



King's Research Portal

DOI:

[10.1016/j.jebo.2012.01.002](https://doi.org/10.1016/j.jebo.2012.01.002)

Document Version

Early version, also known as pre-print

[Link to publication record in King's Research Portal](#)

Citation for published version (APA):

Skarbak, D. (2012). Prison Gangs, Norms, and Organizations. *Journal of Economic Behavior and Organization*, 82(1), 96-109. <https://doi.org/10.1016/j.jebo.2012.01.002>

Citing this paper

Please note that where the full-text provided on King's Research Portal is the Author Accepted Manuscript or Post-Print version this may differ from the final Published version. If citing, it is advised that you check and use the publisher's definitive version for pagination, volume/issue, and date of publication details. And where the final published version is provided on the Research Portal, if citing you are again advised to check the publisher's website for any subsequent corrections.

General rights

Copyright and moral rights for the publications made accessible in the Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognize and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the Research Portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the Research Portal

Take down policy

If you believe that this document breaches copyright please contact librarypure@kcl.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.

Prison Gangs, Norms, and Organizations

David Skarbek*

Journal of Economic Behavior & Organization
82(1) 2012: 702-716

Abstract

Much of the order that exists in the inmate social system is not the result of government action. How do prisoners create order? Inmates use a combination of norms and organizations to provide governance privately. Norms rely on decentralized information transmission and enforcement mechanisms. Organizations, on the other hand, have well-defined memberships and create explicit information transmission and enforcement mechanisms. Inmates cannot rely on norms for governance when the inmate population is large, increasingly crowded, and when fewer inmates arrive with a prior prison commitment. When norms fail, inmates create organizations to protect themselves and provide governance. Once these groups have the power to deter predators, they prey on others. Contemporary and historical evidence from California correctional facilities provide support for these claims and suggest an explanation of the origin and growth of prison gangs.

*Email: david.skarbek@duke.edu. Address: Duke University, Department of Political Science, 326 Perkins Library, Box 90204, Durham, North Carolina 27708, United States.

1 Governance in a Society of Captives

Prison gangs in California currently have a substantial influence within the inmate social system, but they did not exist for the first one hundred years that the corrections system operated. What led to their formation and rapid growth in the late 1950s and 1960s? Prison gangs have reputations for violence and racism, and while this reputation is in some degree deserved, it overlooks the important function prison gangs perform. This paper suggests an explanation for the rise of prison gangs by examining inmates' need for extralegal governance in the inmate social system. Norms are effective in relatively small communities because inmates can rely on decentralized, reputation-based governance mechanisms at low cost. When norms fail, conflict increases, so inmates seek alternative forms of governance by creating protective associations. Once these groups are powerful enough to deter predators, they are also strong enough to prey on others—and they often do. Prison gangs use their credible threat of violence to intimidate and extort inmates and to engage in self-enforcing exchange in contraband markets.

Official institutions cannot provide all of the governance that inmates demand. Correctional officers may be corrupt or face monitoring, prosecution, and punishment costs that prevent them from maintaining a completely safe facility, so inmates will victimize each other.¹ Inmates cannot rely on official mechanisms to support exchange in contraband markets, so they must devise

¹Past work that models law enforcement actors as self-interested includes Benson et al. (1995) and Mast et al. (2000).

self-enforcing exchange institutions to capture the benefits of trade.

The emphasis of past work on norms has presented them as the alternative to government as a mechanism of social control (for example Ellickson 1989, 1991). This paper emphasizes a third option, organizations, as an important governance mechanism. People living in self-governing communities can use norms and organizations to protect their property. Norms are effective in close-knit, homogenous groups. As a community becomes larger, decentralized norms become less effective. Inmates seek alternative sources of governance in the form of organizations. An organization is composed of a well-defined group of members who develop explicit information transmission and enforcement mechanisms. They have rules for how to interact with others, and they threaten people who harm its members. The costs of establishing an organization are justified when norms are insufficient to meet the governance demands of inmates.²

This research contributes to three literatures. First, past work examines self-governance and the private provision of local public goods in situations where the state is absent to see what alternative governance institutions arise (Ostrom 1990). Privately produced law and order can emerge in remarkably diverse environments (Benson 1990; Benson 1998; Stringham 2007).³ These

²Becker (1968) is the first application of rational choice theory to crime and punishment. Economists have modeled the relationship between deterrence and organized crime, finding that greater deterrence can increase the competitiveness of criminal markets and the amount of crime (Buchanan 1999). On the economics of organized crime more broadly, see Anderson 1979; Reuter 1983, 1987; Jennings 1984; Fiorentini and Peltzman 1995; Garoupa 2000; Chang et al. 2005; Seals 2009.

