The Gateway to Mass Incarceration:

A County-Level Analysis of Jails in the United States

Dissertation

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ABSTRACT

What factors determine differential levels of punishment across communities? This question has been addressed by sociologists, policy scholars, and other social scientists for decades, as mass incarceration has become one of the defining social problems of the 20th and 21st centuries. Social scientists have largely focused upon the institution of the prison and the state and federal levels of government as the central units of analysis in studying punishment as a social institution. Racial/ethnic threat, economic distress, and a declining government emphasis on social welfare policy are the central theoretical concepts in this literature. In my dissertation, I build upon recent research on mass incarceration that highlights the importance of space and county-level analysis in understanding punishment and imprisonment. I take the jail as my unit of analysis, a local institution of punishment that has been neglected in the larger study of mass incarceration. I examine the extent to which theories of punishment, demonstrated to explain imprisonment rates and prison privatization, do or do not explain jail incarceration and privatization. In short, my dissertation represents a place-based approach to the study of punishment that elevates local institutions and the role they play in creating punitive county-level environments.

First, I examine the relationship between jail incarceration rates and county government social service provision and capacity, as well as local political conditions in a

sample of approximately 1,300 U.S. counties. I synthesize the sociology of punishment with studies of local governments to examine ways in which county governments balance their punitive and social welfare functions. I find that counties with lower rates of social service provision and with higher capacity governments have higher jail incarceration rates. Additionally, I find that counties with more conservative political climates have higher incarceration rates. After accounting for county government service provision, capacity, and county-level political context, I do not find a significant rural-urban difference in jail incarceration rates.

Second, I examine the relationship between county government capacity, county political and sociodemographic factors and jail privatization. Studies of correctional privatization tend to focus upon prison privatization and state-level variables, particularly economic, political, and demographic factors. I examine the extent to which these determinants explain jail privatization at the county-level, using a sample of approximately 1,300 U.S. counties and a measure of jail privatization drawn from a primary dataset. I find that county government economic characteristics are important for jail privatization, particularly fiscal independence and correctional expenditures. I also find that more conservative and rural counties are significantly more likely to privatize jail services.

Third, I examine the extent to which the punitive and economic development functions of jails are associated with institutional characteristics of counties, namely local government social expenditures and local labor markets, across a sample of approximately 2,300 U.S. counties. I synthesize insights from two literatures: the sociology of punishment and studies of rural prison construction. I find that counties with higher unemployment, lower educational spending, and higher employment in vulnerable/declining industries have higher pre-trial jail populations. However, I do not find a relationship between jail contracting and the variables commonly associated with prison construction. However, I do find that both dependent variables are significantly spatially clustered, suggesting the existence of concentrated, county-level geographies of punitiveness and carceral entrepreneurship.

As a whole, these findings demonstrate the need to consider place-based, countylevel institutional and sociodemographic conditions when studying punishment. This research also indicates the importance of spatial factors when studying incarceration. While mass incarceration is a massive social system with national-level impacts, the building blocks of this system and its inequalities are rooted in individual communities. Through a better understanding of how local governments, local labor markets, and spatial context are associated with jail incarceration, inmate contracting, and privatization, researchers can develop concrete strategies to address the social conditions that contribute to punishment vulnerability in individual communities.

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CHAPTER 1. JAILS AND MASS INCARCERATION: THE LOCAL FRONT OF A NATIONAL SOCIAL PROBLEM

Why do some communities incarcerate more individuals than others? Why do rural counties incarcerate more individuals per capita than urban counties? What leads local governments to privatize correctional services? Social scientists have long examined the determinants of imprisonment, mass incarceration, and prison privatization, explaining a growth in both the scope of incarceration and correctional privatization as the result of shifts in political culture and social policy as well as racial animus.

In this dissertation, I examine the extent to which previous studies of correctional expansion and privatization explain parallel phenomena at the county-level. While social scientists have created a robust literature examining mass incarceration and prison privatization, this research focuses on national and state units of analysis. However, the jail is also an important correctional institution, as it represents the "front door" to the larger system of mass incarceration and illustrates the ways in which communities and carceral institutions are intertwined (Subramanian et al. 2015). Also, jails have both been getting larger and incarcerating more individuals since the 1970s, a trend that parallels prison growth during the era of Mass Incarceration (Mai et al. 2019). Despite their importance, jails have been systematically neglected. This research gap exists for both local incarceration rates in the form of the jail (Simes 2021) and local correctional

privatization (Kim 2022). In this dissertation, I address this gap by examining ways in which local governments, politics, and demographic characteristics of counties are associated with jail incarceration and privatization.

My contribution in this dissertation is two-fold. First, I provide a systematic extension of mass incarceration research to the county-level. Theories and studies of punishment and prison privatization focus on the national and state units of analysis and the institution of the prison. While the prisons and these scales of analysis are important, researchers have yet to explore the extent to which these factors do and do not explain county-level jail incarceration dynamics. In this way, this dissertation represents both a theoretical and empirical extension of social science research. An additional contribution of this dissertation is that it uses a national-level primary dataset (the National Association of Counties survey) in addition to secondary data. As a result, this dissertation provides generalizable insights into the relationship between jails and county governments. To my knowledge, this dissertation provides the first county-level, empirical analysis of a national sample of jail incarceration rates and privatization.

My goal in this dissertation is to extend mass incarceration research to the local, county-level of analysis. In addition, I analyze the relationship between spatial context and local government characteristics and jail dynamics. While these factors have been demonstrated to be important for imprisonment and national/state units of analysis, it is not clear to what extent these factors explain jail incarceration (Eason 2010; Kim 2022; Simes 2021). Beyond the empirical and theoretical gaps addressed by this dissertation, a better understanding of jail incarceration is also of substantive value to real communities. Jails have an outsize role, particularly in rural counties, as they often serve as the central

criminal justice institution. They may also function as a source of mental health and other rehabilitative services in counties with a lack of other sources of social services (Ruddell and Mays 2007). Rural jails often offer fewer services than urban jails and are more dangerous for inmates, as measured by rates of suicide and death (Applegate and Sitren 2008; Mays and Thompson 1988). Additionally, as jails are usually a county government institution, jail funding is dependent on county general funds and revenue (Edelman and Mayer 2001). As a result, jails may compete with other health, education, and transportation services for funding in a given county, setting up a zero-sum competition between incarceration and social services (Cornelius 2008; Mai et al. 2019). As a result, jails are closely intertwined with local social policy environments, local governance, and community well-being.

In this chapter, I provide a brief overview of how jails fit into the larger structure of mass incarceration. I also discuss changing trends in jail incarceration since the 1970s and the relevance of these trends for understanding mass incarceration and community well-being. Next, I discuss current approaches to the study of mass incarceration that provide important starting points for analyses of the jail. Finally, I summarize the chapters of this dissertation, my research questions, and the contribution of each chapter to the study of jails and mass incarceration more broadly.

I. Literature and Background

Research on mass incarceration tends to focus on prisons and cross-national, national, and state-level analysis. While prisons are an important criminal justice institution, everyone who is in prison must first pass through a jail. In recent years, jails

have received increased attention in research institute reports, particularly regarding rural-urban differences and shifting racial and gendered dynamics in jail incarceration rates (Mai et al. 2019; Subramanian et al. 2015; Subramanian, Riley, and Mai 2018). These empirical reports and an increasing interest in spatial trends in incarceration have led scholars to call for an increased focus on jail incarceration and county-level studies of local corrections (Kim 2022; Simes 2021). In the discussion that follows, I outline recent empirical trends in jail incarceration and why these trends are of scholarly and public concern.

A. Jails as a Local Government Institution

I begin by providing a brief overview of what jails are, how they are managed, and recent trends in jail incarceration. I then discuss how jails are connected to local governments and are the various roles jails can play in a community and as a part of a range of local government services.

1. Jail Administration and Operation

It is important to first establish what a jail is and how it functions. In this section, I will discuss the basic function, challenges, and management of jails. Jails are a local government institution that houses inmates pre-trial, post-trial before transportation to prison, and for sentences of a year or less (Cornelius 2008). Because jails are a local government institution, their management and character are highly variegated as they are tied to local dynamics and conditions. This complexity and decentralization of jails is one reason that they have been neglected in the social science literature on incarceration and criminal justice (Klofas 1990; Mai et al. 2019).

Additionally, most jails in the U.S. (2,700 out of 3,300) are managed by sheriffs (Hamm 1990). Sheriffs are elected county officials and have no higher authority in the county government structure, making them highly autonomous local political figures. Additionally, sheriffs are more likely than the average police chief to have close ties to the community in which they serve (Falcone and Wells 1995; Weisheit, Falcone, and Wells 1995). As the sheriff is elected and reports directly to the electorate, the sheriff is thought to be both more politically active and responsive to the local community than an appointed police chief (Falcone and Wells 1995; Weisheit et al. 1995). Also, many jails are funded by fee income, which can be used at the sheriff's discretion. For example, if there is an excess of income from jail-sourced fees, the sheriff can use these fees to support the sheriff's chosen priorities (Hamm 1990). Thus, in comparison to prison wardens, the sheriff has much more control and discretion in jail management, allowing sheriffs to act as local policy entrepreneurs and demonstrating one of the numerous ways in which jails are directly affected by local social, fiscal, and political conditions (Williams 2011).

Recent studies have highlighted a noteworthy and concerning increase in jail incarceration, which has highlighted the complexities and inequalities in jail incarceration trends. The massive increase in prison inmates from the 1970s, known as mass incarceration, is well documented, as is its accompanying racial inequality and disproportionate impacts on Black communities (Alexander 2012; Western 2007; Western and Pettit 2005). Recent studies have also demonstrated how imprisonment and prison construction are not evenly distributed across space (Eason 2010, 2017; Eason, Zucker, and Wildeman 2017). Over this same period, jail inmate populations and jail capacity have also been steadily increasing (Mai et al. 2019). Like imprisonment and prison construction, this growth in both jail capacity and incarceration is not evenly distributed across space. As reported by the Vera Institute of Justice, there is a clear spatial inequality in jail incarceration rates in the U.S. Since 2005, urban counties have recorded a 9% decline in their jail populations, rural, suburban, and mid-size counties have marked an 11% increase in their jail populations (Mai et al. 2019).

While social scientists have not yet substantively addressed expanding jail inmate populations, increasing jail capacity, or spatial dynamics, the Vera Institute of Justice has provided invaluable preliminary reports and data on the topic. In addition to highlighting concerning statistical trends, such as increased jail incarceration (Subramanian et al. 2015), the Vera Institute also has also engaged in case study research that examines justifications and narratives proffered by county officials for expanding jail capacity and incarcerating more inmates in local jails (Mai et al. 2019). In the most recent study of this type, the Vera Institute complied a convenience sample of 77 counties in 31 states that sought to expand their jail capacity between 2000-2019, using secondary data and local news reports to identify their cases (Mai et al. 2019). In these 77 cases, there were three central reasons cited for increasing county-level jail incarceration: health and safety concerns, service provision, and revenue generation. Through these contextual analyses, this report highlights the way in which the jail is used as a point of service provision by county governments as well as a way to generate revenue for the county.

In the section that follows, I discuss the ways in which jails function as more than a punitive institution. Specifically, I discuss the use of jails as a point of social service provision and as a source of county revenue generation.

2. Jails as Social Service Providers and Revenue Generators

While the punitive function of the jail is clear, the use of a jail as a point of social service provision or form of economic development is not something that has been explored by the broader sociology of punishment or policy literature. In some cases, county officials state that increased jail incarceration and a larger jail facility is necessary to provide mental health and addiction services to the county population (Mai et al. 2019). In this sense, the jail is presented as an indispensable component of a county's suite of social services, rather than an inherently punitive local institution. In reality, however, jails often compete with health, education, and social welfare programs for funding (Cornelius 2008; Mai et al. 2019). As a result, increased investment in jails may lead to a direct reduction in other county social service programs.

Similarly, when county officials discuss jail expansion and increased jail incarceration levels as a matter of revenue generation, the punitive function of the jail is also downplayed. In these cases, county officials argue that by having a larger jail or being willing to increase the number of jail inmates held in their facility, the county can lease jail beds to other jurisdictions. Thus, the jail becomes a county economic development vehicle which provides revenue that supports county-funded programs, including social service programs (Mai et al. 2019; Marvel 2019). This use of the county jail is particularly salient for rural counties, as rural county governments are most likely to report fiscal stress (Lobao and Kraybill 2005) and face the starkest funding shortages in their jail budgets (Ruddell and Mays 2007, 2011).

As a result of the complex ways in which jails are embedded in county politics and enmeshed with county social policy and revenue environments, jails are not simply a punitive institution. In fact, based on the Vera Institute reports discussed above, jails serve as a revenue generator, social service provision point, *and* a punitive institution. As such, jails reflect the convergence of a multiplicity of county-level, place-based social factors. The political figure of the sheriff, county social services, and county budgets and revenue all directly impact jail operations. As a result, to understand the contemporary landscape of jail incarceration and operation, close attention to county-level conditions, namely county government characteristics (i.e. social policy, capacity), local politics, and spatial context is necessary. In the next section, I discuss recent studies that have begun to highlight the need for more studies of local incarceration, namely jails, and the factors these studies consider to be important.

B. Scaling Down the Study of Punishment and Corrections

As stated previously, the study the jail requires a county-level, place-based approach to the study of punishment. While this approach to jail research has yet to be undertaken, a parallel spatial, place-based approach to the study of imprisonment has become more prominent in recent years. In the discussion that follows, I review recent place-based and spatial approaches to incarceration and how these approaches parallel the larger sociology of punishment.

1. Place-Based and Spatial Perspectives on Punishment

For the last decade, John Eason has pioneered an explicitly spatial approach to the study of prison construction (2010, 2012, 2016, 2017) as well as imprisonment (Eason et al. 2017). In his research, Eason finds that space, primarily rurality, is an important factor in both prison construction and an individual's likelihood of imprisonment. Simes (2018, 2021) carries forward Eason's spatial work and studies mass imprisonment through an

explicitly spatial lens. Not only does Simes find a similar, rural spatial effect in imprisonment rates in her study of Massachusetts, but she also develops a systematic framework of "punishment vulnerability" (2021:152). This framework synthesizes both the findings of Eason's spatial work with broader sociological and criminological research and presents both a timely and insightful framework for studying punishment as a place-based social phenomenon.

Simes' (2021) framework of "punishment vulnerability" is comprised of two central categories of variables: place-based socioeconomic and sociodemographic variables and criminological variables. While Simes includes a range of variables traditionally associated with punitive outcomes, such as non-white population shares, poverty, and political disenfranchisement, she also includes a range of measures more often used to capture aspects of the welfare state and social well-being. For example, Simes includes individual health, single-parent households, rurality, education, housing availability, and stigma as important predictors of punishment. While she also includes criminological measures such as police officers per capita, prison capacity, and sentencing environments in her framework. Simes emphasizes the role of communitylevel social insecurity in her framework. In sum, Simes calls for a study of punishment that centers place-based economic and social conditions, as it is these factors that create spatially-contingent centers of "punishment vulnerability" and maintain the U.S.'s current system of mass incarceration.

2. Integrating Spatial Approaches with the Sociology of Punishment

Simes' social, place-based approach to the study of punishment aligns with institutional perspectives on punishment that consider punishment a social process not wholly dictated by criminal behavior or crime rates (Garland 2001; Sutton 2000). Economic conditions, namely employment, are also an important predictor for neo-Marxist theories of punishment, namely the Rusche and Kirchheimer tradition, which considers punishment to be a state-sanctioned way of controlling surplus labor periods of high unemployment (Chiricos and Delone 1992; Rusche and Kirchheimer 1968; Sutton 2004). Simes' framework also includes a range of functions associated with the welfare state, including provision of social services, healthcare, and housing. The decline of the welfare state has long been connected to the increased punitiveness of the post-1970s period by scholars of mass incarceration and punishment (Garland 2001; Sutton 2000, 2004; Wacquant 2009). Finally, race and ethnicity have been shown to be crucially important factors in the contemporary era of mass incarceration, with Black and Hispanic communities being disproportionately impacted by mass incarceration (Alexander 2012; Subramanian et al. 2018; Western 2007; Western and Pettit 2005).

Simes' approach also incorporates contextual factors that are highlighted as important in studies of prison privatization (Kim 2022). Political factors have long been found to be important predictors of prison privatization (Butz and Fording 2022; Jing 2010; Mitchell and Butz 2019). Similarly, increased state levels of racial diversity, particularly in prison populations, have been found to predict increased levels of privatization (Butz and Fording 2022; Enns and Ramirez 2018). Inequality is a more recent addition to the prison privatization research tradition, and has also been found to be significantly associated with prison privatization outcomes (Mitchell and Butz 2019).

While not explicitly mentioned in Simes' framework, government capacity is implicitly subsumed under the category of "Prison Capacity." Simes defines "Prison

Capacity" as "A prison system with greater capacity for incarceration" (2021:154). While government capacity, particularly fiscal and administrative resources, are explicitly and regularly included as determinants in studies of prison privatization (Butz and Fording 2022; Jing 2010; Kim and Price 2014), studies of imprisonment tend not to explicitly consider state capacity. Particularly in analyzing jails, county government finances are crucial for jail operations, and I examine a range of government capacity variables in my analyses to account for the close connection between local government capacity and local punishment capacity.

II. Overview of Chapters

As demonstrated above, jails are an important unit of analysis that has been neglected in the broader social scientific research on punishment and mass incarceration. While recent studies have begun to take a more place-based, local approach to the study of punishment, these studies focus on imprisonment rather than jail incarceration (Eason et al. 2017; Simes 2021). However, these place-based approaches, in conjunction with insights from the broader sociology of punishment, provide a rich guide for my dissertation and a systematic study of the jail as a local punitive institution. This dissertation takes up the mantle of institutional and place-based studies of mass incarceration research and extends it to the jail, an important and neglected local punitive institution.

In my dissertation, I answer three central research questions that examine the relationship between county-level governmental, political, spatial, and social factors and jail incarceration. In Chapter 2, the central question I ask is: To what extent are county

government social service provision and capacity associated with county-level jail rates? In this chapter, I connect the robustness of the local state and its social welfare functions to punitive outcomes (jail rates).

In Chapter 3, I connect characteristics of county governments, namely capacity and expenditures, with the likelihood that county jails have been privatized. The central question I ask in this chapter is: what county government and county-level contextual factors are associated with a higher likelihood of county jail privatization? My central contribution in this chapter is an extension of prison privatization research to jails.

Finally, in Chapter 4, I compare and contrast factors associated with two functions of the jail: punishment and revenue-generation. I address two central research questions in this chapter: 1) To what extent are institutional and economic characteristics of counties associated with the pre-trial jail incarceration rate? 2) To what extent do these same factors explain (or not) the use of jails as an economic institution? To answer these questions, I utilize two different dependent variables—pretrial jail incarceration (a measure of jail incarceration as a form of punishment) and the share of total jail populations in a county that are held for other jurisdictions (representing an economic development function of the jail). I also use a spatial modeling technique in this chapter to capture spatial dynamics demonstrated to be important in studies of imprisonment (Simes 2018, 2021).

In short, in this dissertation, my goal is to extend the robust mass incarceration literature to the county-level unit of analysis. In the process, I examine the extent to which the local state, local politics, local socio-demographics, local economies, and spatial location are associated with jail incarceration and privatization. In doing so, I

highlight place-based "punishment vulnerability" (Simes 2021:152) and demonstrate the extent to which theories of punishment and privatization are able to explain the same phenomena at the local level. As such, my goal is to not only extend research and theory to a new unit of analysis, but also to think more expansively about how the jail functions as a local institution and what the community impacts of such "punishment vulnerability" at the community-level may be.

CHAPTER 2. LOCAL PUNISHMENT AND THE LOCAL STATE: DO COUNTY GOVERNMENTS AND LOCAL POLITICS MATTER FOR JAIL INCARCERATION?

I. Introduction

While sociologists have long studied prisons and mass incarceration, jails, another important institution of both government and punishment, remain undertreated. Jails are an outlier in the larger literature on mass incarceration, in that they have received significantly less scholarly attention (Klofas 1990). However, as the primary intake facility for those who eventually are incarcerated, jails are a critically important part of the larger carceral system in the United States, as well as a long-standing local government institution. As such, they are deserving of additional study.

Jails are not only theoretically important, given their status as a local government institution and their importance in the larger system of mass incarceration, but they are also empirically important, given shifts in jail incarceration rates noted in recent years. Recent research by the Vera Institute highlights an increase in jail populations, particularly in rural areas (Kang-Brown and Subramanian 2017; Mai et al. 2019; Subramanian et al. 2015). While the massive increase in the U.S.'s prison population post-1970 in the era of mass incarceration sparked a wave of sociological research to analyze the underlying causes and processes, no parallel research agenda has emerged to study the jail population¹. As jails are closely connected to local governments and local community conditions, jails are both important to study as an institution that is closely connected to many communities and individuals across the U.S. and also as an important, local laboratory for testing theories and models used to examine prisons and state and federal levels of punishment. I address this gap in this chapter by asking: Do the explanations and findings regarding punishment at the state and national level (i.e. imprisonment) also explain punishment at the local level (i.e. jails)? I also ask to what extent county government characteristics are associated with jail incarceration levels, to investigate the connection between the local state and local punishment.

Institutional theories of punishment provide important theoretical insights into the sociological study of jail incarceration. An institutional approach to the study of punishment highlights the ways in which punishment is a social institution shaped by other social institutions, specifically the state, social welfare institutions, politics, and cultural values (Garland 1990). According to this perspective, penal policy is shaped by social processes and is not perfectly and rationally tied to crime rates, as even "crime" is itself a socially constructed, historically contingent category of deviant behaviors (Black 1976; Muller 2012; Wilson and Kelling 1982). I extend the sociology of punishment literature to the study of jails through an institutional theoretical approach, considering the role of the local state and local politics in relation to local incarceration rates.

As the state is an essential component to studies of punishment, local governments are an important component of a sociological study of jails, as jails are local

¹ The Vera Institute is a notable exception to this, as they have published multiple reports directly discussing increased jail rates and rural-urban divergences, and are partnering with sociologists to conduct additional research into these disparities.

government institutions. The interdisciplinary local governments research provides insights into the relationship between government social policy and capacity, characteristics of the state that are central factors in institutional explanations of punishment (Garland 1990; Sutton 2000). As a result, from the research on local governments, I derive important variables that measure characteristics of the local state that operationalize concepts from the sociology of punishment.

In this chapter, my central research question is: How are county government characteristics and county political conditions associated with jail rates across the U.S.? In other words, do local governments matter? And if they do matter, do they matter in the way(s) predicted by institutional theories of punishment (Garland 2001; Sutton 2000, 2004)? I use a cross-sectional analysis to examine the relationship between county government social service environments, capacity, politics, and county-level jail populations. My central contribution in this chapter is a county-level analysis of punishment and its relationship to the local state and local political conditions. An additional contribution of this chapter is that it relies upon a primary dataset, the National Association of Counties 2007 county government survey, which provides a more nuanced perspective on county governments than would be allowed by using purely secondary data.

II. Literature and Background

Jails, specifically county jails, are a critical component of the American criminal justice system and represent the "front door" to the U.S. system of mass incarceration (Subramanian et al. 2015). However, jails have generally been consistently neglected in

the social science literature (Klofas 1990). Not only are jails substantively important as "Mass Incarceration's Front Door" (Subramanian et al. 2015), but they are also important for understanding punishment as a social phenomenon. Chiricos and Bales (1991) argue that both punishment and labor markets are highly localized phenomena and important insights into local dynamics that influence punishment outcomes are lost in state and national analyses. Other studies, particularly those evaluating the relationship between punishment outcomes and unemployment, hypothesize that jails (i.e. localized manifestations of punishment) may be more sensitive to unemployment, particularly minority unemployment, than prison rates (Chiricos and Delone 1992). I follow this line of inquiry in this chapter, examining the relationship between local governments, local politics, and punishment.

Rural jails have received even less attention than urban jails, as criminal justice research in the U.S. exhibits a strong urban bias (Weisheit et al. 1995). This is particularly concerning, as recent reporting by the Vera Institute indicates a clear spatial inequality in the incarceration rates of county jails in the U.S. While urban jails have seen a 9% decline in their pre-trial jail populations since the mid-2000s, rural, suburban, and mid-size cities have noted an 11% increase. This spatial disparity is also the inverse of crime rates (Mai et al. 2019). This suggests important sociological factors at work in determining the numbers of individuals held in jail in the U.S. and is an additional motivator for a more locally-focused analysis of jail incarceration.

In the discussion that follows, I reflect upon how jail populations may be explained by an extension of synthetic, institutional theories of punishment, specifically with a focus on the social welfare functions and capacity of the local state—the level of government directly involved in maintaining and overseeing jails in the U.S.

