positively skewed (1.450). Supplemental analyses revealed that there were no significant differences in the outcomes of the analyses whether this variable was log transformed.

Parallel with the results reported earlier, the ADF statistic was estimated for each of the multiplicative terms that will be used in the GLS regression models. Each of the six multiplicative terms are created using the untransformed additive terms. ADF unit root tests for the 18 variables examined in this chapter were estimated. Of the six product terms only one, the product of violent crime and social disruption, was stationary and this variable was not first differenced. Four of the remaining five multiplicative terms were first differenced to remove any trend. The product of economic stress and civic disengagement did not conclusively reject a unit root after first differencing, so this variable was second differenced and further tests revealed that this procedure removed the remaining trend.

LAGS OF THE INDEPENDENT VARIABLES

Prior to estimating the GLS models, the lags for the six product terms introduced in this section had to be selected. This task is of critical importance because the lags selected for the independent variables have a significant impact upon the results when time series models are estimated. For instance, changing the lag of an independent variable in a regression model from two to five years may result in a significant change in the outcomes of the entire model, even if the lags of the other independent variables remain unchanged. As a result, specification of the most appropriate lags in the study of long-term imprisonment trends must balance theory, previous empirical work as well as the statistical methods available.

In the analyses of the additive effects of social disruption, political disaffection, and civic disengagement, lags were selected solely on the basis of theory, and cross correlations were then estimated to evaluate the strength and direction of association. The rationale for the lags used was predicated on an argument that the effects of macro-level social, political, and economic factors are relatively short-term processes—within the restriction of one to three years. Consistent with this approach, the lags for the product terms used in these multivariate analyses also fall within the three-year restriction.

Using lagged interaction terms within time-series analyses presents an additional empirical challenge because there is a methodological rationale for both the additive and multiplicative terms having the same lag in a model.³ In the analysis of the additive effects of the three variables of interest—political disaffection, civic disengagement, and social disruption—lags of three years were used. This lag is appropriate because it takes some time before the recognition of a social problem to be translated into a policy response (Lichtenstein et al, 1978). One problem, however, is the fact that violent crime and economic stress variables had different lags, one and two years respectively. In order to be empirically consistent, therefore, these variables are lagged three years in these analyses. Doing so does not alter the substantive conclusions drawn from the results reported above. Consequently, the additive terms (both violent crime and economic stress) as well as the six product terms included in the analyses reported in this series of analyses all have lags of three years.

MULTIVARIATE RESULTS

Having described the univariate and bivariate tests completed on the dependent and independent variables, this section presents the results of 27 GLS regressions of the impact of violent crime rates and economic stress on the effects of political disaffection, civic disengagement, and social disruption. First, each product term was added to the final models examined in the analysis of additive effects (see Model 5 in Tables 6-2 to 6-4), resulting in six separate equations for each dependent variable (i.e., one equation for each product term). Second, separate equations were estimated with three economic stress product terms and subsequently, the three violent crime product terms. Finally, an equation for each dependent variable was estimated that included both the three economic stress product terms and the three violent

crime product terms. The effects of the product terms were generally consistent across these different model specifications; therefore only the final model is discussed here. The results are presented in Table 6-6, which displays the coefficients and standard errors for the six product terms examined for each dependent variable.⁴

I. The conditioning effects of violent crime and economic stress on annual imprisonment rates

Model 1 of Table 6-6 examines the relationships between the six product terms and adult imprisonment rates. Of the six two-way interactions considered, all but one was statistically significant. The lone insignificant interaction represents the product of violent crime and civic disengagement. Nonetheless, the significant interactions observed are primarily contrary to expectations—at least for the imprisonment and admissions rates.

Increases in the amount of violent crime, for instance, actually dampen the effects of political disaffection, while increases in the amount of economic stress weaken the effects of civic disengagement and social disruption on changes in annual imprisonment rates.

In addition to the one insignificant variable (the product term of violent crime and civic disengagement), the product term of violent crime and political disaffection was statistically significant only when considered with the other five product terms and control variables. The product term of violent crime and political disaffection was not statistically significant when added to the nine variable model. Jaccard (2001) argues that a statistically significant association is only one consideration when interpreting the results of multiplicative terms in regression equations—there should also be a meaningful change in the model fit with the addition of a multiplicative term. After the product term of violent crime and political disaffection variable was removed from the model that included all of the control variables and product terms, there was only a marginal decrease in the adjusted r^2 (from .477 to .471). As the product term of violent crime and political disaffection did not significantly change the model fit, and this variable was only statistically significant in one model, the relationship between this product term and imprisonment rates was not further analyzed.

Table 6-6. Summary effects of violent crime and economic stress on adult imprisonment trends: 1952 to 2000
(Six product terms added to the nine-variable baseline model)

Imprisonment Admissions Estimated Time Rates <i>2d</i> Rates <i>d</i> Served <i>d</i>				
	Lags	b	b	b
Crime * Disaffection <i>d</i>	3	.143†	-.342	.004*
Crime * Disengagement <i>d</i>	3	.556	-2.544*	.075*
Crime * Disruption	3	-.669*	1.369†	-.005
Econ. * Disaffection <i>d</i>	3	-.634*	-1.015*	.007*
Econ. * Disengagement <i>2d</i>	3	-5.610*	-11.113*	.059*
Econ. * Disruption <i>d</i>	3	-5.275*	1.252	-.049†

† = Variable was only significant when considered with the other five product terms, or had no influence on the model fit (see Jacard, 2001); *d* = First Differenced; *2d* Second Differenced

* $p \leq .05$; Note: Each model also includes the controls, plus the main effects of all variables.

Inconsistent with the expectations, Model 1 in Table 6-6 reveals that the four remaining product terms all had a significant negative association with annual imprisonment rates. These four product terms were; violent crime and social disruption, economic stress and political disaffection, economic stress and civic disengagement, and economic stress and social disruption. These results can be analyzed in a number of ways.

First, the finding of a negative relationship between the product term of violent crime and social disruption and imprisonment suggests that net of other factors, social disruption exerts a weaker effect on imprisonment rates when rates of violent crime are increasing. Second, there was a negative association between the product term of economic stress and political disaffection and imprisonment rates. Again, this is a counterintuitive finding because it suggests that political disaffection exerts a weaker effect on imprisonment rates when rates of economic stress are increasing. Model 1 of Table 6-6 also reveals that there was a significant negative association between the product term of economic stress and civic disengagement and changes in imprisonment rates.

This finding suggests that civic disengagement exerts a weaker effect on imprisonment rates when rates of economic stress increase. Again, this theoretically inconsistent finding may reflect the ambiguous findings of the main effects revealed earlier. Lastly, there was a negative relationship between the product term of economic stress and social disruption and changes in imprisonment rates. This suggests that the effect of social disruption on imprisonment rates dampens when rates of economic stress are increasing.

Of the four product terms that had a negative association with imprisonment rates, three of these product terms included the economic stress variable, yet the bivariate correlations revealed that the economic stress variable had a strong positive association with the other dependent and independent variables. Accordingly, this may suggest that the lags used in these analyses might not be correctly specified with the imprisonment rate variable. Alternatively, the economic stress variable may have a positive relationship with prison admissions or sentence length (which are the component parts of imprisonment rates) but not directly associated with imprisonment itself.

The finding that the focus variables exert a weaker impact on prison admissions when economic stress or violent crime increase may also be a function of the level of analysis examined in this research. Jail

populations, for instance, may be more sensitive to changes in the amount of violent crime or economic stress than other levels of aggregation (Arvanties and Asher, 1998; D'Alessio and Stolzenberg, 1995; Hagan, 1994; McCarthy, 1990). Omitting these populations, estimated at 665,475 inmates at the end of 2002 (Harrison and Beck, 2003), is therefore a limitation in this study. Another possibility is that juveniles—who are not typically included in imprisonment rates—may be regulated more severely during eras of increasing violent crime or economic stress. The contribution of juvenile crime to increases in violent crime since the mid 1980s, for instance, is well documented (Fox, 2000). In addition to contributing to violent crime, juvenile facilities held almost 110,000 inmates in October, 2000 (Harrison and Beck, 2003).

II. The conditioning effects of violent crime and economic stress on federal and state prison admission rates

Model 2 in Table 6-6 examined the relationships between the six product terms and annual prison admissions rates. Of the six two-way interactions considered, five are statistically significant. The one non-significant variable was the product term of economic stress and social disruption. Again, inconsistent with theoretical expectations, three of these product terms are negatively associated with annual state and federal prison admission rates.

The product term of violent crime and social disruption, the one variable that was positively associated with prison admissions, was not statistically significant in any of the models that were estimated. In fact, when this product term was added to the nine variable baseline model there was almost no increase in the model fit (the adjusted r^2 increased from .524 to .525). When this variable was removed from the model that included all six product terms, there was only a very modest decrease in the adjusted r^2 (from .607 to .597). As the product term of violent crime and political disaffection made neither a significant contribution to the model fit, nor revealed consistent results in the three models estimated, this variable was dropped from further analyses.