³The effectiveness of self-governing groups has also been examined theoretically (Sutter

institutions worked reasonably well in the context of mining camps (Umbeck 1977a; Umbeck 1977b; Umbeck 1981; Stewart 2009), the “wild” west (Clay 1997; Anderson and Hill 2002), international commerce (Benson 1989), Medieval Japanese monasteries (Adolphson and Ramseyer 2009), international Hawala networks (Schaeffer 2008), Ancient Greece (D’Amico 2010), and in pre-colonial African trade (Leeson 2005, 2006, 2007b, 2008; 2009). The study of prison gangs complements this work by investigating a society of captives where the state has substantial control over people in a way that *limits* the private provision of local public goods. For example, incarceration prevents inmates from migrating to guide public good provision through Tiebout competition (Tiebout 1956). Inmates cannot evict from the community those individuals who free ride on local public goods, nor can inmates choose who they live and interact with (Tullock 1985).

Second, past work examines how inmates develop governance institutions to facilitate exchange. Radford’s (1945) classic article describes flourishing markets in a World War II prisoner of war camp. Subsequent work investigates how social relationships among inmates influence market outcomes. In P.O.W. camps during World War II, military hierarchy impeded markets and led to lower survival rates than in camps with less hierarchy (Holderness and Pontif 2009). In the infamous Andersonville Civil War camp, inmates who had stronger social ties were more likely to survive because reciprocity

1995; Dixit 2004, Stringham and Zywicki 2011) and experimentally (Ostrom et al. 1992; Powell and Wilson 2008; Smith et al. 2011). Powell and Stringham (2009) provide an excellent recent survey of the literature on public choice and the economics of anarchy.

within a social network smoothed resource shocks (Costa and Kahn 2007).⁴ The California corrections system provides an opportunity to compare the effectiveness of governance institutions when the prisoners—criminals rather than soldiers—are less likely to be cooperative.

Third, sociologists, economists, and political scientists have argued that the distinguishing characteristic of organized crime is not that it engages in crime, but that it *governs* crime by providing private protection services to people engaged in illicit markets. The Sicilian Mafia (Gambetta 1993; Bandiera 2003), Russian Mafia (Varese 2005), Japanese Yakuza (Milhaupt and West 2000; Hill 2003), and Los Angeles gangs (Sobel and Osoba 2009; Skarbek 2011) provide protection to people when the state cannot or will not do so and a long-term demand for their services exists (Skaperdas 2001; Varese 2011). Because of the lack of secure property rights, formal markets, and often subsistence levels of income, the inmate social system more closely resembles a primitive society than a developed civil society (Costa and Kahn 2007). Gangs operate like “primitive states” or “quasi-governments” (Skaperdas and Syropoulos 1995; Baumol 1995). This paper examines the role of organized prison gangs and governance institutions in light of coercion-based theories of the origin of the state (Oppenheimer 1914; Holcombe 1993; Benson 1999).

The history of the California Department of Corrections and Rehabilita-

⁴Andersonville, however, was still subject to substantial amounts of violence and plunder at the hands of roving prisoner groups, suggesting the need for additional governance institutions (Skarbek 2010b).

tion (CDCR) provides the perspective needed to understand how governance in the inmate social system relates to changes in the demographic and legal environment. The state's first facility opened in 1852, and it has the second longest history of prison gang activity in the United States.⁵ California has been influential to corrections policy across the country (Irwin 1980) and two recent Supreme Court rulings are intimately related with gangs, so understanding California prison gangs informs inmate social organization and public policy more broadly (Johnson v California 2005; Brown v Plata 2011).⁶

There are no reliable, publicly available quantitative data on prison gang membership and activity within particular correctional facilities (Pyrooz et al. 2011). The absence of data results from the consciously covert nature of prison gangs and administrators' desire to withhold sensitive information related to operations (Fong and Buentello 1991). In fact, the CDCR withholds information precisely because it relates to gangs. For example, while requesting data, the CDCR explained that they will not provide inmate ethnicity information at the institutional level "because of its sensitive nature in relation to gangs and gang activity" (personal correspondence).

⁵On prison gangs in other states, see Jacobs (1977), Crist (1986), Lane (1989), Fong (1990), and Fong and Buentello (1991). Camp and Camp (1985) provides the best national survey of prison gangs available.

⁶Page (2011) provides an outstanding political history of incarceration in California, with a focus on the political power of the California Correctional Peace Officers Association. In general, the rising number of people incarcerated has important political implications, including reduced civic participation and trust in government (Weaver and Lerman 2010).

To overcome this lack of data, this paper draws on two types of evidence. First, excellent sociological and anthropological studies document inmate life by researchers who either have been incarcerated (Chicano Pinto Research Project 1970; Irwin 1980; Koehler 2000) or have conducted ethnographic research inside prisons (Sykes [1958] 2007; Davidson 1974; Williams and Fish 1974; Kalinich 1980). The accounts of former gang members, inmates, and law enforcement officials provide insights into the origin, operation, and development of prison gangs (Bunker 2000; Mendoza 2005; Morrill 2005; Fuentes 2006; Morales 2008; Blatchford 2008). Second, the paper collects data on inmate demographics from over sixty years of annual reports and documentation from the CDCR. Much of these data are incomplete, but by collecting them from archival sources and reports, they provide a clearer picture of how changing demographic factors influenced inmate social organization. Though both of these data sources are less systematic than desired, they have the advantage of providing an insider's look at this issue, from multiple perspectives, and during the specific period of interest, so they provide the best evidentiary sources available.