A. Punishment and the State

In institutional theories of punishment, the state is a central focus, as the state is the central institution that determines and enforces laws and punishments. However, the state is also influenced by political and social forces that become institutionalized within the state (Garland 2001; Sutton 2000). At its core, an institutional account of punishment is a synthetic account that considers punishment to have multiple sources of causality (Garland 1990; Sutton 2000). While the broader sociology of punishment features theoretical and empirical traditions that build on classical theorists, Garland (1990) argues that these separate approaches take a piecemeal approach to the very complex institution of punishment. For example, the Marxist Rusche-Kirchheimer hypothesis asserts that unemployment and labor supply variables are the most salient determinants of punishment. Other theoretical perspectives that adapt insights from the works of Durkheim and Weber emphasize the primacy of political and cultural forces in shaping penal policy (Garland 1990; Savelsberg 1994). As noted by both Sutton (2000) and Garland (1990), each of these separate theoretical perspectives highlights important aspects of punishment as a social institution. However, each of these theoretical explanations, on their own, do not provide a satisfying explanation for punitive policy and the appetite of contemporary society for punishment. Instead, a synthetic approach that incorporates insights from all of these perspectives is the best theoretical way forward, according to Garland (1990), who has been on the forefront of theoretical extension and institutional synthesis in the sociology of punishment. In the words of

Sutton, an institutional perspective considers both how punishment reinforces "dominant conceptions of deviance and morality" as well as "normative boundaries and political authority" (2000:352). In short, the state represents the bureaucratic field in which different class, political, and social interests compete. As a result of this competition and interaction within the institution of the state, the outcomes of penal policy and punishment are produced.

In this chapter, my analysis focuses upon the role of the local state in local punishment (i.e. jail rates), and I utilize institutional theories of punishment, building on the work of Garland (2001), Wacquant (2009), and Sutton (2000, 2004), to analyze this relationship. In my approach, I highlight the role of state policy priorities, characteristics, and political context as important determinants of county-level punitiveness. I discuss each of these topics below and describe how they reflect and relate to institutional theories of punishment.

1. The Punitive State and Social Service Provision

When discussing the role of the state in punishment in the United States, it is necessary to highlight the historical transition of the U.S. justice system from a relatively rehabilitation-oriented system to a more punitive system in latter half of the 20th century (Garland 2001). Garland (2001) argues that this shift is driven by political and social shifts in the U.S. Neoliberalism, an ascendant political ideology with an emphasis on decentralized, free markets merged with social conservativism during the latter portion of the 20th century to create a "Neo-Conservativism." In this new, "Neo-Conservative" era, Garland (2001) argues, the previous state priority of rehabilitating offenders fell out of favor. As a result, the normative assumption became that crime was committed out of

rational self-interest rather than social alienation, leading both politicians and the general public to favor punitive policies over rehabilitation. Garland credits this cultural and political shift with the rise of mass incarceration through the state's greater emphasis on harsh sentencing and greatly diminished focus on social services and rehabilitation, both inside and outside of the criminal justice system. It is this fundamental shift in the priorities and orientation of the state that is the focus of institutional theories of punishment.

I follow Garland's (2001) assertion that this political and social shift away from rehabilitation and toward punitiveness was reflected both in penal *and* social welfare policy during this era. As a result, this punitive neoliberal policy environment considers the poor "undeserving" and in need of strict regulation, in both criminal justice and social welfare policy. This connection between criminal justice and social welfare policy is represented in other sociological work, notably that of Wacquant (2009). Like Garland (2001), Wacquant argues that a new class structure was emergent in the U.S. from the 1980s onward. At the bottom are the stigmatized groups who are deemed "undeserving" and shunted into either incarceration (as a form of warehousing and "neutralization") or unstable wage work. In essence, Wacquant argues that the contemporary neoliberal state has two central pillars: "workfare" and "prisonfare," both of which regulate, coerce, and surveil the poor through both expanded incarceration and strict, austere social welfare policies.

Sutton (2000, 2004) also emphasizes the connection of social policy and penal policy in his cross-national, institutional analyses of punishment. Sutton engages with the Rusche-Kirchheimer thesis, the central neo-Marxist tradition in the sociology of punishment. Researchers in this tradition have considered unemployment an important predictor of imprisonment rates, as imprisonment acts as a way for the state to manage the threat of the unemployed and/or lower classes. However, Sutton argues that the institution of the state, through policy and political representation mitigates the relationship between economic conditions and punitive outcomes. Sutton (2004) found that the more generous the national welfare benefits, the lower the imprisonment rates in his cross-national model. Thus, Sutton (2004) demonstrates that social policy acts as a moderating influence on punishment outcomes, depending on the priorities of the state.

Based on these institutional theories of punishment and empirical findings, I expect increased social service provision by county governments to be associated with lower overall levels of jail incarceration.

2. The Punitive State and State Capacity

While the social service provision function of the state shrunk during the neoliberal era, the capacity of the state remained sizeable, as seen through the massive and concurrent expansion of the criminal justice system. However, during this era, state capacity was channeled toward punitive actions, such as mass incarceration, rather than social services. In his analysis of welfare reform and the contemporary criminal justice system, Wacquant (2009) argues that the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) mirrors the core values of mass incarceration: punishing the poor. As the U.S. shrank its range of social welfare programs, it expanded its punitive infrastructure, marking a massive redirection of not only government priorities, but also the use of government resources and bureaucratic growth. Wacquant even frames prisons as the U.S.'s default public housing program. In short, Wacquant

makes a compelling case of the dual consideration of social and penal policy and material and symbolic factors in studies of punishment, as his core argument is that the rise of mass incarceration in the U.S. is the result of *social insecurity* rather than *criminal insecurity*. As a result, welfare reform and mass incarceration both work toward the "…ordering of social insecurity in the age of deregulated capitalism" (Wacquant 2009:295). In this sense, the neoliberal state has not shrunk in its capacity to act and create policy. Rather, resources have been channeled away from social policy and toward punitive policy. This can be seen in the concurrent slashing of the social safety net during welfare reform and the massive expenditures for prison construction during the "Prison Boom" during the 1990s (Eason 2016).

Based on the work of Wacquant, I would expect increased county government capacity to be associated with overall higher levels of jail incarceration, as in the current policy environment, government capacity, both fiscal and administrative, tends to be channeled toward punitive ends and away from social welfare policies and programs.

3. The Punitive State and Political Context

Institutional theories of punishment also consider political culture and values to be important institutional determinants of punishment. Both political and social context are important influences on the state, which in turn, causes them to have important implications for punitive policy. As institutional theories synthesize insights from classical theorists, the political and social aspects of institutional theories are rooted both in theoretical adaptations of Marx and Durkheim, who argue, respectively, that punishment is a way to both control the working class and reaffirm a traditional social order. Sutton (2004), in revisiting the Marxist Rusche-Kirchheimer hypothesis, finds the extent to which the state reflects class-based interests and class politics has a significant impact on imprisonment rates cross-nationally. Sutton finds increased working-class representation in governments (as measured by left political influence) is associated with lower levels of imprisonment. Based on these findings, I expect markers of a more conservative political context to be positively associated with a higher jail population. I also expect increased institutionalization of working-class interests in local governments to be associated with lower levels of jail incarceration.

Garland (2001) also argues that social conservatism plays an important role in shaping punitive policy in the neoliberal era. Through an ascendant social and political conservatism, criminal justice policy and its political justifications take on a moralizing and symbolic tone. This concern with reaffirming dominant social norms and social solidarity through punishment suggests the utility of Durkheim for the study of punishment (Garland 1990), specifically an attention to social variables as important institutional influences. In fact, a relationship between social conservatism, as measured through religious affiliation, and imprisonment has been empirically verified in numerous studies (Jacobs 2004; Jacobs and Carmichael 2001). Other studies have found public opinion and values to be similarly predictive of punitive outcomes (Enns 2014). These findings suggest that support for punitive legislation, such as "Three Strikes" is associated with perceived social decline, loss of social stability and eroding social institutions (Tyler and Boeckmann 1997). As a result, I would expect counties with higher levels of political and social conservatism to have higher jail incarceration rates.

B. Jails and the Local State

While government is an important and necessary component of an analysis of punishment, incarceration has largely been examined at the state and federal level. As jails are a *local* government institution, it is important to review the ways in which local government social policy emphases and local government capacity may relate to punishment, i.e. county-level jail rates. In the discussion that follows, I highlight research that pertains to the aspects of the state highlighted by institutional theories of punishment, namely local government social service provision and capacity and political context.

1. Jails and Local Government Service Provision

As discussed previously, the post-1980s era of "neoliberalism" heralded significant changes to policy and governance, including economic deregulation, devolution and retraction of the welfare state, an emphasis on individual responsibility, and expansive penal policy (Wacquant 2009). As an additional impact of these policy changes, local governments have become an increasingly important level of the state, both empirically and theoretically. As the federal government increasingly delegates responsibility to lower governmental levels, county governments have grown in size and are increasingly responsible for economic development and social welfare programming that had previously been the jurisdiction of state and federal levels of government (Lobao 2016; Lobao, Adua, and Hooks 2014).

These changes in governance have had important implications for county governments and their relevance to communities. Despite the burden of increased responsibility to provide more services, county governments have not uniformly received fiscal or administrative support to carry out these duties. County governments reflect a
range of regional and spatial inequalities in their resources and capacity to provide services. As a result, this results in resource inequalities in the local welfare state, which directly impacts community well-being through limited access to services and programs (Lobao and Kraybill 2005).

While the relationship between the local state and local punishment has not been explored as systematically as the relationship between the nation-state and punitive outcomes, research on jails suggests a similar, inverse relationship between the robustness of local governments' social service provision and jail incarceration. Jails are, in most cases, directly managed by local governments (Hamm 1990). Jails, as a local government service, also represent a point of competition for local government funds, with jails directly competing with health, education, and other social programs for funds (Cornelius 2008). Jail funding is also often dependent upon county revenue and general funds (Edelman and Mayer 2001). Jails also may serve as a site of mental health and other service provision in counties without many other treatment options (Ruddell and Mays 2007), reflecting the an overlap between social and penal services similar to that highlighted by Wacquant (2009). In fact, jails have long been noted as incarcerating the mentally ill and those in need of addiction treatment due to an absence of other health facilities in communities (Kerle 1982). These studies highlight the interdependence between local governments' social welfare and punitive functions, with jails both providing certain social services as well as competing for funds with other county government programs and centers.

2. Jails and Local Government Capacity

An additional aspect of the local state that is important to this discussion is local government capacity. State capacity is not a primary focus of institutional theories of punishment, with scholars generally arguing that the neoliberal state has used its capacity for penal, rather than social welfare, ends (Garland 2001; Wacquant 2009), rather than losing capacity overall. However, studies of local governments highlight the importance of local government capacity, particularly as it relates to local government social service provision. Common measures of county government capacity rely on measures of Weberian bureaucratic capacity, such as administrative staff, fiscal resources, financial and governmental autonomy, and employment size (Lobao et al. 2014; Lobao and Kraybill 2005).

Of particular relevance for my analysis is the observed relationship between local government capacity (i.e. administrative, staff, and fiscal resources) and the social service function of the local state. Greater county government capacity has been found to be associated with higher rates of service provision (Lobao and Kraybill 2005). Generally, local governments research finds that a more robust, well-resourced, contemporary local state, as measured through revenue and staff resources, tends to provide more social services (Lobao and Kraybill 2005). This raises the important question of if local governments are inherently less neoliberal and more benevolent than state and federal governments. However, no studies have explicitly examined the relationship between local government capacity and local punishment to determine if local government capacity is negatively associated with punishment rates and deviates from the punitive,

neoliberal norms of state and federal governments. This is a gap which I address in this chapter.

This relationship between capacity, service provision, and jail incarceration is also relevant to spatial dynamics in jail incarceration rates. Descriptive analyses of jail incarceration have highlighted clear rural-urban differences in jail rates, with rural counties having a higher county-level jail incarceration rate than urban counties (Mai et al. 2019). This rural-urban jail rate differential is also relevant for the previously outlined relationship between county government capacity and social service provision. Rural county governments are more likely to report fiscal stress and lower government capacity. This is exacerbated by common rural social conditions, including declining, aging populations and weaker economic bases, which results in a shrinking and unstable tax base for local governments, leading to lower fiscal and administrative capacity. Economic health is an important determinant of social service provision, and as a result, rural county governments tend to provide fewer social services than urban counties (Lobao and Kraybill 2005). This may mean that rural counties (and other economically distressed counties) may be more punitive, as they lack a robust set of non-carceral services as an alternative to incarceration. Additionally, case studies have demonstrated that jail incarceration is used as a revenue-generation strategy by some counties. This may also mean that counties facing economic challenges may have higher jail rates as they hold more jail inmates for other jurisdictions to generate additional county revenue (Mai et al. 2019; Marvel 2019).

By extension, based on local governments research, I would expect rural counties to have higher jail rates. I expect this, as rural counties have lower county government

capacity, which is, in turn, associated with lower levels of social service provision. Lower levels of social service provision, in turn, based on institutional theories of punishment, should be associated with higher levels of punishment. This expectation parallels the findings of the Vera Institute, which has found that rural counties' rate of pre-trial jail incarceration to exceed that of urban counties (Kang-Brown and Subramanian 2017; Mai et al. 2019).

3. Jails and County Political Context

Local political factors are also important for local governments. County public sector unionization is a measure of the institutionalization of class politics within local governments, with public sector unionization being positively related to county government social service provision (Lobao et al. 2014). As a result, this same measure of institutionalized, labor-based interests in local governments should be associated with lower jail rates, as county governments with better working-class representation should be less carceral. Additionally, at the county-level, political behavior, such as Republican voting, has been found to be closely tied to religious fundamentalism (Kelly and Lobao 2019). As local governments are influenced in important ways by their political and social contexts (Lobao et al. 2014), it is important to include measures of both political affiliation and religious fundamentalism in county-level analyses of jail rates, as in higher-level analyses of imprisonment rates.

III. Summary and Research Questions

The central research question I answer in this chapter is: Are county government characteristics and county-level political conditions related to jail incarceration rates? In

this analysis, I examine how local government capacity and service provision and local political context influences the total jail population in a sample of U.S. counties.

In short, a synthesis of institutional perspectives on punishment and studies of local government provides a framework for examining the relationship between local governments and local punishment. As relates to social service provision, institutional theorists predict that states with more generous social welfare policies and programs will be less punitive. As the local governments literature does not provide a competing hypothesis for the relationship between punishment and local social service provision, I base my hypotheses regarding the relationship between county government social service provision and jail rates on institutional theories of punishment and expect county government social service provision to be negatively associated with jail incarceration.

The directionality of the relationship between local government capacity and jail rates, however, is less clear. Based on institutional perspectives on punishment, in the current, neoliberal policy climate, the state generally mobilizes its resources for punitive, rather than social welfare ends, due to shifting social and political influences since the 1970s. As a result, the state's capacity to act tends to be mobilized for punitive ends (Wacquant 2009). However, according to local governments research, local governments with more capacity tend to use that capacity for increased social welfare programs and services (Lobao 2016; Lobao and Kraybill 2005). By extension, this positive association between local government capacity and social service provision would predict that local government capacity should be *negatively* related to local levels of punishment. This raises the question of whether the local state is less neoliberal and more social welfare focused, by default, than the state and federal government. In short, does the local state

mobilize its resources for punitive ends, as is the case for state and national governments and imprisonment? Or does the local state mobilize its resources for increased social service provision and, thus, less punitive ends?

As relates to county-level political context, I expect that county-level political and social factors to relate to jail incarceration in the direction predicted by institutional theories of punishment. In short, I expect public sector unionization to be negatively associated with the jail rate. In contrast, I expect both political and social conservatism to create a more punitive county-level political context, which will result in higher levels of jail incarceration.

A. Social Service Provision

I examine how county government social service provision levels and county government capacity relate to jail incarceration rates. Both theory and empirical research connect social policy with punishment outcomes, with increased government emphasis on social welfare being associated with decreased incarceration rates (Garland 2001; Sutton 2000, 2004; Wacquant 2009). Based on these insights, I develop the following hypotheses:

H1: Counties that have cut services to balance their budgets will have higher jail populations. I expect this relationship as two hallmarks of neoliberal policy service cuts as a budgetary strategy co-exist with increased levels of punishment (Garland 2001; Wacquant 2009). In short, counties that have cut services reflect more of a neoliberal local policy environment.

H2: Counties that offer more social services will have lower jail populations. I expect this relationship, given the assertion of institutional theories of punishment that the state's punitive and social welfare functions are inversely related.

H3: Counties in a state where TANF administration is devolved to counties will have lower jail populations. I expect this relationship, as counties located in states where TANF administration is devolved tend to provide more social services (Lobao et al. 2014; Lobao and Kraybill 2005) and increased social service provision is associated with lower levels of punitiveness in studies of imprisonment (Sutton 2000, 2004).

B. State Capacity

Additionally, in the contemporary era, state resources (i.e. capacity) tend to be used for punitive, rather than social welfare or rehabilitative ends by state and federal governments due to neoliberal, punitive policy changes since the 1970s (Garland 2001; Sutton 2000, 2004; Wacquant 2009). Based on these theorists' assessment of the contemporary neoliberal state, I would expect state resources at all levels to be used for punitive ends.

However, research on local governments finds that county government capacity is positively associated with social service provision (Lobao and Kraybill 2005). As increased social welfare service provision is generally associated with lower levels of punitiveness in institutional theories of punishment, this positive association between local government capacity and service provision would lead me to expect that increased local government capacity should result in lower jail incarceration (as a byproduct of increased service provision). As a result, county government capacity may be positively *or* negatively associated with jail rates. However, I expect to find county government

capacity to be negatively associated with county-level jail rates. I expect this relationship due to the observed positive relationship between county government capacity and county government social service provision. As higher capacity governments offer more social services, I expect higher capacity governments will also be less punitive. In short, I expect county governments to use their resources for more progressive, rehabilitative ends. Based on these insights, I develop the following hypotheses:

H4: I expect that counties with a grant writer on staff will have lower jail rates. Having a grant writer on staff is a measure of local government administrative capacity (Lobao et al. 2014). A grant writer allows county governments to apply for a range of grants and access a pipeline of resources and programs unavailable to governments without a full-time employee dedicated to grant-writing. Having a grant writer on staff has been found to be associated with higher levels of county government social service provision (Lobao et al. 2014; Lobao and Kraybill 2005). As a result, counties with a grant writer may have an expanded suite of social services as an alternative to incarceration, which may be associated with lower jail incarceration rates. Alternatively, having a grant writer on staff may enable county governments to take advantage of resources and programs such as USDA Community Development Loans. As these funds are a wellknown source for jail expansion projects, a grant writer may be associated with increased jail incarceration rates (Mai et al. 2019). However, as discussed above, the relationship between county government capacity and local punitiveness is not clearly established, and the directionality of the relationship between the grant writer and jail rate variables may be either positive or negative.

H5: I expect counties with more economic autonomy to have lower jail populations. Economic autonomy is an indicator of financial independence, which allows counties more control over their own fiscal decisions. Generally, counties with more fiscal autonomy offer a wider range of services (Lobao et al. 2014). As a result, I hypothesize that county governments will use this increased control to fund more social welfare rather than punitive programs. However, based on institutional theories of punishment, this variable could also be positively related to the county-level jail rate, as increased capacity and autonomy may simply be used to further existing punitive county government policy goals.

H6: I expect counties with healthier economies to have lower jail populations. As research has found that county structural characteristics, including economic conditions, directly relate to local government capacity through the local tax base (Lobao and Kraybill 2005), county economic health is an important measure of local government capacity. However, based on institutional theories of punishment, economic health could also be positively related to the county-level jail rate, as increased capacity may simply be used for punitive ends.

H7: I expect rural counties to have higher jail populations. Overall, rural counties tend to have lower capacity governments that offer a smaller range of social services (Lobao and Kraybill 2005). As such, I consider rurality to be another measure of county government capacity. While I have mixed expectations for the other county government capacity variables, I still expect rurality to be positively associated with jail rates, based on reports that rural areas as a spatial category have the highest overall rate of pre-trial jail incarceration (Mai et al. 2019).

H8: I expect that counties that utilize Home Rule will have lower jail populations. Counties that utilize home rule have an additional level of autonomy and local control in governance decisions and as such, home rule functions as a measure of political autonomy and potential to pursue their own, non-punitive policy goals. Home Rule allows counties a greater level of autonomy in governance decisions and has been used in recent decades to institutionalize and enact local, progressive movements such as creating Sanctuary Cities and prohibiting fracking within local boundaries. While these local policy initiatives can often be overridden by state governments, a Home Rule charter enables greater local political autonomy and policymaking (Fox 2017). As a result, Home Rule, as an indicator of political/administrative autonomy reflects the potential for progressive local government policymaking. As jail incarceration is directly tied to the local policy environment and policing priorities, Home Rule counties may be a more progressive and thus less punitive local policy environment.

H9: I expect that counties with higher revenue levels will have lower jail populations. County revenue is an important fiscal resource that reflects a county's ability to fund a range of social services and non-punitive programs.

H10: I expect that counties with more county government employees per capita will have lower jail populations. I expect that increased administrative staff will allow county governments to provide a wider array of non-punitive services, which will result in lower levels of jail incarceration.

C. Political Context

I examine variables, derived from institutional theories of punishment, that examine the relationship between political context and institutions, namely institutionalization of working-class interests in local governments. Sutton (2004) finds that the institutionalization of working-class interests in national governments, as measured by the level of left-political party representation, is negatively related to imprisonment rates. Sutton argues that institutionalization of progressive ideals leads to more progressive policy that is less punitive toward the poor and working-class. In my analysis, I include a measure of county government workforce unionization, a measure that captures the extent to which class politics are institutionalized in local governments (Lobao et al. 2014). Based on these findings, I develop the following hypothesis regarding class politics and local governments:

H11: I expect counties with higher county government workforce unionization rates to have lower jail populations.

Measures of social conservatism are also important components of institutional theories of punishment. Conservative political affiliation, as conceptualized through Republican party strength, has been found to be associated with higher imprisonment rates and more support for punitive policies, such as capital punishment (Jacobs 2004). Garland (2001) also highlights the role social conservatism played in shaping political institutions and creating more punitive policy. This positive relationship between social conservatism and punitiveness is further attested in studies that find a positive relationship between religious fundamentalism and imprisonment rates (Jacobs 2004; Jacobs and Carmichael 2001). In both the case of religious fundamentalism and political conservatism, these factors are directly connected to the desire to punish deviance and reaffirm a set of traditional social values and a desire to preserve "law and order," resulting in more punitive policy environments. Based on these findings, I develop the following hypotheses:

H12: I expect counties with higher levels of Republican party voting in the 2008 Presidential election to have higher jail populations.

H13: I expect counties with higher rates of evangelical Christians to have higher jail populations.

In Table 2.1 below, I summarize my hypotheses and the directionality of the expected relationships. For the county government capacity variables, while I expect county government capacity to be negatively associated with jail rates, I include the alternative outcome in parentheses in the table below to represent the competing hypotheses of institutional theories of punishment which consider the state to use resources for punitive ends.

| Variables | Expected |
|--|--------------|
| | Relationship |
| County Government Social Service Provision | |
| H1: Service Cuts | + |
| H2: Social Services Offered | - |
| H3: TANF Devolved | - |
| County Government Capacity | |
| H4: Grant Writer on Staff | - (+) |
| H5: Economic Autonomy | - (+) |
| H6: Economic Health | - (+) |
| H7: Rural Status | + |
| H8: Home Rule | - (+) |
| H9: Revenue | - (+) |
| H10: Employees | - (+) |
| Political Context | |
| H11: County Government Unionization | - |
| H12: Republican Party Voting | + |
| H13: Evangelical Christian Adherence | + |

 Table 2.1 Summary of Expected Relationships to Jail Incarceration

D. Control Variables

I also include a range of control variables in my analysis. While including the homicide rate is standard practice in analyses of imprisonment and incarceration, the other control measures are also relevant to the topic of jails and the importance of local government. Structural characteristics of a county, such as unemployment, poverty, minority population share, as well as educational attainment all directly reflect both the fiscal needs of a local population as well as a local government's tax base, which may directly affect local government capacity and revenue (Lobao and Kraybill 2005). Additionally, Sutton (2000, 2004) finds that levels of institutional integration into society, as measured through employment rates and educational attainment, influence imprisonment rates over time. Thus, while this analysis primarily focuses on the role of the local state in determining jail rates, including these other measures also captures important realities about county social contexts which may also play an important role in determining jail populations. I expect the proportion of college graduates to be negatively associated with the jail rate. However, I expect the homicide rate, unemployment rate, and poverty rate to be positively associated with the jail rate. The disproportionate racial inequality of the U.S. criminal justice system is also well-documented, requiring the inclusion of a measure that captures a county's Black population (Alexander 2012; Pettit and Western 2004). I expect the share of Black residents in a county to be positively associated with the jail rate.

IV. Data and Methods

My data for this analysis is comprised of both primary and secondary components. The primary component of this dataset is the 2008 National Association of Counties (NACo) survey, which was collected in 2007-2008. This survey is a nationally representative sample of county governments in the U.S. in the 46 contiguous states that have county governments or parish governments (Louisiana). This survey achieved a 60 percent response rate (n=1756). The NACo survey is the primary source of the county government variables of interest in this chapter.

In addition to the NACo survey, I utilize secondary data from the Vera Institute of Justice, the American Community Survey, the Census of Governments and other sources. I detail the source, level of measurement, and date of measurement of each of my variables below.

