My Neighbor's Keeper?: Social Capital, Diversity and Criminal Justice

Daniel P. Hawes

Associate Professor Department of Political Science Kent State University Bowman Hall 302 Kent, OH 44242-0001 330-672-8923 dhawes2@kent.edu

Prepared for the Western Political Science Association Annual Conference, April 3-5, 2015. Las Vegas, NV.

Crime in America

American prides itself in being a world leader. We have the world's most powerful military, largest economy, highest spending research and development, and some of the best universities. There is much to be proud of. However, it also leads world in incarceration rates. No other country incarcerates more of their citizens than the United States. Indeed, the United States holds about 25 percent of the world's incarcerated population. Compared to other OECD nations, the United States is in a league of its own. In 2009, the average incarceration rate for OECD nations was 140 inmates per 100,000 population¹. The rate in the United States for that same year was 760 – over 5 times higher. Furthermore, the US incarceration rate overshadows those of the world's most repressive regimes. In 2012, it was 40 percent higher than Cuba's and 152 percent higher than Iran's.

There are nearly 1 million more American inmates than there are active duty members of the US Army, Marine Corps, Navy, Air Force and Cost Guard combined. This was not always the case, however. The recent boom in incarcerations in the United States began in the early 1970s. Between 1972 and 2001, the federal and state prison population exploded from 196,000 inmates to more than 1.3 million. The incarceration rate went from 93 to 470 inmates per 100,000 population (Pattillo, Weiman and Western 2004).

This unprecedented increase in incarcerations cannot simply be explained by the occurrence in crime, at least not in recent years. While crime rates increased significantly between 1960 and the early 1990s, they have been on the decline ever since. Indeed, the crime rate in 2005 was roughly equal to the crime rate in the early 1970s when we began

¹ These figures are based on the 2010 OECD Factbook. <u>http://www.oecd-ilibrary.org/economics/oecd-factbook-</u> 2010 factbook-2010-en

to see the spike in incarcerations (Western 2006). Figure 1 presents the trend in incarceration rates as well as total crime rates (violent crimes and property crimes) per 100,000 population. Here we see a lag between crime and incarceration rates of about 10 years. Crime rates began to rise significantly in the mid-1960s and incarceration rates followed suit about 10 years later. Crime rates peaked in the early 1990s and have been on a precipitous decline ever since. Nearly two decades later, however, incarceration rates have not reversed their trend. In fact, incarcerations have continually increased since the 1980s even if we consider incarceration rates relative to crime rates. As Figure 2 presents, incarcerations relative to crime rates significantly decline through the 1960s, and were relatively stable during the 1970s. However, beginning in the 1980s, there was an increase in the incarceration rate relative to crime rates which has accelerated since the 1990s. For example, in the mid-1970s there were approximately 0.03 state inmates per crimes committed. This ratio steadily increased and by 2009, the ratio was 1.25, over forty times greater the ratio in the 1970s. While the causes of the prison buildup are numerous and varied (see Useem and Piehl 2008), it is clearly not simply a direct result of an increase in criminal activity (see Smith 2004, Yates and Fording 2005).

The Connection between Social Capital and Criminal Justice

The theoretical causes of crime are extensive and varied, ranging from individual to collective, biological/psychological to social, and economic (e.g. rational-choice) to critical (e.g. Marxist). There is a well-developed literature within criminology, however, that emphasizes how social factors – including social capital – relate to crime.

Beginning in the 19th century, biological and psychological explanations of criminal behavior became popular and came in response to classical explanations of crime that argued individuals engage in crime due to freely choosing to commit crime to maximize pleasure (Cullen and Agnew 1999). While they provided significantly more complex and nuanced explanations of behavior than the classical explanations, they still largely ignored the role social factors played in criminal activity. The 20th century saw the birth of a number of theoretical approaches that emphasized social factors including social bonding (Hirschi 1969), social control (Durkheim 1951, Janowitz 1985), social structure (Hagan 1989), social strain (Merton 1938, 1968) and social disorganization (Shaw and McKay 1942, Rose and Clear 1998). Social capital can and has been linked to crime using several of these approaches, including disinvestment, social disorganization theory and strain theory.²

The connection between social capital and other forms of capital (e.g. human, economic) has been frequently noted (e.g. Coleman 1990, Hagan 1994). Social capital is important in both the transference of other forms of capital and is needed for human capital to produce its maximum potential. As a result, high social capital tends to be highly associated with higher human capital as the two tend to have a reciprocal relationship. This is due in part to social capital aiding in the transfer and accumulation of other forms of capital. That is, capital investment in one form can aid the development of capital in other forms. Alternatively, lower human and economic capital are often associated with lower social capital. Hence, economic capital *disinvestment* in communities leads to suboptimal

² Rosenfeld, Messner and Baumer (2001) also argue that social capital could be a causal mechanism using "anomie" theory (see Sampson 1997) since social capital can work to reinforce social norms that govern behavior.

outcomes and undermines the development and maintenance of other forms of capital (Hagan 1994). Communities that witness significant capital disinvestment often resort to "recapitalization," an attempt to "reorganize what resources are available, even if illicit, to reach attainable goals" (Hagan 1994, 334). The implication, then, is that communities that have seen disinvestment in traditional forms of social, human, and economic capital are more likely to develop alternative recapitalization strategies, many of which entail illegal activities (e.g. drug dealing).³ Hence, high levels of capital disinvestment are linked to low social capital, resulting in recapitalization, which may take non-traditional and even criminal forms, leading to higher crime rates.

Related to capital disinvestment is social disorganization theory. Shaw and McKay (1942) contend that informal social controls and organization can work to prevent criminal activity. A simple example would be a neighborhood watch group where neighbors monitor each other's property. These informal social controls and organization are more likely to exist and thrive in communities with higher levels of social capital – a logical conclusion given how social capital has been conceptualized and operationalized. For example, Putnam argues that among the core components of social capital are civic participation, volunteerism, social trust, and engagement in public affairs. All of these factors should conceptually increase participation in developing and maintaining a successful neighbourhood watch program within a community. Alternatively, we would not expect to see the development of such a program in areas that lacked any of these components of social capital.

³ Hagan (1994) identifies residential segregation, race-linked inequality, and concentrations of poverty as three disinvestment processes the hinder the formation and development of conventional social capital.

Bursik and Grasmick (1993) have added to Shaw and McKay's classical social disorganization theory by considering the interaction between informal and formal processes of control. In the *systemic model of crime*, formal "public control" – e.g. law enforcement – is bolstered by informal processes including community involvement and efforts to secure public services for the community. Rosenfeld, Messner and Baumer (2001) make the case that social capital plays a role in this process and hence "areas with extensive civic engagement are better able to secure adequate policing and other resources relevant to the 'public control' of crime" (287). Therefore, using a social disorganization perspective, communities with higher levels of social capital should have lower crime rates either due to social capital's reinforcement of informal social controls and organization via social trust and public engagement or because these communities are better able to secure resources for formal public control.⁴

Finally, social capital can fit with a strain theory perspective. Classical strain theory argues that individuals are pressured into crime due to deprivation and a lack of monetary opportunities through legal and legitimate channels. This is particularly the case when society places a high-value on monetary success. However, due to relative deprivation not all groups are able or likely to achieve such success. This inability to achieve these societal goals leads to strain or frustration among individuals leading them to crime (Agnew 1992). It has been argued that social capital can compensate for economic deprivation. In a crossnational study, Scheve and Stasavage (2006), for example, find that church going and religiosity – arguably a form of social capital – can act a substitute for social insurance.