Consequently, the remaining four product terms all had a negative association with prison admission rates, including the products of violent crime and political disaffection, violent crime and civic disengagement, economic stress and political disaffection, and economic stress and civic disengagement. These findings, while theoretically unexpected, are empirically consistent with the findings in

the previous analyses of imprisonment rates. The product terms of crime and political disaffection, as well as crime and social disruption are negatively associated with annual prison admissions. This finding suggests that both social disruption and political disaffection exert a weaker impact on prison admission rates when rates of violent crime are increasing.

The product terms of economic stress and political disaffection as well as economic stress and civic disengagement were also negatively associated with annual prison admissions. Consistent with the findings in Model 1 in Table 6-6, economic stress conditions the effects of political disaffection and civic disengagement and these focus variables exert a weaker impact on annual prison admissions when economic stress increases.

The finding that the variables of interest exert a weaker effect on annual prison admissions when economic stress or violent crime increases is unexpected. Yet, there are some alternative explanations for these unexpected findings. Some governments may respond to these types of increasing social, political, economic, and cultural stresses through other mechanisms of informal social control, such as increasing funding for secondary education or job creation programs that are intended to ameliorate the impact of economic or social disruption (Western, Pettit, and Guetzkow, 2002). Such programs might have a short-term effect on reductions in annual prison admissions—especially if these programs provided support for parolees or probationers within the community—and reduce their recidivism (see Langan and Levin, 2002). Yet, scholarly argument suggests that this has not occurred, and that prison systems have generally not invested in community supports for parolees (Travis and Lawrence, 2002).

While there is a conceptual appeal to the notion that governments may respond to increasing economic or social turmoil by increasing the funding for social welfare programs, many empirical studies have found that assistance and imprisonment have an inverse relationship—imprisonment has increased at the same time as funding for social welfare programs has been cut (Beckett and Western, 2001; Greenberg and West, 2001). As a result, these findings may support theoretical work that has identified a continuum of informal and formal mechanisms of social control (Piven and Cloward, 1993; Spitzer, 1975). Governments rely upon a number of social policy interventions

to conditions of stress and uncertainty, and changes in the use of imprisonment are only one response (Wacquant, 2001).

Another possible explanation for the finding that the variables of interest exert a weaker effect on annual prison admissions when economic stress or violent crime increases might be attributed to the level of analysis examined in this study. National prison admissions rates obscure the variation between state admissions. As a result, it is very possible that the variables of interest exert a stronger effect on prison admissions in some states, but these distinctions are lost when looking at the national statistics. These issues are further addressed in the summary and conclusions section and reinforce the importance of examining more than one level of analysis when looking at imprisonment trends (see Arvanites and Asher, 1998; McCarthy, 1990). Again, while this may be preferable, the lack of political, social, and cultural data since 1952 makes this task impossible at other levels of analysis.

Lastly, other types of formal social control, such as the institutionalization of deviant (or criminal) populations in jails, treatment centers, juvenile or mental health facilities may also account for the finding that the focus variables exerted a weaker impact upon annual prison admissions when economic stress or violent crime increased. If these populations were added to the federal and state inmate populations, the outcomes of these analyses might be more consistent with the hypotheses (see Penrose, 1939).

III. The conditioning effects of violent crime and economic stress on time served

Model 3 in Table 6-6 reveals that five of the six interaction terms had a statistically significant relationship with time served. Only one variable, the product term of violent crime and social disruption was not statistically significant. The relationships in this model are more theoretically consistent than the results reported in the previous pages. Of the five significant variables, for instance, four have a positive relationship with the time served.

The lone variable that had a negative association with time served was the product term of economic stress and social disruption. This variable had a significant association only when the other five product terms were included in the same model. When the product term of economic stress and social disruption was added to the baseline model, it was not statistically significant, and made almost no change in the

model fit (i.e., the adjusted r^2 changed from .261 to .262). This product term was eliminated from the model that included all of the product terms, and there was only a modest decrease in the adjusted r^2 (from .331 to .325). Consistent with the analyses reported for the annual imprisonment and prison admission rate dependent variables, the product term of economic stress and social disruption was not considered in further analyses.

The remaining four interaction terms—violent crime and political disaffection, violent crime and civic disengagement, economic stress and political disaffection and economic stress and social disruption—all had a positive association with time served. The product terms of violent crime and political disaffection, as well as violent crime and civic disengagement are positively associated with annual prison admissions. As a result, both social disruption and political disaffection exert a stronger positive effect on time served when rates of violent crime are high, or increasing. The product terms of economic stress and political disaffection as well as economic stress and civic disengagement were also positively associated with time served. This finding suggests that both political disaffection and civic disengagement exert a positive impact on the time served of federal and state prisoners when economic stress increases. These outcomes are consistent with the hypotheses outlined earlier.

The findings in this set of analyses are inconsistent with the results reported for the prison admission and imprisonment rate variables, but such results may also reflect the fact that prison admissions and imprisonment rates are products of different decision-makers within criminal justice systems than the decision-makers who influence the time served of inmates. Annual prison admissions, for instance, are primarily a function of the activities of the police and courts. These elements of criminal justice systems may be less sensitive to oscillations in social disruption, political disaffection or civic disengagement than policy-makers or legislators. A central hypothesis of this study was that legislators have used criminal justice systems to reduce political disaffection and to increase their legitimacy.

Imprisonment rates, by contrast, are a function of both the time served of inmates as well as the annual number of admissions. While prison officials can't control the number of inmates they admit, they historically had the ability to reduce overcrowding through emergency early release or recommendation of parole (Berk et al., 1982; Blumstein

and Cohen, 1973; Petersilia, 2001). Until the 1970s, for instance, indeterminate prison sentences were the norm, and prison officials had considerable flexibility to release inmates early. This reflexivity of the system (see Caplow and Simon, 1999) has decreased over time, and mandatory minimum sentences, rigid sentencing guidelines, the abandonment of both indeterminate sentences and parole, as well as the increasing political scrutiny of criminal justice decision-making have decreased the flexibility of prisons to respond to overcrowding. All of these factors have increased the time served, which in turn increases the imprisonment rate.

Although there are important differences across the dependent variables considered, in general, violent crime and economic stress only weakly moderate the effects of disaffection, isolation, and disruption. These effects provide further insight into the meaning of the complex relationships between punishment and social or political structure. Interestingly, however, this pattern is not observed for admissions rates or time served. A slightly different pattern emerges for the other two focus variables. Civic disengagement *reduces* imprisonment rates and admissions rates more substantially when economic stress is higher (violent crime also amplifies the negative effect of isolation, but only for admissions rates), and it increases time served to a greater extent in conditions of higher violence rates and economic stress. This points to a complex pattern by which higher levels of violence and instability reduce the extent to which civic disengagement is met by increases in imprisonment and admissions, but increase the extent to which it invokes responses in the form of longer prison sentences served.

Finally, the patterns for disaffection are inconsistent both within and across models for imprisonment, admissions and time served and across the two moderator variables considered. The results for imprisonment are consistent with those observed for isolation and disruption—disaffection reduces imprisonment rates more so when economic stress exert opposite moderating effects. The effects of disaffection on admissions rates and time served are small when violent crime rates are higher, while these effects are stronger in the face of higher economic stress. The following paragraphs outline some possible reasons for these findings.

SUMMARY AND CONCLUSIONS

This series of analyses examined both the main effects of the three variables of interest on the different dependent variables. Moreover, a second series of analyses added six interaction terms to the baseline models. Results from analyses that examined the main effects of social disruption, civic disengagement, and political disaffection on imprisonment rates, prison admissions rates, and time served are summarized in Table 6-5.

Consistent with the expected hypotheses, political disaffection had a significant positive association with all three of the dependent variables. Net of several control variables, increasing self-reported political disaffection contributed to increases in prison admissions, time served, and imprisonment rates. This supports claims made by several researchers about the relationships between political behavior and the use of imprisonment (Beckett, 1997; Beckett and Sasson, 2000; Chambliss, 1999; Garland, 1990, 1991, 1996, 2001; LaFree, 1998; Savelsberg, 1994; Tonry 1995, 1999a).

Net of the effects of the other variables, the civic disengagement variable had a significant positive relationship with both imprisonment rates and time served, but a non-significant association between civic disengagement and annual admissions rates. As a result, this finding provides partial support for the hypothesis that increasing civic disengagement leads to the increased use of formal social control. This outcome is consistent with the theoretical propositions that formal social control varies inversely with informal social control (Black, 1976, 1989, 1993; Tonnies, 1995; 2000).