A. Dependent Variable

The dependent variable is the 2013 county-level total jail population rate (per 100,000 residents aged 15-64) from the Vera Institute of Justice's² "Incarceration Trends" dataset³, which primarily relies upon the Census of Jails (most recently taken in 2013). This variable is an average daily count of inmates held in jails in a county and is inclusive of individuals held both pre-trial for a particular jurisdiction and for other

² The Vera Institute of Justice is an independent nonprofit national research and policy organization dedicated to mission of reducing mass incarceration and its racial and socioeconomic inequities. To facilitate this mission, the Vera Institute has compiled data from the Bureau of Justice Statistics and other official sources and made publicly available extensive datasets that reflect trends in both imprisonment and jail incarceration from the 1970s to the present.

³ Alaska, Connecticut, Delaware, Hawaii, Rhode Island, and Vermont are excluded from this analysis, as these states do not have local jails, but rather rely upon a "unified state prison-jail corrections system" (Kang-Brown and Subramanian 2017:8).

jurisdictions (such as other counties or federal/state agencies). The year 2013 is of particular interest as after 2008, rural and urban pretrial detention rates (pretrial populations comprise most of the jail population in the US) clearly diverged, with urban areas recording a marked decline in pretrial detention, while rural areas noted a steady increase (Kang-Brown and Subramanian 2017). Thus, 2013, due to the clear rural-urban difference, provides an substantively interesting time-point for analysis. The total jail population was chosen as the dependent variable as the total jail population rate (rather than only pre-trial) includes counts of jail inmates held for other jurisdictions. Including these extra inmates is important, as holding inmates for other jurisdictions has become an increasingly common practice in jails, often as a form of generating county revenue (Mai et al. 2019). As a result, this dependent variable provides a more inclusive measure of county-level incarceration.⁴ This dependent variable, while measured at the county level, is also an aggregation of the jail populations in the county jails as well as other jail jurisdictions, such as city jails in larger cities within counties (Kang-Brown et al. 2020)⁵. As this variable was positively skewed, a log transformation was used.

B. Independent Variables

Independent variables are primarily drawn from the 2008 NACo survey, the 2007 Census of Governments, and the 2008-2012 American Community Survey.

⁴ In preliminary analyses, I analyzed both the pre-trial jail rates and the share of inmates held for other jurisdictions as separate dependent variables with this same selection of county-level independent variables. The best models were those that used the total jail rate as the dependent variable. This may be due to the fact that the total jail rate is a daily average count of jail inmates in each jurisdiction, as opposed to the pre-trial and other, disaggregated counts of jail inmates, which are single-day counts taken on the last weekday in June. As a result, the total jail rate may be a more normalized measure of jail inmate populations over a longer period.

⁵ While this measure may contain data from municipal jails, jails are predominantly a county government institution managed by elected sheriffs, a county official. For example, more than 88% of jail inmates are held in county jails (Gaes 2019), with over 82% of counties operating a jail facility (Littman 2021:870).

1. County Government Service Provision

I include a range of measures of county governments' social service provision, all derived from the NACo survey. The first measure of the local social service provision, also from the NACo survey, is if a county government has cut services in the last three years to navigate funding shortages, coded as a binary "Yes" or "No" response. As an additional measure of service provision levels, I include a categorical measure of if a county is in a state where TANF (Temporary Aid to Needy Families) program delivery is devolved to the county. I also include a count of the number of social services provided by county governments. These variables are all are derived from the NACo survey.

2. County Government Capacity

I include a range of measures of county government capacity. The first measure of county government bureaucratic capacity is if the county government has a grant writer on staff. This grant-writer measure is derived from the 2008 National Association of Counties (NACo) Survey and is a binary variable, coded as "yes" or "no."

The second measure of local state capacity I include is a measure of economic autonomy from the 2007 Census of Governments. This measure is calculated by dividing a county government's revenue from their own sources and dividing that own-source revenue figure by the amount of revenue the county government receives from state and federal sources. As a result, this measure reflects a ratio that compares a county government's own-source revenue to revenue received from higher levels of government. Thus, the higher the ratio, the more economically autonomous the local government.

As an additional measure of county government capacity, I include a categorical measure of if a county operates under a Home Rule charter. This variable is derived from

the NACo survey. An additional measure of local government capacity that I include is a measure of county government officials' ratings of a county's economic health on the NACo survey, which is coded as a categorical variable with five categories: Poor, Fair, Good, Very Good, and Excellent. I also include a measure of rurality, derived from the NACo survey.

Finally, I include measures of county revenue and full-time employees as additional measures of fiscal and administrative capacity, relatively. The county revenue variable measures the total revenue received by a county government per 10,000 county residents. The county government employment variable measures the number of full-time county government employees per 10,000 residents. Both of these variables are derived from the 2007 Census of Governments.

3. Political Context

I include three measures of the county political context when assessing the influence of political context on jail rates at the county-level. The measures I use are the share of the county that voted for the GOP candidate in the 2008 Presidential election, county-level evangelical Christian adherence rate⁶ (adherents per 1,000 county residents), and the proportion of the county government workforce that is unionized. The share of GOP voting in the 2008 Presidential election is a continuous variable, drawn from David Leip's Atlas of U.S. Presidential Elections, a database of official election results from all

⁶ Evangelical Christian adherence (i.e. religious fundamentalism) is a highly regionalized phenomenon, with most congregations being concentrated in the Southern region of the U.S. (Pew Research Center 2015). However, both imprisonment and jail incarceration are also regionally concentrated in the South and religious fundamentalism is an established independent variable in studies of imprisonment (Jacobs 2004; Kang-Brown and Subramanian 2017; Mai et al. 2019). Thus, while this measure of religious fundamentalism may also be capturing regional effects, it is still an important independent variable in this analysis.

50 states and Washington, D.C. (Leip 2018). The evangelical adherence rate variable is derived from the 2010 Religious Congregations and Membership Study, conducted by the Association of Statisticians of American Religious Bodies, which is the most complete available census on religious congregations and their members (Grammich et al. 2012). The county government unionization measure is derived from the NACo survey. This measure is used to capture county-level class politics in other studies (Lobao et al. 2014).

4. Control Variables

I use a range of control variables to control for the racial composition, economic conditions, educational attainment, and homicide rate of counties. I measure the racial composition of counties by including the share Black. I measure educational attainment by the proportion of county residents with a bachelor's degree. I capture economic conditions of the county through the county unemployment rate and the share of county families living in poverty. These variables are all derived from the 2008-2012 American Community Survey data (centered in 2010). I expect the share Black to be positively associated with county jail rates, as with the poverty and unemployment rates. I expect the share of college graduates in a county to be negatively associated with the jail rate.

The 2010 homicide rate measure is derived from the FBI's Uniform Crime Report (UCR) database, which I accessed through the Inter-university Consortium for Political and Social Research (ICPSR). This measure is a rate of the number of murders, homicides, and non-negligent manslaughters per 100,000 residents in a county. Including a measure of violent crime or homicide is an essential part of this analysis, as controlling for the local criminological context is standard procedure in studies of incarceration and punishment. As Maltz and Targonski (2002) and Pridemore (2005) highlight, there can be

reporting gaps and irregularities in county-level crime data. While I am aware of the limitations of this data, I follow the insights of Lott, Jr. and Whitley (2003) and utilize a measure of homicide, a type of crime which is more likely to be consistently reported across jurisdictions. I expect the homicide rate to be positively associated with the jail rate.

Table 2.2 below presents descriptive statistics for the total jail rate as well as measures of county government social service provision, capacity, and political contextual factors. The mean 2013 total jail rate was 5.91, slightly higher than the 2006 mean of 5.83.

| | Mean | SD | Min, Max |
|---|---------|---------|-----------------|
| Dependent Variable | | | |
| 2013 Jail inmates per 100,000 residents (log) ^a | 5.91 | .74 | .269, 9.25 |
| County Government Characteristics | | | |
| County Government Social Service Environment | | | |
| Count of Social Services Offered ^b | 2.84 | 2.50 | 0, 10 |
| TANF-Devolved State ^b | .33 | | 0, 1 |
| Services Cut to Balance Budgets ^b | .23 | | 0, 1 |
| County Government Capacity | | | |
| Grant Writer on Staff ^b | .35 | | 0, 1 |
| Economic Autonomy ^c | 6.78 | 17.17 | .20, 223.73 |
| County Economic Health ^b | | | 1, 5 |
| Poor | .10 | | |
| Fair | .31 | | |
| Good | .39 | | |
| Very Good | .16 | | |
| Excellent | .04 | | |
| Metropolitan Status ^b | | | 1, 3 |
| Rural | .29 | | |
| Suburban | .36 | | |
| Urban | .35 | | |
| Home Rule ^b | .16 | | 0, 1 |
| Total Revenue Per Capita ^c | 1202.85 | 1319.38 | 80.72, 33524.39 |
| County Government Employment Per Capita ^c | 38.67 | 12.76 | 13.06, 143.12 |
| County Political & Ideological Characteristics | | | |
| Percent County Government Employees Unionized ^b | 19.39 | 28.89 | 0, 88 |
| Share GOP Voting in 2000 Presidential Election ^d | .57 | .13 | .15, .88 |
| Evangelical Christian Adherence Rate ^e | 22.74 | 15.52 | .29, 98.78 |

Table 2.2 Descriptive Statistics (N=1,326)

| County Socio-Demographic Characteristics | | | | |
|---|-------|-------|-------------|--|
| Percent College Graduates ^f | 12.73 | 5.23 | 2.24, 42.18 | |
| Percent Unemployed ^f | 4.46 | 1.71 | 0, 20.03 | |
| Percent Black ^f | 7.75 | 12.58 | 0, 73.46 | |
| Percent Families in Poverty ^f | 10.93 | 4.97 | 0, 41.95 | |
| Homicide Rate (per 100,000 residents) ^g | 1.45 | 3.67 | 0, 53.21 | |
| Population (log) ^f | 10.41 | 1.30 | 4.41, 16.10 | |
| 2006 Jail Inmates (per 100,000 residents, log) ^a | 5.83 | .75 | 2.60, 9.40 | |

Note. SD = standard deviation.

^a Vera Institute of Justice Incarceration Trends; ^b 2008 NACo Survey; ^c 2007 Census of Governments; ^d David Leip's Voting Atlas; ^e 2010 Religious Congregations and Membership Survey; ^f 2008-2012 American Community Survey; ^g 2010 FBI Uniform Crime Report

C. Analytical Approach

I fit a cross-sectional, linear regression model using state fixed-effects. The primary statistical assumption being made with this type of model is that the county-level data is clustered by states, with states having statistically significantly different intercepts⁷. It is this core assumption that makes fitting a fixed effects model appropriate, following the logic cited by Sutton (2004) in his cross-sectional analysis. I also estimate robust standard errors to correct for heteroskedasticity. This model also includes a lagged version of the dependent variable as a predictor, specifically the logged 2006 jail rate, as a form of partial-adjustment, which Sutton (2000) argues is necessary to accurately model social phenomena such as incarceration, which are heavily dependent on previous levels of incarceration.

⁷ As an additional way to analyze state-level factors, I included the state-level Economic Freedom Index from the Pacific Research Institute, a free market think tank, as an independent variable in preliminary analysis. However, this variable was not significantly related to the outcome variable and was not included in the final models presented in this chapter.

Collinearity diagnostics yielded an average variance inflation factor value (VIF) of 1.77, with no individual VIF value higher than 3.26.⁸ The model presented here is based on a sample of 1,326 counties in the U.S., due to a number of missing cases in the FBI UCR data. I also included a range of interaction terms in preliminary analysis that interacted political and ideological variables (GOP voting and evangelical adherence rates) with both the share Black and unemployment and poverty rates of counties. None of these interaction effects were significant, so they were excluded from the final models.

V. Results

The full state fixed-effects regression model (Model 2) explains approximately 72% of the variation (R-squared=.7158) in jail rates in the sample. I report results below in Table 2.3, which includes two models: one with and one without the lagged version of the dependent variable. In both models, I find support for both political context, state capacity, and socio-economic conditions as explanations of jail rates across counties. I provide detailed interpretations of results by each variable group below.

⁸ Original models included both total county government expenditures and total county government revenue. However, due to high multicollinearity between these two variables (VIF > 8), only total county government revenue was retained in the final models presented here.

| | Model 1 | Model 2 |
|---|------------------|------------------|
| | <i>b</i> (S.E.) | <i>b</i> (S.E.) |
| County Government Social Service Provision | | |
| Count of Social Services Offered | 0184 (.0077)* | 0102 (.0056)† |
| TANF Devolved State | 0065 (.0442) | .0107 (.0327) |
| Services Cut as Budget Strategy | .0539 (.0404) | .0802 (.0296)** |
| County Government Capacity | | |
| Grant Writer on Staff? | 0309 (.0325) | 0671 (.0233)** |
| Economic Autonomy | 0029 (.0013)* | 0008 (.0009) |
| County Economic Fair | .1539 (.0680)* | .1467 (.0411)*** |
| Health ^a Good | .1600 (.0680)* | .1448 (.0427)** |
| Very Good | .1523 (.0752)* | .1018 (.0497)* |
| Excellent | .0331 (.0846) | .1808 (.0606)** |
| Spatial Context ^b Suburban | 0179 (.0454) | 0305 (.0299) |
| Rural | 0172 (.0571) | 0294 (.0394) |
| Home Rule | .0057 (.0465) | 0070 (.0347) |
| Total County Government Revenue Per Capita | .0000 (.0000)*** | .0000 (.0000) |
| County Government Employment Per Capita | .0045 (.0022)* | .0008 (.0015) |
| Political Context | | |
| % County Government Workforce Unionized | .0006 (.0008) | 0005 (.0006) |
| Share GOP voting in 2008 Election | 3325 (.2403) | .0311 (.1573) |
| % Evangelical | .0083 (.0023)*** | .0039 (.0014)** |
| Control Variables | | |
| % College Graduates | 0293 (.0050)*** | 0094 (.0036)* |
| % Unemployed | .0565 (.0211)** | .0142 (.0114) |
| % Black | .0031 (.0022) | .0005 (.0014) |
| % Family Poverty | .0000 (.0061) | .0007 (.0039) |
| Homicide Rate (Homicides per 100,000) | .0050 (.0060) | .0034 (.0036) |
| Population in 2010 (Logged) | .0237 (.0239) | 0313 (.0162)† |
| Lagged Dependent Variable: 2006 Jail Rate | | .6780 (.0300)*** |
| (Logged) | | × / |
| Intercept | 6.7097*** | 2.0907*** |
| F | 9.80*** | 42.30*** |
| R-Squared | .4292 | .7102 |
| Adjusted R-Squared | .3998 | .6950 |
| RMSE | .5728 | .4079 |
| N | 1,326 | 1,323 |
| "Reference category is Poor; "Reference category is | Urban. | |

| Table 2.3 State-Fixed Effect Regression of Total Jail Rate per 100,000 at the | <u>,</u> |
|---|----------|
| County-Level in 2013 (Logged) w/ Robust Standard Errors | |

*Reference category is Poor; *Reference category is <u>†p<.1; *p<0.05; **p<0.01; ***p<0.001</u>

A. County Government Social Service Provision

In both models, I find support for a relationship between jail rates and county government social service provision. In both models, the count of social services offered by county governments is significantly and negatively associated with jail rates. While this relationship is weaker in Model 2, after controlling for past levels of jail incarceration, the count of social services offered by a county is still significant at the p<.1 level. Additionally, in the full model, county governments that have cut services as a way to cope with budget shortfalls have higher jail rates (b=.0802, p<.01).

These findings lend support to Sutton's (2000, 2004) assertion that social welfare policy priorities and penal policy are inversely related. These findings are also consistent with Wacquant's (2009) and Garland's (2001) assertions that the retrenchment of social welfare policy is associated with a rise in punitive outcomes.

B. County Government Capacity

In both models, I also find support for a relationship between county government capacity and jail rates. In Model 1, economic autonomy (b=-.0029, p<.05) is significantly and negatively associated with jail rates. Additionally, both revenue (b=.0000, p<.001) and county employees per capita (b=.0045, p<.05), however, are significantly and positively associated with jail rates. These findings reflect the mixed hypotheses discussed previously. In the case of economic autonomy, when counties have more financial independence, they seem to be less carceral. However, simply having more revenue and more employees are associated with elevated levels of incarceration. As a result, while all three are measures of capacity, fiscal independence has a different effect than simply having a robust bureaucracy and income stream.

In contrast to Model 1, in which a wider range of government capacity measures were statistically significant, after controlling for past levels of jail incarceration in Model 2, only two capacity variables are significant: the presence of a grant writer and self-rated economic health. A grant writer on staff in the county government is significantly and negatively associated with the jail rate. This measure of capacity is associated in the direction I initially predicted. While a grant writer represents expanded local state capacity to access funds, those counties with a grant writer on staff may be more likely to use their grant writer's skills to secure funding for rehabilitative or social programs, rather than increased incarceration. In both models, I find that a county's self-rated economic health is significantly associated with the jail rates, however this relationship is stronger in Model 2. I find that counties with better self-rated economic health have higher levels of jail incarceration.

As relates to fiscal and administrative capacity, the story seems to be that counties with more fiscal and administrative resources have higher jail rates, after accounting for the effects of social service provision. In contrast, counties with more fiscal independence have lower jail rates. After controlling for past levels of jail incarceration, other types of administrative capacity become significant, such as having a grant writer on staff, suggesting different types of capacity have different relationships to local incarceration.

My findings suggest that, to some extent, increased capacity of local governments, as measured by revenue, economic health, and number of employees, is associated with higher levels of incarceration. This is logical, as jail and prison operations are both expensive and require a range of employees, making revenue, a healthy tax base, and government employees necessary to more extensive jail operations. However, there are some types of county government capacity that are negatively associated with the jail rate, demonstrating that counties use the specialized skills of grant writers and economic independence for non-carceral policy ends.

C. Political Context

In both models, the only political variable that is significantly related to county jail rates is the evangelical Christian adherence rate. The evangelical adherence rate is significantly and positively associated with jail rates (b=.0039, p<.01). This finding aligns with my hypothesis regarding the relationship between a more conservative political climate and punishment at the county-level. This finding also parallels other research which finds political and social conservatism to be associated with more punitive environments (Jacobs and Carmichael 2001).

D. Control Variables

I also find support for a relationship between sociodemographic county characteristics and the jail rate. In Model 1, the unemployment rate is positively and significantly related to the jail rate (b=.0565, p<.01). However, once past levels of jail incarceration are included in Model 2, unemployment is no longer significant.

In both models, the share of college graduates is significantly and negatively associated with the jail rate. This replicates Sutton's (2000, 2004) cross-national finding that increased institutional integration into society, through education, for example, is associated with lower imprisonment rates. Population is also marginally significant and negatively associated with the jail rate in the full model (Model 2, b=.-.0313, p<.10). Finally, the 2006 level of jail incarceration is strongly associated with 2013 jail incarceration (b=.6780, p<.001), showing jail incarceration to be highly path dependent.

The share Black, poverty rate, and the homicide rate all fail to meet the threshold of statistical significance in both models.

VI. Discussion and Conclusion

Scholars of mass incarceration and punishment more broadly have long highlighted the importance of the state in determining imprisonment rates. In the process, these research traditions have highlighted the ways in which policy priorities, state capacity, and political context shape punitive outcomes. However, these theoretical perspectives and empirical findings have yet to be systematically applied to the local, county level to understand how similar factors affect jail incarceration. In this chapter, I take an initial step toward filling this gap, as I extend institutional theories of punishment to county-level jail incarceration. As a result, I am able to demonstrate the ways in which social service provision, government capacity, and political context is associated with not only aggregate levels of imprisonment, but also county-level jail incarceration.

I now address my central research question: How are county institutional arrangements, namely county government social service provision and capacity and county political conditions, associated with jail rates in the U.S.? I find that both service cuts and the number of social services is significantly associated with the jail rate, and in the direction predicted by the sociology of punishment. County governments that have cut services and offer fewer social services overall are more likely to have higher levels of jail incarceration. In this way, the connection between neoliberal service cuts and increased punishment noted in studies of state and national-level prison incarceration also holds for county-level jail incarceration.

I also find evidence for a significant association between county government capacity measures and jail rates. When accounting for past levels of incarceration (Model 2), I find that counties with self-rated "Poor" economic health have significantly lower jail rates than economically healthier counties. This same positive relationship is also attested in Model 1, with county government revenue and employment. This suggests that, as a local government institution, the jail requires a well-resourced county government, both fiscally and administratively. Thus, elevated jail incarceration seems not to be the project of economically distressed counties seeking to generate revenue through economic development. This supports preliminary reports by the Vera Institute of Justice. While Vera Institute, in a study of 77 counties, found that approximately 20% of county officials referenced expanding county jail capacity as a way to generate revenue (by contracting out empty beds to other jurisdictions), the same Vera Institute report highlights how expensive jail maintenance and expansion can be, highlighting the importance of fiscal resources and a robust tax base in maintaining an elevated jail population or funding jail expansion projects (Mai et al. 2019).

Finally, not all measures of county government capacity have the same relationship to jail rates. Having a grant writer on the county government staff, a measure of capacity, is significantly and negatively related to jail rates (Model 2). In addition, I also find that increased economic autonomy is associated with decreased jail rates (Model 1) before controlling for past levels of jail incarceration. Both the presence of a grant writer and increased economic autonomy may allow for counties to be more economically independent and fund a wider range of other initiatives beyond incarceration to address local needs and issues in a more progressive manner. This

suggests that all types of capacity are not equivalent and that increased staff and resources do not necessarily translate into more social welfare-focused policy at the county level. Rather, it is a certain type of human capital (in the form of the grant writer) and local financial *autonomy* rather than higher levels of revenue that are associated with a less punitive county context.

Additionally, I find that levels of evangelical Christianity are positively and significantly associated with jail incarceration rates. Neither Republican party support or public sector unionization have a significant relationship to local punishment.

Also, spatial context is not a significant correlate of the jail rate. This is despite the clear rural-urban differential noted by Vera Institute reports (Kang-Brown and Subramanian 2017; Mai et al. 2019). In this case, it appears county government characteristics and local political contexts account for spatial differences in jail rates. This parallels the finding of local governments studies that find county structural characteristics to be more salient predictors of local policy environments than spatial location alone (Lobao and Kraybill 2005).

My findings both parallel and nuance previous studies of mass incarceration and imprisonment. Overall, I find that lower levels of social service provision and higher capacity (primarily fiscal and staff) is associated with higher levels of jail incarceration. This follows Wacquant (2009) and Garland's (2001) assertions that increased capacity of the neoliberal state tends to be associated with an increased desire to punish. Also, county governments that cut services as a budget strategy had an increased jail rate, illustrating the ways in which local neoliberal policy environments are also more punitive environments (Sutton 2000). Additionally, these findings illustrate the empirical reality

that jails and increased inmate levels are a significant public expense (Mai et al. 2019). Finally, this study highlights the importance of social conservatism as a correlate of jail incarceration, another finding replicated in national and state-level imprisonment studies (Jacobs 2004).

While this chapter provides an important step toward the systematic study of local incarceration, there are limitations that should be addressed by future research. First, this study is limited in that it is cross-sectional. Future research should examine the relationship between jail rates and county government and county-level political conditions in a time-series or longitudinal model. Additionally, while most jails are county jails and thus intimately connected to county government services and capacity, some jails, including in this analysis, are municipal jails. Future research should distinguish between county and municipal facilities. Finally, while quantitative research provides important, generalizable insights into the determinants of jail rates across the U.S., qualitative research is necessary to contextualize these quantitative findings. Ethnographic and case study research focusing on county government resources and programming in counties with growing jail populations would provide important context and insight into the quantitative relationships highlighted in this analysis. This research would be of both public and scholarly importance, as it would allow a clearer understanding of how county government balance competing funding priorities and the local tradeoffs made between social services and incarceration.

While studying mass incarceration and punishment has long been an important part of the sociological discipline, this research focuses on state and national imprisonment, rather than county-level jail incarceration. This chapter makes two central contributions to the sociology of punishment literature. First, I extend institutional theories of punishment to the local, county-level unit of analysis. My second contribution is that, due to the primary NACo data, I am able to demonstrate the relationship between county government policy environments and capacity and county-level jail rates. In examining the ways in which the local state is related to local punishment, future research both in local government and the sociology of punishment can consider the whole mass incarceration process and understand the ways in which jails, county governments, and communities are intertwined.

CHAPTER 3. JAIL PRIVATIZATION: A COUNTY-LEVEL ANALYSIS OF PUBLIC-PRIVATE PARTNERSHIP IN COUNTY GOVERNMENT JAIL SERVICE PROVISION

I. Introduction

Mass incarceration is a significant and broadly studied social problem of the 20th and 21st centuries. While mass incarceration and punishment in the U.S. is intimately connected to public law and the state, private actors are important actors in the contemporary U.S. criminal justice system, both contemporarily and historically (Pozen 2003). The most prominently studied case of criminal justice privatization is private prisons, a topic which has engendered heated political and scholarly debate since the resurgence of private prisons in the 1980s (Kim 2022). While privatized corrections have a long history in the U.S., since 2000, the number of inmates held in private prison facilities has increased 32%, while the general prison population has increased 3% (The Sentencing Project 2021), demonstrating that privatized incarceration in state and federal facilities remains an issue of both public and scholarly concern.