⁴ For an interesting argument on how overreliance on formal social controls can backfire and disrupt social community structures, see Rose and Clear (1998).

Therefore, in communities that have low levels of human or economic capital, social capital can act as a reserve upon which individuals can draw from. Alternatively, areas with low levels of social capital do not provide this resource. Hence, a lack of social capital can perhaps be seen as additional form of deprivation, which could lead to higher crime rates (Ronsenfeld, Messner, and Baumer 2001).

Empirical work on the relationship between social capital and crime is limited. Ronsenfeld, Messner, and Baumer (2001) found that social capital was negatively correlated to homicide rates in a study of 99 counties in the United States. Similarly, Hawes, Rocha and Meier (2013) also found social capital was negatively correlated with murder rates in a longitudinal analysis in the 48 contiguous states.

There is even less work that examines the relationship between social capital and incarcerations. On its face, if social capital incorporates social trust and empathy, we may expect high social capital areas to have lower incarcerations since citizens (e.g. jurors, prosecutors) will be more empathetic and/or trusting of the accused. That said, it is also possible that empathy and norms of reciprocity only apply to those who follow these norms. Those who break the norms (i.e. criminals) may be treated with less compassion than they would in an area with weaker norms (i.e. lower social capital). High social capital may also increase police efficiency due to citizen cooperation and, in turn, increase the likelihood of solving and prosecuting crimes hence increasing the incarceration rates.

In terms of racial disparity in incarcerations, the relationship is unclear. Putnam has argued that social capital works to promote racial equality. As he writes in *Bowling Alone*, "inequality and social solidarity are deeply incompatible" (2000, 294). However, Putnam

also acknowledges that "social capital, particularly social capital that bonds us with others like us, often reinforces social stratification" (358). If social capital reinforces bonding and stratification, then we might expect the black-white disparity in incarcerations to be higher in areas with higher levels of social capital. As discussed below, perhaps the social trust and empathy that social capital engenders is conditional on race.

The Role of Inequality and Race

A common theme in much of the work on the causes of crime is that inequality – particularly economic inequality – appears to be at the heart of this process. Indeed, social disorganization theory, capital disinvestment, and strain theory all have aspects of inequality at their core. For example, in strain theory, absolute levels of deprivation are less important than relative deprivation; that is, the level of deprivation compared to a reference group is more consequential than deprivation in an absolute sense (Burton and Dunaway 1994). Others, such as Blau and Blau (1982) and Samson and Wilson (1994) argue that inequality - whether across racial groups or in terms of geographical concentrations of poverty - is a central cause of social disorganization.

The empirical work on the relationship between social capital and inequality in crime rates and incarcerations is less clear. Hero (2007), for example has linked social capital to a number of measures inequality in the United States and found a positive relationship. That is, social capital appears to be related to an increase in inequalities between Anglos and minority groups. This was also found to be the case in a study by Hawes and Rocha (2011) that examined inequality between whites and blacks across several policy areas including incarcerations.

One possible reason for this discrepancy in the relationship between social capital and crime and equality in incarcerations is that the determinants of crime may be different from the determinants of incarcerations. The theoretical link between social capital and crime is fairly straightforward; however, incarcerations are more complex. Incarceration rates are obviously a function of actual crime rates; hence, it should also be related to social capital (assuming social capital is a determinant of crime). However, there are numerous other factors, including bureaucratic discretion and citizen participation (either in reporting crime or as jury members). If social capital and trust vary across and between racial and socioeconomic groups, decisions that are crucial in detecting, prosecuting and convicting criminals may result in disparities in enforcement outcomes.

This suggests that social capital may reduce *crime rates* while simultaneously increasing *inequality in incarceration rates* between racial groups. This proposition differs from the claims Putnam (2000) has made, in which he argues social capital should promote equality due to reinforced norms of reciprocity, inclusiveness and a community-oriented perspective. Putnam (2000) states "far from being incompatible, liberty and fraternity are mutually supportive...the most tolerant communities in America are precisely the places with the greatest civic involvement." The result, he contends, is that minorities will be better off in high social capital communities. Social capital, however, could result in discrimination toward minorities – whether intentional or the or not. This is in line with Hero's work (1998, 2003; Hero and Tolbert 1996) in which he argues social capital or the "civic republicanism" tradition ignores ascriptive hierarchy, which is closely linked racial/ethnic segregation and bifurcation within states. That is, social capital tends to be

highly correlated with racial homogeneity. If social trust and norms of reciprocity are linked to race, these norms may not apply equally to racial and ethnic minorities.

Take, for example, a hypothetical neighborhood watch program in a high social capital, racially homogenous (white) neighborhood. Due to a high sense of community and civic engagement, neighbors vigilantly monitor the neighborhood and faithfully report "suspicious" activity. In such a scenario, a Hispanic or African-American man driving through the neighborhood may be at an increased risk of being reported to police as "suspicious" than his white counterpart. This is both due to racial bifurcation and segregation and increased social capital. In a highly diverse community, it would not be strange to see an individual of a different race driving through the neighborhood. Additionally, if social capital were low, there may not be an effective neighborhood watch program and the "suspicious" activity may go unreported. Thus, it is the combination of racial homogeneity and high social capital results in an increased likelihood of a report being filed. An active and engaged neighborhood watch program could be thought of as more "effective" policing (i.e. more arrests and incarcerations), which in itself is a good thing. However, if social capital is also highly correlated with racial homogeneity, minorities who do live in these areas may be more likely to be targeted and profiled; hence, we may see higher disparities across racial/ethnic lines.

This could, in part, explain the massive disparity in incarceration rates between whites and blacks. While a majority of inmates are white (nearly 60 percent), blacks are significantly overrepresented in the prison population. African Americans make up over 37 percent of the total prison population while making up only 13 percent of the total US

population. If we consider the risk of incarceration for black versus white men, the disparity is staggering. According to Western (2006), black men are seven times more likely to be incarcerated than white men of a similar age. Even when accounting for age and educational attainment (high school dropouts vs. high school completion), black males are still 4.8 to 5.3 times more likely to spend time in prison. While these disparities can be attributed to a variety of factors, social perceptions, networks and capital are also likely to play a role.

Data and Methods

The empirical analysis examines the relationship between social capital and criminal justice (crime and incarcerations) at the state level from 1986-2009. It examines both absolute levels of crime and incarceration rates, including relative rates between whites and blacks.