Contrary to the hypotheses and the results of previous studies (i.e., Jacobs and Helms, 1999—who found a significant positive association between collective outbursts and correctional spending), the present research found that social disruption had a significant negative association with both imprisonment rates as well as the time served, and a non-significant negative association with admissions rates. This finding suggests that increases in the amount of disruption, change, and turmoil within the United States actually are related to decreases in the use of formal social control. One plausible interpretation of this finding is that increasing formal control, including imprisonment, mitigated the efforts of the protest movement. Consider, for instance, the use of lethal violence on unarmed student protestors at Kent State University, or

President Reagan's termination of several thousand striking air traffic controllers. These types of formal social control responses throughout the mid 1970s to early 1980s may have had the desired effect on "insubordinate" populations, by reducing protests, labor disputes, and other types of collective social outbursts.

The theoretically inconsistent finding of an inverse relationship between social disruption and imprisonment may also reflect poor specification of the social disruption variable used in this study. The social disruption index was a combination of self-reported data as well as several indicators of protest. Further study of social disruption, for instance, might include additional self-report indicators of social transformation, upheaval and change. These indicators might include measures of family stress, the impact of technology, the transformation from an industrial to a service economy and the social stress that these transitions have caused (i.e., increasing anomic pressure). In addition to these indicators, self-reported perceptions about social stress, uncertainty, and the threat that these social changes pose may be more important than the actual number of riots, protests, or strikes.

The political disaffection variable had a significant positive association with all three dependent variables. The inconsistent effects of civic disengagement and social disruption across the dependent variables, by contrast, may be due to the fact that these outcome measures reflect two distinct types of decision-making. Imprisonment rates, for example, are a function of both the number of prison admissions and the amount of time these offenders serve (Blumstein and Beck, 1999; Stern, 1998). Prison admissions are a function of the amount of reported crime (Gottfredson and Gottfredson, 1987; Rennison and Rand, 2003), the activities of the police (Liska and Chamlin, 1984; Miller, 1996), and the behavior of courtroom work groups (Walker, 2001), who ultimately act upon legislative priorities (Beckett, 1997; Beckett and Sasson, 2001; Chamblis, 1999, Tonry, 1999a). Any of these elements in the criminal justice system can influence the number of prison admissions.

Time served, by contrast, was historically a function of the sentences imposed by judges. Both correctional officials and members of parole boards, however, could influence the length of sentence through early releases (Caplow and Simon, 1999; Petersilia, 1998, 1999, 2001). Over the past two decades, however, both sentence length and time served have increasingly become the outcomes of legislative decisions. These legislators may be more responsive to political

disaffection as well as changes in political and social behavior as civic disengagement increases. In addition, legislators may have advocated for increasing punitive sanctions for offenders as a mechanism to enhance their political appeal (Chambliss, 1999; Tonry, 1999b), or in response to correctional stakeholders (Dyer, 2000; Warren, 2000).

A review of Table 6-5 provides tentative empirical support for the hypothesis that there are two processes responsible for changes in the use of imprisonment. The violent crime factor, for instance, was positively associated with both imprisonment rates and prison admission rates, but negatively associated with time served. Although crime variables are typically included in every empirical study of imprisonment trends, other studies have produced similar findings (D'Alessio and Stolzenberg, 1995; Lessan, 1991). One possible explanation for finding a negative association between violent crime and time served are the increasingly punitive sentences for drug offenders, and mandatory minimum sentences for other non-violent offenders (Blumstein and Beck, 1999).

The inability to find a consistent association between crime variables and imprisonment trends illustrates one limitation of using crime as a control variable in the study of imprisonment trends. The ambiguous findings are present regardless of how crime variables in previous studies were operationalized. Scholars who included property offenses in their crime variables (i.e., Jacobs and Helms, 1996) found a non-significant relationship with prison admissions. Property offenses, however, do not always result in imprisonment, nor do they drive the type of public fear that contributes to imprisonment “booms”. Future longitudinal studies of imprisonment trends might control for drug offenses—which are significantly associated with increases in imprisonment (Blumstein and Beck, 1999)—but reliable and valid drug offense data are not available for the 1950s and 1960s.

One possible alternative to using crime variables in the study of imprisonment trends is to use an indicator of self-reported fear of crime. It has been argued that fear of crime has been created by politicians and the media (Beckett, 1997; Beckett and Sasson, 2000; Roberts and Stalens, 1997; Tonry, 1999a). Fear of crime is an outcome of both the media’s preoccupation with crime and the television viewing habits of respondents, irrespective of the actual crime rates. Increasing fear of crime is also associated with the claimsmaking activities of politicians who want to be perceived as “tough on crime”:

One reason why public fear of crime (and victimization) increased during an era of decreasing crime rates (Beckett, 1997; Tonry, 1999a). Controlling for public opinion, however, reflects an indirect causal process that would require different methodological techniques to investigate.

A supplementary series of analyses were conducted where the violent crime variable was replaced with an indicator of public concern about crime—respondents who reported that either crime or drugs were the most important problem facing the nation in annual Gallup polls. This variable was statistically significant in all three models—negatively associated with both prison admissions and imprisonment rates, but positively associated with time served. This is another indicator that the legislative branch might be more sensitive or responsive to public fear of crime than are other components of criminal justice systems.

Consistent with conflict theories, the direct outlays for assistance (as a percentage of the GDP) had a strong negative association with prison admissions and imprisonment rates. Yet, this control variable also had a strong positive association with the time served. This ambiguous finding also supports the proposition outlined earlier that different decision-makers are responsible for determining the severity of sanction. Policy makers, for instance, may advocate for enhancing the use of sentence lengths when welfare rates are increasing.

While Marvell and Moody (1997) found a positive association between the size of the young male population and increases in prison admissions, this study produced ambiguous empirical support for this finding. From 1952 to 2000 the percentage of males aged 15 to 29 years was negatively associated with imprisonment and annual prison admission rates, but positively associated with the time served. While this finding provides further evidence that there is more than one element (or dimension) of punishment, there may be some alternative methodological reasons for these results. The ages included in this study or the era studied may, for example, contribute to ambiguous findings. Studies that examined the relationships between population age structure and imprisonment trends that ended their analysis at the 'tail end' of the baby boom typically report different findings than the present study (i.e., Carroll and Doubet, 1983), which includes data from the 1990s, an era characterized by a decreasing young male population during a period of increasing imprisonment.

In order to test whether the temporal era selected influence the results in studies of imprisonment, a supplementary series of analyses was estimated that examined the years 1952 to 1994. One striking finding was that political disaffection and civic disengagement were positively associated with all of the dependent variables while social disruption was negatively associated with all of the dependent variables. This finding demonstrates the sensitivity of time series analyses to the era studied.

Although many empirical studies have examined the UI relationship (Chiricos and DeLone, 1992) the findings tend to be ambiguous—and are often a consequence of the years studied (Michalowski and Carlson, 1999, 2000) as well as the dependent variable selected (Chiricos and DeLone, 1992). This study contributes to these ambiguous findings for the UI relationship—Table 5-8, for example, reported a significant positive relationship between the unemployment factor and annual prison admissions, but a significant negative association between unemployment and time served. Recent scholarly argument has advocated for study of measures of unemployment severity (Chamlin and Cochran, 2000), but average rates of unemployment may be a better indicator.⁵

Previous studies of imprisonment trends have found a significant association between economic variables and imprisonment (Jacobs and Helms, 1996; Lessan, 1991). Analyses of the untransformed bivariate correlations (see Table 5-7) suggested that the economic stress factor would have a strong positive association with all three of the dependent variables. Once this variable was first-differenced, lagged, and included in the multivariate models, however, it was only positively associated with the annual prison admission rate. Inconsistent with theoretical expectations, there was a negative association between economic stress and the annual imprisonment rate, and this variable did not have a significant association with time served.

Garland (1990) observed that the use of punishment is an inherently political process. The finding that political disaffection is positively associated with all three dependent variables affirms this hypothesis. In fact, this was the only variable in the study that had a consistent positive association with all three dependent variables. An additional measure of social behavior, the civic disengagement variable, was also associated with both imprisonment rates and time served and provides empirical support for this hypothesis. Lastly, the social

disruption variable had a significant negative association with both imprisonment rates and time served, which was an unexpected finding.

A second series of analyses included six interaction terms in the multivariate models. It was hypothesized that the effects of political disaffection, civic disengagement, and social disruption on adult imprisonment trends would be stronger, or at least evident, during periods of increasing violent crime and economic stress. Consistent with the hypotheses was the finding that violent crime and economic stress condition the effects of political disaffection and civic disengagement such that these variables exert a stronger *positive* impact on the time served of prison inmates when economic stress or violent crime are increasing. Contrary to the hypotheses, however, the analyses demonstrated that political disaffection, civic disengagement, and social disruption exert a stronger *negative* impact upon imprisonment rates and prison admissions when rates of violent crime or economic stress are increasing.