However, prisons are only one component of the criminal justice system and one point of entry for private actors. Jails, as the first point of incarceration in the larger criminal justice pipeline are an important unit of analysis (Kang-Brown and Subramanian 2017). Despite this centrality, jails have received sparse attention in the mass incarceration research, with studies of jail privatization being essentially non-existent (Kang-Brown and Subramanian 2017; Selman and Leighton 2010). While a small overall proportion of the U.S's jails are privatized, jail privatization has increased approximately 200% since 1993 (Cornelius 2008:45), with approximately 5% of U.S. jail inmates being held in private jails as of 2016 (Gaes 2019). Recent studies that do discuss jail privatization are often in the form of published lists of fully private jail facilities or single-case case studies that are not broadly generalizable (Shichor and Gilbert 2001). Generally, the authors of these studies do not connect jail privatization to broader research on correctional privatization. As a result, while a range of studies examine the conditions under which privatization of prison facilities occurs (Butz and Fording 2022; Jing 2010; McDonald 1994; Mitchell and Butz 2019; Price and Schwester 2010), it is unclear whether these same conditions hold in the case of jail privatization (Gaes 2019; Kim 2022).

In this chapter, I address this gap in the correctional privatization literature by answering the following question: what factors are associated with privatized county jail operations? In addressing this question, I provide insights into the conditions under which county governments privatize their jail services. In doing so, I assess how the factors associated with jail privatization correspond (or not) with the factors associated with prison privatization.

II. Literature and Background

While rhetoric and scholarship around correctional privatization tends to frame privatized corrections as new and inherently distinct from the public criminal justice system, this doesn't reflect historical realities or current arrangements. In fact, until the

beginning of the 20th century, private correctional facilities were very common. Convict leasing was also a common form of correctional privatization in the years following the Civil War (Lindsey, Mears, and Cochran 2016). It was only as the result of lobbying by unions and humanitarian groups that the 20th century saw a return to fully public correctional facilities, a status quo which would remain in place until the 1980s and the emergence of neoliberal policy reforms (Pozen 2003). However, between 1900 and the 1980s, many correctional facilities, including prisons, operated under a form of partial privatization, with important services in public correctional facilities, including staffing and healthcare provision being provided by private contractors. While the re-emergence of fully privatized prisons in the 1980s received significant attention and generated debate and controversy, the co-occurring and widespread partial privatization of prisons and local correctional facilities received little to no attention (Pozen 2003).

In the discussion that follows, I review the current research on prison privatization, as it is from this research that I draw my theoretical and empirical approach to jail privatization, relying primarily on the theoretical model designed by Mitchell and Butz (2019). I then discuss the need to use a more expansive definition of "privatization" of correctional services, especially at the local level.

A. Prison Privatization

Research on the determinants of prison privatization is rooted in the disciplines of public administration and political science and tends to focus on three categories of statelevel characteristics: economic factors, political/ideological factors, and demographic factors (Kim 2022; Mitchell and Butz 2019). These categories of predictors and their accompanying hypotheses are largely drawn from the broader public administration

literature on privatization. Most studies of prison privatization assume that some level of "government failure" in administration and/or service provision is responsible for the prevalence of prison privatization (Morris 2007). As a result, most studies' central variables measure state government characteristics, as these are considered the central determinants of prison privatization decisions.

Studies of the determinants of prison privatization, while implicitly drawing from theories of privatization in their choice of independent variables, often do not explicitly reference theoretical frameworks and are, instead, empirically focused. These studies of prison privatization are informed by the larger public administration research on privatization, which considers instrumental (state government fiscal considerations) and political (anti-union, small government sentiment) variables to be the most important theoretical predictors of privatization decisions (Jing 2010). However, recent studies have begun to explicitly analyze prison privatization through theoretical frameworks, from theories of privatization (Jing 2010), policy diffusion (Mitchell and Butz 2019), and the social construction of racial threat (Butz and Fording 2022; Enns and Ramirez 2018).

In my analysis, I use a theoretical framework derived from that of Mitchell and Butz (2019) to analyze jail privatization. Mitchell and Butz's (2019) framework consists of four central concepts, derived from the prison privatization literature and policy diffusion research: economic factors, political/ideological factors, demographic factors, and external factors. This theoretical framework largely mirrors the institutional and political factors long emphasized in broader privatization theory (Jing 2010). I adapt Mitchell and Butz's (2019) theoretical framework and apply three of their four central concepts in my analysis, focusing on the economic, political/ideological, and demographic determinants of correctional privatization.⁹

To my knowledge, there are no studies of the determinants of jail privatization. Studies of prison privatization provide the clearest roadmap for studying the privatization of jails. In the discussion that follows, I briefly discuss each of the categories of determinants adapted from Mitchell and Butz's (2019) theoretical framework: economic factors, political factors, and demographic factors. I note each factor's theoretical and empirical relationship to prison privatization outcomes and note their relevance for studying jail privatization.

1. Economic Factors

Economic factors are of central importance for studies of prison privatization. There are two central categories of economic factors researchers consider important determinants of prison privatization: government fiscal conditions and state-level economic conditions (Mitchell and Butz 2019). I discuss both categories of economic factors below.

Government Fiscal Conditions. Prison privatization research has long hypothesized state fiscal conditions to be a central determinant of privatization. Studies that incorporate fiscal measures test the claim, made by political leaders, that prison privatization is a straightforward way to maximize efficiency and cost-savings in correctional service provision. According to this political rhetoric, involving the private

⁹ I do not utilize the "external factors" portion of Mitchell and Butz's (2019) theoretical framework, as operationalizing the "external" concepts requires both measures of spatial contiguity and event history data, neither of which were available for the dataset used in this analysis. However, the additional three factors in their theoretical model (economic, political/ideological, and demographic factors) provide a set of indicators that encapsulate the most commonly studied aspects of prison privatization.

sector in public service delivery provides general cost-savings to governments and is a valid solution for "government failure," such as fiscal constraints or other inefficiencies related to staffing shortages or policy constraints (Kim 2022; Morris 2007). Due to these narratives that justify privatization using financial or efficiency rationales, fiscal variables are important factors in analyses of prison privatization.¹⁰

Most studies of prison privatization include state government fiscal variables to test the hypothesis that privatization is a state response to general fiscal stress or diminished fiscal capacity. Fiscal characteristics of state governments are measured using a range of variables, including fiscal capacity/autonomy (Price and Riccucci 2005), tax revenue (Butz and Fording 2022), and budget shortfalls (Gunderson 2022). These more general measures of the state fiscal environment, such as state tax revenue or budget shortfalls, have not been found to be significantly related to prison privatization outcomes (Butz and Fording 2022; Gunderson 2022; Jing 2010).

Studies of prison privatization also commonly include fiscal measures directly related to prison operations, such as per-inmate operating costs (Jing 2010) and corrections expenditures (Butz and Fording 2022; Kim and Price 2014; Price, Carrizales, and Schwester 2009). Generally, researchers have found a positive relationship between state-level prison privatization and correctional system expenditures, with states that spend more on corrections having a significantly higher privatized prison population. In these cases, elevated corrections spending is interpreted as a measure of corrections-

¹⁰ Most studies of prison privatization test the claim that there is a relationship between expenditures and privatization, rather than accepting political rhetoric and justifications as valid explanations for privatization. Also, the research findings as to the actual efficiency, cost-savings, and quality of service achieved by prison privatization are mixed (Kim 2022).
related fiscal stress on state governments (Butz and Fording 2022; Kim and Price 2014; Price et al. 2009).

Economic Context. Beyond state government fiscal conditions, broader economic context is another important, but understudied, economic determinant of prison privatization (Kim 2022). Economic context, measured as per capita income or wealth inequality, is usually conceptualized as a proxy measure for state government capacity, as the economic conditions of a state's citizens has important implications for the resources and capacity available to state governments (Mitchell and Butz 2019; Price and Riccucci 2005). Mitchell and Butz (2019) found that wealth inequality is positively related to prison privatization, while other studies have not found a relationship between per capita income and prison privatization (Price and Riccucci 2005). Despite the theoretical relevance of inequality measures for prison privatization, research in this area has yet to incorporate a broad range of population-level economic and inequality measures, such as poverty or unemployment (Kim 2022).

Measures of urbanization are also important in prison privatization research. Mitchell and Butz (2019) theorize population density to be an important proxy measure for a state's administrative capacity, as they propose that more urban states will have increased government capacity to manage private contracts. This theoretical prediction is supported by their finding of a positive relationship between population density and privatization outcomes. While Mitchell and Butz (2019) categorize population density as a demographic determinant of prison privatization, population density measures characteristics of a state's population (i.e. residential patterns) and functions as a proxy measure of government capacity. As a result, I diverge from Mitchell and Butz (2019)and

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conceptualize spatial attributes of counties as a measure of economic context, and a proxy measure of government capacity, rather than a demographic variable. Also, rural county governments generally report higher levels of fiscal stress due to their weaker economic base due to economic conditions in rural counties, such as elevated unemployment and poverty rates and lower levels of educational attainment (Lobao and Kraybill 2005). Based on these relationships, I include measures of county-level economic context, namely unemployment, poverty, educational attainment, and spatial location as proxy measures of county governments' economic base and capacity.

Including a spatial measure in a study of jail privatization is also appropriate, as rural jails have been found to face a myriad of fiscal and administrative challenges. In fact, as early as 1988, researchers noted privatization as a possible solution to rural jails' myriad challenges (Mays and Thompson 1988). Rural jails are consistently underfunded, have high rates of staff turnover, are often unsafe, old structures (Applegate and Sitren 2008; Ruddell and Mays 2007, 2011), and have higher rates of suicide and death than larger, urban jails (Mays and Thompson 1988). Based on this list of challenges, rural jails seem prime candidates for privatization, due to the diminished capacity of rural county governments, which elevates the potential for a "government failure" to provide jail services in rural counties (Morris 2007).

2. Political and Ideological Factors

I also consider the role of political and ideological factors in my analysis of jail privatization. Political and ideological conditions of states are another central tenet of Mitchell and Butz's (2019) theoretical framework. This theorized relationship between politics and ideology and prison privatization is connected to the rise of the political ideology of Neoliberalism. Neoliberalism, which champions fiscal austerity in policy and public-private partnerships, is closely associated with conservative, Republican politics. This business-like approach to policy and governance, also known as the "New Public Management," became dominant in the 1980s. Corrections, like the rest of government, was not immune to these neoliberal policy innovations. During the 1980s, private companies began to infiltrate the correctional landscape and prison privatization became increasingly common. As such, prison privatization is also a political and ideological process (Mitchell and Butz 2019), and I expect jail privatization to also be associated with political and ideological factors.

Political factors are often operationalized as measures of political conservatism. The most common measures are the extent of Republican control of the state legislature or the presence/absence of a Republican governor (Butz and Fording 2022; Gunderson 2022). While there is mixed support for the importance of the direct effects of political affiliation influencing prison privatization (Gunderson 2022; Price and Riccucci 2005), this may be due to the range of different variables and data sources used to measure these concepts (Kim 2022).

An additional common political measure in studies of prison privatization is union strength. Neoliberalism, the policy innovation responsible for prison privatization, tends to be strongly anti-union. According to neoliberal principles, unions are an obstacle to efficient, private sector-style government operations. As such, researchers hypothesize that increased union strength, particularly public sector union strength, reflects a state's level of resistance to privatization. As a result, higher levels of unionization should be related to lower levels of prison privatization. Additionally, correctional officers in public correctional facilities tend to be highly unionized, while private prison employees are largely non-union, providing further support for an inverse relationship between unionization and prison privatization (Gunderson 2022). While some studies have found that greater public employee unionization is associated with lower levels of prison privatization (Butz and Fording 2022), most do not find unionization, in the public or private sector, to be a significant determinant of privatization (Gunderson 2022; Jing 2010; Kim and Price 2014; Mitchell and Butz 2019; Price and Riccucci 2005).

In addition to measures of state-level political leadership, Mitchell and Butz's (2019) framework also considers the social conservatism of the state *population*. While state-level political leadership measures are often not found to have direct relationships to privatization outcomes, political attitudes of state residents, are often significantly related to prison privatization outcomes, with more socially conservative states being more likely to privatize their prisons, even when controlling for Republican party leadership at the state level and elevated levels of privatization in neighboring states (Mitchell and Butz 2019; Price and Riccucci 2005).

Based on the theoretical and empirical importance of political and ideological factors for understanding prison privatization, I include political and ideological measures in my analysis of jail privatization. Specifically, I consider the association between jail privatization and political conservatism, social conservatism, public sector unionization, and existing levels of privatization at the county-level (which indicates a more neoliberal county government environment).

3. Demographic Factors

I also consider demographic factors, namely the share of county populations that are racial and ethnic minorities, in my analysis of jail privatization, as race and ethnicity have been demonstrated to be important determinants of prison privatization. While race and ethnicity are not included as demographic components of Mitchell and Butz's (2019) theoretical framework, other scholars of prison privatization have hypothesized that states with higher populations of racial and ethnic minorities may be more likely to privatize their prison facilities. This relationship between prison privatization and minority populations is considered to be the manifestation of a racist desire to reduce public spending on a government function (i.e. incarceration) perceived to mostly impact minority citizens (Butz and Fording 2022; Enns 2014; Price et al. 2009). In one of the first papers to examine the relationship between race and prison privatization, Price et al. (2009) found that the proportion of the Hispanic population was significantly and positively related to prison privatization, with the share black demonstrating a marginally significant, positive relationship to privatization. More recently, Butz and Fording (2022) analyzed the role of racial context in prison privatization, finding that white racial fear and Republican state government leadership are significant moderators of the relationship between the black imprisoned population in a state and prison privatization. This illustrates that racial politics and the racial and ethnic composition of state populations are important factors for understanding prison privatization.

Based on these findings, I incorporate county-level measures of racial and ethnic minority population share in my analysis of jail privatization. Specifically, I examine the relationship between the percent of a county's population that is Black or Hispanic and the share of jail inmates who are Black, as these factors reflect a county-level application of the state-level measures used in prison privatization research.

B. Privatization and the Jail

As there are no studies of the determinants of jail privatization (Gaes 2019; Kim 2022), the theories and empirical findings of the prison privatization literature discussed above provide the clearest roadmap for studying jail privatization. While jails and prisons are distinct correctional institutions, economic, political/ideological, and demographic factors are all also relevant for studying local government and local government service privatization (Lobao et al. 2014; Lobao and Kraybill 2005). As a result, it is relatively straightforward to extend state-level theories and findings regarding prison privatization to the county-level analysis of jail privatization, with the county acting as a new unit of analysis for testing theory (Lobao and Hooks 2015). This theoretical extension provides insights into ways in which different scales of government in the U.S. federal system respond similarly or differently to a range of fiscal and institutional challenges and how this affects privatization of core government functions (CGF), such as correctional services and punishment (Jing 2010).

Additionally, in my analysis, I use a primary dataset to analyze county governments' jail privatization decisions. I also use a dependent variable that is a more inclusive measure of jail privatization. In studies of prison privatization, the dependent variable is derived from secondary data and is often the proportion of inmates held in fully privately owned and operated prisons. As a result, this measure divides the prison landscape in the U.S. into two binary categories of fully "private" or fully "public." Discussions of jail privatization usually reflect a similar, binary conceptualization of

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correctional privatization. As a result, discussions of jail privatization tend to focus on a very small number of medium-to-large, fully private jail facilities, usually in the form of small-n case studies (Kiekbusch 2001).¹¹

While dichotomous measures of privatization dominate in studies of prison privatization, correctional privatization, in reality, operates along a spectrum and can include a variety of public-private partnerships. Private entities may be involved in everything from funding the construction of a new public facility, management of a public facility, staffing the public facility, and/or service provision in the public facility (Morris 2007). In this way, private organizations, both for-profit and non-profit, may be significantly involved in every step of the lifespan and operations of a public correctional facility, while never *owning* the facility, a criteria for most prisons or jails to be marked as "private" in secondary data (Lindsey et al. 2016).

Thus, studies of privatized prisons and jails only examine cases of full correctional privatization and tend to not consider the broader continuum of partially privatized corrections, which see the public and private sector working in tandem. This model of "partial privatization" is particularly important for local corrections (Lindsey et al. 2016). For example, CoreCivic, one the largest private correctional contractors in the U.S., has been offering service programs in county jails for decades, including vocational, educational, addiction treatment, mental health, and community service programs. As a result, the company advertises this partnership as a source of labor cost

¹¹ For example, in 2008, there were 37 fully private jail facilities in the U.S.

savings to local taxpayers through partial privatization (Cornelius 2008:46) and is an integral partner in providing essential services inside the jail.

Additionally, while prison privatization studies focus on for-profit, corporate privatization of prison operations, non-profits are also common private partners in correctional service provision. This is particularly important at the level of community and local corrections. Juvenile residential facilities, for example, are commonly operated by nonprofit organizations with government contracts (Montes and Mears 2019). While nonprofits are not profit-motivated like corporate firms, nonprofit-local government contracts are still a form of public-private partnership and represent a form of correctional privatization. This reflects the complexity and the scope of privatized corrections, which extends far beyond the ownership and operation of fully private correctional facilities by for-profit firms. In practice, private (for-profit or nonprofit) organizations may be involved in a wide range of activities related to correctional services. For example, in the case of the jail, private organizations may be involved in financing, constructing, and managing the physical jail facility. In addition, inside the operating jail, private organizations may be the primary provider of a range of essential services, such as drug, alcohol, and mental health treatment, education classes, telephone calls, or reentry programming. Some services may also be more likely to be offered by nonprofit organizations than for-profit companies (Montes and Mears 2019:221).

In practice, due to how closely entangled the public and private sector are in correctional service provision, correctional facilities often straddle a boundary of fully "public" or fully "private." This begs the question: "When a prison is publicly operated but private entities support those operations, is the prison 'public' or 'private?"" (Montes and Mears 2019:220). As many correctional facilities are neither fully public or fully private, primary data that better captures this continuum of correctional privatization is needed (Montes and Mears 2019).

I address these issues in the correctional privatization literature in two ways. First, I utilize a dependent variable from a primary dataset rather than using secondary data. This primary survey data provides a more global, inclusive measure of jail privatization, recording all public-private correctional service provision partnerships. As such, this measure captures both partial privatization as well as the involvement of nonprofit organizations, both of which are important components of correctional service provision at the local level (Lindsey et al. 2016; Montes and Mears 2019; Morris 2007). Additionally, this survey data links specific county governments to jail contracting with private organizations. This provides more specific insights as to the characteristics of which county governments choose to privatize jail services.

Secondly, my analysis examines the extent to which jail privatization mirrors—or not—patterns observed in state prison privatization. Jails and county governments are distinct from prisons and state governments in that they are intimately tied to local communities and socioeconomic conditions. As such, the county-level unit of analysis is an important laboratory to test theories previously only examined at higher units of analysis (Lobao and Hooks 2015). Additionally, as county and local governments are increasingly responsible for a wide range of service provision (Lobao 2016), understanding the conditions under which these governments are more likely to privatize their services, particularly jail services, is important for community well-being and government accountability.

The relationship between county governments, jail services, privatization, and community well-being is important and complex. The complexities of this relationship are embodied well in the figure of the county sheriff. Whereas prison funding and operations are overseen by a warden and a state or federal department of corrections, most (approximately 2,700 out of 3,300) jails are administered by an elected county sheriff (Hamm 1990). The sheriff is a unique figure in that they are both an administrator and a politician, as they manage jails and county law enforcement but are elected officials (Handberg and Unkovic 1982; Weisheit et al. 1995). County sheriffs also play an outsize role in politics and law enforcement in rural areas, with the sheriff's office being the only law enforcement agency in many rural counties (Handberg and Unkovic 1982; Weisheit et al. 1995). Sheriffs also have more autonomy over jail budgets, operations, and funds than prison wardens. This is important, as most sheriffs are allowed by law to use surplus funds from jail operating budgets for other law enforcement purposes, at their own discretion. Additionally, in many counties, sheriffs are allowed to use these "savings" to supplement their own salaries, fund local projects, or replenish their own re-election funds. While the discretion of the sheriff does not guarantee negligence or misuse of funds, these unique powers of the sheriff have led analysts to conclude that there is both a fiscal and political incentive to reduce jail operating costs and provide lower quality jail services (Hamm 1990).

As such, privatization of county jail facilities represents both an empirical gap in the correctional privatization literature, but also an ethical problem. Jails, while intended to serve a criminal justice function, also have the ability to serve as a source of additional funds for county sheriffs and county projects. While sheriffs may use these funds for prosocial ends, the lack of oversight over this aspect of county governance leaves communities vulnerable, both to potential misuse of tax dollars that go to jail operating budgets and to sheriffs with a motivation to incarcerate additional jail inmates to inflate the jail budget, which will then be diverted to non-jail ends. In this context, both the full and partial privatization of jails may be an additional means by which sheriffs and county officials can cut jail operating costs, to the detriment of jail inmates, and channel county funds to other ends. As a result, jails provide a unique and insightful testing ground for theories of prison privatization, as jails reflect an important intersection of the fiscal and political factors of county governments.

In the section that follows, I outline my research question as well as my hypotheses and expected relationships. I draw both my hypotheses and expected relationships directly from Mitchell and Butz's (2019) theoretical framework and the broader prison privatization literature.

III. Expected Relationships

The research question I address is: What factors are associated with an increased likelihood of privatized county jail facilities? In my analysis, I include three categories of independent variables, informed by the prison privatization literature: economic, political/ideological, and demographic factors (Mitchell and Butz 2019). I discuss each category of variables, along with the associated hypotheses and expected relationship, below.

1. Economic Factors

Based on the findings of the prison privatization literature, I expect county government fiscal conditions and county-level economic conditions to be associated with jail privatization. In my analysis, I include both county governments' fiscal characteristics and county populations' economic conditions. I measure a county's economic conditions in two ways: through county government fiscal conditions and the economic conditions of a county's population.

H₁: I expect that counties with greater fiscal capacity, as measured through county government fiscal autonomy and county government revenue, to be less likely to privatize their jail services. Increased county fiscal autonomy, as a measure of fiscal capacity, should be associated with the ability of county governments to independently provide a wider range of services (Lobao et al. 2014). Additionally, governments with lower levels of revenue may be unable to afford to independently fund and provide a wide range of government services, leading to increased likelihood of privatization. Local officials view jail privatization as a way to reduce government expenditures (Cornelius 2008:46). As such, counties with reduced fiscal capacity may be more likely to privatize jail operations to cope with budget shortfalls.

H₂: I expect counties with higher levels of police and correctional expenditures to be more likely to privatize correctional facilities. I expect this relationship based on previous prison privatization research that considers elevated government expenditures an indicator of fiscal stress in both cross-sectional and longitudinal analysis. State-level studies of prison privatization also tend to find a positive relationship between prison privatization and expenditures (Kim and Price 2014; Mitchell and Butz 2019; Price et al. 2009).

H₃: I expect counties with greater levels of general inequality, as measured through unemployment and poverty, will have increased levels of privatization. Counties with elevated poverty and unemployment rates may have diminished county government capacity to fund services, including correctional services. As a result, these counties may turn to private companies or NGOs (non-government organizations) to provide jail services.

H4: Rural counties will be more likely to have privatized jails, as these counties have a weaker tax base and will be less capable of independently providing a wide range of services, including correctional services. Jail budget shortfalls have also long been associated with rural counties, making it more likely that rural county governments will seek private-sector partners for jail service provision (Applegate and Sitren 2008; Ruddell and Mays 2007, 2011).

H₅: Counties with higher educational attainment will be less likely to have privatized jails, as these counties have a more robust local labor market and thus a more robust local tax base. As a result, these county governments will have more fiscal capacity to independently operate jail facilities.

2. Political and Ideological Factors

I expect counties with more conservative political and social climates to demonstrate higher levels of privatization. Following the conventions and findings of the prison privatization literature, I include measures of political and ideological climate as well as a measure of public sector unionization. **H**₆: Counties with a more conservative political climate, as measured by the share of GOP voting in the 2000 Presidential election are more likely to privatize jail services, as conservative ideology tends to favor privatization (Huang et al. 2004).

H₇: Counties with a more conservative social and ideological climate, as measured by the adherence rate of evangelical Christians in a county, are more likely to have privatized correctional facilities.

H₈: Counties with fewer unionized county government employees are more likely to privatize their jail services, as unionized employees are likely to resist cost-cutting privatization measures.

H9: Counties with a wider range of privatized services generally are expected to be more likely to privatize their jail services (Lobao et al. 2014). In other words, I expect that if counties have already privatized most of their service provision, they are also significantly more likely to have privatized their jail services as well. In this sense, jail privatization may simply reflect a county's generalized tendency toward privatization of public services.

3. Demographic Factors

I also include a range of demographic variables that capture additional dimensions of counties beyond economic and political/ideological factors. Recent studies have found race and ethnicity to be important predictors of prison privatization (Butz and Fording 2022; Price et al. 2009). As a result, I expect counties with more racial and ethnic diversity and more Black jail inmates to have an increased likelihood of jail privatization as a response to perceived racial threat. **H**₁₀**:** Counties with higher proportions of minority residents (operationalized as the share of Black and Hispanic residents) are more likely to have privatized jail services.

H₁₁: Counties with a higher proportion of black jail inmates will be more likely to have privatized jail facilities.