Dependent Variables

The inclusion of both absolute levels of crime and incarcerations as well at relative race-based measures is an important distinction for several reasons. First, the argument has been made that minorities will be better off in high social capital areas since social capital is expected to produce more desirable policy outcomes (e.g. Putnam 2000). However, others contend that minorities may be worse off *relative to whites* in high social capital states (e.g. Hero 2003). It is possible that both arguments are correct. That is, minorities may be at a higher relative risk of being incarcerated *compared to whites* but overall crime/incarcerations may be lower – including those of minorities. Thus, we may

see "better," albeit more unequal policy outcomes. In order to examine this possibility, both absolute and race-specific relative measures are needed.

Crime here is measured in several ways. Every year, the FBI publishes the Uniform Crime Report (UCR) – a collection crime statistics from state and local law enforcement agencies. The UCR breaks down crime into either violent crime or property crime and provides the total number of crimes rates in these categories per 100,000 population. These crime rates serve as two state-level dependent variables for total crime in each state.⁵ These data are available from 1986-2009 – the full time span of this study. Since social capital is expected to increase a sense of togetherness, community and inclusiveness, we should expected high social capital states to lower total crime rates.

State-level incarceration rates were obtained collected from 1986 to 2009 from the Bureau of Justice Statistics' National Prisoners Statistics, 1978-2012 study.⁶ These data include incarceration rates of whites and blacks in state prisons (*White/ Black State Prisoner Rate*) and are measured as the number of white and black state prisoners per 100,000 of their respective state population. During this time period, the average incarceration rate for whites was 207 inmates per 100,000 white population with a maximum rate of 547 (Arkansas in 2007). The average black incarceration rate was significantly higher at 1508 inmates per 100,000 black population, with a high of 9545 inmates per 100,000 black population (South Dakota in 1992). In this same year, the white incarceration rate was only 167 per 100,000 white population in South Dakota.

⁵ Violent crime consists of murder and non-negligent manslaughter; forcible rape; robber; and aggravated assault. Property crime includes burglary rate; larceny and theft; and motor vehicle theft. Regression models were run using each of these as individual dependent variables; however, for this paper, only total crime rates (property and violent) are used. The UCR data are available at <u>http://www.ucrdatatool.gov/</u>

⁶ ICPSR Study No. 34981.

This disparity highlights the high level of inequality that exists in criminal justice policy throughout the states. To capture this disparity, the final dependent variable is the incarceration odds ratio of for black and white prisoners. It is simply the ratio of the black and white incarceration rate (black rate/white rate). A value of 1 represents parity; that is, whites and black have the same likelihood of being incarcerated. Alternatively, values higher than 1 indicate that blacks have higher odds of incarceration. The average blackwhite incarceration ratio during this time period is 8.32; hence, blacks were over eight times more likely to be incarcerated than whites. South Dakota and Iowa had the highest black-white ratios of 57.3 and 33.4, respectively. From 1986 to 2009 there were 24 states that had black-white incarceration ratio of 10 or greater (totaling 287 state-years). No state had a black-white ratio of 1 or less, that is, an equal odds ratio.

Racial Diversity

Hero (1998, 2003, 2007) convincingly argues social diversity (or ascriptive hierarchy) can be equated with minority diversity. Furthermore, he argues, in considering the effects social capital has public policy outcomes for minorities, one must consider racial/ethnic diversity. Hero (1998; Hero and Tolbert 1996) argues that state politics are influenced by the level of racial/ethnic diversity within a state. Indeed, Hero (1998) argues that minorities are often better off, relative to whites, in states with high levels of minority diversity. Hawes and Rocha (2011) also find that state-level diversity is an important determinant of policy equity across several policy areas. Perhaps even more importantly, Hero (2007) suggests that the effect social capital has on state policy outcomes may be contingent on racial diversity. We will discuss this in more detail later. Thus, following

Hero, we include racial diversity as a central theoretical variable in explaining crime and criminal justice policy outcomes. To do this, we use a Blau dissimilarity index to measure diversity at the state level.⁷

While Hero has found that racial diversity is an important predictor in explaining state policy outcomes, others have found minority group size – particularly black group size – is important in explaining incarcerations. Smith (2004) for example, finds that the percent of a state's population that is black is a significant predictor of state incarceration rates. Furthermore, Yates and Fording (2005) argue that the percent of the population that is black moderates the relationship between conservative politics and black incarcerations. Thus, in addition to racial diversity, we also consider the effect of the percent of the population that is black on crime and incarcerations.⁸

Control Variables

The models control for a number of political, economic and demographic factors. Table 1 presents the descriptive statistics and sources for these variables. The models control for three state-level political variables: the percent of females in state legislature and the percent of Democrats in state senate and house, and Berry et al.'s (2012) measure of government ideology. States that are controlled by more male, conservative Republican lawmakers may be more likely to advocate "get tough on crime" legislation and allocate

⁷ Racial Diversity is measured as $1 - [(proportion Latino population)^2 + (proportion black population)^2 + (proportion white population)^2 + (proportion other population)^2].$

⁸ Since this variable is skewed, we follow Yates and Fording (2005) and use the natural log of this variable. While the racial diversity variable contains the proportion of the population that is black, including both variables does not seem to be problematic.

more state resources and support to law enforcement and prisons, which could in turn have an effect on both crime and incarceration rates.

State demographic controls include median income per capita and gross state product per capita are used to control for state-level economic conditions that could affect crime and incarceration rates. Both of these measures are in 2007 constant dollars and are also adjusted for across state cost-of-living differences.⁹ Additionally, the models include the percent of the population that are living in poverty and the percent with a college degree. There are also two measures of that capture the level of racial inequality in poverty and educational attainment. These are measured as the black-white odds ratios for poverty and college degrees, respectively. Higher values on these measures indicate that blacks have a higher rate of poverty or educational attainment within the state than whites, respectively. The models also control for the divorce rate since it has been linked to higher levels of crime, particularly homicide rates (Land et al. 1990). Finally, the number of voting-ineligible felons per 100,000 voting eligible persons is included as a control. Since many felons face a probationary period (e.g. parole) where even minor offences (drug or firearm possession) can result in incarceration, states with higher felon populations may have higher incarceration rates. Furthermore, states with a large number of felons may witness higher crime rates and may affect citizens' and policymakers' attitudes toward criminal justice policy resulting in harsher and longer sentencing, which may cumulatively increase the prison population. We also control for the level of violent and property crimes

⁹ The annual cost-of-living index was obtained from William Berry's website: http://mailer.fsu.edu/~wberry/garnet-wberry/a.html

within each state since states with higher crime rates may have higher incarceration rates. Table 1 presents the descriptive statistics for the variables.

The empirical analysis employs a pooled cross-sectional time-series design to account for both the cross-sectional and temporal dynamics of these relationships. All dependent variables were tested for panel stationarity.¹⁰ Both crime dependent variables had unit roots; thus, first-difference models were used for the crime models. The remaining dependent variables were panel stationary.¹¹ The incarceration models utilize herteroskedastic panel-corrected standard errors (Beck and Katz 1995) to control for heterogeneity across the states.