While the findings reported above are generally contrary to the hypotheses they may also be outcomes of the levels of analysis considered, the range of public policy options available to legislators, as well as the discretion of decision-makers involved in the regulation of formal social control. Examination of the main effects of civic disengagement, political disaffection, and social disruption outlined earlier suggested that two different groups of decision-makers were responsive to different economic, cultural, political and social factors—stakeholders working within criminal justice systems, as well as legislators and policy makers whose activities typically influence the activities of criminal justice systems from outside.

Analysis of the conditioning effects of violent crime and economic stress support the hypothesis that different factors influence these two sets of decision makers. Legislators, who are overwhelmingly responsible for increasing the time served of prison inmates over the past two decades, may be more responsive to the conditioning effects of economic stress and violent crime than their counterparts who work within criminal justice systems. This hypothesis is consistent with Savelsberg's (1994) observation that policy-makers within the United States are vulnerable to oscillations of public opinion about crime (see Jacobs and Kleban, 2003). These political nature of criminal justice systems within the United States also provides these policy-makers with significant personal gains by "being tough on crime."

To empirically evaluate whether the time served and imprisonment represent a similar dimension of punishment a number of supplementary analyses were completed. A GLS regression model was estimated that included the nine control variables used in the previous series of analyses as well as the time served variable. Net of the control variables, there was a non-significant relationship between the time served and imprisonment rates. This finding reinforces the hypothesis that the time served represents a different dimension of formal social control than imprisonment rates or prison admissions.

There are two alternative explanations for the finding that the effects of political disaffection, social disruption or civic disengagement are weaker when violent crime or economic stress are increasing. First, violent crime or economic stress may have a more powerful conditioning effect at the local, rather than state or federal levels of analyses. As a result, increasing economic stress or violent crime may exert a stronger effect on political disaffection, social disruption or civic disengagement on increases in jail populations, rather than prison populations. This hypothesis is consistent with Hagan's (1994) observation that the police, courts and corrections at the city level of analysis respond quickly when threatened with increasing social disruption.

It is also plausible that national prison admissions and imprisonment rates average out the individual state-level effects. Violent crime or economic stress might condition social disruption, political disaffection, and civic disengagement in some states, but these effects are lost when looking at national-level data. The conditioning effects of violence and economic stress might be very pronounced in smaller states—perhaps those that are characterized with higher rates of poverty or inequality—but these differences are masked by the effects of large states. High-imprisonment states such as Florida, Texas and California, for instance, represent approximately one-third of all state imprisonment rates. According to the BJS, at midyear 2000, California imprisoned almost as many offenders as the nine northeastern states combined (Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont).

In addition, there are a number of alternative social policy responses to the problems of increasing violent crime or economic stress—as well as civic disengagement, social disruption or political disaffection. A number of scholars have argued that less formal social

control mechanisms have been used to respond to surplus labor populations, the problem of poverty, or disaffected populations (Piven and Cloward, 1993; Spitzer, 1975). Many of these social control mechanisms are outside the criminal justice system and include the delivery of different types of social services. European nations, for instance, have generally relied upon these types of social control to confront social problems (Jacobs and Kleban, 2003; Savelsberg, 1994). Instead of placing persons with substance abuse problems in prison, for example, some nations rely upon alcohol or drug treatment (see Walmsley, 2003).

The ambiguous findings revealed in this study may also be a consequence of the continuum of social control within the United States. As a result, it is possible that economic stress or violent crime may condition the effects of political disaffection, social disruption, and civic disengagement such that these variables exert a stronger positive impact upon other mechanisms of social control, which include welfare programs. In order to empirically test this hypothesis, a parallel series of GLS models were estimated using the direct outlays for assistance (as a percentage of GDP) as a dependent variable.

Using the same control variables (less the direct outlays for assistance) and the six interaction terms, a number of equations were estimated to determine whether the effects of political disaffection, civic disengagement and social disruption on direct outlays for assistance would be stronger during periods of increasing violent crime or economic stress. Of the six two-way interactions considered, all but one was statistically significant. The lone insignificant variable was the product term of economic stress and social disruption ($p = .06$), which approximates statistical significance. Only one of these variables, the product term of violent crime and political disaffection, had a negative association with increases in direct outlays for assistance. This outcome also suggests that net of the eight control variables, the variables of interest exert a stronger effect on direct expenditures for welfare when economic stress or violent crime are increasing. This finding suggests that the interaction terms used in this study may assist future researchers to identify factors associated with other mechanisms of social control—at least at the national level of analysis.

A third possible reason for the lack of empirical support for the hypotheses—in some of the models—is the possibility that the interaction terms that included the social disruption variable are not specified correctly. Of the six models that included the social disruption

variable, for instance, only the product term of economic stress and social disruption was significantly associated with one dependent variable—imprisonment rates. This pattern is similar to the analyses of the main effects of the imprisonment rate variable, and this finding supports the argument reported earlier that there may be more effective ways to operationalize the social disruption variable. One possibility is that public opinion data would more accurately reflect the amount of perceived social disruption—which may be more meaningful (especially to legislators) than the actual number of strikes, protests or demonstrations.

Another consideration in the specification of the interaction terms used in this research is the fact that the actual amount of violent crime or economic stress may only account for a small percentage of the *perceived* threat or stress. Self-reported fear of crime, for instance, may have a far greater conditioning effect on political disaffection, social disruption or civic disengagement than the actual rate of reported offenses, or arrests. Several scholars have recently identified that there is a non-significant association between the number of offenses and fear of crime (Beckett, 1997; Beckett and Sasson, 2000) and that fear of crime is a result of media and political activities (Chambliss, 1999; Roberts and Stalens, 1997; Tonry, 1999b).

Lastly, it is possible that the economic stress variable is not a valid indicator of economic stress. This study used an index that is a measure of the actual amount of economic stress. Poll data that captures public perceptions about economic stress may be a more meaningful measure of economic stress. During times of increasing economic volatility, the perceived economic stress (e.g., fear of unemployment, financial problems or bankruptcy) may greatly exceed the actual economic stress—especially for social groups that are most vulnerable to changes in economic conditions. As a result, the perceived stress, rather than the actual economic stress, may have a greater conditioning effect on political disaffection, civic disengagement or social disruption.

To determine whether the findings in this series of analyses were a consequence of the specification of the lags—a potential problem in longitudinal analyses—additional models were estimated that used lags of one to five years. While there were differences in the model fit, the findings of these supplementary analyses produced very similar results. This finding suggests that the theoretically inconsistent findings are not due to the lags of the independent variables.

In conclusion, therefore, the findings in this chapter were generally inconsistent with expectations—at least for the admissions and imprisonment rates. The multiplicative terms generally had a significant positive association with the time served variable. These findings do, however, confirm the analyses reported earlier that identified the influences of two different sets of decision-makers on changes in imprisonment trends. The activities of the police, courts and corrections may exert different effects than the activities of policy makers or legislators. Stakeholders within criminal justice systems, for instance, may be more insulated from the influences of public opinion, social behavior and political forces. On the other hand, policy makers are likely to be more sensitive to changes in political disaffection, civic disengagement or social disruption.

Lastly, a series of supplemental analyses provides tentative support for the hypothesis that the interaction terms used in this study may be more successful in identifying the relationships between political disaffection, civic disengagement, social disruption, and changes in other less punitive forms of formal social control, such as direct outlays for assistance. Researchers might use such variables to examine other types of formal social control, such as juvenile imprisonment, jail populations or capital punishment.

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The Future of Mass Imprisonment

Do extra-legal factors influence the use of imprisonment? This study addressed three empirical questions about the ways in which underlying macro social, political, economic, and cultural forces influenced the use of imprisonment within the United States from 1952 to 2000. Controlling for a number of variables that are theoretically and empirically associated with changes in imprisonment trends, the first hypothesis examined three main effects: Is there a positive relationship between social disruption (i.e., represented by the number of urban collective actions [riots], changes in public perceptions of threat, labor unrest) and increased use of imprisonment? Further, is there a positive relationship between changes in political disaffection (i.e., self-reported trust in government, political efficacy, government responsiveness, pessimism about the future, anger at government) and fluctuations in the use of imprisonment? Lastly, is there a positive association between civic disengagement (i.e., reductions in civic involvement) and the increased use of imprisonment?

In addition to examining the main effects of political disaffection, civic disengagement, and social disruption, this research also addressed two questions that examined the conditioning effects of violent crime and economic stress on the three variables of interest. More specifically, are the effects of social disruption, civic disengagement or political disaffection on imprisonment trends amplified during periods of increasing economic stress? Further, are the effects of social disruption, civic disengagement or political disaffection on imprisonment trends stronger during periods of increasing violent crime?