IV. Data and Methods

In this analysis, I use a dataset comprised of primary and secondary components. The primary data is derived from the NACo (National Association of Counties) survey, collected in 2007-2008. This survey is a nationally representative sample of county governments in the U.S. in the 46¹² contiguous states that have county governments or parish governments (Louisiana). This survey achieved a 60 percent response rate (n=1756). I also incorporate secondary data elements, including the 2000 Census of Population, 2002 Census of Government, the 2000 Religious Congregations and Membership Study (RCMS), the Vera Institute of Justice Incarceration Trends dataset, and the David Leip Voting Atlas.

A. Dependent Variable

The dependent variable in this study is a categorical, binary variable, derived from the NACo county government survey. This variable reflects county responses to a question item on the NACo survey, which asks whether or not the county contracts with a private company or non-profit organization to provide jail/correctional facility services. This measure reflects a more inclusive measure of correctional privatization, as it includes both full and partial county correctional privatization as well as county

¹² Connecticut and Rhode Island do not have county governments.

government partnership with both corporations and NGOs.¹³ This measure follows the convention established by Mitchell and Butz (2019:510) which considers privatization to be a unique policy innovation and thus utilizes a binary measure of adoption/non-adoption.

B. Independent Variables

Independent variables for this analysis are derived from the 2002 Census of Governments, the 2000 Census of Population, the David Leip Voting Atlas, the 2000 RCMS, and the Vera Institute Incarceration Trends dataset. In my analysis, I have three categories of county-level independent variables that are of interest: 1) Economic characteristics (inclusive of both county government fiscal and county economic characteristics), 2) Political/ideological context, and 3) Demographic characteristics. Each category and its variables are discussed discretely below.

1. Economic Factors

Following the framework of Mitchell and Butz (2019), I conceptualize county economic factors as being comprised of two categories of variables: county government fiscal measures and the socioeconomic characteristics of the county population. Due to the theoretical and empirical importance of government fiscal characteristics for prison privatization outcomes, I include measures of both general county government fiscal

¹³ The Vera Institute of Justice Incarceration Trends data includes a jurisdiction-level file that lists the number of jail inmates held in privately owned jail facilities. In 2008, there were 37 private jail jurisdictions in the U.S. I analyzed an alternative dependent variable in my models, which was the share of total jail inmates at the county-level who were held in private jails. In this analysis, the poverty and unemployment rates were the only statistically significant independent variables of interest, and they were significant in the same direction as the models presented in Table 3.2. Also, due to missing cases in the 2008 total jail rate, only 1,269 full cases were available for analysis. Given these largely null results, smaller sample size, and the perspective provided by a more inclusive measure of correctional privatization, I retained the dependent variable from the 2008 NACo survey.

conditions and law enforcement/correctional expenditures in my analysis of jail privatization. As jail operating costs and budgets are often paid out of county general funds (Edelman and Mayer 2001), county government fiscal conditions are directly relevant to jail operations, just as state government fiscal conditions are relevant to prison operations.

County Government Fiscal Characteristics. I measure county fiscal capacity using two variables from the 2002 Census of Governments: economic autonomy and total county government revenue per capita. Economic autonomy is a ratio that measures a county's financial independence and capacity (Lobao et al. 2014; Price and Riccucci 2005). This variable is calculated by dividing the amount of a county government's total own-source revenue (i.e. sourced directly by the county through property taxes, sales taxes, and user fees) by the combined revenue the county receives from the state and federal governments. Thus, the larger the economic autonomy ratio, the more financially autonomous the county. Per-capita revenue (thousands of dollars per number of county residents as of the 2000 Census of Population) reflects a county government's income and financial health (Butz and Fording 2022; Mitchell and Butz 2019). In initial models, I also included county government employment size. However, this variable was not included in the final models due to issues of multicollinearity.¹⁴

I also include two measures of county government expenditures that are relevant to correctional privatization: police and correctional expenditures. Both of these

¹⁴ Both county government employment size and county revenue showed strong indicators of multicollinearity. They exhibited tolerance values of approximately .14 and VIFs of approximately 7. As both measures made similar theoretical contributions, employment size was removed from the model. The sample size also increased significantly due to the sizeable number of missing cases for the employment size variable.

expenditure figures are derived from the 2002 Census of Governments. I adjust both of these expenditure figures to be per capita measures, to adjust for very populous counties that, by default, would be more likely to have higher expenditures overall. I calculate each measure by dividing the total expenditure figure (in thousands of dollars) for both police and corrections by the population of the county according to the 2000 Census of Population.

County Economic Context. I also measure county-level economic conditions beyond county government characteristics. The county poverty rate and the unemployment rate are two central measures to measure county-level economic conditions. Both variables are derived from the 2000 Decennial Census. I also include measures of urbanicity and educational attainment, as both of these factors relate to economic diversity and health. The rural-urban measure is derived from the NACo survey, which consists of three categories (1=metropolitan, 2=non-metropolitan, metropolitan adjacent [suburban], 3=non-metropolitan, non-metropolitan adjacent [rural]), with 1=metropolitan serving as the reference category. I measure educational attainment as the proportion of county residents over the age of 25 with a bachelor's degree, a variable which is also derived from the 2000 Census of Population.

2. Political and Ideological Factors

As has been well documented in the prison privatization literature, political and ideological factors are important predictors of correctional privatization at the state level (Kim 2022). I measure political and ideological factors using two categories of variables: county government characteristics and county-level population characteristics.

I measure county government political characteristics using county government service privatization as well as public sector unionization. Both measures are derived from the 2008 NACo survey. To analyze the extent to which a county government already privatizes services, I include a measure of the proportion of county government services that are provided by private or non-profit organizations. As an additional measure of the strength of the public sector in a county, I also include the share of the county government workforce that is unionized.

I also include measures of the political and ideological orientation of county residents. To measure political context, I include the share of a county's population that voted for the GOP candidate in the 2000 Presidential election, derived from David Leip's Atlas of U.S. Presidential Elections, a database of official election results from all 50 states and Washington, D.C. (Leip 2018). I also use the county-level evangelical Christian adherence rate¹⁵, or number of evangelical Christian adherents per thousand county residents, to measure county-level ideological conditions. This variable is derived from the 2000 RCMS survey (Jones et al. 2000).

3. Demographic Factors

Following previous studies, I also examine the relationship between demographic factors and local correctional privatization. I analyze this relationship by including two measures in my analysis: county population of racial/ethnic minorities (the share Black

¹⁵ Evangelical Christian adherence (i.e. religious fundamentalism) is a highly regionalized phenomenon, with most congregations being concentrated in the Southern region of the U.S. However, both imprisonment and jail incarceration are also regionally concentrated in the South and religious fundamentalism is an established independent variable in studies of imprisonment (Jacobs 2004; Kang-Brown and Subramanian 2017; Mai et al. 2019). Thus, while this measure of religious fundamentalism may also be capturing regional effects, it is still an important independent variable in this analysis.

and Hispanic in a county) and the share of a county's jail inmates who are Black. The share Black and Hispanic variables are derived from the 2000 Census of Population. The jail inmate variable is derived from the Vera Institute of Justice¹⁶ and was calculated by dividing the number of Black jail inmates by the total of jail inmates in a particular county.¹⁷ I also included a range of interaction terms in preliminary models, which interacted Black and Hispanic jail inmate shares and population with the proportion of GOP voters and evangelical adherence rates. None of these interaction terms were significant, so they were excluded from the final models presented here.

C. Descriptive Statistics

The descriptive statistics summarized in Table 2 reflect the sample of 1,371 counties in the United States. Overall, a minority of counties, 8.1%, report privatizing their jail services. On average, counties in the sample report privatizing 23% of their services, with observations ranging from no privatization (0%) to complete privatization (100%).

| Table 3.1 Descriptive | Statistics | (N=1,371) |
|-----------------------|------------|-----------|
|-----------------------|------------|-----------|

| Mean | SD | Min, Max |
|-------|------------------------------|------------------------------------|
| | | |
| .081 | .273 | 0, 1 |
| | | |
| | | |
| 6.503 | 22.843 | .149, 578.5 |
| | <u>Mean</u> .081 6.503 | Mean SD .081 .273 6.503 22.843 |

¹⁶ The Vera Institute of Justice is an independent nonprofit national research and policy organization dedicated to mission of reducing mass incarceration and its racial and socioeconomic inequities. To facilitate this mission, the Vera Institute has compiled data from the Bureau of Justice Statistics and other official sources and made publicly available extensive datasets that reflect trends in both imprisonment and jail incarceration from the 1970s to the present.

¹⁷ These racial/ethnic categories of jail inmates are derived from a single-day figure recorded at the end of June of a given year. In preliminary analyses, I also included the Hispanic jail population share, as well as the overall minority jail population share (calculated by adding the counts of all jail inmates categorized as Black, Hispanic, Asian, and Native American, then dividing that sum by the total number of jail inmates in a particular county). As the Hispanic jail population share and overall minority jail population share variables were not statistically significant in these preliminary analyses, these variables were excluded from the final analysis presented here.

| Total Revenue Per Capita (1000s) ^c | 970.063 | 796.716 | 64.070, 9802.98 |
|---|---------|---------|-----------------|
| Correctional Expenditures Per Capita (1000s) ^c | 43.368 | 65.960 | .176, 2044.848 |
| Police Expenditures Per Capita (1000s) ^c | 58.471 | 57.728 | .331, 1208.609 |
| County Economic Context | | | |
| Percent Families in Poverty ^d | 9.967 | 5.222 | 1, 45.2 |
| Percent Unemployed ^d | 3.363 | 1.286 | 0, 10.9 |
| Urban Location ^b | 35.8% | .479 | 0, 1 |
| Suburban Location ^b | 34.4% | .475 | 0, 1 |
| Rural Location ^b | 29.8% | .458 | 0, 1 |
| Percent College Graduates ^d | 11.216 | 4.960 | 2.5, 36.6 |
| County Political & Ideological Factors | | | |
| Percentage of County Services Privatized ^b | 23.472 | 23.905 | 0, 100 |
| Percent County Government Employees Unionized ^b | 20.338 | 29.051 | 0, 88 |
| Percent GOP Voting in 2000 Presidential Election ^e | 57.472 | 10.911 | 22.87, 88.53 |
| Evangelical Christian Adherence Rate ^f | 21.3868 | 15.378 | .14, 89.69 |
| County Demographic Factors | | | |
| Percent Hispanic ^d | 5.468 | 10.859 | .1, 91.6 |
| Percent Black ^d | 7.668 | 12.914 | 0, 73.1 |
| Percent Black Jail Inmates ^g | .504 | .264 | 0, .994 |

Note. SD = standard deviation.

^aThe reference category for the dependent variable is 0=no privatization of county jail/correctional facilities.

^b2008 NACo Survey, ^c2002 Census of Governments, ^d2000 Census of Population, ^eDavid Leip Voting Atlas, ^f2000 Religious Congregations and Membership Survey, ^g2006 Vera Institute of Justice Incarceration Trends

D. Analytic Approach

To address my research question, I fit a multi-level, binary logistic regression model with random effects. The primary statistical assumption being made with this type of model is that the county-level outcomes are clustered within their state contexts, with states having significantly different intercepts. As state-level policies dictate the legality of jail privatization (Kiekbusch 2001), accounting for state-level variation is a necessary and appropriate component of this analysis.

The Level 1 model equation for the fitted, conditional model is written as follows:

$$\eta_{ij} = \beta_{0j} + \beta_{1j}(X_{1ij} - \overline{X} \dots) + \beta_{2j}(X_{2ij} - \overline{X} \dots) + \cdots \beta_{qj}(X_{qij} - \overline{X} \dots)$$

In this equation, $\beta_{1j} \dots \beta_{qj}$ represents the coefficients for the Level 1 independent variables, with *q* representing the number of independent variables in the model. The notation $X_{ij} - \bar{X}$... represents the grand-mean centering of all continuous, county-level

predictors included in the model, following the guidelines of Heck, Thomas, and Tabata (2012:71–75). The categorical predictors were entered into the model uncentered. The Level 2 component for this analysis consists only of a random intercept, with the Level 1 predictors' slopes ($\beta_{1j}...\beta_{qj}$) being considered fixed, as follows:

$$\beta_{1j} = \gamma_{10}$$
$$\beta_{2j} = \gamma_{20}$$
$$\dots$$
$$\beta_{qj} = \gamma_{q0}$$

Thus, combining the Level 2 random intercept equation with the above equations produces the following full equation for this specific analysis, including a population exposure variable¹⁸ and the random effect of the variance of the Level 2, state intercepts:

$$\eta_{ij=\gamma_{00}+\gamma_{10}(X_{1ij})+\gamma_{20}(X_{2ij})+\cdots+\gamma_{q0}(X_{qij})+v_{0j}+\ln(population)}$$

1. A Note on Logistic Regression with Rare Events Data

As can be seen in the descriptive statistics listed in Table 2 above, a minority of counties (111, or approximately 8%) in this analysis responded that they had privatized their county jail/correctional facility services. In cases where the outcome of interest is very rare in data, there is a risk of biased parameter estimates and an underestimation of the probability of rare events due to the extreme skewness of the outcome variable (King and Zeng 2001). Rare events data in logistic regression analysis are a common methodological challenge in political (King and Zeng 2001), social science (Eason 2010), and health research (Courvoisier et al. 2011).

¹⁸ As I consider population to be an important variable in this analysis that may affect the odds of a county privatizing correctional operations, I include it as an exposure or "offset" control variable in my models. This method weights the regression results according to the log population of a county in 2000 and constrains the coefficient of the log population variable at 1. This strategy accounts for the effects of population without requiring that the coefficients be reported in the regression results presented below.

To address these methodological issues, there are a number of analytic solutions for rare events data. These include the "rule of ten," meaning that for each predictor variable, a logistic regression model should include at least ten outcome "events" (Courvoisier et al. 2011; Vittinghoff and McCulloch 2007). There are also specific software packages created for rare events logistic analysis. Relogit is a Stata package specifically designed by King and Zeng (2001) to analyze rare events data. An additional analytic strategy to address these issues in rare events data is Firth logistic regression (Coveney 2021; Firth 1993; Heinze and Schemper 2002), which includes a weighting strategy for rare events data, which is considered a methodological improvement upon King and Zeng's (2001) Relogit program.

In preliminary analysis, I fit logistic regression models, rare event logistic regression models, and Firth logistic regression models. For all three models, the regression coefficients, standard errors, statistical significance, and model fit statistics were all very similar. However, the Firth and rare event logistic analytic packages in Stata are unable to be used in conjunction with random effects or offset commands. Given the similarity of the three regression methods' results, I report here the results of the logistic regression. Also, while my analysis does not quite meet the threshold of the "rule of ten" events per independent variable in logistic regression, Vittinghoff and McCulloch find that "…when a statistically significant association is found in a model with 5-9 EPV [events per variable], only a minor degree of extra caution is warranted, in particular for plausible and highly significant associations hypothesized a priori" (2007:717). Additionally, Vittinghoff and McCulloch (2007) also find that in addition to the 5-9 EPV threshold, increased bias is likely with data featuring less than 30 total

"events" of the dependent variable. My data meets and exceeds both the 5-9 EPV and 30 event threshold.¹⁹

I also conducted checks for multicollinearity. The mean VIF for these variables is 1.43, with the highest VIF value being 2.79.

V. Results

In this analysis, I utilize three conditional, fitted models to test the relationship between Level 1 covariates, accounting for clustering at Level 2 (i.e. the state-level) and the Level 1 outcome of the log(odds) of county jail privatization. Model 1 demonstrates the relationship between county economic conditions and privatization outcomes. Model 2 adds the effects of political and ideological context. The final model, Model 3, includes measures of demographic characteristics and racial threat that may be associated with the county's decision to privatize their jail/correctional facilities.

Table 3.2 illustrates the results of the multi-level, binary logistic model of county jail and correctional privatization as of 2007. Model 1 includes measures of county economic characteristics, both county government fiscal conditions as well as county population economic conditions. Regarding county government fiscal characteristics, counties with increased economic autonomy, or increased control over their own budgets and income, are actually more likely to privatize their correctional services (b=.007), a relationship that is the opposite of what I predicted. This relationship may be explained

¹⁹ As an additional point of verification, I conducted a discriminate analysis. This analysis found a statistically significant difference between the categories of the binary outcome variable, using the same range of predictors. The standardized coefficients from this analysis mirror the directionality of the logistic regression coefficients reported in this chapter, providing a third source of support for these results, in addition to the rare event and Firth logistic regression findings.

by the fact that counties with increased economic autonomy, by default, also have increased fiscal responsibility for service provision. As a result, counties with high economic autonomy are more reliant on their own finances and do not have a strong buffer of additional state and federal revenue to remedy any budgetary shortfalls.

Additionally, both police and correctional expenditures are significantly related to jail privatization outcomes. These relationships are expected based on the prison privatization literature, however, the directionality of these expenditures coefficients in Model 1 is different than I expected. Prison privatization research predicts that governments that spend *more* on correctional costs would be more likely to privatize services, as elevated correctional expenditures are conceptualized as an indicator of fiscal stress. However, in the case of jails and county-level correctional privatization, there is a negative relationship between privatization and correctional budgets (b=-.011). This suggests that counties that spend more on corrections are less likely to have privatized corrections. The directionality of this relationship is different than that predicted of the state-level studies, which tend to find a positive relationship between correctional expenditures and privatization. In the case of county jail privatization, this negative relationship between correctional expenditures and privatization may reflect counties' effort to address correctional budget shortfalls through private partnerships. Alternatively, county governments without the same budget constraints may be able to use their larger correctional budget to avoid privatization and provide services directly. Finally, the expenditure that *does* have a significant and positive relationship (b=.008) is county government expenditures for police services. This finding suggests that these

counties may have higher overall law enforcement costs, leading them to privatize correctional services as a way to provide more funding for policing.

As regards the county economic context, family poverty rates are positively associated with privatization outcomes (b=.065), as is rurality (b=1.314), with the rural odds ratio being the largest in magnitude in the model. Additionally, the educational attainment variable exhibits a significant and negative relationship (b=-.130) with privatization. While the county government revenue variable is not significant, poverty, rurality, and educational attainment act as additional indicators of county economic health as well as the robustness of the local tax base. In other words, rurality, higher poverty, and lower educational attainment may contribute to a weaker local government tax base, which may result in a higher likelihood of county governments privatizing jail operations as a way to cut costs, suggesting an economic dimension to privatization decisions.

However, this logic is troubled by the significant and negative coefficient of unemployment (-.278) and the marginally significant positive coefficient of suburban location. As I expect suburban and low unemployment counties to have higher capacity county governments, an elevated likelihood of jail privatization in these counties is an unexpected result.

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| i o o | Model 1: Economic Factors | | Model 2: + Political & Ideological | | Model 3: + Demographic Factors | |
|--|------------------------------|-------|---------------------------------------|-------|-----------------------------------|-------|
| | | | | | | |
| | | | Factors | C | | |
| | <i>b</i> (S.E.) | OR | <i>b</i> (S.E.) | OR | <i>b</i> (S.E.) | OR |
| Variance Component (τ_{00}) | 1.603(.613) | | 1.29 (.570) | | .735 (.415) | |
| Intercept (γ_{00}) | -14.018 (.303)*** | .000 | -14.296 (.312)*** | .0000 | -14.404(.299)*** | .000 |
| County Economic Factors | | | | | | |
| County Government Fiscal Conditions | | | | | | |
| Economic Autonomy | .007 (.004)* | 1.007 | .006 (.004) | 1.006 | .006 (.004)† | 1.006 |
| Total Revenue Per Capita (1000s) | .000 (.000) | 1.000 | .000 (.000) | 1.000 | .000 (.000) | 1.000 |
| Correctional Expenditures Per Capita (1000s) | 011 (.005)* | .989 | 013 (.005)** | .987 | 017 (.005)** | .983 |
| Police Expenditures Per Capita (1000s) | .008 (.002)*** | 1.008 | .012 (.003)*** | 1.012 | .007 (.004)† | 1.007 |
| County Economic Context | | | | | | |
| Percent Families in Poverty | .065 (.032)* | 1.068 | .072 (.033)* | 1.075 | .055 (.040) | 1.057 |
| Percent Unemployed | 278 (.126)* | .757 | 224 (.131)† | .799 | 098 (.140) | .907 |
| Suburban Location ^a | .620 (.318)† | 1.859 | .836 (.334)* | 2.307 | .871 (.348)* | 2.391 |
| Rural Location ^a | 1.314 (.338)*** | 3.722 | 1.438 (.366)*** | 4.211 | 1.509 (.380)*** | 4.520 |
| Percent College Graduates | 130 (.034)*** | .878 | 126 (.034)*** | .882 | 125 (.037)** | .882 |
| County Political and Ideological Factors | | | | | | |
| Percent of County Services Privatized | | | .026 (.005)*** | 1.026 | .026 (.005)*** | 1.026 |
| Percent County Government Employees Unionized | | | 012 (.006)† | .988 | 010 (.006) | .990 |
| Percent GOP Voting in 2000 Presidential Election | | | .022 (.014) | 1.023 | .033 (.015)* | 1.034 |
| Evangelical Christian Adherence Rate | | | 004 (.011) | .996 | 017 (.012) | .982 |
| County Demographic Factors | | | | | | |
| Percent Black | | | | | .013 (.013) | 1.013 |
| Percent Hispanic | | | | | 022 (.016) | .978 |
| Share Black Jail Inmates | | | | | 981 (.491)* | .375 |
| Log Likelihood | -427.574 | | -389.565 | | -337.804 | |
| Chi-Squared | 132.47*** | | 150.45*** | | 139.42*** | |
| Ν | 1,371 | | 1,323 | | 1,269 | |

| Table 3.2 Multilevel Binar | v Logistic | Regression | s of Jail and C | Correctional P | rivatization a | t the County | v-Level in 2007 |
|----------------------------|------------|------------|-----------------|----------------|----------------|--------------|-----------------|
| | | | | | | | |

a. The reference category for the suburban and rural dummy variables is metropolitan. $\frac{1}{p} < .10$; $\frac{1}{p} < 0.05$; $\frac{1}{p} < 0.01$; $\frac{1}{p} < 0.01$ ۰P Jg ai pop ep ep ιp

In Model 2, I add political and ideological measures. As in Model 1, correctional and police expenditures remain significant correlates of jail privatization, as do poverty, educational attainment, and the spatial indicators, with suburban location gaining statistical significance. However, economic autonomy and unemployment are no longer statistically significant, suggesting that their effect is mediated by political and ideological factors. Of the political and ideological variables, the share of county services that are privatized is the most significant correlate of jail privatization outcomes (b=.026), with counties that have already privatized a larger share of their services being significantly more likely to privatize jail and correctional services as well. Also of note is the marginal significance and negative directionality (-.012) of the county government unionization variable. This inverse relationship between county government, public sector unionization and the odds of privatization of correctional services aligns with the findings of the prison privatization literature. In other words, places with stronger unionization, particularly public sector unionization, are less likely to privatize correctional services and facilities. In Model 2, neither the GOP voting share nor the evangelical adherence rate are significantly associated with correctional privatization, demonstrating that county government political characteristics are the most salient political factors in this model.

In the final model, Model 3, I include measures of county-level demographic factors. These measures are intended to measure the racial and ethnic diversity of a county as well as potential racial threat (as measured by the share of jail inmates who are Black). After including these variables, the only county government fiscal variable to retain a substantive threshold of statistical significance is correctional expenditures per capita, which also retains its negative coefficient. Both police expenditures and economic autonomy are only significant at the p<.10 level and positive, as in previous models. After accounting for race and ethnicity, neither poverty nor unemployment are significantly related to privatization outcomes. However, suburban and rural location as well as educational attainment retain their significance. Among the political and ideological variables, the share of county government services that are privatized remains positive and significant (b=.026), and the share of GOP voters in the 2000 Presidential election is also positive and significant (b=.033). In this final model, neither the evangelical Christian adherence rate nor county government unionization levels are significant, suggesting that the most important political and ideological measures are GOP voting prevalence and county's overall level of service privatization. Interestingly, neither the share Black nor Hispanic are statistically significant. Interestingly, the proportion of jail inmates who are Black is significant, but *negative* (b=-.981), a finding which contradicts the hypothesized relationship between racial threat and correctional privatization noted in studies of prison privatization (Butz and Fording 2022; Enns and Ramirez 2018).

In their full model, Butz and Fording (2022) find a negative direct effect for the correlation between the state-level Black prison population and prison privatization outcomes. However, this full model includes an interaction term, which shows the effect of the Black prison population to be contingent upon a state's political context and the level of reported fear of minorities by state residents. Following these findings of Butz and Fording (2022), I tested a range of interaction terms that combined GOP voting and evangelicalism each with the Black jail share, Black population, and Hispanic population.

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I added each interaction to Model 3, the final model, one at a time, and I also tested multiple interaction terms in conjunction with each other. None of these interaction terms were statistically significant, so I excluded them from the final model.

VI. Discussion and Conclusion

While prison privatization has received significant attention in both the public domain and scholarly research, the privatization of local corrections has received significantly less attention in both the public and academic arenas (Kim 2022). Previous research on correctional privatization has primarily focused on upon prisons and statelevel analysis in the U.S. This chapter takes an important, initial step toward addressing this gap by extending and applying the insights of the prison privatization research to the case of jails. Specifically, I apply these insights to the county-level, using primary data to examine the extent to which established factors influencing state prison privatization also are associated with county-level jail privatization. Prison privatization research has established that there are three central categories of independent variables that affect prison privatization outcomes at the state level: economic, political/ideological, and demographic (Kim 2022). However, little is known about the extent to which these same factors and measures are able to explain jail privatization.