Findings

Crime Rates

Table 2 presents the first-difference crime rate models. Here we see that social capital has a negative and statistically significant relationship with both violent and property crime rates. This negative relationship provides some support to Putnam's social capital thesis; that is, higher levels of social capital are associated with lower rates of crime. Since these models use the first-differences for each variable, they are estimating short-term effects. Thus, a one-point increase in social capital is associated with about 10 fewer violent crimes and 62 fewer property crimes per 100,000 population in the following year. However, a one-point change in social capital in one year is a very large shift; indeed, the

¹⁰ The tests included the Augmented Dickey-Fuller and the Im-Person-Shin unit root tests.

¹¹ The prison incarceration variables were panel stationary with the addition of a lagged dependent variable (LDV), hence the inclusion of a LDV for these models. The jail incarceration models estimate panel-specific AR1 panel corrected standard errors (see Zhu 2013).

average one-year change in social capital within a state is only 0.02. Thus, if we considered a substantial annual increase in a state's social capital, say 0.27 (or one standard deviation in the first-differenced variable), we would expect violent crime to decline by about 2.8 crimes per 100,000 population. Property crime would witness a decrease of about 17 crimes per 100,000 population. This translates to about 125 fewer violent crimes and 730 fewer property crimes in a state of average (median) size in 2009. While these figures may seem substantial, the average (median) number of violent and property crimes committed in a state in 2009 was 14,905 and 132,350, respectively. Thus, the short-term impact of a substantial increase in social capital corresponds with less than a one percent decrease in crime. The effect of a typical one-year change in state-level social capital (0.02) is very small in relative terms (less than one-tenth of one percent). It should be noted, however, that, being first-differenced models, only short-term effects are captured and that the longterm effects can be cumulative, as we will discuss shortly.

Racial diversity is only statistically significant in the violent crimes model, suggesting that an increase in diversity is associated with an increase in violent crime rates. However, the average one-year change in the racial diversity index is only 0.007 (standard deviation = 0.02). Thus, a state that experienced a significant increase in diversity (0.02) would expect the violent crime rate to increase by about 5.6 crimes per 100,000 population. This corresponds to about 242 additional crimes in an average-sized state or about 1.5 percent of the median number of violent crimes in 2009.

As noted earlier, these models only account for short-term effects. Table 3 presents autoregressive error correction models that capture the longer term relationship between

social capital and crime rates. Here we include the lag of social capital, the change in social capital, and a disequilibrium term $(DV_{t-1} - Social Capital_{t-1})$ that captures how quickly the short term effects dissipate (Zhu 2013). Here we see that the effects of social capital appear to be long-lasting. That is, the disequilibrium term is relatively small, suggesting that the effects of a change in social capital do not dissipate immediately or quickly. The long-run impact can be calculated as 1-(β_2/γ), where γ is the coefficient from the disequilibrium term (i.e. DV_{t-1} – Social Capital_{t-1}). The long-run effects of a one-standard deviation increase in social capital are about 42 fewer violent crimes and 276 fewer property crimes per 100,000 population. In a state with a population of 4 million, this would translate into nearly 1,700 fewer violent crimes and 11,000 fewer property crimes over time. It is worth noting that a one-point increase in social capital is a very substantial change, and very unlikely to occur from one year to the next. Indeed, only seven states witnessed such a oneyear change in social capital from 1986-2009. That said, if we consider changes in social capital over time, even a short time period, a one-point shift in social capital is not unreasonable. From 1986 to 2009 there were 151 cases that witnessed at least a one-point change in social capital in a five-year period and 72 cases within a three-year period. This provides empirical support for Putnam's theses on the ameliorating effects of social capital on crime.

Incarcerations

Table 4 presents the results for incarceration rates. These models capture the relationship between social capital and incarcerations in state prisons. The first column presents total incarceration rates, followed by white and black rates, respectively. Since the

dependent variables first three models are related to each other – that is, it is highly likely that factors that affect white rates will also affect black rates – we estimate these models using Seemingly Unrelated Regression (SUR) models. While other estimators produce similar results, the SUR models are the more efficient given that the errors are likely correlated across the models. Furthermore, this estimation is consistent with past research examining these dependent variables (e.g. Yates and Fording 2005).

Most notable is that social capital does not appear to be statistically related to total incarceration rates, but it is a strong predictor of race-specific rates, albeit in opposite directions. Social capital is *negatively* related to total and white prison incarcerations; however, the opposite is true for black incarceration rates: there is a strong *positive* relationship between social capital and black incarcerations. This finding is very robust and is not dependent on model specification. This suggests that the effects of social capital are race specific and operates differently for whites than blacks – in this case, to the detriment of blacks.

Another way to think about how social capital has differential effects of white versus black citizens with respect to incarcerations, is to model the odds ratios of black/white incarceration rates (see Hawes and Rocha 2011 and Hero 2003). The odds ratio captures the relative likelihood of incarceration for blacks compared to whites. Higher values indicate that blacks are more likely to be incarcerated relative to the white incarceration rate. The final column in Table 4 presents the relationship between social capital and the

relative likelihood of incarceration for blacks and whites.¹² Here we see that social capital is associated with a higher incarceration rate for blacks relative to whites. The effect of a onepoint increase in social capital is a 4.8 percent increase in the prison ratio. Given that the average (median) black-white incarceration odds ratio in 2009 was 7.20, a nearly 5 percent increase is not trivial. To put this in perspective, if we used the 2009 average white prison incarceration rate as a baseline (about 255 inmates per 100,000 white population), a black-white ratio of 7.20 (i.e. the median state ratio) means there would be about 1836 black inmates per 100,000 black population. The model suggests that a one-point increase in social capital would translate into an *additional* 89 black inmates per 100,000 population, holding the white inmate rate constant.¹³ This would translate into an additional 700 black inmates in an average sized state in 2009. Obviously, these figures would be significantly higher for states that have higher baseline incarceration rates.

Racial diversity is also associated with an increase in the black-white odds ratio. A significant increase in racial diversity (0.16) is associated with a about a 7.7 percent increase in the black-white incarceration odds ratio. It should be noted, however, that this relationship controls for the percent of the state population that is black, a factor that is related to diversity. When removed from the model, the relationship between racial diversity and black-white incarcerations is negative, albeit not statistically significant.

Interestingly, the percent of the population that is black has a negative relationship on the black-white odds ratio. The models in Table 4 suggest that overall incarceration

¹² For these models, the odds ratios are logged due to the skewedness of the dependent variables (see Hawes and Rocha 2011).