This study of imprisonment trends makes several methodological, empirical, and theoretical contributions. First, this research introduced

more sophisticated independent variables to the study of imprisonment trends than have traditionally been used. In order to develop these variables, exploratory factor analyses and an algorithm were used to combine similar economic, social and cultural data into single indices. It was hypothesized that increasing the sophistication of the variables used in this study of imprisonment trends would reduce the ambiguous findings so common in similar research (see Chiricos and DeLone, 1992). While the strategy of using factor analysis did not produce a model that explained the use of imprisonment across all three dependent variables, several of the indicators that were developed may prove fruitful in future research of formal social control.

Another methodological contribution was the use of interaction terms in the multivariate models. It was hypothesized that some of the variables of interest would have a stronger effect, or at least be evident, on imprisonment trends during periods of high or increasing economic stress or violent crime. While interaction terms have increased our understanding in previous imprisonment research (i.e., Sutton, 1987) the results in this research were somewhat ambiguous. A number of strategies were identified, such as using self-report measures of economic stress or fear of crime—instead of actual unemployment or crime statistics—that may prove useful in future studies that include interaction effects. It is possible that the perceived fear of crime is more important than the actual rate of crime. Understanding the relationships between punishment and public opinion is important when one considers how imprisonment is increasing during an era of decreasing crime.

A number of empirical contributions are made in this research. This study extends the analyses of imprisonment trends into the new millennium. Recent studies of imprisonment trends, for example, typically ended their analyses in the early 1990s (Jacobs and Helms, 1999). In order to examine the variables of interest, this study estimated numerous GLS regression models and controlled for a number of national-level economic, demographic and crime variables that had been identified in the theoretical and empirical literature as being associated with changes in imprisonment trends. This study also responded to gaps in the empirical literature by examining three dependent variables: annual federal and state imprisonment rates, annual federal and state prison admission rates, and time served for federal and state prison inmates.

This research also contributed to the theoretical literature by providing empirical support for scholarly argument that acknowledges the complexity of punishment (Garland, 1990, 2001)—and that rejects the proposition that there is one underlying dimension that explains changes in the use of punishment. Another major finding is the strong empirical support for integrated theories of punishment that acknowledge the influences of social, cultural, and political factors on changes in imprisonment trends. More specifically this research provides strong and consistent empirical support for propositions that have identified the relationships between political behavior and the use of imprisonment (Beckett, 1997; Beckett and Sasson, 2000; Chambliss, 1999; Garland, 1990, 1991, 1996, 2000, 2001; Jacobs and Helms, 1996, 1999; Melossi, 1993; Savelsberg, 1994; Tonry, 1995, 1999a). This study also provides empirical support for hypotheses that have identified the relationships between changes in civic disengagement and the use of formal social control (Black, 1976, 1989; Tonnies, 1995, 2001).

Lastly, several of the control variables produced results that are theoretically consistent with a number of propositions that have identified the relationships between extra-legal factors and changes in the use of imprisonment (Durkheim, 1900; Liska, 1992; Rusche and Kirchheimer, 1939). These theoretical contributions are summarized in the following pages.

SUMMARY OF FINDINGS

Controlling for economic, demographic, and violent crime variables, do political, social, and cultural factors influence the use of imprisonment? This study found that the main effects of the three variables of interest, the six control variables, as well as the six interaction effects produced generally consistent results. The factors that influenced annual prison admissions and imprisonment rates, for example, tended to reveal a distinctly different process than the factors that influenced the time served by state and federal prison inmates. These results reflect how different decision makers influence outcomes within criminal justice systems. Legislators have influenced the amount of time served by federal and state inmates, and this study demonstrated how these policy makers respond to different political, economic, and cultural forces than their counterparts within criminal justice systems. As a result, this finding provides empirical support for a number of propositions that

have identified the relationships between legislators and the use of punishment (Melossi, 1993; Savelsberg, 1994; Tonry, 1999a).

Decisions about the use of imprisonment are inherently political yet the relationships between imprisonment and political behavior have received only cursory review in the empirical literature (Jacobs and Helms, 1996, 1999; Nicholson-Crotty and Meier, 2001, 2003; Taggart and Winn, 1993). Scholars have recently argued that politicians have used criminal justice systems to bolster their popularity (Beckett, 1997; Beckett and Sasson, 2000; Chamblis, 1999; Mauer, 1999; Tonry, 1995, 1999a) or legitimacy (Garland, 2001; Kiliyas, 1986; LaFree, 1998). The fact that political disaffection—an index of self-reported political antipathy and mistrust—had a significant positive relationship with changes in all three measures of punishment provides empirical support for these propositions.

Civic disengagement, an index of social involvement, also had a theoretically consistent association with imprisonment trends. Americans are less connected to voluntary, school or religious organizations, service clubs or trade unions than they were five decades ago. This withdrawal from community participation may influence the use of imprisonment in two ways. First, reduced community involvement may contribute to higher rates of crime (Rosenfeld et al., 2001; Sampson et al., 1997), which in turn may contribute to the increased use of formal social control, including imprisonment. Second, decreased civic engagement may also contribute to increases in formal social control—even when crime rates remain stable or decrease (Black, 1976, 1989; Tonnies, 1995, 2000). Within this study, civic disengagement was positively associated with imprisonment rates and time served, but had a non-significant association with prison admissions.

The third variable of interest in this study was social disruption, an index that represents increasing social turmoil, protest, and conflict. It was hypothesized that social disruption threatened existing social arrangements, and that governments increased the amount of formal social control in response to “insubordinate” populations (Levy, 1998; Parenti, 2000). Social disruption was significantly related with both the time served and imprisonment rates, but in an unexpected direction. The social disruption variable actually decreased while time served and imprisonment rates increased—and this contrary finding is both unexpected and counterintuitive. Further studies of the relationships

between social disruption and public policy—such as the use of imprisonment—might prove more fruitful if they are based entirely upon self-reported indicators rather than data about the actual numbers of labor problems or urban protests. As mentioned above, perceptions of social problems (such as urban discontent, violent crime or economic stress) may have a greater influence on public policy than the actual scope of these problems.

Two hypotheses examined the conditioning effects of violent crime and economic stress on political disaffection, civic disengagement, and social disruption. Contrary to theoretical expectations, including the statistical interactions revealed that political disaffection, civic disengagement, and social disruption exert a weaker effect upon imprisonment rates or prison rates when rates of violent crime or economic stress are increasing. Political disaffection and civic disengagement, by contrast, exerted a stronger effect on the time served when economic stress or violent crime increased. While the findings about prison admissions or imprisonment rates are contrary to expectations, this research demonstrates that economic stress and violent crime may condition the effects of political disaffection, civic disengagement, and social disruption on other mechanisms of formal social control.

A supplementary series of analyses found that five of the interaction terms introduced in this study had a significant positive association with direct outlays for assistance as a percentage of the GDP. There is a continuum of formal social control that ranges from taxation, fines, the provision of assistance, in-patient mental health services, alcohol and drug treatment, various types of community and institutional imprisonment and ends with the use of state-sanctioned violence, such as the death penalty. Interaction effects may be a more effective method of identifying the relationships between political disaffection, civic disengagement, social disruption and the “soft” end of social control. American legislators may respond, for example, to changes in political disaffection, civic disengagement, and social disruption by increasing social spending—at least in the short term (see Piven and Cloward, 1993).

The control variables included in the GLS models generally support the proposition that two distinct decision-making processes influence changes in the use of imprisonment. Inconsistent with expectations, no control variable was positively associated with all three dependent variables. One of the most consistent findings, for

instance, is the positive association between imprisonment rates, admissions rates and the violent crime factor. The fact that violent crime was not associated with increases in time served may be a consequence of longer prison sentences for drug offenders (Blumstein and Beck, 1999) and mandatory minimum sentences for property and drug offenders (Irwin and Austin, 2001; von Hirsch, 1999).

Consistent with recent empirical studies of imprisonment trends (Beckett and Western, 2001; Greenberg and West, 2001) this study found an inverse relationship between direct outlays for assistance as a percentage of GDP and both imprisonment rates and prison admission rates. There was, however, a positive association between the direct outlays for assistance and time served. These inconsistent results also reflect the different policy makers involved in these decisions. Politicians may be more responsive to changes in the use of welfare expenditures (or other social spending) than their counterparts within criminal justice systems (see Garland, 2001). It is possible that legislators may advocate for more severe sanctions for offenders, for example, when welfare spending increases.

This research also provides tentative empirical support for the minority threat hypothesis (Beckett and Western, 2001; Greenberg and West, 2001; Jacobs and Carmichael, 2001; Kane, 2003; Ruddell and Urbina, 2004; Yates, 1997). The percentage of the population that is Black was positively associated with both prison admissions and imprisonment rates from 1952 to 2000. Contrary to the minority threat hypothesis, however, the percentage of the population that is Black had a significant negative relationship with time served. This finding suggests that sentencing processes, typically influenced by legislators and the courts, are less likely to be influenced by changes in the minority population than imprisonment rates or prison admissions. Again, these somewhat inconsistent results within the same study reinforce the complexity surrounding the use of punishment.