Overall, my findings mirror the findings of prison privatization research. I find that government expenditures are significantly associated with county-level jail and correctional service privatization. In addition, I find that local measures of inequality and measures that indicate the robustness of county-level tax bases and economies are also significantly related to privatization outcomes, including spatial location of counties. I also find that the local political context, including existing tendencies toward privatization and higher prevalence of GOP voting, are also important factors. The county jail is one of a suite of county services and is not immune to broader local trends toward privatization. Finally, the share of Black jail inmates in a county is significantly and negatively related to privatization outcomes. Despite the directionality of this relationship being the opposite found in studies of prison privatization, my findings still demonstrate that the racial composition of inmate populations is important at the local level.

My research question asks what factors are associated with a higher likelihood of local correctional privatization, taking the findings and hypotheses of the prison privatization literature as my starting point. I generally find that the same categories of variables that are important at the state level—economic, political, and demographic factors-are also important at the local level. However, while the same categories and indicators are significant, the directionality of these relationships does not necessarily mirror the findings of the prison privatization studies. In Model 3 above, increased police expenditures are associated with higher odds of jail privatization, a relationship predicted by prison privatization research. However, increased correctional expenditures are associated with lower odds of jail privatization, exactly the opposite relationship hypothesized by prison privatization research. This relationship between correctional expenditures and jail privatization may be due to different dynamics between government spending and correctional privatization at the county-level vs. the state level. It also may be the result of my cross-sectional analysis, whereas a longitudinal model may find a positive, rather than a negative relationship.

Additionally, I find that rural and suburban counties are significantly more likely to have privatized jail/correctional services. While rurality is not explicitly measured in studies of prison privatization, some studies include measures of population density, but have found a marginal (p<.1) and positive relationship between population density and prison privatization (Mitchell and Butz 2019). My finding that rural counties are significantly more likely to have non-governmental jail service partners may be due to the overall lower capacity of rural county governments, as rural county governments tend to face considerable fiscal constraints in providing services (Lobao and Kraybill 2005) and particularly jail services (Ruddell and Mays 2007, 2011). As a result, full or partial jail privatization may be used as a coping mechanism for both reduced county resources and ability to provide the necessary range of correctional functions and services associated with a jail. Also, as detailed in numerous recent studies by the Vera Institute, rural areas have experienced a sustained increase in jail incarceration rates (Kang-Brown and Subramanian 2017; Mai et al. 2019). This increase in inmate numbers may present yet another source of fiscal stress for rural county governments, resulting in increased levels of public-private partnership in correctional service provision in rural counties.

Additionally, the higher likelihood of privatization in rural counties raises important questions. As discussed previously, rural jails have long faced a laundry list of challenges, including unsafe, outdated facilities, funding shortfalls, and staff turnover (Kerle 1982; Ruddell and Mays 2007, 2011). The higher odds of privatization in rural counties may be a fiscal coping mechanism to address both the reduced capacity of rural county governments as well as these well-documented challenges specific to rural jails (Mays and Thompson 1988). However, my current cross-sectional analysis is unable to speak directly to the mechanisms causing this relationship between rurality and jail privatization. Of particular interest is how the county sheriff, an important figure in rural law enforcement and jail administration (Handberg and Unkovic 1982; Weisheit et al. 1995), is involved with privatization and fiscal decisions related to rural jails. Future research should explore how county fiscal conditions and political factors inform rural jail privatization and how county sheriffs balance the law enforcement, administrative, and political expectations of their office.

Finally, I find that Black and Hispanic population shares as well as the share of jail inmates who are Black is not associated with an increase in the odds of jail privatization. In fact, I observe the opposite relationship. This finding is a notable divergence from the prison privatization literature. This negative relationship may be attributable to the spatial dynamics associated with jail privatization. I find a clear rural effect, with rural areas being significantly more likely than urban areas to privatize jail operations. As rural areas tend to have a lower percentage of Black residents (and thus Black jail inmates), this relationship may explain the significant and negative coefficient for the Black jail inmate share variable. In short, this finding suggests that racial threat is not an important predictor of county jail privatization decisions.

While this chapter provides an important first step toward understanding jail privatization and how it compares to prison privatization, it has limitations. One limitation is the limited number of "events" in the dependent variable. While the 111 "events" in the sample meet the threshold of 5-9 EPV and 30 "events" suggested by Vittinghoff and McCulloch (2007), a larger sample with more "events" would be preferable. This could be accomplished through longitudinal modeling, which would increase the number of "events" as well as address the cross-sectional temporal limitations of this chapter's analysis. A longitudinal analysis would also be interesting in that it would allow insight into change over time in factors relating to jail privatization, as well as how these factors have changed in the years following the Great Recession. Additionally, a spatial analysis that accounts for the privatization of neighboring counties would allow for insights into the ways in which jail privatization follows established patterns of policy innovation diffusion (Mitchell and Butz 2019). This spatial modeling strategy may also nuance the clear spatial findings in Models 1-3 above.

This study also provides a foundation for future research in this area. Of particular interest would be qualitative research that examines the importance of private contracts for jail services for rural county governments. Additionally, future data collection in this area should examine both the range of correctional services counties offer to their residents as well as the extent to which they privatize this range of services. Both local corrections and "partial privatization" are rich potential fields of study, and this chapter is only one step toward examining these concepts and how they relate to economic, political/ideological, and demographic characteristics of counties across the United States.

CHAPTER 4. LOCAL INSTITUTIONS, ECONOMIES, SPACE, AND THE JAIL AS A PUNITIVE AND ECONOMIC INSTITUTION

I. Introduction

While a significant amount of research has considered the role of politics, sociodemographic factors, government priorities in imprisonment rates and the larger phenomenon of mass incarceration (Jacobs and Carmichael 2001; Sutton 2000, 2004), very little scholarly focus has been given to the role these factors play in local, countylevel manifestations of punishment—namely, jail rates. As jail incarceration rates continue to rise and as jails represent the gateway into the larger system of mass incarceration, the factors which correlate with jail incarceration levels are of both immediate empirical and public concern (Kang-Brown and Subramanian 2017; Mai et al. 2019; Subramanian et al. 2015).

While neglected in the broader scholarship of punishment, jails are a critical institution in the larger criminal justice system in the U.S. As the point of intake to the larger system of mass incarceration, jails are directly connected to local policing practices, local government decision-making and spending priorities, and are more likely to be influenced by local social conditions, such as racial inequality and unemployment (Chiricos and Bales 1991). As a result, jails are closely tied to local social contexts, a fact which is reflected in the clear rural-urban disparity in jail incarceration rates. While urban pretrial jail rates have declined in recent decades, pretrial rates in rural areas have seen a

sustained increase, with rural pretrial incarceration rates having risen 436% between 1970 and 2013 (Kang-Brown and Subramanian 2017). In the larger body of research on mass incarceration in the United States, understanding the role of the jail across space and how it connects to social contexts and local government priorities provides important insights into the roots of mass incarceration and the types of communities most impacted by this social problem.

The most oft-noted role of jails is as the gateway to the larger system of mass incarceration, as jails are where unsentenced inmates are held pre-trial and preconviction. However, jails have increasingly begun to serve a second function—as a source of revenue, generated through the lease of jail beds to other jurisdictions. In 1978, 45% of jails held inmates for other jurisdictions. As of 2013, that number had increased to 84%, and 22% of jail inmates were being held for other authorities. In a sample of 11 states in the South and West, more than 30% of jail inmates were being held for other jurisdictions (Kang-Brown and Subramanian 2017). While the use of prisons as an economic development strategy in economically distressed, primarily rural areas has been the focus of substantial study and debate (Eason 2017; Hooks et al. 2010; Hoyman 2001; King, Mauer, and Huling 2003), no equivalent studies have examined the use of jails as an revenue-generating institution. This is despite the fact that jail beds are increasingly being leased out to other jurisdictions to generate county revenue.

In this chapter, I address two central research questions: 1) To what extent are institutional and economic characteristics of places (counties) associated with the pre-trial jail incarceration rate? 2) To what extent do these same factors explain (or not) the use of jails as an economic institution? To answer these questions, I utilize two different
dependent variables—pretrial jail incarceration (a measure of jail incarceration as a form of punishment) and the share of jail inmates in a county who are held for other jurisdictions (representing an economic function of the jail).

To address these research questions, I draw insights from both the larger body of research on mass incarceration as well as prison siting. I also incorporate insights from rural sociological perspectives on spatial inequality. Institutional approaches to the study of mass incarceration highlight the role that racial minority populations, government spending, political factors, and economic conditions influence punishment outcomes. While this body of research is robust and has been studying these relationships for decades, little to no research examines the extent to which these factors are associated with local manifestations of mass incarceration—namely pretrial jail incarceration rates. I extend the insights of this research to the local context.

However, as noted above, the jail serves both a punitive and an economic function. Here, the prison siting literature provides a helpful complement to institutional studies of mass incarceration. While the mass incarceration research focuses on state and national-level policy and aggregate statistics, the prison siting literature includes a focus on specific communities which use punishment as a form of economic development (Carlson 1992; Courtright et al. 2010; Eason 2017; Hoyman and Weinberg 2006; Yanarella and Blankenship 2006). This research provides important insights as to which types of places are likely to rely on punitive institutions as a form of income generation. As a result, this literature provides important insights for developing predictions of which types of places are likely to have a higher proportion of jail inmates that are held for other jurisdictions—namely, the use of jails for economic development and revenue generation

purposes. This prison siting research also focuses primarily on rural areas, as rural areas are significantly more likely to use prisons as economic development. This emphasis on spatial differences is important, given that jail incarceration rates are not evenly distributed across the U.S., with rural areas noting more of a sustained increase in jail rates than any other spatial category in the U.S (Kang-Brown and Subramanian 2017). As a result, there may also be spatial dynamics in the practice of jail contracting.

To examine the relationship between institutional and economic characteristics of place and the punitive and economic functions of the jail, I examine the county-level jail rate, broken down into two different forms: pre-trial and the share held for other jurisdictions. In this way, I examine the factors associated with *how* jails are used at the local level—for punishment or economic development.

To begin, I outline why studying jails is important empirically, theoretically, and socially. I then discuss the range of social factors found to be related to imprisonment rates at the national and state level as well as the types of places likely to rely on incarceration as a form of economic development. I conclude by discussing the variables from these bodies of research that should be associated with the two types of jail populations.

II. Literature and Background

Mass incarceration is a well-established focus of social science research. The vast majority of this research tradition focuses on prisons. While prisons are a fundamentally important institution, they are not the only institution of punishment in this larger system. Jails are also an important part of the criminal justice system and are the first facility in

which individuals are incarcerated. Jails have generally received little attention in the larger study of mass incarceration, despite being a common institution. Jails are located in most communities in the U.S. and are a node of connection between the broader system of mass incarceration and local communities.

The study of mass incarceration is robust and has found a range of predictors of rising imprisonment rates. Economic and institutional factors, along with political conservatism, racial threat, religious fundamentalism have all been found to have clear associations with imprisonment (Jacobs 2004; Jacobs and Carmichael 2001; Jacobs, Stephanie L. Kent, and Carmichael 2005; Sutton 2000). While these findings provide important insights into cross-national and national-level studies of imprisonment an punitive policy, it remains unclear the extent to which these factors explain local incarceration rates, particularly pre-conviction incarceration rates (Sutton 2000). As this research doesn't explain which types of *localities and communities* are more punitive, I take that as one of my central goals in this chapter, namely, to provide insights into county-level dynamics of punishment, which are a necessary complement to aggregate, national and state-level discussions and research on mass incarceration and punitive policy.

The prison siting literature, while being less theoretical than the sociological study of punishment, also focuses on economic and institutional factors. The prison siting literature focuses on the communities and places most likely to build prisons as a form of economic development, focusing on the economic rather than punitive function of the prison. However, this research does not examine the jail as an economic development vehicle. Jails have increasingly come to serve an economic as well as a punitive function for local governments, as indicated by the increased share of jail inmates who are living in leased beds in different jurisdictions (Kang-Brown and Subramanian 2017; Mai et al. 2019). In understanding which localities are most likely to use jails in this way, it is instructive to look to the prison siting literature, as this body of research has found that rural areas with higher than average poverty, unemployment, and minority population rates in the South are most likely to construct prisons to generate jobs (Eason 2010). These findings provide an important point of departure for considering the economic function of the jail. These factors also overlap considerably with the factors found to have an association with punitive policy—namely economic conditions.

I begin my discussion below by discussing the broader findings of research on imprisonment and imprisonment rates and how these findings can be adapted to a more localized analysis of local punitiveness, as measured by pre-trial jail incarceration. I then discuss the prison siting literature to illustrate the place-based associations of prison construction, which provides important insights into the contexts in which punitive institutions, such as prisons and jails, are likely to be used for economic development purposes.

A. Punishment and Theory

In this chapter, I draw from theoretical explanations of punishment that center on institutional and economic factors as explanations for imprisonment rates and punitive policies. While these theories focus on a different unit of analysis (prisons, as opposed to jails) and are concerned with higher-order effects, such as state and national conditions, the sociology of punishment provides important theoretical insights and variables that are a necessary starting point for an analysis of jail incarceration rates.

1. Institutional Factors

Institutional Attachment. One of the more prominent and compelling theoretical explanations of punishment and incarceration is the institutional perspective. This perspective is formulated in the work of Garland (1990, 2001). Garland (1990) argues that punishment needs to be considered a social institution in its own right, as punitive practices and policies are not only are shaped by society, but also *shape* society. Sutton (2000) extends this institutional argument and asserts that punishment, as measured by incarceration, is merely one of a range of ways of classifying and managing marginal social populations. In this analysis, Sutton (2000) examines a range of institutional forms of social classification that would direct individual life-courses, namely education, military service, and employment in the formal labor market. Through these institutional pathways, Sutton argues, individuals become more integrated into formal society, an integration which confers a positive moral standing and makes individuals less vulnerable to the criminal justice system.

Government Spending. Sutton also analyzes government social spending, as this is yet another institutional influence that affects individual life courses. Sutton (2000) asserts that, through education and welfare spending, governments provide another institutional influence that supports marginal individuals and competes with the institution of punishment for control over individual life-courses. Also, through elevated social spending, governments act as an important buffer between economic hardship and negative social outcomes, such as incarceration.

Labor Markets. Institutional perspectives on punishment also consider economic conditions to be important determinants of punishment. Perhaps the most prominent

economic approach to punishment is the Rusche-Kirchheimer Thesis, rooted in a Marxist perspective. This thesis asserts that imprisonment rates are inversely related to employment rates, with the state using punishment and incarceration as a strategy to manage excess labor (Chiricos and Delone 1992; Rusche and Kirchheimer 1968). Research in this vein has tended to find evidence of this inverse relationship between punishment and employment rates (Chiricos and Delone 1992; Sutton 2000). This relationship seems particularly strong when considering an individual's likelihood of being incarcerated in jail pretrial or having a longer stay in jail pretrial (Chiricos and Bales 1991). This focus on unemployment is compatible with the institutionalist approach, as labor markets and formal employment are an important institutional influence on individual life-courses (Sutton 2000).

Additionally, labor markets and sectors of employment significantly affect local economies. Poverty rates, educational attainment, and unemployment are all affected by labor market dynamics, including the dependence of places and regions on specific industries, which have varying levels of compensation and stability (Sherman 2014). As labor markets and economies are important institutions, particularly for a county-level analysis, including measures of employment levels in certain industries is appropriate for this analysis.

While these research traditions provide a rich collection of theories and findings regarding mass incarceration and explanations for imprisonment rates, little research has theorized or examined the extent to which these findings and relationships apply to local incarceration and the institution of the jail. As jails primarily hold unsentenced inmates, the dynamics and institutional forces which govern incarceration the local level may differ from those found at the higher level of state and national policy (Sutton 2000) and local jail populations may be more responsive to local economic inequalities (Chiricos and Bales 1991). I extend this body of research by applying these institutional, theoretical propositions to jail rates and local incarceration, joining these insights with the findings of the prison siting and spatial inequality of punishment literature to theorize how local context and spatial factors are related to the dual punitive and economic roles of the jail.

B. Punishment and Space

The prison siting literature and the recent spatial analyses of imprisonment provide an important complement to the study of jails and the broader theories of punishment. The prison siting literature and spatial analyses of incarceration provide an important, spatial and contextual perspective that addresses not only incarceration rates, but also the use of punitive institutions, namely the prison, as an economic institution. Additionally, the prison siting research shares a focus on educational attainment, employment, and economic factors as predictors of the use of prisons, a punitive institution, as a form of local economic development.

I begin by discussing the prison siting research and the insights it provides for understanding what types of places and communities are most likely to build prisons, a punitive institution, as a way to create jobs. I then discuss recent scholarship that has examined the spatial dynamics of incarceration and punishment in other ways. This research provides important insights for an analysis of the use of the jail as an economic, income-generating institution and the spatial dynamics that may be a part of this process.

1. Prison Siting as a Rural Social Problem

As an outcome of the phenomenon of mass incarceration, the massive spike in prisoners in the U.S. resulted in a skyrocketing demand for prison beds to house these new inmates. This phenomenon is commonly described as the "Prison Boom" (Eason 2016). The "Prison Boom" primarily demonstrates the ability of prisons to function not only as an institution of punishment but as an economic institution. The "Prison Boom" also illustrates the spatial dynamics of the larger system of mass incarceration.

The trends of the Prison Boom are well-documented. Primarily, the Prison Boom consists of prison construction predominantly in rural areas. These rural areas were often economically desperate and disadvantaged, with local officials aggressively courting state and federal officials to construct prisons in each community as a way to create jobs in the local community. In addition to being economically disadvantaged, rural prison towns are also more likely to be located in the South and have lower levels of educational attainment (Eason 2010, 2017). While the ability of prison construction to result in demonstrable economic benefits for has been hotly contested for nearly two decades, the spatial trends among prison construction during this period are not.

The rural prison siting literature also emphasizes the importance of race and ethnicity, providing an important point of connection to the sociology of punishment literature. The sociology of punishment has clearly established that the system of mass incarceration has had a disproportionately brutal impact on racial and ethnic minorities. Black men in particular have disproportionately been the target of punishment and harsh sentencing, resulting in Black men making up a disproportionate share of the U.S.'s prison population (Alexander 2012; Pettit and Western 2004; Western and Pettit 2005). While there is still a disproportionate number of Black individuals incarcerated in jails, as in prisons, the racial disparity between Black and white jail inmates has begun to decline in recent years. Recent reports from the Vera Institute of Justice find that during 1990-2013, when looking at *jail* incarceration, Black jail incarceration rates have declined and white jail incarceration rates have increased (Subramanian et al. 2018).

While mass incarceration's prison inmates are disproportionately sourced from urban communities of color, rural communities, including rural communities of color, are disproportionately impacted by prison construction. Eason (2010, 2012) has demonstrated that communities with higher minority populations are also more likely to site prisons within their borders. These same communities are also more likely to exhibit multiple indicators of concentrated disadvantage, such as residential segregation and/or high poverty and unemployment. This research highlights importance of including measures of economic distress, minority population share, and rurality in studies of prison construction and the use of mass incarceration as economic development. Also, these findings highlight the similarities between the places that are both origin points and destination points for prison inmates, through both policing/arrest and prison construction.

These insights are particularly important for studies like my current analysis, which juxtaposes the punitive and economic function of jails, the local companion institution to the prison. While smaller than prisons in scale in terms of inmates and employees, jails can also be used as an income generating institution. While most jail inmates are held in jail pre-trial, meaning they are unable to post bail or are awaiting trial, an increasing number of jail inmates are held by one jurisdiction for another jurisdiction

(Kang-Brown and Subramanian 2017). Under this arrangement, jails temporarily lease empty beds to other jurisdictions, such as counties without jail facilities, counties with overcrowded jails, or in some cases, even to state departments of corrections to address prison overcrowding. While a systematic analysis of these types of counties has yet to be undertaken, initial reports and case studies show local officials describing jail contracting as a self-sustaining form of economic development, with county officials citing jail contracting as a way of funding local social services, creating self-sustaining jobs, and tapping into a local growth industry (Mai et al. 2019; Marvel 2019). While the economic development function of the jail is, of yet, not examined to the same extent as the economic development function of the prison, there seem to be initial parallels between jails and prisons in this sense, with both functioning not only as punitive institutions in their respective communities, but also economic institutions which create financial value.

2. Spatial Dynamics in Mass Incarceration

Outside of studies of rural prison construction during the Prison Boom, other scholars have recently begun to examine the non-urban geographies of punishment in the U.S., challenging the notion that mass incarceration and an increased likelihood of imprisonment is something that is only faced by urban communities. In recent work, both Eason et al. (2017) and Simes (2018, 2021) demonstrate that the risk of imprisonment is not merely be the monopoly of poor urban communities of color. Rather, small cities and rural communities are also at a high risk of sending their residents to prison. Simes (2018) finds that net of factors such as crime and minority population share, the prison admission rates of the greater Boston area (i.e. Boston suburbs and satellite cities) are significantly higher than metropolitan Boston itself. Also, there is a significant spatial correlation, with the prison admission rate of surrounding census tracts being a significant predictor of admission rates in a given tract. This demonstrates that prison admissions and punitive practices, when examined at the local level, are spatially contingent.

Eason reports similar findings, both regarding prison admissions and prison construction—capturing both the punitive and economic development function of prisons as an institution. In their study of Arkansas prison admissions, Eason et al. (2017) find that rural and intermediate counties are both points of origin for prison inmates as well as destinations for prisoners. While Eason et al. find that the highest *average* rates of black imprisonment are found in urban counties in Arkansas, the highest *overall* rates of black imprisonment (i.e. the outliers in this analysis) are found in rural and intermediate counties, demonstrating that the traditional hallmark indicators of mass incarceration generally thought to be the jurisdiction of urban areas is also shared by rural areas. This finding is supported by reports from the Vera Institute of Justice which report that rural pre-trial jail incarceration rates are both significantly higher and have shown a more consistent rate of increase through 2013 than any other spatial context, including urban areas (Kang-Brown and Subramanian 2017).

These findings related to imprisonment have important insight for the study of jails and suggest three important variables for my analysis, namely racial and ethnic minority populations, spatial analytical factors, and a measure of rurality. I include measures of both the Black and Hispanic population shares of counties, following the findings of both scholarship on mass incarceration and prison construction, as both the punitive and economic functions of the prison disproportionately impact minority communities.

I also extend the emergent spatial study of mass incarceration in this chapter by explicitly examining the spatial component of both the economic development and the basic, punitive function of jails, using a national-level analysis of all counties in the U.S, building upon the state-level analyses of Simes (2018, 2021) and Eason (2017). Simes (2018, 2021) finds that the spatial lag of the dependent variable (log prison admission rate) is significant, along with spatial location. As a result, studies of punishment should include a measure of spatial context as well as spatial clustering of punishment, as Simes' findings suggest that "punitive geographies" not only exist but are clustered with other punitive places. Additionally, Simes finds that non-urban areas have higher rates of incarceration, demonstrating that social conditions in less densely populated areas contribute toward increased punishment outcomes. Given these findings, studies of punishment should account for neighboring areas' levels of punishment as well as urbanicity, as both of these factors reflect institutional and social characteristics of place that also influence punishment outcomes.

III. Conceptual Framework and Expected Relationships

In this chapter, I bring together the insights of the institutional perspectives on punishment with the more empirically focused prison siting literature. Together, these bodies of research provide important insights and starting points for examining jails, a local institution of punishment and the conditions under which it is used for a punishment or an economic development function. In this chapter, I focus on the institutional components of both research traditions, primarily the relationship between integration into institutions, such as education, the military, and local labor markets. Local labor markets are critical to both traditions, with the Rusche and Kirchheimer tradition predicting that punishment is a way for the state to mitigate the social threat of surplus labor. An additional mitigating, institutional factor is the social spending of governments, which bolster the social safety net and can mitigate the relationship between economic conditions and punishment levels. This emphasis on local economic conditions is mirrored in the prison siting literature, which highlights the role poverty, unemployment, and educational attainment play in prison construction, particularly as prisons (and jails) play a financial as well as punitive role in their communities.

In addition, both recent imprisonment research (Alexander 2012; Eason et al. 2017; Simes 2021) and the prison siting literature (Eason 2010, 2017) provide a range of overlapping socio-demographic independent variables. Both bodies of research highlight the importance of race, primarily Black population share, for understanding both the likelihood of incarceration as well as the likelihood of the use of mass incarceration as economic development. Also, both bodies of research highlight the importance of spatial contiguity and rural-urban spatial dynamics in both imprisonment and prison construction.

My approach extends both of these bodies of work by bringing both of them into dialogue with each other to examine the associations between place-based economic institutional characteristics, race, space, and jail incarceration rates. In order to disentangle the different functions of the jail—punitive and economic, I use two distinct dependent variables but retain the same range of independent variables. This marks a new, jail-based application of these insights as well as a more place-based analysis of incarceration. I extend theoretical explanations of punishment by applying them to a new unit of analysis—the jail—while also nuancing them with spatial insights into punishment and theorizing the jail as an economic as well as a punitive institution.