¹³ The odds ratio would increase from 7.20 to 7.55. A baseline of 255 white inmates would correspond with 1925 black inmates per 100,000 black population, an increase of 89.25.

rates are positively related with the percent of a state's black population, the black incarceration rate goes down – both in absolute numbers and relative to whites – as the percent of the black population increases. This relation is not sensitive to whether or not racial diversity is included in the model. Past work (e.g. Smith 2004) has found a positive relationship between black population size and overall incarceration rates. These findings suggest, however, that black incarceration rates will be lower in states with a larger black presence, all else being equal.

The relationship between social capital and black-white incarcerations, as significant as they are, are only the short-term impacts of social capital. Table 5 presents the long-term effects via an error correction model similar to what we saw in Table 3. Here we see that the disequilibrium term is -.138 for the prison model, which is significantly larger than it was for the crime models. This suggests that the effects of social capital have a longer lasting impact on incarcerations than on crime. The long-run effect of a one-time, one-point increase in social capital is about nearly 6 percent increase in the black-white odds ratio.

The preceding analysis presents strong support for the hypothesis that social capital is related to both crime and incarcerations. Social capital appears to be linked to lower levels of crime, but higher incarceration rates. This could be interpreted a number of ways. It could be that states with high social capital also tend to have lower tolerance for law breakers, or that they have more stringent laws (hence more opportunities for them to be broken), or that they are generally more punitive. Alternatively, it may be that high social capital states have more effective policing, perhaps as a result of higher citizen and

community participation. However, this explanation does not explain why the effect of social capital only applies to black incarcerations rather than all incarcerations. If high social capital states were simply more punitive or more efficient at policing, we would expect higher incarcerations across the board, not only for African Americans.

Social Capital and Racial Diversity

It is possible that social capital operates differently base on racial context. Indeed, this is a central part of Rodney Hero's thesis: racial diversity conditions the effect of social capital. In the context of criminal justice, this may operate via several mechanisms. As discussed earlier, social capital can take the form of social trust whereby individuals develop norms of reciprocity and empathy. Alternatively, social capital can be linked to increased social controls – e.g. neighborhood watch – where citizens aid law enforcement, thus reducing crime and potentially increasing the apprehension of criminals (and hence incarcerations).

It is possible that social capital takes different forms based on the racial context. Consider the following example. In May of 2010, *What Would You Do?*, an ABC network television show, air an episode in which they staged the attempted theft of a bicycle in a suburban public park.¹⁴ The point of the experiment was to see if how by-passers would respond to the theft. Would they intervene? Would they call the police? To perform the "theft," two actors individually attempted to steal a bicycle chained to a post. The first actor was a white young male, while the second was an African American male of approximately the same age. Figure 3 presents a screenshot from the television show depicting both

¹⁴ The broadcast is available at: <u>http://abcnews.go.com/WhatWouldYouDo/video/stop-bike-thief-10589721</u>

young men. Both were dressed in a similar fashion; thus, the only real difference was their race.

The white actor proceeded to "steal" the bicycle using a number of increasingly dramatic tactics: a hammer, a hacksaw, bolt-cutters, and finally, a loud electric grinder producing a shower of sparks. For over an hour he performed the staged theft, and of the 100-plus individuals who passed by, only a handful questioned him at all. When asked whether the bike was his, he responds "Technically, no" and "No, why? It's not your bike." It wasn't until he began using the grinder that someone finally attempts to stop him and call the police.

The experiment was repeated with the black actor. Within seconds, he is questioned. He replies with the same responses as the white actor, but to no avail. A crowd quickly forms. They call the police and use their cell phones to take pictures of his face. The experiment was repeated several times, and each time the response is nearly identical.

What explains the difference in the public's reaction? The level of social capital was identical; indeed, it was the same park on the same day. The only difference was the race of the "thief." If social capital is conditional on racial context, we would expect different reactions. In the first scenario – with the white actor – social capital takes the form of *social trust* and empathy. People assume the man lost his key, or is a park employee. When the racial context changes, however, so does social capital. Here, it takes the form of *social control* and citizens become "good neighbors" and protect one another's property (similar to a neighborhood watch program).

If a similar state-level dynamic exists between social capital and racial diversity in response to crime, then we would expect the effects of social capital on incarceration rates to be conditional on the racial diversity of the state. In homogenous states, social capital takes the form of social trust, rather than social control. Thus, we would not expect social capital to have as great a "crime-fighting" effect since individuals give each other the benefit of the doubt rather than acting as neighborhood watch patrols. As racial diversity increases, however, we would expect social capital to enhance social controls. Similarly, the relationship between social capital and incarceration rates may be contingent on the percent of the population that is black. Past work has found that the effects of state-level political variables on the black-white incarceration disparity are conditioned on the size of the black population (Yates and Fording 2005).

Table 6 presents the results from two interactive models that include a multiplicative term between social capital and racial diversity and percent of the population that is black, respectively. Here, we are theoretically interested in how racial diversity moderates the effect that social capital has on incarcerations. Figures 4 and 5 present this conditional relationship by plotting the marginal effects of social capital on the dependent variable (black-white incarceration odds ratio) for different values of racial diversity and percent black population, respectively. In both cases, the effect social capital is conditional on racial context. In homogenous states, social capital is not associated with increased incarcerations for blacks relative to whites. However, as racial diversity increases, the effect of social capital on the black-white incarceration odds ratio also increases and becomes statistically significant at just below the average level of diversity (0.3). We see a similar relationship when social capital is interacted with the percent black

population variable. In states with below average black populations, social capital has a negative effect on the black-white incarceration disparity. However, in states with above average black populations, social capital is associated with higher black-white incarceration ratios.

This supports the notion that social capital transforms from social trust to social control as racial diversity/minority population increases, thus resulting in higher incarceration rates for blacks. If racial diversity is the trigger for social capital taking on a social control structure (rather than social trust) then it is no surprise that the consequence is higher incarcerations for minorities. It is the racial context that shapes how social capital is used. States with higher levels of diversity are more likely to adopt systems and institutions of control when social capital is present.

Conclusion

"Am I my brother's keeper?"¹⁵ This was Cain's response when asked the whereabouts of Abel, his brother whom he had just murdered. The Judeo-Christian tradition has used Cain's defiant, callous response as an example of how not to behave. This is a foundation for the idea that we all have a responsibility to look out for one another: a foundation for the commandment to "love your neighbor as yourself."¹⁶ This idea was reinforced and extended in the Christian faith with the parable of the Good Samaritan. "Who is my neighbor?"¹⁷ was the question that prompted the parable. The answer provided in of the story of the Good Samaritan is that one's neighbor is anyone who has need of him or her, even one's enemy.

¹⁵ Genesis 4:9. New International Version.

¹⁶ Leviticus 19:18. New International Version.

¹⁷ Luke 10:29. New International Version.

Social capital offers promise to be catalyst for improving our communities and society. It offers to make us all better neighbors by reinforcing norms of reciprocity and application of the Golden Rule: to "do to others as you would have them do to you."¹⁸ It holds potential in propelling us to be our brother's (and neighbor's) keepers. The empirical evidence seems to bear this out. Social capital is linked to lower crime and disease, and better outcomes of citizens.