Contrary to the hypothesis that increases in the size of the young male population are associated with the increased use of imprisonment (i.e., Marvell and Moody, 1997) this variable was negatively associated with prison admissions and imprisonment rates, and positively associated with time served. This ambiguous finding may be a consequence of the years included in this study. Previous studies that found a positive association between the population of young males and imprisonment examined eras that reflected the demographic

influence of the “baby boomers” (Carroll and Doubet, 1983). More recent studies have also found a negative association between male populations and admissions (see Jacobs and Helms, 1996). Including the 1990s—an era where reductions of the young male populations occurred at the same time as the increasing use of imprisonment—may have influenced this outcome. This study did find, however, a positive association between the size of the young male population and the time served. Legislators may, for instance, perceive that these young male populations as threatening to the status quo, and advocate for more severe sentences for the illegal activities of young persons.

Previous empirical examinations of the UI relationship have produced ambiguous findings and it has been suggested that the outcomes of these studies are a function of the years studied (Michalowski and Carlson, 1999, 2000) as well as the dependent variable selected (Chiricos and DeLone, 1992). This study provided limited empirical support for the UI relationship as there was a positive association between the unemployment factor and annual prison admissions, but there was also a significant negative association between the unemployment factor and the time served. A supplementary series of analyses were estimated using the average unemployment rate (not seasonally adjusted) instead of the unemployment severity factor. When this alternative variable was included in the models, it was positively associated with all three dependent variables from 1952 to 1996 (but not 1952 to 2000). Accordingly, it appears as though these findings are sensitive to the unemployment variable used in the study, and era examined.

STRENGTHS AND LIMITATIONS OF THE STUDY

Three decades of empirical studies have generally resulted in ambiguous findings about the relationships between extra-legal factors and the use of imprisonment. This study extends the theoretical and empirical literature in a number of ways: by introducing more sophisticated indicators of economic conditions, cultural values, beliefs and behavior, using multiplicative terms, and examining more than one dependent variable. Despite the fact that more sophisticated methods of measuring social, political and economic trends were used, this study did not reveal a single regression model that consistently explained changes in the use of imprisonment in all three dependent variables.

One potential flaw in previous imprisonment research designs is that the independent variables used in these studies tend to be rather simplistic. Previous studies of imprisonment trends that included social, cultural or political factors have generally used relatively unsophisticated variables (i.e., whether the President was a Democrat or Republican in a given year multiplied by the party's political governance). As a result, several scholars argued that more sophisticated indicators of political or cultural values be used to study imprisonment trends (D'Alessio and Stolzenberg, 1995; Inverarity, 1992; Jacobs and Helms, 1996; Taggart and Winn, 1993). In order to develop these indicators, exploratory factor analyses and an algorithm were used to combine data from different sources into single indices.

Exploratory factor analysis was used to create two variables from a number of indicators of cultural values, beliefs and behavior that were labeled civic disengagement and social disruption. The results of this study revealed that the civic disengagement variable is positively associated with imprisonment trends in two of the three models estimated. The utility of the civic disengagement variable suggests that an index of this type might be used in other national studies of public policies and civic behavior, including crime. This research did not, however, produce theoretically consistent results when including the social disruption variable in the GLS models.

In addition, an algorithm was used to combine 19 self-report items from six different series of poll data to create an index of political disaffection from 1952 to 2000. In order to establish the validity of this index, a number of supplementary analyses were estimated using data from alternative sources. These analyses suggest that net of other factors, increasing political disaffection is associated with decreases in the audience size of televised Presidential addresses as well as reductions in self-reported approval for the President. This finding has two implications: first, it suggests that the index labeled political disaffection developed in this research is a valid indicator of mistrust of government. Second, this variable may have some utility beyond the discipline of criminology and criminal justice.

A further contribution of this study is the fact that three dependent variables were examined.¹ Few studies of imprisonment trends have included more than one dependent variable, and the study of imprisonment rates, time served, and prison admission rates was important for both theoretical and empirical reasons. It was speculated

that this research would successfully identify an underlying dimension of imprisonment common to all three dependent variables. In retrospect, however, the goal of finding a single model that could consistently explain imprisonment trends across different dependent variables was optimistic considering the ambiguous results produced in the past three decades of imprisonment research. The results presented in Chapter 6 strongly suggest that the processes that influence time served are different than the processes that influence the number of prison admissions or imprisonment rates. While this study failed to produce a model that could explain changes in all three dependent variables, political disaffection was positively associated with all of the dependent variables.²

This study is also limited in a number of ways, and these limitations must be considered when evaluating the results presented earlier. The fact that the social disruption variable produced results that were contrary to the hypotheses may reflect some form of misspecification of that variable. In order to construct the social disruption variable, both self-reported poll data, as well as two measures of social disruption (the annual number of urban ethnic demonstrations and protests and the annual number of strikes in large firms) were used. Perhaps the results of this study would be different if this index were comprised entirely of self-reported data—much like the political disaffection index, although it is possible that an index based entirely on self-report data might produce similar results. It is also plausible that increasing social disruption may actually contribute to increases in jail admissions or local imprisonment rates, and this possibility is worthy of further examination.

Alternatively, it is possible that increases in the use of formal social control actually reduced the numbers of ethnic urban riots and labor protests in firms in excess of 1,000 employees—two of the indicators that were used in the construction of the social disruption variable. One possible reason for ambiguous findings in empirical studies of imprisonment trends is the use of actual measures of economic stress or reported crime. Future studies of imprisonment trends that include measures of self-reported fear of physical or economic security may prove fruitful. Fear of crime, for instance, has typically increased while crime rates decreased (Rennison and Rand, 2003). In addition, the actual bankruptcy or inflation rate might capture only a small percentage of the fear of economic insecurity. It is therefore likely that self-reported fears of economic distress or

victimization might have a more consistent association with changes in the use of imprisonment. Using these self-report data to construct the multiplicative terms may also produce different results when these variables are included in future studies of imprisonment trends.

Lastly, the inability to produce consistent results across the three dependent variables may be a consequence of examining national trends. Political disaffection, civic disengagement, and social disruption may have a more powerful effect on changes in state-level imprisonment practices. As discussed previously, national prison statistics might obscure individual state-level effects as high-imprisonment states such as California, Florida or Texas for example, might mask the effects in states that imprison fewer offenders.

It is also possible that local or county level imprisonment practices might also be influenced by the three variables of interest. A number of scholars have reported that extra-legal factors have different effects on the use of imprisonment at different levels of analysis (Arvanties and Asher, 1998; Chiricos and DeLone, 1992; McCarthy, 1990). It has been proposed, for instance, that social disruption has a powerful influence upon changes in jail populations (see Hagan, 1994). The influence of social disruption, political disaffection, and civic disengagement were not, however, estimated on jail populations as reliable and valid data from the 1950s and 1960s were unavailable.

IMPLICATIONS FOR FUTURE RESEARCH

The conclusions that may be drawn from this study are tempered by the fact that many of the variables used in this research have not been used in previous empirical studies of imprisonment trends, and therefore, their validity and reliability are not well-known. Of the 15 independent variables used in this study, for instance, 12 were created using exploratory factor analyses or algorithms that had not been used extensively in past research on imprisonment. Nevertheless, the findings for the variables used as statistical controls are generally similar to previous empirical work. As a result, this study may have created more empirical and theoretical questions than it has answered. Yet, the hope is that future investigators will build on this research to better understand the social, political, and cultural sources of punishment. In the end, understanding why we carry out punitive crime

control practices might help us develop more just, fair, and equitable criminal justice systems.

One major limitation in this research is that it did not provide the single model that would consistently explain increases in the use of imprisonment with all three dependent variables. Instead, the findings of this research suggest several conclusions about the relationships between political disaffection, civic disengagement, social disruption and imprisonment trends. First, increases in the amount of political disaffection played an important role in increases in prison admissions, time served, and imprisonment rates from 1952 to 2000. Given these results, it is conceivable that governments responded to fluctuations in political disaffection by increasing the use of formal social control in order to demonstrate some form of domestic policy success. This finding is theoretically consistent with a number of scholars who have argued that federal and state politicians have used criminal justice systems to bolster their political capital or legitimacy (Beckett, 1997; Beckett and Sasson, 2000; Chamblis, 1999; Dyer, 2000; LaFree, 1998; Windlesham, 1998; Zimring et al., 2001).

Second, increasing civic disengagement is associated with increased imprisonment rates as well as time served from 1952 to 2000. Supplementary analyses reported in Chapter 6 indicate that if this study were conducted from 1952 to 1994, this variable would have a significant positive relationship with all of the dependent variables. As a result, this research provides tentative empirical support for hypotheses about the relationships between civic engagement and political behavior (Putnam, 2000). In addition, this finding also supports the theoretical work that proposes that reductions in civic engagement contribute to increased use of formal social control (Black 1976, 1989; Tonnies, 1995, 2001). Future studies of imprisonment trends might more fully examine the causal process implied by this relationship.