My research question in this chapter is two-fold: 1) To what extent are institutional factors, concentrated disadvantage, and spatial location associated with county-level jail rates? 2) To what extent do these factors vary, according to the different functions of the jail? In the discussion that follows, I discuss my expected findings for each of the variables in my analysis. I also summarize my expected findings and the directionality of their associated relationships for each variable in Table 4.1.

Based on institutional theories of punishment, I expect institutional characteristics of places, namely levels of formal education, military service, and integration into the formal labor market to play an important role in jail dynamics. These factors have been demonstrated to play a role in cross-national studies of imprisonment, and institutional characteristics of places are also important for a range of social outcomes. Based on Sutton's (2000) cross-national findings, I expect higher levels of military service to associated with higher pre-trial jail rates, as Sutton finds that the military and imprisonment rates expand jointly. While Sutton (2000) doesn't find a relationship between educational attainment and imprisonment, other researchers have found that prison towns are likely to have lower rates of college graduates and less educated workforces (Eason 2017). Thus, I expect educational attainment and both pre-trial and jail contracting rates to be inversely related to each other, as counties with higher educational attainment are more likely to have robust labor markets that don't rely on

punitive institutions to generate local employment or revenue. Finally, I expect the unemployment rate to be positively related to both pre-trial jail incarceration and jail contracting.

Based on the institutional perspectives on punishment, I would expect that the social expenditures of local governments would be negatively associated with pre-trial incarceration. I expect this relationship, as local governments with elevated social expenditures should have a wider range of institutional supports and resources for county populations, beyond the punitive institution of the jail. Incorporating measures of government expenditures on social programs is important, as it provides insights into the ways in which government spending on marginal, vulnerable populations moderates (or fails to moderate) the relationship between economic conditions and punishment.

Additionally, labor markets and sectors of employment significantly affect local economies. Poverty rates, educational attainment, and unemployment are all affected by labor market dynamics, including the dependence of places and regions on specific industries (Sherman 2014). By including the share of individuals employed in certain economic sectors, I am able to measure the ways in which not only formal employment, but the dominance of certain industries in certain places relates (or not) to the punitive and economic function of the jail. I expect higher levels of employment in more professional industries, such as FIRE and public administration to be associated with lower levels of both pre-trial and contracted jail incarceration, as these industries are more stable sources of employment. However, recent studies have demonstrated that financialization, or the growth of the financial sector, is associated with increased economic inequality (Lin and Tomaskovic-Devey 2013). Given the theoretical and

empirical links between punishment and inequality discussed above, it is also possible that FIRE employment share may be positively related to both pre-trial incarceration and jail contracting.

On the other hand, I expect higher employment share in extractive and manufacturing industries to be associated with higher levels of both dependent variables. This is the case, as extractive and manufacturing industries are both unstable and declining sectors of employment, with regions relying on these forms of employment, namely the Rust Belt and Appalachia, experiencing high levels of unemployment, poverty, and most recently, opioid addiction (Cerdá et al. 2021; Rigg, Monnat, and Chavez 2018). As areas with higher employment shares in both manufacturing and extractive sectors, particularly coal extraction, have higher rates of opioid overdoses (Cerdá et al. 2021), I expect counties to also have higher jail incarceration rates, particularly pre-trial incarceration, as these resource-poor communities may not have options other than jail incarceration to support local residents who are addicted to or in possession of opioids.

Additionally, areas with a higher reliance on the extractive industry are often subject to "Boom and Bust" dynamics. These dynamics entail both economic inequality and instability as well as social fragmentation and psychological distress due to rapid social change in a given community (Brown, Dorius, and Krannich 2005; Jacquet and Stedman 2014). This unique combination of economic and social instability due to residential mobility, economic change, and demographic change (particularly a rapid influx of often young, single men) results in social conditions where counties that are more dependent on the extractive sector may also have higher jail incarceration rates if

punitive institutions become the default way of managing social instability and inequality. As a result, I expect that counties with a higher reliance on the manufacturing and extractive sectors will also experience diminished institutional pathways for individuals to be classified as members of "formal" society, making these counties more likely to rely on punitive institutions for both social control and economic development (Sutton 2000).

Based on both perspectives, I also expect measures of concentrated disadvantage to be important correlates of both pre-trial jail incarceration and jail contracting. I expect economic distress, as measured through the percentage of families in poverty, to be positively associated with both pre-trial and contracted jail rates. I also expect minority population share, measured as the share Black and Hispanic, to be positively associated with both outcome variables, as racial and ethnic minorities have been clearly and disproportionately affected by mass incarceration, both through disproportionate incarceration rates and prison construction (Eason 2017).

Finally, I expect spatial location to be an important correlate of both dependent variables. Specifically, I expect rural areas to have higher rates of both pre-trial and contracting jail populations. I expect this, given the repeated findings that rural areas were more likely to use prisons as a form of economic development during the prison boom and that rural areas and smaller cities have higher rates of both imprisonment and jail incarceration (Eason 2017; Eason et al. 2017; Simes 2021).

| Variables | Expected Relationship |
|---|--------------------------|
| Institutional Attachment | |
| Unemployment | + |
| Educational Attainment | - |
| Percent Veteran | + |
| Local Government Spending | |
| Health Spending Per Capita | - |
| Education Spending Per Capita | - |
| Local Labor Markets | |
| Percent Employed in Manufacturing | + |
| Percent Employed in Extractive | + |
| Percent Employed in FIRE | - |
| Percent Employed in Education Services | - |
| Percent Employed in Public Administration | - |
| Concentrated Disadvantage | |
| Percent Black | + |
| Percent Hispanic | + |
| Percent Families in Poverty | + |
| Spatial Location | |
| Population Size (Logged) | - |
| Rural | + |
| Small/Mid-Sized City | + |
| Suburban | - |
| Urban | - |

Table 4.1 Summary of Expected Relationships

IV. Data and Methods

As discussed previously, most studies of mass incarceration examine imprisonment rates and take the state or the nation-state as the unit of analysis. However, I take the jail and the county-level as my unit of analysis in this study. As jails are an inherently local institution that responds to local conditions, such as policing decisions, economic conditions, and local government priorities, studying them at the county-level is appropriate, as it allows for a more nuanced analysis that accounts for local factors.

While other studies have examined spatial trends and rural-urban differences in imprisonment at the county-level, these studies only analyze the counties in a single state

(Eason et al. 2017; Simes 2018). In my analysis, I incorporate insights from these previous county-level studies while expanding my analysis to the entire contiguous U.S. In doing so, I expand my sample size and make more generalizable statements about jail incarceration.

In this analysis, I utilize secondary data. Namely, I use data from the Vera Institute of Justice, the Census of Government, the American Community Survey, and the Uniform Crime Report.

A. Dependent Variables

In this analysis, I utilize two dependent variables: the pre-trial jail incarceration rate and the share of a jail's inmates that are held for other jurisdictions, both measured at the county-level. Both of these measures are derived from the Vera Institute of Justice's²⁰ Incarceration Trends dataset²¹, which primarily relies upon the Census of Jails (taken in 2013). The year 2013 is of particular interest for two reasons. First of all, it is the most recent year of the Census of Jails included in the Vera Institute's dataset. Secondly, between 2006 and 2013, rural and urban pretrial detention rates clearly diverged, with urban areas recording a marked decline in pretrial detention, while rural areas noted a steady increase (Kang-Brown and Subramanian 2017). Given the spatial findings of the

²⁰ The Vera Institute of Justice is an independent nonprofit national research and policy organization dedicated to mission of reducing mass incarceration and its racial and socioeconomic inequities. To facilitate this mission, the Vera Institute has compiled data from the Bureau of Justice Statistics and other official sources and made publicly available extensive datasets that reflect trends in both imprisonment and jail incarceration from the 1970s to the present.

²¹ Alaska, Connecticut, Delaware, Hawaii, Rhode Island, and Vermont are excluded from this analysis, as these states do not have local jails, but rather rely upon a "unified state prison-jail corrections system" (Kang-Brown and Subramanian 2017:8). Also, Alaska and Hawaii are not part of the contiguous U.S., which presents practical challenges for a spatial modeling strategy that maps the influence of contiguous counties upon their nearest neighbors.

prison siting literature, the 2013 data provides an opportunity to test for rural-urban disparities in both jail rates.

The pre-trial jail rate is measured as the number of pre-trial jail inmates per 100,000 residents of a county aged 15-64. The Vera Institute adjusts their jail rate data in this way to both account for county population as well as for the fact that the very old and the very young are the least likely age groups to be incarcerated. I calculated the share contracted variable by adding the total number of jail inmates held for other jurisdictions (such as jails, prisons, and federal authorities) then dividing that total by the rated capacity of the jail facilities in a given county.²² In short, this measure captures the proportion of jail space in a given county that is occupied by inmates who did not originate from the county in question.

B. Independent Variables

Independent variables for this analysis are sourced from the 2007 Census of Governments, the 2012 American Community Survey, centered in 2010, and the 2010 Uniform Crime Report. A number of independent variables, namely the Census of Governments and the Uniform Crime Report have missing data, which resulted in a sample of 2,355 counties being used in this analysis.

²² I also calculated and analyzed another dependent variable that was the share of total jail inmates (as opposed to the share of the jail's capacity) who were held for other jurisdictions. However, due to the different ways in which the total jail inmate count and the count of inmates held for other jurisdictions are calculated (average daily count vs. single-day count at the end of June, respectively), I chose to retain the share of jail capacity occupied by jail inmates held for another jurisdiction measure for ease of interpretation. The regression results with both dependent variables were essentially equivalent, with key variables having similar levels of significance and the same directionality of coefficients.

1. Institutional Factors

Institutional Attachment. In this analysis, I use three measures of local institutional attachment, following the work of Sutton (2000). Following this perspective, the penal apparatus functions as an institution, competing with other social institutions, such as education, the military, and labor markets, to guide individual life courses. While economic conditions and institutions are the central focus of my analysis, I also consider the role of other social institutions and pathways in my analysis, particularly as Sutton (2000) found evidence that education and military enlistment are also significantly related to cross-national imprisonment rates. To measure the relationship between the jail and other social institutions, I include three variables: the share of the county population that is a veteran, the share of a county population that has a bachelor's degree, and the unemployment rate. All of these variables are derived from the 2012 American Community Survey, centered in 2010.

Local Government Spending. Sutton (2000) finds that social spending by national governments is another important institutional predictor of imprisonment rates, using education and welfare spending in his analyses. To measure this relationship, I use two variables derived from the 2007 Census of Government: health spending per capita and education spending per capita. In initial models, I also included a measure of welfare spending per capita as well as the share of a county's total expenditures that were spent on social programming. However, due to significant missing data, both of these variables were excluded from the final analysis, presented here. Excluding these variables did not significantly alter the results of the regression analysis.

Local Labor Markets. I include additional measures of the local economic context to examine the extent to which certain industries are related to elevated risks of punishment or likelihood of using jails as an economic development strategy. Dominant industries in a specific place are closely tied to economic conditions, employment levels, and educational attainment. To that end, I include measures of the share of a county's population that are employed in the manufacturing, extractive, FIRE (finance, insurance, and real estate), education services, and public administration sectors. All of these variables are derived from the 2012 five-year American Community Survey, with the mid-point year 2010.

2. Concentrated Disadvantage

I also account for measures of county-level disadvantage and vulnerability in this analysis. A broad range of research on mass incarceration has conclusively established that minority populations are disproportionately impacted by mass incarceration (Alexander 2012; Pettit and Western 2004) and prison construction (Eason 2017). To account for this, I include a measure of both the share Black and Hispanic at the countylevel. In initial models, I included a measure of the share of foreign-born residents in a county. However, due to multicollinearity (VIF > 6) and a lack of significance of the variable, the foreign-born variable was excluded. I also include a measure of the share of families in poverty as an additional way to control for local economic conditions. All of these variables are derived from the 2012 American Community Survey, centered in 2010.

3. Spatial Location

As spatial characteristics of places have been demonstrated to be an important component of studies of mass incarceration, particularly in the use of prisons as economic development strategies, I also control for the metropolitan status of counties as well as their population. In these models, I use the logged county population from the 2012 American Community Survey, centered in 2010. To measure metropolitan status, I use the Vera Institute's rural-urban categories which are coded categorically and labeled as follows: Rural (reference category), Small/mid-sized city, Suburban, and Urban²³.

4. Control Variables

Crime Rates. I also include a measure of county-level crime rates, as the purpose of the justice system is ostensibly to protect citizens from and punish crime. Additionally, including a measure of violent crime or homicide is an essential part of this analysis, as controlling for the local criminological context is standard procedure in studies of incarceration and punishment. As Maltz and Tagonski (2002) and Pridemore (2005) highlight, there can be reporting gaps and irregularities in county-level crime data. While I am aware of the limitations of these data, I follow the insights of Lott, Jr. and Whiteley (2003) and utilize a measure of homicide, a type of crime which is more likely to be

²³ This measure of urbanicity is based upon the National Center for Health Statistics (NCHS) six category rural-urban classification scheme. The Vera Institute measure collapses the six categories to four. "Urban" counties are core counties of metropolitan areas with a million or more people. "Suburban" counties are located in the surrounding metropolitan area of "Urban" counties. "Small/medium" metropolitan counties are counties with populations of more than 50,000 that are not in the "Urban" or "Suburban" categories. Finally, the "Rural" category is constructed by combining non-core and micropolitan counties (populations between 10,000-50,000). While this urbanicity measure doesn't provide the most nuanced measure of rurality, it is this measure of rurality that appears in the Vera Institute's reports that highlight a clear rural-urban differencial in pre-trial jail incarceration (Mai et al. 2019). In order to investigate this descriptive spatial difference in a manner consistent with these reports/findings, I retain this original Vera Institute measure of rurality.

consistently reported across jurisdictions. This 2010 homicide rate measure is derived from the FBI's Uniform Crime Report (UCR) database, which I accessed through the Inter-university Consortium for Political and Social Research (ICPSR). This measure is a rate of the number of murders, homicides, and non-negligent manslaughters per 100,000 residents in a county. As this variable was skewed, I conducted analyses with both the log transformed and the untransformed version. The results were the same with all versions of the variable, so I chose to include the untransformed version in this analysis.²⁴

Political Climate. Sutton (2000) also notes that national-level political party influences, particularly conservative party influences, can play an important role in influencing imprisonment rates. While my focus in this analysis is the institutional, economic, and spatial association with local punishment, it's important to control for local political climate, as political conservatism has been found to have a significant association with imprisonment rates, both cross-nationally and at the state level in the U.S. (Jacobs 2004; Jacobs and Carmichael 2001; Sutton 2000). I control for political climate by including the share of the county population that voted for the GOP Presidential candidate in the 2008 election. This variable is derived from David Leip's Atlas of U.S. Presidential Elections, a database of official election results from all 50 states and Washington, D.C. (Leip 2018).

Lagged Dependent Variables. Finally, I also control for past levels of the dependent variables. I use the 2006 measure of both the pre-trial jail rate and the share of jail inmates held for other jurisdictions. I use 2006 as the lag year as 2006 is the most

²⁴ I also utilized both the log transformed and untransformed violent crime rate in these models, but there was no difference in the results when using the homicide rate vs. the violent crime rate, transformed or untransformed. As a result, I used the untransformed homicide rate variable in the final models.

recent year (pre-2013) where the Census of Jails was conducted, presenting a more reliable source of measurement of the jail population.

C. Descriptive Statistics

Table 4.2 presents the descriptive statistics for the sample of counties in the United States that represent the basis for this analysis. In 2013, the average pre-trial jail population at the county level was 289.696 inmates per 100,000 county residents, which marks a slight increase from the 2006 mean of 269.639. This trend of increase over time is mirrored in the jail contracting variable, with an increase from .196 to .217 between 2006 and 2013.

| Table 4.2 Descriptive Statistics (N=2,355) | |
|--|--|
| | |

| | Mean | SD |
|--|----------|---------|
| Dependent Variables ^a | | |
| Pre-trial jail rate | 289.696 | 556.544 |
| Share of jail inmates held for other jurisdictions | .217 | .690 |
| Measures of Institutional Attachment ^b | | |
| Percent Unemployed | 4.522 | 1.651 |
| Percent College Graduates | 12.554 | 5.205 |
| Percent Veteran | 11.577 | 2.831 |
| Local Government Spending ^c | | |
| Health Spending Per Capita | 92.889 | 140.24 |
| Education Spending Per Capita | 1690.059 | 546.886 |
| Local Labor Markets ^b | | |
| Percent Employed in Manufacturing | 12.505 | 6.867 |
| Percent Employed in Extractive Sector | 6.291 | 6.713 |
| Percent Employed in FIRE | 4.751 | 1.885 |
| Percent Employed in Education and Health Services | 22.880 | 4.426 |
| Percent Employed in Public Administration | 5.698 | 3.209 |
| Concentrated Disadvantage ^b | | |
| Percent Black | 8.428 | 13.424 |
| Percent Hispanic | 8.832 | 13.729 |
| Percent Families in Poverty | 11.277 | 5.165 |
| Spatial Location | | |
| Population Size (Logged) ^b | 10.468 | 1.341 |
| Rural ^a | 60.55% | |
| Small/Mid-Sized City ^a | 25.35% | |
| Suburban ^a | 12.44% | |

| Urban ^a | 1.65% | |
|---|--------------------------|-----------|
| Control Variables | | |
| Homicide Rate ^d | 1.523 | 3.966 |
| Percent GOP Voting in 2008 Presidential Election ^e | 57.324 | 13.084 |
| Lagged Pre-trial jail rate ^a | 269.639 | 658.965 |
| Lagged Inmates held for other jurisdictions (logged) ^a | .196 | .284 |
| <i>Note</i> . SD = Standard Deviation | | |
| ^a 2013 Vera Institute of Justice; ^b 2012 American Community S | Survey; ^c 200 | 07 Census |
| of Governments; ^d 2010 Uniform Crime Report; ^e David Leip's | s Voting Atla | as |

D. Analytical Approach

As my research questions explicitly focus on the relationship between local contexts, spatial factors, and jail rates, I design my analytical approach accordingly. To address the spatial components of this analysis, I fit a spatial regression model which explicitly takes into account the value of the dependent variable in neighboring counties. A standard OLS regression model may be appropriate for modeling relationships between dependent and independent variables, but when it comes to analyzing phenomena, such as jail rates and incarceration, which have been shown to have a spatial effect, an OLS model is not able to capture and model the influence of neighboring counties on the dependent variable. The spatial regression model I fit for this analysis incorporates a spatial lag of the dependent variable²⁵ through the creation of a spatial weight matrix that takes into consideration the shared borders of counties in the U.S.²⁶

²⁵ This type of model is distinct from a spatial error model, which addresses correlation in the error terms of nearby places but does not model the influence of neighboring variable values, something which the spatial lag model does.

²⁶ The construction of spatial weights based on shared vertices is referred to as a "queen's case," as it resembles a queen's movement on a chess board. I use the "queen's case" rather than the alternative "rook's case" because the rook's case defines contiguity of neighboring units through a shared border (rather than vertex), making the queen's case the more appropriate way to model the observed adjacency of counties in the U.S.

Before fitting the spatial regression models in this chapter, I first fit an OLS model and conducted the Moran's I test for spatial dependence. The results of this test rejected the assumptions of spatial independence in the data. To account for this spatial dependence, I fit a spatial regression (SAR) model for each of my dependent variables. In both models, the spatial component of the model is statistically significant, further confirming the spatial contingency of both jail contracting and pre-trial incarceration. Through this model strategy, my models include a spatial lag of the 2013 value of both dependent variables, which is the average of the value of the 2013 dependent variable for surrounding counties. I also include a temporal lag of the dependent variable from 2006 to account for past levels of each dependent variable as well as state-level fixed effects to control for state-level policy characteristics. I examined the variance inflation factors (VIFs) for both models, with no individual VIF value of more than 3.02 in either model.

V. Results

Table 4.3 contains the results from the spatial lag models of pre-trial jail incarceration rates in the U.S. Table 4.4 presents the results of the spatial lag models of the share of a county's jail capacity that is occupied by inmates from other jurisdictions. These results make clear that very different factors are related to the use of jails as an institution of punishment and as an economic institution at the county level. I begin my discussion of the results by reviewing the relationships between institutional factors, economic arrangements, and pre-trial incarceration. Finally, I discuss the differing findings for the economic development use of the jail.

A. Pre-Trial Incarceration

Table 4.3 presents findings for pre-trial jail incarceration rates in 2013. Model 1 and Model 2 contain the same list of independent variables, with Model 2 also including a temporal lag of the dependent variable. As Model 1 has both a very low R-squared and few statistically significant variables in comparison to Model 2, the discussion that follows focuses on the results from Model 2.

In counties with higher unemployment, the pre-trial jail rate is significantly higher (b=35.278, p<.01). Neither of the other measures of institutional integration/attachment are significant, but their coefficients are in the predicted direction, in line with Sutton's (2000) cross-national findings. In terms of government spending, education spending and pre-trial jail incarceration are inversely related—counties with higher education spending have lower levels of pre-trial jail incarceration. This also matches Sutton's (2000) finding that in the U.S., federal education spending and imprisonment rates are inversely and significantly related. Health spending, another measure of social welfare spending, however, is not significantly related to pre-trial incarceration and exhibits a positive coefficient, rather than the negative coefficient I predicted.

| | Model 1 | Model 2 |
|---|---------------------------------------|-------------------|
| | Pre-Trial Jail | Pre-Trial Jail |
| | Rates | Rates |
| | <i>b</i> (S.E.) | b(S.E.) |
| Measures of Institutional Attachment | | <u> </u> |
| Percent Unemployed | 33.602 (9.662)** | 35.278 (6.014)*** |
| Percent College Graduates | -5.737 (3.729) | -2.865 (2.333) |
| Percent Veteran | -3.196 (5.397) | .399 (3.372) |
| Local Government Spending | | |
| Health Spending Per Capita | 029 (.091) | .020 (.057) |
| Education Spending Per Capita | .005 (.025) | 047 (.016)** |
| Local Labor Markets | | |
| Percent Employed in Manufacturing | -3.328 (2.838) | .412 (1.772) |
| Percent Employed in Extractive | 2.675 (3.259) | 6.402 (2.031)** |
| Percent Employed in FIRE | 5.177 (8.324) | 10.48 (5.189)† |
| Percent Employed in Education Services | -2.539 (3.299) | 496 (2.066) |
| Percent Employed in Public Administration | 7.461 (4.577) | 4.343 (2.850) |
| Concentrated Disadvantage | | |
| Percent Black | -1.458 (1.586) | -2.460 (.992)* |
| Percent Hispanic | -1.557 (1.518) | -2.449 (.944)** |
| Percent Families in Poverty | 1.902 (3.905) | -2.457 (2.442) |
| Spatial Location | | |
| Population Size (Logged) ^b | -32.002 (15.994) | -3.958 (10.028) |
| Small/Mid-Sized City ^a | 33.876 (30.921) | 4.129 (19.310) |
| Suburban ^a | 11.984 (43.829) | -28.404 (27.269) |
| Urban ^a | 61.656 (101.578) | -15.502 (63.415) |
| Control Variables | · · · · · · · · · · · · · · · · · · · | |
| Homicide Rate | .964 (2.877) | 1.347 (1.793) |
| Percent GOP Voting in 2008 Election | -1.405 (1.490) | -1.397 (.932) |
| Pre-trial jail rate (2006) | | .644 (.011)*** |
| Spatial Lag of Pre-Trial Jail Rate | .545 (.114)*** | .350 (.040)*** |
| Intercept | 594.518 (285.470)* | 89.502 (179.002) |
| Chi-Square | 258.08*** | 4362.95*** |
| Psuedo-R ² | .0809 | .6471 |
| Ν | 2,355 | 2,351 |
| ^a Reference category is Rural Counties | | |
| †p<.10; *p<0.05; **p<0.01; ***p<0.001 | | |

Table 4.3 2013 Spatial Lag, State Fixed-Effects Model of Pre-Trial Jail Rates

| | Model 1 | Model 1 |
|--|---------------------|------------------|
| | Inmates Held | Inmates Held for |
| | for Other | Other |
| | Jurisdictions | Jurisdictions |
| | <i>b</i> (S.E.) | <i>b</i> (S.E.) |
| Measures of Institutional Attachment | | |
| Percent Unemployed | 023 (.012)† | 027 (.011)* |
| Percent College Graduates | 011 (.005)* | 007 (.004) |
| Percent Veteran | 006 (.007) | 002 (.006) |
| Local Government Spending | | |
| Health Spending Per Capita | 000 (.000) | 000 (.000) |
| Education Spending Per Capita | 000 (.000) | .000 (.000) |
| Local Labor Markets | | |
| Percent Employed in Manufacturing | 001 (.004) | 001 (.003) |
| Percent Employed in Extractive | 011 (.004)** | 008 (.004)* |
| Percent Employed in FIRE | .022 (.010)* | .024 (.010)* |
| Percent Employed in Education Services | .004 (.004) | .004 (.004) |
| Percent Employed in Public Administration | 002 (.006) | 007 (.005) |
| Concentrated Disadvantage | | |
| Percent Black | 000 (.002) | 002 (.002) |
| Percent Hispanic | .001 (.002) | 002 (.002) |
| Percent Families in Poverty | .006 (.005) | .009 (.005)† |
| Spatial Location | | |
| Population Size (Logged) ^b | 060 (.020)** | 027 (.019) |
| Small/Mid-Sized City ^a | .090 (.039)* | .076 (.036)* |
| Suburban ^a | .096 (.055)† | .043 (.051) |
| Urban ^a | .151 (.128) | .083 (.118) |
| Control Variables | | |
| Homicide Rate | .003 (.004) | .005 (.003) |
| Percent GOP Voting in 2008 Election | .001 (.002) | .001 (.002) |
| Inmates held for other jurisdictions (2006) | | 1.045 (.049)*** |
| Spatial Lag (Inmates Held for Other Jurisdictions) | 023 (.141) | 270 (.107)* |
| Intercept | .853 (.359)* | .275 (.334) |
| Chi-Square | 166.72 | 654.38*** |
| Psuedo-R ² | .0665 | .2268 |
| Ν | 2,354 | 2,336 |
| ^a Reference category is Rural Counties | | |
| †p<.10; *p<0.05; **p<0.01; ***p<0.001 | | |

Table 4.4 2013 Spatial Lag, State Fixed-Effects Model of Rates of Jail Inmate Contracting

In terms of county-level employment sectors, the strongest relationship is between the pretrial jail rate and the share of a county's population employed in the extractive industry. There is a significant and positive relationship between the share of a county's population that's employed in the extractive industry and the pre-trial jail rate (b=6.402, p<.01). The share employed in FIRE industries is also positive and marginally significant (p<.1). While none of the other employment sectors are significantly related to the pretrial jail rate, it's noteworthy that all of these coefficients are positive, with the exception of the educational services employment variable. These results indicate that of all employment sectors in the U.S., it is the extractive industry which is most closely related to local measures of punishment.