What is less clear is how social capital relates to the question of "who is my neighbor?" Hero's work suggests that social capital is contextualized by race and ethnicity. The empirical evidence related to black-white disparities in incarcerations supports this and suggests that mechanism by which social capital is deployed depends on racial context. Who is treated as one's "neighbor" depends on their race.

Building on work in political science, sociology and criminology, this paper presents analysis examining the relationship between social capital, crime and incarcerations across the U.S. states. The results suggest that social capital is associated with lower violent crime rates but higher incarceration rates. Furthermore, states with higher levels of social capital are associated with disproportionately higher incarceration rates for African-Americans both in absolute terms and relative to white incarceration rates.

Furthermore, the relationship between social capital and crime seems to be conditional on racial context. The effect of social capital on incarceration inequality is strongest in racially diverse states. Social capital appears to exasperate the disparity in black-white incarcerations, but only in racially diverse states. This supports the notion that social capital strengthens racially-targeted social controls as the racial context becomes more diverse. This suggests social capital

¹⁸ Luke 6:31. New International Version.

is triggered, perhaps, by the same considerations that create racial threat (e.g. Blalock 1967, Giles 1977, Kinder 1996).

There are many caveats concerning the analysis and results at this point. Further work is needed to examine the within state-level temporal dynamics as well as to further examine the interaction between social capital and diversity. Questions of reverse causation and reciprocal effects should also be addressed. Furthermore, future work should examine the policy-making side of criminal justice policy to explore the causal mechanism linking social capital to higher incarcerations, particularly for minorities. This may follows different processes at the local and state level. Jail-level incarcerations may reflect discriminatory practices in both citizens reporting crime and police discretion in making arrests. State prison population figures, however, are more likely a reflection of state laws, prosecutorial discretion, parole hearings and attitudes of judges and juries. Future work should examine incarcerations at multiple levels. As discussed earlier, if social capital, trust and empathy are transferred more easily within racial groups (as opposed to across racial groups), "norms of reciprocity" may disproportionately benefit white defendants in the decisions made by law enforcement, prosecutors, judges and juries. That is, inequality does not inherently entail proactive discrimination *against* minorities; it can also occur from favorable treatment toward members of the majority. Future work - both theoretical and empirical - should explore this relationship.

References

- Berry, William D., Richard C. Fording, Evan J. Ringquist, Russell L. Hanson, and Carl Klarner.
 2012. "A New Measure of State Government Ideology, and Evidence that Both the New Measure and an Old Measure are Valid." *State Politics & Policy Quarterly* Published Online Dec. 20, 2012.
- Blau, J.R., Blau, P.M., 1982. The cost of inequality: metropolitan structure and violent crime. *American Sociological Review* 47, 114-129.
- Bourdieu, Pierre, and Loic J.D. Waquant. 1992. *An Invitation to Reflexive Sociology*. Chicago: University of Chicago Press.
- Bursik, Robert J., and Harold G. Grasmick. 1993. *Neighborhoods and Crime: The Dimensions of Effective Community Control.* New York: Lexington.
- Coleman, J.S., 1990. *The Foundations of Social Theory*. Cambridge, MA.: Harvard University Press,
- Cullen, Francis T., and Robert Agnew. 1999. *Criminological Theory: Past to Present Essential Readings*. Los Angeles: Roxbury Publishing Company.
- Hagan, John. 1994. Crime and Disrepute. Thousand Oaks, CA: Pine Forge Press.
- Hawes, Daniel P., and Rene R. Rocha. 2011. "Social Capital, Racial Diversity, and Equity: Evaluating the Determinants of Equity in the United States." *Political Research Quarterly* 64: 924-937.
- Hawes, Daniel P., Rene R. Rocha and Kenneth J. Meier. 2013. "Social Capital in the Fifty States: Measuring State-Level Social Capital 1986-2004" *State and Politics and Policy Quarterly* 13: 121-138.
- Hero, Rodney E. 1998. *Faces of Inequality: Social Diversity in American Politics*. New York: Oxford University Press.
- Hero, Rodney E. 2003. "Multiple Theoretical Traditions in American Politics and Racial Policy Inequality." *Political Research Quarterly* 56: 401-408.
- Hero, Rodney E. 2007. *Racial Diversity and Social Capital*. New York: Cambridge University Press.
- Hero, Rodney E. and Caroline J. Tolbert. 1996. A Racial/Ethnic Interpretation of Politics and Policy in the States of the US. *American Journal of Political Science* 40: 851-871.
- Hirschi, Travis. 1969. Causes of Delinquency. Berkeley: University of California Press.
- Kawachi, Ichiro, Bruce P. Kennedy, and Kimberly Lochner. 1997. "Long Live Community: Social Capital as Public Health." *The American Prospect* (Nov.-Dec.):56-59.

- Knack, Stephen. 2002. "Social Capital and the Quality of Government: Evidence from the States." *American Journal of Political Science* 46: 772-785.
- Land, Kenneth C., Patricia L. McCall, and Lawrence E. Cohen. 1990. "Structural Covariates of Homicides Rates: Are There any Invariances across Time and Social Space?" *American Journal of Sociology* 95:922-963
- Merton, Robert K. 1938. "Social Structure and Anomie." *American Sociological Review*. 3: 672-682.
- Merton, Robert K. 1968. Social Theory and Social Structure. New York: Free Press.
- Pattillo, Mary, David Weiman and Bruce Western. 2004. *Imprisoning America: The Social Effects of Mass Incarceration*. New York: Russell Sage Foundation.
- Portes, Alejandro. 1998. "Social Capital: Its Origins and Applications in Modern Sociology." Annual Review of Sociology 24: 1-24.
- Putnam, Robert D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.
- Putnam, Robert. 1993. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton University Press.
- Rose, Dina R., and Todd R. Clear. 1998. "Incarceration, Social Capital, and Crime: Implications for Disorganization Theory." *Criminology* 36(3):441-480.
- Rosenfeld, Richard, Steven F. Messner and Eric P. Baumer. 2001. "Social Capital and Homicide." *Social Forces* Vol. 80(1): 283-310.
- Sampson, Robert J., and William Julius Wilson. 1995. "Toward a Theory of Race, Crime, and Urban Inequality." In *Crime and Inequality*, eds John Hagan and Ruth D. Peterson. Stanford, CA: Stanford University Press.
- Scheve, Kenneth, and David Stasavage. 2006. "Religion and Preferences for Social Insurance." *Quarterly Journal of Political Science* 1: 255-286.
- Shaw, Clifford R., and Henry D. McKay. 1942. *Juvenile Delinquency and Urban Areas*. Chicago: University of Chicago Press.
- Smith, Kevin B. 2004. "The Politics of Punishment: Evaluating Political Explanations of Incarceration Rates." *Journal of Politics* 66(3): 925-938.
- Useem, Bert, and Anne Morrison Piehl. 2008. *Prison State: The Challenges of Mass Incarceration*. New York: Cambridge University Press.
- Western, Bruce. 2006. *Punishment and Inequality in America.* New York: Russell Sage Foundation.