Examination of the conditioning effects of violent crime and economic stress on political disaffection, social disruption, and civic disengagement produced inconclusive findings. Contrary to expectations, this study found that violent crime and economic stress condition political disaffection, social disruption, and civic disengagement such that the effects of these variables exert a weaker impact on admissions or imprisonment rates when violent crime or economic stress is increasing. These contrary results are tempered somewhat by the finding that violent crime and economic stress

condition political disaffection and civic disengagement on time served in the expected direction—with stronger effects observed when violent crime or economic stress increased. More importantly, perhaps, is the unexpected finding that the conditioning effects of economic stress and violent crime might help us understand the use of other forms of formal social control, such as direct outlays for assistance.

The findings of this study of imprisonment trends have a number of implications for future research and theoretical development. For instance, this study confirmed theoretical arguments made by a number of scholars who identified the relationships between political behavior and imprisonment (Beckett, 1997, Beckett and Sasson, 2000; Chambliss, 1999; Jacobs and Helms, 1996; LaFree, 1998; Savelsberg, 1994; Tonry, 1999b). The index of civic disengagement was also strongly associated with two of the dependent variables. It is therefore hoped that researchers use the political disaffection and civic disengagement variables in future empirical tests of public policy.

Garland (1990, 1991) has argued that the use of punishment is an inherently complex social phenomenon. This study confirms that there are a number of social forces that contribute to the use of imprisonment irrespective of crime rates. There are, however, subtle differences in how these macro social, cultural, economic, and political factors influence different components (and decision makers) of criminal justice systems. This may explain why a single regression model was unable to explain the increases in the use of imprisonment in the three dependent variables considered in the study. In retrospect, it was perhaps overly optimistic to hope that increasing the sophistication of the independent variables could result in conclusively identifying the complex social relationships that lead to changes in the use of punishment.

Generally, this research provides consistent empirical support for scholars who have argued that integrated theoretical models should be used as a framework for understanding our use of formal social control (Caplow and Simon, 1999; Cappell and Sykes, 1991; Garland, 1990, 1991, 2000, 2001; Savelsberg, 1994). All three variables of interest in this study are closely associated with the integrated models that have been proposed in the literature. The six control variables included in the regression models also illustrate the importance of understanding the use of formal social control within the larger context of other economic, demographic, and social changes. These findings suggest

that imprisonment is a process that is embedded in a number of complex social relationships and within a continuum of social control mechanisms (see Garland, 2001, Sparks, 2003).

This study also provides partial empirical support for social control theories that suggest that there is a significant relationship between crime and punishment. The violent crime variable was positively associated with prison admissions as well as imprisonment rates. The fact that violent crime does not condition the effects of political disaffection, social disruption, and civic disengagement in the models that included interaction terms may relate more to the specification of the variable than the annual number of violent offenses. Future studies of the relationships between crime and imprisonment might benefit from including indices of self-reported fear of crime—which is only weakly related to actual crime rates. Policy makers may be more sensitive to these public fears, for example, than the actual number of reported offenses.

The analyses of the main effects also produced limited empirical support for minority threat hypotheses. Consistent with the findings of a number of recent studies the research revealed a significant relationship between the percentage of the population who are Black and increases in the use of imprisonment (Beckett and Western, 2001; Greenberg and West, 2001; Yates, 1997). Future studies of imprisonment might also benefit by examining the influence of extra-legal factors on disaggregated Black, Latino, and White imprisonment rates. Do different factors, for example, drive the imprisonment trends of African-Americans, contrasted against their White or Latino counterparts? There are a number of self-report indices of attitudes towards racial policy, and these might also inform the study of African-American imprisonment trends (i.e., Kellstedt, 2000). Also, crime specific analyses might be more important. Perhaps it isn't imprisonment *per se* that is used to thwart threats, but imprisonment for certain types of offenses (i.e., drugs).

It was hypothesized that increasing the sophistication of unemployment and economic stress variables would produce findings that were theoretically consistent with the conflict models proposed by Rusche (1933) and Rusche and Kirchheimer (1939). As the analyses showed, however, these variables produced ambiguous findings. As Michalowski and Carlson (1999) note, these economic variables are sensitive to the eras examined—unemployment rates, for instance, have different associations with imprisonment at different stages of

economic development. Economic conditions may also have a more significant effect on the local use of imprisonment (D'Alessio and Stolzenberg, 1995).

Any empirical study that increases our understanding about the use of punishment reveals something about the character, interests, beliefs, and values of the society in which the punishments are carried out. The United States makes widespread use of imprisonment contrasted against other rich industrialized nations. This rate is even greater if the persons imprisoned in juvenile facilities, immigration detention, military prisons, facilities for the mentally ill and local jails are counted. Moreover, a substantial number of persons are regulated within the community through the use of bail, probation and parole. Altogether, this continuum has been called a "penal range" (Sparks, 2003). Lastly, the state exerts a "softer" social control through the regulation of social spending. Together, these processes illustrate the nature of formal social control within the United States. Unfortunately, we have very little understanding of these mechanisms of control.

THE FUTURE OF MASS IMPRISONMENT

The pervasiveness of different mechanisms of formal social control, including the use of imprisonment, raises many questions about public policy and punishment. What does the maintenance of high imprisonment practices tell us about American cultural values and beliefs? Christianson (1998:ix) observes the apparent contradiction of American values:

What explains the paradox of a country that prides itself as being the citadel of individual liberty, yet imprisons more persons per capita than any other nation in the world with the possible exception of Russia?

Is there a fundamental difference, for instance, between American cultural values and those of our European counterparts that have similar rates of crime, but use imprisonment more sparingly? Or is it possible that these punitive values are similar, but American political systems are less insulated to public demands for punishment (Jacobs and Kleban, 2003; Melossi, 1993; Ruddell, 2005; Savelsberg, 1994)? Marshall (2000:13) for instance, argues that "Europeans and Canadians crave severe punishments as much as Americans, but that their political

culture is anti-democratic,” and that, “They’ve chosen a more civilized and humane political order over a fully popular and participatory one.”

Such observations suggest that the relationships between public opinion, punishment and politicians need to be carefully scrutinized. Do legislators, for example, respond to punitive cultural values by increasing the use of imprisonment, or has political claimsmaking actually created this seemingly endless demand for punishment? The research literature supports both positions on this issue, which dominates a number of public policy debates (see Baumgartner and Jones, 1993; Jones, 1994).

Roberts, Stalens, Indermaur, and Hough (2002:184) suggest that part of our shared punitive attitudes towards crime and justice are a consequence of our “tendency (which is afflicting many areas of political debate) to reduce complex issues to simplistic propositions that give rise to simple solutions.” Crime is certainly a complex issue, and if we examine the issue closely, we find that it is closely associated with long-standing social problems such as concentrated poverty (see Wilson, 1987) or addictions. Is the criminal justice system the best way to respond to these social problems, or just the most politically popular option?

Garland (2001) argues that cultural factors within the United States have contributed to expansion in the use of social control, including policies that have abandoned inmate rehabilitation in favor of high imprisonment practices. These propositions, which have emerged from the integrated approaches, are very theoretically appealing (see also Feeley and Simon, 1992). Garland (2001:6) argues that high imprisonment practices only represent a feature of a “densely interwoven character of social relations that an inquiry into the transformation of one institutional field inexorably leads to questions about contiguous fields and about the cultural, political and economic relations that underlie them.” The present study has provided indirect empirical support for Garland’s observations by identifying a number of cultural, political, and social variables positively associated with the use of punishment. Future scholars might find empirical tests of Garland’s theoretical positions fruitful, especially if such studies include other forms of social control. Focusing only upon the study of imprisonment alone may be somewhat misleading given the pervasiveness of different types of formal social control.

Blumstein (2003) has recently speculated that imprisonment rates are now showing more stability than they have for almost two decades.

When Blumstein and his colleagues first proposed that incarceration was a self-regulating process they defined the optimum use of imprisonment at approximately 125 to 150 persons per 100,000 residents in the population—a rate that was almost constant between the 1920s and 1970s. Ironically, this is approximately the rate of imprisonment used in most developed European nations today (Ruddell and Urbina, 2004). In fact, the current rate of imprisonment of drug offenders closely matches the entire imprisonment rate in most first-world nations. But if drug abuse is our chief concern, one might question why so few drug offenders actually receive drug-treatment while in prison—in 1997 for instance, only one in eight persons received drug treatment in state prisons (Mumola, 1999).

Perhaps the current federal and state imprisonment rate of 476 persons per 100,000 residents in the population will achieve a similar rate of homeostasis. Yet, there has been some movement to reduce prison populations due to state budget crises (Wilhelm and Turner, 2002). In California, for instance, the budget crisis has lead legislators to develop plans to reduce imprisonment by ten percent (Little Hoover Commission, 2003). Wilhelm and Turner (2002) note how in other states, prisons built during the expansion remain unused due to budget shortfalls. Perhaps more ominously, however, legislators who fear being perceived as “soft on crime” are also cutting rehabilitative budgets in prisons (Wilhelm and Turner, 2002).