As pertains to the concentrated disadvantage variables, however, the most striking result is the relationship between the measures of the proportion of Black and Hispanic residents in a county and the pre-trial jail rate. Both the share of Black (b=-2.460, p<.05) and Hispanic (b=-2.449, p<.01) residents are significantly and *negatively* correlated with the 2013 pre-trial jail rate. This negative relationship between minority population share and incarceration levels is in the opposite direction of what is predicted by the larger literature on mass incarceration, where racial minorities, particularly Black men, have been disproportionately the target of punishment and harsh sentencing (Alexander 2012; Pettit and Western 2004; Western and Pettit 2005). However, recent descriptive analysis by the Vera Institute of Justice finds that from 1990-2013, when looking at *jail* incarceration, the trend has actually been a *decline* in Black jail populations and a

sustained *increase* in white jail populations (Subramanian et al. 2018). In this case, these results regarding Black and Hispanic populations' relationship to jail rates may not match the established findings regarding prison populations but are in line with observed trends regarding local jail incarceration.

Finally, none of the spatial variables have a significant relationship with the pretrial jail rate, despite descriptive analyses that show a clear rural-urban disparity (Kang-Brown and Subramanian 2017). Despite the lack of a significant relationship between the spatial variables and the pre-trial jail rate, the coefficients for the suburban and urban categories are both negative, which is the expected direction. This spatial effect may be captured by the spatial lag of the dependent variable included in the model, which is significant (p<.001), demonstrating that pre-trial incarceration rates are significantly and positively related to the pre-trial incarceration rates of surrounding counties, net of other factors, such as economic, spatial, and social conditions. In this sense, the rural-urban spatial effect may be better explained as "punitive geographies" with certain institutional and social characteristics rather than simply a rural-urban spatial difference.

B. Inmates Held for Other Jurisdictions

Models 1 and 2 in Table 4.4 examine the relationship between the share of jail capacity occupied by jail inmates held for other jurisdictions (namely, the use of a jail as a source of revenue generation) and the same range of independent variables. While studies of the Prison Boom highlight the role local unemployment, poverty, educational attainment, and minority population share play in the use of prisons as a form of economic development (Eason 2010, 2017; Simes 2018), these models do not clearly reflect those same relationships.

In Model 1, both unemployment and educational attainment are significantly related to jail contracting. However, the relationship between unemployment and jail contracting is negative (b=-.023, p<.10), which is exactly the opposite relationship predicted by the literature. It is also the inverse relationship presented in Table 4.3. Comparing these two sets of results suggests that counties with higher unemployment are likely to have higher pre-trial jail populations, which may mean, as a result, that these counties have less open space in their jails to contract out to other jurisdictions. It also suggests that jail contracting may not be an effort to create jobs to address elevated, local unemployment levels, as was the case for prison construction (Eason 2017).

Mirroring the findings outlined in Table 4.3, the share of a county's population employed in the extractive industry is significant in Model 1. However, the direction of this coefficient is negative (b=-.011, p<.01). Based on the findings presented in Table 4.3, where extractive industry employment is positive and significant, Model 1 in Table 4.4 may reflect the reality that counties with higher extractive employment are less likely to have extra space in their jails, making it less likely that they will be able to house inmates for other jurisdictions. In contrast, the share of county residents employed in FIRE industries is positive and significant in Model 1 (b=.022, p<.05), a finding which mirrors those in Table 4.3. This suggests that counties with more FIRE employment are more carceral overall, as they *both* hold more individuals pre-trial and for other jurisdictions. As increased financial sector employment is associated with higher levels of economic inequality (Lin and Tomaskovic-Devey 2013), the significance of the FIRE employment variable demonstrates that county-level financialization is also associated with county-level punitiveness, emphasizing the link between economic inequality and punitive outcomes.

As relates to the spatial variables, there is a clear spatial effect in Table 4.4, contrary to the findings presented in Table 4.3. In Table 4.4, the "Small/Mid-Sized City" category has a significantly *higher* rate of jail contracting than rural counties (b=.090, p < .05). In Model 1, the Suburban counties are also shown to have a significantly higher rate of contracting than rural counties (b=.096, p<.10). While contrary to the ruralfocused findings and expectations of the prison siting literature, these findings may reflect the reality that rural jails face consistent funding shortfalls and overcrowding issues (Kerle 1982; Ruddell and Mays 2007, 2011). As a result, rural jails may simply lack the space and finances to take in additional inmates for other jurisdictions. While some rural counties have expanded their jails to generate revenue through jail contracting (Marvel 2019), this may not be a strategy widely used by rural counties. While rural areas disproportionately constructed prisons during the Prison Boom, prisons are a state or federally funded institution. Jails, on the other hand, are largely dependent on local government finances and capacity for most costs. As a result, rural county governments, which tend to have lower fiscal capacity overall, may not have the financial means to expand their facilities or house additional jail inmates for additional revenue. In this

sense, using jails to generate revenue may only be within the means of more populous and possibly better-resourced counties.

In Model 2, after controlling for past levels of jail contracting, the same relationships observed in Model 1 largely remain. For example, the statistically significant and positive relationship between unemployment and jail contracting (b=.027, p<.05) is retained. The same holds for the percent employed in the extractive (b=.008, p<.05) and FIRE industries (b=.024, p<.05), as well as for the higher level of jail contracting in small/mid-sized cities (b=.076, p<.05) vs. rural counties.

The concentrated disadvantage variables also highlight some interesting relationships. In neither model are the share of Black or Hispanic residents significant. In a parallel to the prison siting findings, the poverty rate variable in Table 4.4 Model 2 is marginally significant and positively (b=.009, p<.1) related to the share of jail inmates held for other jurisdictions, suggesting that elevated poverty rates or broader economic distress may motivate counties to use punitive institutions as a form of income generation. Given the negative coefficient of the unemployment rate, the positive coefficient for the poverty variable is interesting, as the prison siting literature would predict a positive coefficient for both poverty and unemployment. This finding suggests that jail contracting may not serve community economic development goals, but rather as a local government revenue generation strategy. In this sense, elevated poverty rates may indicate a distressed local tax base and a local government in need of revenue, with jail contracting being used to generate that revenue. As jails tend to be smaller than prisons,

jail contracting may simply be used as a form of local government entrepreneurship to fill local government coffers rather than an economic development initiative meant to address community-wide unemployment.

As in the pre-trial model, the spatial lag of the dependent variable is also significant, but only in the full model, Model 2. However, the coefficient for the spatial lag in Model 2 is *negative* (-.270, p<.05). This demonstrates that jail contracting is a spatially contingent process, and that counties with higher rates of contracting tend to be located next to lower average rates of contracting. In short, whereas more pre-trial incarceration tends to be associated with higher levels of pre-trial incarceration, certain counties that specialize in jail contracting seem to inhibit the same practice among their neighbors.

VI. Discussion and Conclusion

In the study of punishment, scholars have emphasized the need to study institutions, particularly the state and labor markets. Recent scholarship has also emphasized the importance of race, ethnicity, poverty, and spatial characteristics of place. This same range of independent variables is also the focus of studies of prison construction during the Prison Boom. As a result, scholars of punishment and scholars of prison siting highlight a largely overlapping range of place-based factors relevant for the study of punitive institutions.

While recent research has highlighted the need for a place-based, integrative study of punishment (Simes 2021), this research primarily focuses on prisons and state and
federal-level units of analysis. However, the jail and the local, county-level unit of analysis are important aspects of the larger criminal justice system, as well; aspects which have received little attention in the larger research on mass incarceration. This chapter brings together the institutional perspectives on punishment with the prison siting literature to examine the institutional factors, indicators of concentrated disadvantage, and spatial conditions under which jails are used for punishment or economic development. The institutional perspective in the sociology of punishment focuses on the role of unemployment and government spending and policy, as well as institutional integration into society through education and military service (as well as formal employment). However, this tradition is focused upon state and national-level analyses of imprisonment and has not examined the extent to which these theories and findings hold for local, pre-conviction incarceration. I extend this research by applying the theories and findings to a national-level, county analysis of pre-trial incarceration to understand how punishment manifests locally. Additionally, I extend this work by incorporating a focus on spatial inequality, which I accomplish by including measures of local economic context, concentrated disadvantage, and geography.

However, as is demonstrated by the prison siting literature, institutions of punishment, such as prisons and jails, are not merely punitive institutions, but also serve economic functions. The prison siting literature tends to be less theoretical and more empirical, often focusing on individual states or community case studies. I extend this research by conducting a national-level analysis that examines the jail, an analogous institution to the prison, and what factors are associated with its use for economic development purposes. I also incorporate theoretical insights from institutional studies of punishment by juxtaposing the analysis of the jail as a two-fold institution—an institution of local punishment as well as an institution of local income generation through housing jail inmates for other jurisdictions.

My central research question was two-fold: 1) To what extent are the institutional, concentrated disadvantage, and spatial correlates associated with county-level jail rates? 2) To what extent do these factors vary, according to the different functions of the jail? In answering these questions, my goal was to discern the extent to which the punitive and economic functions of the jail are associated with similar place-based, institutional characteristics, while also controlling for the spatial contingency of punishment through a spatial modeling strategy.

I find that institutional and economic characteristics of counties are important for understanding pre-trial jail incarceration. Counties with higher unemployment rates and higher employment in extractive industries, such as coal and gas extraction also have higher rates of pre-trial jail incarceration. Communities dependent on the extractive sector are known for their "Boom and Bust" economic cycles, resulting in high levels of economic precarity and inequality and social disorganization, resulting in social problems such as the opioid epidemic and increased crime and drug use more generally (Cerdá et al. 2021; Rigg et al. 2018). These finds align with the theoretical predictions of neo-Marxist theories of punishment that predict that economic downtowns and/or high levels of unemployment are likely to be associated with increased punitiveness, as the state seeks to manage the labor surplus (Chiricos and Delone 1992). I also find that education spending by local governments is inversely related to pre-trial incarceration rates, corroborating the findings of Sutton (2000) who found, particularly in the U.S., this same inverse relationship between imprisonment and education spending. I also find that counties with higher Black and Hispanic populations have lower pre-trial jail incarceration rates, a relationship that aligns with descriptive analyses which note that white jail rates have seen a sustained increase in every region of the U.S. for the past thirty years, while Black jail rates have declined (Subramanian et al. 2018).

Finally, despite reports that rural pre-trial jail incarceration rates are consistently outpacing urban jail rates, I do not find a significant rural-urban difference in this analysis. Rather, it appears that these differences are better explained by factors such as unemployment, extractive industry employment, and white population share. However, pre-trial jail rates *are* spatially contingent, with the spatial lag of the dependent variable being positive and significant, demonstrating that it may not be a matter of rural-urban punitive differences, but rather more localized, punitive geographies. In this sense, the social factors which constitute these punitive geographies align well with characteristics of rural areas—lower minority population share, elevated unemployment, and reliance on extractive industries, and these factors may account for the observed rural-urban effect noted in other reports (Kang-Brown and Subramanian 2017).

Contrary to my findings for the pre-trial jail rate model, the use of jails for economic development, namely holding inmates for other jurisdictions, does not follow the predictions of the prison siting literature. While prisons were used as job creation strategies in poor, rural communities with higher than average unemployment and minority population shares (Eason 2010), these relationships are not replicated in my analysis. In short, following the findings of the full model presented in Table 4.4, the highest levels of jail contracting were found in small/mid-sized cities with lower unemployment, higher poverty, lower employment in extractive industries and higher employment in FIRE industries. The only finding which clearly aligns with studies of prison construction is the poverty variable, which is only marginally significant (p<.1). However, employment in the FIRE industries may act as a county-level proxy for measures of inequality, as rising employment in the financial sector has been connected to rising economic inequality over the past half century (Lin and Tomaskovic-Devey 2013). This suggests that direct and indirect measures of inequality are still important correlates of the use of both prisons and jails as revenue generators at the local level.

Here it is helpful to juxtapose the findings presented in Table 4.4 with the findings reported in Table 4.3. Housing other jurisdictions' inmates may simply be connected to having a lower pre-trial jail population. Thus, the negative relationship to

the extractive industry and unemployment makes sense, as both variables were found to be associated with higher levels of pre-trial incarceration.²⁷

While the institutional and concentrated disadvantage variables largely did not follow my expectations, jail contracting, like prison construction, demonstrated significant spatial patterning. Firstly, the spatial lag of jail contracting in Table 4.4, Model 2 is statistically significant (p < .05) and negative, demonstrating that being neighbors with a high-volume jail contracting county results in neighboring counties having significantly lower levels of contracting. Just as the pre-trial spatial correlation suggests the existence of "punitive geographies" or "punishment vulnerability" (Simes 2021:152), the negative spatial lag for the contracting variable suggests the existence of localized "punishment economies," where one county acts as a jail contracting "hub" for a specific area. Contrary to the prison siting literature, these "hubs" are not predominantly rural counties. Instead, they are small/mid-sized cities, a spatial category also found to send higher rates of individuals to prison in both Massachusetts and Arkansas (Eason et al. 2017; Simes 2021). This reinforces the idea that there is something important occurring in the less-populous end of the spatial spectrum as regards both punishment and the use of punitive institutions for economic ends. Even if rural counties are not implicated in jail contracting in the same way they were for prison construction,

²⁷ In preliminary analyses, I also included pre-trial jail rates as a control variable in the contracted model. However, the pre-trial variable was not significant and did not significantly affect the regression results, so it was excluded from the final analysis shown here.

the increased prevalence of this practice in small/mid-sized cities and the spatial effect is still of concern and merits future investigation.

My findings in this chapter provide important insights into local dynamics of punishment and the dual uses of the jail—to punish and generate revenue. While pre-trial jail rates generally follow expectations based on research of prisons, this analysis includes sectors of employment and incorporates an important spatial and local approach to studying punishment, which demonstrates that punishment is tied to local economic and social conditions and is spatially contingent, net of all of these factors. In the case of jail contracting, however, this function of the jail is not consistent with previous studies of prisons as economic development strategies. This suggests that the use of jails for economic development is guided by a different range of factors. As jail contracting has become increasingly common in the U.S., this study provides an important starting point for future study of this important function of the jail.

To my knowledge, this is the first study to study jails using a national sample of counties, a theoretical framework, and a spatial modeling technique. It is also the only study, to my knowledge, to juxtapose the punitive and economic functions of the jail. While this study is an important step forward in understanding jail incarceration and its relationship to local conditions, there are a number of limitations to this analysis, which provide fruitful opportunities for future research. First, this analysis is only cross-sectional. A longitudinal spatial model that models temporal as well as spatial contingency would provide additional insights into these place-based relationships and

change over time for both the punitive and economic functions of the jail. Also, due to missing data, all of the counties in the contiguous U.S. were not included in this analysis and certain measures of local government social spending (such as welfare spending per capita) were also excluded. As a result, the measures used here do not directly reflect measures used in other studies of imprisonment, which tend to focus on welfare expenditures. I use health and education as proxy variables. Additionally, I use the Vera Institute of Justice's measure of urbanicity, which does not provide a particularly nuanced measurement of rurality. While I intentionally used this measure as a way to examine rural-urban differences in jail incarceration in a manner consistent with Vera Institute reports, future research should use more nuanced measures of rurality to determine exactly which types of counties at the less-populous end of the spatial spectrum are responsible for rising pre-trial incarceration.

Also, the significant finding for the extractive sector as relates to pre-trial incarceration provides an important starting point for future analysis. Future research on jail incarceration in extractive-focused counties should examine the extent to which indicators of social disorganization/integration, central independent variables in both urban sociology studies of crime and social impact analysis in natural resource extraction (Barnett and Mencken 2002; Brown et al. 2005; Hayes-Smith and Whaley 2009; Sampson and Groves 1989), are associated with more punitive local contexts, net of measures of crime. While the extractive industry is associated with social problems such as the opioid epidemic (Cerdá et al. 2021; Rigg et al. 2018), which has a clear relationship to crime and jail incarceration, the significant relationship I find in my analysis may be due to confounding indicators of social disorganization found in counties economically dominated by the extractive industry.

Finally, these quantitative results provide an important starting point for qualitative studies of counties with high levels of pre-trial jail incarceration and high levels of jail contracting. As jails are local, often county government institutions, local conditions and local decision-making processes are very important for their operation. Qualitative research that investigates how, when, and why local officials use the jail as an institution of punishment or economic development would provide clarifying insights into the processes and human motivations that underlie these quantitative results, particularly the spatial findings for the jail contracting models.

CHAPTER 5. CONCLUSION

The study of mass incarceration has historically focused upon state, national, and cross-national analyses of imprisonment. While prisons and imprisonment rates are important, this focus has neglected local incarceration. In neglecting the jail, scholars of punishment leave unaddressed how local governments, spatial characteristics of places, and other social factors are connected to jail incarceration. As jail incarceration is the first stop in the mass incarceration process and funnels individuals into the current prison population, this is an important gap. In this dissertation, I explicitly focus on jails and how county government, political, spatial, and other social characteristics of places are related to jail incarceration and privatization. I find that local governments are important for understanding both jail incarceration and privatization levels. In addition, local economic and spatial conditions are also important for understanding jail dynamics.

I. Review of Findings

In Chapter Two, I examine the relationship between jail incarceration rates and county government social service provision and capacity, as well as local political conditions. In this chapter, I merge theoretical insights from institutional perspectives on punishment with empirical insights from studies of local government to understand how jails function both as a local government and punitive institution. I find that counties that have cut services to balance budgets and that offer fewer services overall have higher rates of jail incarceration. I also find that counties with higher capacity governments (as measured through the robustness of the local tax base, revenue, and employment) also have higher incarceration rates. Additionally, more conservative counties also have higher incarceration rates. These findings reflect the reality that jails are a local government service that requires revenue and capacity to operate. Additionally, this chapter's findings parallel the predictions of institutional studies of imprisonment, as counties with lower rates of social service provision, service cuts, and higher levels of social conservatism are more punitive places. I also find that net of these factors, ruralurban differences are not salient, suggesting that rural-urban disparities in incarceration rates are due to other characteristics of counties rather than spatial location alone.

In Chapter Three, I examine the relationship between county economic, political, and demographic factors and jail privatization. In this chapter, I extend research on prison privatization to the local level. I find that more conservative counties (as measured by counties with higher rates of service privatization and Republican party voting) are significantly more likely to privatize correctional services. I also find that law enforcement expenditures are significantly related to privatization outcomes, with the counties with the highest odds of jail privatization spending less overall on corrections but more on police. I also find that rural and suburban counties are significantly more likely than urban counties to privatize jail operations, showing a clear spatial effect. These findings reflect the importance of variables highlighted in studies of prison privatization. However, this chapter adds an important spatial nuance, demonstrating a positive relationship between rurality and privatization, highlighting the fiscal challenges of jail operations in rural counties.

In Chapter Four, I use a spatial modeling strategy to examine the extent to which the punitive and economic development functions of jails are associated with institutional and spatial characteristics of counties, as well as measures of concentrated disadvantage. This chapter draws insights from two literatures: institutional perspectives in the sociology of punishment and the prison siting literature. The sociology of punishment perspectives referenced in this chapter highlight the role of institutional attachment, namely employment and education, in reducing the likelihood of punishment. Institutional approaches also highlight the role of the state as an important mediator between social conditions and punitive outcomes. The prison siting literature highlights a complementary set of variables, namely unemployment, minority population share, and rurality, as important for predicting if a community will use mass incarceration (i.e. prison construction) as a form of economic development. In extending these prison-based literatures to a county-level jail analysis, I find support for institutional approaches to the study of punishment, as I find that counties with higher unemployment, lower educational spending, and higher employment in vulnerable/declining industries have higher jail populations. However, I do not find a relationship between jail contracting and the variables commonly associated with prison construction. However, I do find that both outcome variables are significantly and spatially clustered, even after accounting for a

range of independent variables, demonstrating that both jail contracting and jail incarceration are subject to spatial processes.

II. Limitations and Future Research

While this dissertation represents important progress in addressing the jail gap in mass incarceration research, there are a range of limitations that should be addressed by future research. I discuss the most prominent of these limitations below.

One clear limitation of this dissertation is the cross-sectional nature of each of the analyses. While I control for past levels of jail incarceration, a formal time-series model would allow for an explicit modeling of temporal effects, which are important for this type of research. Of particular interest would be a spatial time-series analysis that models both spatial clustering of jail incarceration and temporal change. Also, as noted in the individual chapters of this dissertation, some of the important local government variables from the Census of Government have a significant amount of missing data. However, imputing these missing values would allow for more balanced panels for time-series analysis.

While my dissertation presents a national-level, generalizable set of results regarding jail incarceration and privatization, my analyses do not provide the rich, contextualized understanding of mechanisms that is possible through qualitative research. For example, despite the largely null results in Chapter Four regarding jail contracting, jail contracting is an increasingly common practice (Mai et al. 2019). Qualitative, casebased or ethnographic research focusing on counties with a high ratio of contracted inmates would allow for more insight as to what county-level conditions are associated with this practice. In addition, qualitative research would help to illustrate the decision-making processes and trade-offs that result in the relationships between social service provision and jail incarceration that I find in my quantitative analyses. While variables such as local government policy and capacity, politics, and socio-demographics are captured well with quantitative measures, jail incarceration, privatization, and contracting outcomes are all the result of processes and strategic decision-making by local officials. As stated by Garland (2001), punishment is inherently a social process. And as a social process, certain mechanisms and aspects of the issue need to be studied and understood qualitatively.

III. Implications for Sociological Research

My dissertation provides an important starting point for the study of local, placebased corrections. Current research on mass incarceration, while beginning to acknowledge place-based dynamics continues to primarily focus upon prisons as well as state case studies of place-based dynamics in incarceration (Eason et al. 2017; Simes 2021). My dissertation takes up this mantle and extends this prison-based research to jails and a national sample.

Chapters Two, Three, and Four of this dissertation highlight the ways in which local governments, politics, space, and socio-demographics interact with the jail. As jails are inherently local institutions, a place-based analysis of the jail is an important gap in the larger literature on mass incarceration. In taking this local, place-based approach, I highlight the ways in which punishment is intimately connected to local conditions, namely local government characteristics, the local economy, and spatial location. While prisons are the ultimate warehouse for individuals entrapped in the larger system of mass incarceration, the local jail is the first stop in that larger punitive pipeline. In short, to understand punishment, it is necessary to also understand the places in which the punishment process is first initiated, namely the local context. Finally, my research in this dissertation, particularly in Chapter Four, highlights the ways in which "hubs" of punishment and jail contracting exist at the county-level. Understanding how punishment is both a local and spatially contingent process provides an important starting point for both criminal justice reform and future research.

In short, this dissertation highlights the complexities of the county-level context for understanding the broader institution of punishment and its intimate connections with a range of county institutions. The figure of the sheriff, fiscal and policy capacity and priorities of local governments, and local social and political conditions all play an important role in determining jail incarceration rates. These findings reiterate the social nature of punishment, at the local as well as at the state and national level. As eloquently theorized by Garland (2001), punishment is an institution which is shaped by society and, in turn, shapes society. The county jail illustrates well this social reciprocity and the way in which punishment functions as one of a set of local institutions to order and structure society.

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This dissertation represents an initial and important step in the study of mass incarceration. Through closer attention to the ways in which local governments, local economies, and space are connected to jail incarceration and privatization, scholars can better understand the ways in which individuals and places are entrapped in punitive, carceral cycles. Through understanding the entry-point to the system of mass incarceration, both scholars and the public can work to reduce the "punishment vulnerability" of places and create freer and more equitable communities (Simes 2021:152).

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