- Yates, Jeff, and Richard Fording. 2005. "Politics and State Punitiveness in Black and White." *Journal of Politics* 67(4): 1099-1121.
- Zhu, Ling. 2013. "Panel Data Analysis in Public Administration: Substantive and Statistical Considerations." *Journal of Public Administration Research and Theory* 23(2): 395-428.

Variables	Mean	Std. Dev.	Source
Dependent Variables			
Total Violent Crimes per 100,000 population	493.47	315.33	FBI Uniform Crime Report
Total Property Crimes per 100,000 population	4019.85	1200.75	FBI Uniform Crime Report
Total Inmates per 100,000 population	350.73	164.08	BJS National Prison Statistics (ICPSR Study No. 34981)
Black Inmates per 100,000 population	1503.67	628.85	BJS National Prison Statistics (ICPSR Study No. 34981)
White Inmates per 100,000 population	202.33	88.76	BJS National Prison Statistics (ICPSR Study No. 34981)
Black/White Incarceration Ratio	8.26	4.01	BJS National Prison Statistics (ICPSR Study No. 34981)
Independent Variables			
Social Capital	0.144	0.980	Hawes, Rocha and Meier (2013)
Racial Diversity (Blau Index)	0.323	0.163	U.S. Census Bureau Population Estimates
Percent Black Population	10.41	9.47	U.S. Census Bureau Population Estimates
Government Ideology	50.90	25.86	Berry et al. (2012)
Percent Democrats in State Legislature	54.05	16.07	Indiana State University – Klarner Politics
Percent Females in State Legislature	20.49	7.76	Center for American Women and Politics
Income Per Capita (in 2007 \$1000)	26.09	8.62	U.S. Department of Commerce, Bureau of Economic Analysis
GSP per Capita (in 2007 \$1000)	30.79	10.58	U.S. Department of Commerce, Bureau of Economic Analysis
Unemployment Rate	5.19	1.58	U.S. Department of Commerce, Bureau of Economic Analysis
Poverty Rate	12.55	3.71	U.S. Census Bureau, Current Population Survey
Poverty Inequality (Black/White Ratio)	2.76	0.745	U.S. Census Bureau, Current Population Survey
Percent with College Degree	23.32	5.62	U.S. Census Bureau, Current Population Survey
Education Inequality (Black/White Ratio)	0.636	0.195	U.S. Census Bureau, Current Population Survey
Divorces per 1,000 Population	4.43	1.36	National Center for Health Statistics
Voting-Ineligible Felons per 100,000	1199.78	798.46	George Mason University, United States Election Project

Table 1. Variable Summary

A moving average (when possible) or the most recent available years were used to replace missing years for the independent variables.

	First Difference Models		
=	Δ Total Violent	Δ Total Property	
	Crime Rate	Crime Rate	
Δ Social Capital	-10.47*	-62.37**	
	(5.428)	(29.99)	
Δ Racial Diversity	242.4**	-359.6	
	(113.6)	(632.7)	
$\Delta \ln(\% \text{ Black})$	134.0**	495.5	
	(52.56)	(360.9)	
Δ Government Ideology	0.0680	-0.146	
	(0.111)	(0.610)	
Δ % Democrats in Legislature	-0.166	-3.928	
	(0.471)	(2.920)	
Δ % Females in Legislature	0.544	-7.217	
	(1.033)	(6.104)	
Δ Median Household Income (\$1000)	-1.216	-22.77	
	(4.873)	(25.94)	
Δ State GSP per Capita (\$1000)	1.517	-4.530	
	(2.576)	(13.58)	
Δ Unemployment	-0.139	-19.28	
	(2.834)	(14.34)	
Δ Poverty Rate	0.0832	0.602	
	(0.704)	(3.970)	
∆ Black/White Poverty Ratio	12.03	-72.19	
	(39.00)	(192.8)	
Δ % College Degrees	-2.456	12.20	
	(3.165)	(15.57)	
Δ Black/White College Degree Ratio	201.8	668.4	
	(132.5)	(929.4)	
Δ Divorce per 1,000 Population	3.518	8.159	
	(2.979)	(13.51)	
Δ Felons per 100,000 Voting Eligible Persons	0.0117	-0.0184	
	(0.0141)	(0.0765)	
Constant	-7.144	-44.51	
	(5.288)	(28.46)	
Observations	1,104	1,104	
R-squared	0.063	0.034	
Number of States	48	48	

Table 2. Social Capital and Crime Rates

Panel corrected standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

	Error Corre	Error Correction Models		
	Δ Violent Crime Rate	Δ Property Crime Rate		
Δ Social Capital	-11.68**	-63.31**		
-	(5.762)	(30.00)		
Social Capital (t-1)	-1.645	-16.12		
_ 、 ,	(2.585)	(15.25)		
DV _(t-1) – Social Capital _(t-1)	-0.0381***	-0.0585***		
	(0.0141)	(0.0140)		
Racial Diversity	19.78	-94.13		
	(23.71)	(103.9)		
<i>ln</i> (% Black)	0.708	15.74		
	(2.277)	(14.63)		
Government Ideology	0.00131	-0.108		
	(0.0595)	(0.333)		
% Democrats in Legislature	0.289***	1.160*		
	(0.102)	(0.630)		
% Females in Legislature	-0.543**	-0.224		
	(0.259)	(1.573)		
Median Household Income	-1.940**	-10.80***		
	(0.841)	(4.120)		
State GSP per Capita	1.118*	2.356		
	(0.577)	(2.684)		
Unemployment	0.192	-5.429		
	(1.948)	(9.231)		
Poverty Rate	-1.000	-2.748		
	(0.666)	(3.443)		
Black/White Poverty Ratio	1.808	-4.115		
	(3.185)	(14.63)		
% College Degrees	0.189	3.405		
	(0.722)	(3.386)		
Black/White College Degree	13.44	-54.99		
	(12.92)	(73.93)		
Divorce per 1,000 Population	2.531	13.59*		
	(1.566)	(7.664)		
Felons per 100,000	-0.00265**	-0.00697		
	(0.00133)	(0.0102)		
Constant	4.995	310.7**		
	(24.40)	(139.9)		
Long-run effects 1-(β2 / γ)	42.18	276.56		
Observations	1,104	1,104		
R-squared	0.095	0.117		
Number of States	48	48		