Parenti (2000: 242) argues that we need to move away from our desire to punish, and that we need

Less policing, less incarceration, shorter sentences, less surveillance, fewer laws governing individual behaviors, and less obsessive discussion of every lurid crime, less prohibition, and less puritanical concern with “freaks” and “deviants.” Two-thirds of all people entering prison are sentenced for non-violent offenses, which means there are literally hundreds of thousands of people in prison who pose no major threat to public safety. These minor credit card fraudsters, joy-riders, pot farmers, speed freaks, prostitutes, and shoplifters should not rot in prison at taxpayers expense.

Perhaps the public will be more responsive to such changes in the focus of justice systems. In California, for instance, voters overwhelmingly passed Proposition 36, which involved diverting drug offenders from

prison into treatment and rehabilitative programs. Moreover, the public seems to support similar diversionary programs (Macallair, 2003). If these approaches are effective at reducing recidivism without jeopardizing public safety, then why wouldn't we adopt them?

While advocates of "less policing and less imprisonment" have typically come from the political left, there appears to be a more widespread movement amongst conservatives to reduce our reliance on laws and prison. Rosenzweig (2003), for instance, argues that American social and economic conduct is over-criminalized. There is a place for imprisonment, but we must also decide how much is enough? If imprisoning a non-violent offender in California for a 25-year term will cost the state over one million dollars, are there other ways that these resources could be spent to reduce crime?³

This research demonstrates that the decision to use imprisonment—or other methods of formal social control—is the end result of a number of policy choices that are influenced by social and cultural conditions irrespective of crime. By questioning the sources of our punitive crime control practices, this research contributes to a growing number of empirical studies and arguments of scholars who have tried to explain the relationships between culture and formal social control, between economics and punishment, changing social relationships between racial groups, the increased use of proprietary criminal justice agencies, the transformation from an industrial to a service economy, changes in the nature of family and community relationships, and the use of punishment to solve entrenched social problems. By better understanding these relationships, we can more effectively debate the most effective responses to crime and missed opportunities from our reliance upon high imprisonment policies (Abramsky, 2002; Hagan and Dinovitzer, 1999).

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Endnotes

Chapter 1

1. Two US Supreme Court decisions in the 1960s changed the nature of policing: *Mapp v. Ohio* (1961) that created the exclusionary rule, and *Miranda v. Arizona* (1966), that required police officers to advise a suspect of their rights. Operations of the courts were altered with the *Gideon v. Wainwright* (1963) decision that extended state-funded counsel to indigent defendants.
2. Throughout this study the term formal social control is used to define the formal methods that a society uses to control human behavior, including the use of laws and punishments for rule-violators, or deviant behavior. In addition to the use of formal social control, scholars have identified how governments use welfare and social programs to control groups called “the underclass” (see Piven and Cloward, 1993).

Chapter 2

1. US Supreme Court Justice Anthony Kennedy in his address to the American Bar Association on August 8, 2003 expressed concern about mandatory minimum sentences, and suggested that they be eliminated, and that, “A country which is secure in its institutions and confident in its laws should not be ashamed of the concept of mercy.” Moreover, Chief Justice Rehnquist, in his 2004 annual report, was critical of Congress passing the “Protect Act” which reduced the ability of judges to depart downwards from mandatory minimum sentences. See Zlotnick (2004) for an analysis of the “war” on judicial sentencing discretion. Minority threat has also been called social threat (Liska, 1992), and minority group-threat hypothesis (Kane, 2003). Throughout the text, the term minority threat is used.

Chapter 3

1. Elias proposed that as societies evolved, the use of punishment changed as well. According to Elias (1978), the transition from the use of violence (i.e., physical punishments) to confinement follows a predictable course. Kilias (1986) also found that punishment was related to development, and that richer nations were less likely to use corporal or capital punishment. Foucault (1977) argues, by contrast, that the transformation from bodily

punishment to imprisonment was not necessarily intended to reduce the ferocity of punishment, but to make punishment more efficient.

2. In addition to race or ethnicity, Ruddell and Urbina (2004) found that increases in the number of religious groups within a nation were positively associated with increased use of imprisonment in a sample of 140 nations. Moreover, less diverse nations were also more likely to have abolished use of the death penalty.
3. Sorokin (1937) and Weber (1925) both observed that penal sanctions could be used to bolster the legitimacy of the state. Sorokin (1937) also argued that penal severity increased when the power structure was challenged. The war on drugs might be interpreted as an attempt to create social consensus and solidarity from a socially constructed internal threat.

Chapter 5

1. Principle components analyses (PCA) were used to create five of the independent variables in this study. In order to evaluate the effectiveness of PCA these variables were also estimated using principle axis factoring, and the results were identical.
2. To evaluate whether the NES data were a valid indicator of religious behavior in the United States, these data were contrasted against the Gallup index of religiosity. These supplementary analyses found that there was a strong association between the two indexes. The bivariate correlation between the NES and Gallup indicators was estimated, and these measures were highly correlated ($r = .749$). Accordingly, this finding would tend to confirm that the NES, even considering the limitations of missing and mean-replaced data, is a valid indicator of religious behavior.
3. In order to evaluate whether the political disaffection variable was a valid measure of political antipathy, a number of GLS regressions were estimated on two dependent variables, public approval for the President, and the average number of households watching presidential addresses from 1969 to 1999 (Baum and Kernell, 1999). Controlling for the influences of economic stress, civic disengagement and social disruption, increases in political disaffection were associated with decreases in both presidential approval and the average number of households watching presidential addresses.
4. One weakness within this study is the lack of a indicator of drug offenses. Blumstein and Beck (1999) observe that the current drug imprisonment rate approximates the entire imprisonment rates used in the 1950s and 1960s. While murder and robbery tend to be very well reported, however, illegal drug use is unlikely to be reported. Consequently, the only indicators of drug use are arrest rates, which have serious flaws in their validity, especially prior to 1980.

5. Not all criminologists have found a direct association between changes in the age structure and criminality—for an alternative perspective see Levitt (1999).

Chapter 6

1. White's test of heteroskedasticity indicated that there were consistent standard errors and covariance in all of the models examined in this study. Other tests for heteroscedasticity, such as the Goldfeldt-Quant, are able to provide more comprehensive information about the error terms (Pindyck and Rubinfeld, 1998) but are not available in the EVIEWS program. Despite the shortcomings of the White's test, it has been used extensively in prior studies of imprisonment (Jacobs and Helms, 1996, 1999).
2. Residuals from models that had DW statistics less than 1.800 were saved as a variable and the ADF test was estimated. In all models examined, these tests revealed that there was no unit root in the residuals, which is verification that there was no serial correlation.
3. A number of experts in time series analyses were consulted about the rationale for using the same lag for additive and multiplicative terms in a model. These experts suggested that this was the most conservative approach, and most consistent theoretically.
4. It has been suggested that using product terms may increase the risk of multicollinearity in regression models because both the additive and product terms are used in a single equation. While Jaccard (2001) suggests that this limitation can be resolved through a number of strategies, OLS regression analyses were estimated with the differenced variables prior to estimating any GLS models. These results demonstrated a very low condition index—typically from 4.00 to 6.00, well within the acceptable range to reject multicollinearity (Greene, 2000). Additionally, the variance inflation factors (VIF) were estimated in these equations and the VIF ranged from 1.130 to 2.800, again rejecting multicollinearity.
5. A number of models were estimated using the average annual unemployment rate instead of the unemployment factor. These analyses revealed that average unemployment had a significant positive relationship with all of the dependent variables—but only in the years, 1952 to 1996.

Chapter 7

1. In addition to the three dependent variables examined in this study, the average federal sentence length (in months) was also examined. Results were generally consistent with the time served variable. This variable was not included in the findings presented in this research for the following reasons: federal inmates represent only a fraction of all prison inmates (approximately 14 percent), the sentencing patterns of federal courts tend to be more onerous than their state counterparts, and the time served variable already includes these inmates.

2. A further contribution of this study is the demonstration of the sensitivity of time-series research designs to subtle changes in the models that may have a substantial influence on the results. For instance, the specification of the independent variables in the model, the selection of the lags for the independent (or dependent) variables, the era studied, as well as the dependent variables examined are of critical importance in the study of imprisonment trends. This finding reinforces the importance of specifying variables—as well as the models estimated—according to theory, rather than being dictated by the data. This finding also suggests that results of future studies of imprisonment trends be critiqued very carefully.
3. This figure is estimated starting from an annual average cost of imprisonment at \$30,929 per inmate (CDC, 2004) and estimating two percent inflation. This rate does not, however, account for the increasing medical costs of imprisonment as these inmates age.

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