Panel corrected standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

	Prison Inmates per 100 000 Population			<i>ln</i> (Prison Odds
	Prison Inmates per 100,000 Population			Ratio)
	Total	White	Black	Black/White
Social Capital	0.410	-8.676***	63.52***	0.0484***
-	(2.312)	(1.768)	(14.32)	(0.0107)
Racial Diversity	461.5***	-36.63**	779.8***	0.484**
-	(20.50)	(15.68)	(126.6)	(0.195)
<i>ln</i> (% Black)	58.25***	17.43***	-113.3***	-0.198***
	(2.920)	(2.236)	(17.97)	(0.0209)
Total Violent Crime Rate	-0.0420***	-0.0174*	0.0458	1.90e-05
	(0.0136)	(0.0104)	(0.0832)	(6.59e-05)
Total Property Crime Rate	0.00341	0.0193***	0.0641***	-1.06e-05
	(0.00268)	(0.00205)	(0.0164)	(1.30e-05)
Government Ideology	-0.0840	-0.197***	-0.297	0.000543
	(0.0713)	(0.0545)	(0.441)	(0.000515)
% Democrats in Legislature	-2.554***	-1.448***	-7.166***	0.00167**
_	(0.141)	(0.108)	(0.872)	(0.000834)
% Females in Legislature	-0.142	-0.177	12.64***	0.00160
-	(0.302)	(0.231)	(1.857)	(0.00206)
Median Household Income	-1.425**	-0.122	8.354**	0.00333
	(0.672)	(0.514)	(4.159)	(0.00331)
State GSP per Capita	6.889***	5.338***	14.76***	-0.00394**
	(0.527)	(0.403)	(3.253)	(0.00157)
Unemployment	-5.038***	-2.166***	-23.72***	-0.00968*
	(0.984)	(0.752)	(6.099)	(0.00576)
Poverty Rate	3.448***	3.078***	3.879	-0.0175***
	(0.628)	(0.480)	(3.875)	(0.00390)
Black/White Poverty Ratio	-12.59***	-33.72***	204.0***	0.284***
	(2.828)	(2.174)	(17.20)	(0.0137)
% College Degrees	-7.440***	-3.379***	-18.95***	0.00166
	(0.701)	(0.538)	(4.281)	(0.00366)
Black/White College Degree	238.4***	141.6***	142.1	-0.958***
	(14.74)	(11.34)	(89.57)	(0.107)
Divorce per 1,000 Population	15.58***	17.80***	63.08***	-0.0489***
	(1.406)	(1.079)	(8.616)	(0.00601)
Felons per 100,000	0.0516***	0.0303***	0.233***	-2.17e-05*
	(0.00240)	(0.00184)	(0.0148)	(1.14e-05)
Constant				2.406***
				(0.167)
Observations	1,143	1,143	1,143	1,143
R-squared	0.993	0.930	0.605	0.515
Number of States	48	48	48	48

Table 4. Social Capital and Prison Incarceration Rate

Estimates for Rates based on Seeming Unrelated Regression model (XTSUR). Odds Ratio model uses Panel Corrected Standard Errors. *** p<0.01, ** p<0.05, * p<0.1

	Error Correction Models		
	DV: Δ Ln(Black/White Prison Ratio)		
	β	SE	
Δ Social Capital	0.0137	(0.0147)	
Social Capital (t-1)	-0.130***	(0.0198)	
DV (t-1) – Social Capital (t-1)	-0.138***	(0.0224)	
Racial Diversity	0.133*	(0.0777)	
<i>ln</i> (% Black)	-0.0294**	(0.0122)	
Total Violent Crime Rate	3.59e-05	(2.76e-05)	
Total Property Crime Rate	-6.14e-06	(6.88e-06)	
Government Ideology	-8.19e-06	(0.000202)	
% Democrats in Legislature	0.000501	(0.000529)	
% Females in Legislature	0.000553	(0.000771)	
Median Household Income	-0.00163	(0.00153)	
State GSP per Capita	-0.000832	(0.000910)	
Unemployment	-0.00370	(0.00345)	
Poverty Rate	-0.00251	(0.00224)	
Black/White Poverty Ratio	0.0366***	(0.0108)	
% College Degrees	0.00119	(0.00178)	
Black/White College Degree	-0.104	(0.0637)	
Divorce per 1,000 Population	-0.00726**	(0.00322)	
Felons per 100,000	-7.38e-06	(5.82e-06)	
Constant	0.352***	(0.0916)	
Long-run effects $1-(\beta 2 / \gamma)$	0.05	8	
Observations	114	1	
R-squared	0.08	33	
Number of States	48		

Table 5. Long Term Effect of Social Capital on Black-White Incarceration Ratios

Panel corrected standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

	DV: Ln(Black/White Prison Odds Ratio)		
Social Capital	-0.0416	-0.0955***	
	(0.0301)	(0.0232)	
Racial Diversity Index	0.532***	0.547***	
	(0.204)	(0.193)	
<i>ln</i> (% Black)	-0.196***	-0.196***	
	(0.0204)	(0.0176)	
Social Capital × Racial Diversity	0.334***	-	
	(0.107)	-	
Social Capital \times <i>ln</i> (% Black)	-	0.0811***	
	-	(0.0106)	
Total Violent Crime Rate	-1.52e-05	-8.28e-05	
	(6.66e-05)	(6.89e-05)	
Total Property Crime Rate	-9.21e-06	-5.02e-06	
	(1.38e-05)	(1.35e-05)	
Government Ideology	0.000621	0.000880*	
	(0.000493)	(0.000510)	
% Democrats in Legislature	0.00131	0.00110	
	(0.000866)	(0.000873)	
% Females in Legislature	0.00146	0.000535	
	(0.00217)	(0.00208)	
Median Household Income	0.00298	-1.50e-05	
	(0.00314)	(0.00315)	
State GSP per Capita	-0.00541***	-0.00525***	
	(0.00176)	(0.00163)	
Unemployment	-0.0121**	-0.0122**	
	(0.00571)	(0.00589)	
Poverty Rate	-0.0162***	-0.0146***	
	(0.00407)	(0.00410)	
Black/White Poverty Ratio	0.286***	0.282***	
	(0.0141)	(0.0144)	
% College Degrees	0.00197	0.00422	
	(0.00369)	(0.00373)	
Black/White College Degree	-0.900***	-0.747***	
	(0.0937)	(0.0858)	
Divorce per 1,000 Population	-0.0513***	-0.0505***	
	(0.00620)	(0.00584)	
Felons per 100,000	-9.61e-06	-9.52e-06	
	(1.39e-05)	(1.25e-05)	
Constant	2.441***	2.420***	
	(0.162)	(0.154)	
Observations	1143	1143	
R-squared	0.525	0.559	
Number of States	48	48	

 Table 6. Interactive Models: Social Capital, Racial Diversity and Black Population

Panel corrected standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1





Author's calculations based on data from the *Sourcebook of Criminal Justice Statistics*. http://www.albany.edu/sourcebook



Figure 2: Federal and State Prison Incarceration Rates per Total Crime Rates 1960-2005

Author's calculations based on data from the *Sourcebook of Criminal Justice Statistics*. http://www.albany.edu/sourcebook



Figure 3. What Would You Do? Bicycle Theft Experiment

Figure 4. Marginal Effect of Social Capital on Black/White Prison Odds Ratio Conditional on Racial Diversity



Figure 5. Marginal Effect of Social Capital on Black/White Prison Odds Ratio Conditional on Percent Black Population