2 Theory and Empirical Implications

2.1 A Social Dilemma for Inmates

Inmates face numerous social dilemmas in their daily interactions, and the rational behavior of each individual inmate may lead to a situation in which

everyone is worse off (Kollock 1998). Inmates can cooperate by either leaving other inmates alone or engaging in mutually beneficial exchanges. Defection occurs when inmates engage in physical, psychological, economic, and social victimization, including rape, theft, assault, and opportunism when exchanging contraband (Bowker 1980). Sykes’s classic study on prison life describes the inmate’s choice to, on the one hand, “bind himself to his fellow captives with ties of mutual aid, loyalty, affection, and respect, firmly standing in opposition to the officials. On the other hand, he can enter into a war of all against all in which he seeks his own advantage without reference to the claims or needs of other prisoners” ([1958] 2007, 82). This suggests a Hobbesian state of nature where the rules, norms, and shared strategies operating within a facility determine whether inmates’ choices lead to lives that are solitary, poor, nasty, brutish, and short.

In indefinitely repeated games⁷ both inmates can theoretically establish a self-enforcing equilibrium where both rationally choose to cooperate (Telser 1980), but several factors make this unlikely in the incarceration context. First, many inmates have unambiguous release dates. Second, criminals have high discount rates that make it more difficult for the shadow of future benefits to sustain cooperation (Glaeser 1998, 3). People in noncriminal contexts develop mechanisms to signal their low discount rate (Posner 2000,

⁷Indefinitely repeated games are not infinite but have no endpoint knowable ex ante, and there exists an infinite number of possible equilibria. For further discussion, see Posner (2000, 11-18), who models social interaction as a PD game with norms as an endogenous, non-legal mechanism of cooperation.

17), but since criminals discount the future heavily, they require alternative mechanisms (Gambetta 2009). Third, equilibrium choice in repeated games often occurs by participants coordinating on focal strategies based on shared cultural, historical, and social factors (Schelling 1960; Leeson et al. 2006). Under some conditions inmates will be able to coordinate on cooperative strategies, but in others, defection will be focal because of the criminal histories of the population.

The Hobbesian solution is for inmates to consent to the creation of a sovereign to punish defectors (Hobbes [1651] 2009). Correctional officers lack the necessary information and incentives to perform this role adequately. Inmates often fake injuries and file false complaints to manipulate the system, get time off prison jobs, move to a more preferred cellblock, and avoid other inmates (Kaminski 2004, 145-168; Gambetta 2009, 111-148). A correctional officer may also lack sufficient evidence to punish an assailant. When defection occurs during an illicit exchange, alerting a correctional officer will entail confessing to one's own participation in the prohibited activity. For example, inmates cannot rely on guards to resolve a dispute over a heroin deal gone wrong. In addition, supervisors cannot perfectly monitor correctional officers, and guards may lack the concern needed to investigate a complaint or punish the victimizer. Inmates can bribe officers to participate in illegal activities, but when they do, they lose access to official governance mechanisms and must rely on self-enforcing ones. In short, officials do not provide all of the governance that inmates demand (Sykes [1958] 2007, 40-63).

Inmates will attempt to produce their own governance mechanisms to punish defection and facilitate cooperation.⁸ Norms and organization provide two methods for establishing self-governance within the inmate social system. Norms identify the permitted, obliged, and forbidden behaviors of people with particular attributes in a given context (Crawford and Ostrom 1995). Rather than reflecting an inherent belief or preference, norms are endogenously determined in environments where people seek to maximize their welfare compared with the efficiency of alternative mechanisms (Posner 2000, 11-35). Norms typify the relatively decentralized governance mechanism, and they lack explicit protocols for communicating information and designated individuals responsible for punishing defection.

Members of organizations, in contrast, form beliefs about the permitted, obliged, and forbidden behaviors in a particular context, but they also have a forum for discussing and establishing the range of available punishments, assignment of the authority to punish, and protocols for imposing the punishment. An organization exists when a group with defined membership develops explicit information transmission and enforcement mechanisms to deter defection and punish it when it occurs.

Prison gangs are an important type of organization operating behind bars and they have several methods of communicating information and punishing misbehavior. Gangs communicate the standards of appropriate behavior

⁸The idea that institutions function as commitment devices and allows the capture of gains from exchange is quite general. See North (1990), Ostrom (1990), Greif and Laitin (2004), and Masten and Pruffer (2011).

explicitly in written documents. For example, the *Nuestra Familia* prison gang outlines the fourteen principles of behavior for Hispanic inmates in its document, the “Fourteen Bonds” (Fuentes 2006, 38-40, 63-65). Like most prison gangs, the *Nuestra Familia* maintains a record of inmates, known as the Bad News List, who deserve punishment for misbehavior (Fuentes 2006, 9). This list is distributed to gang leaders throughout the correctional system who monitor for these individuals and punish them as appropriate. The gang assigns specific members in each tier of a facility to the role of identifying new inmates, checking them against the list, and monitoring and regulating inmate behavior (ibid.). When an inmate in good standing with the gang transfers to a different facility, he often brings a note from gang leaders to the new facility to indicate his status at his previous location (Balassone 2010).⁹ Gang leaders often send additional notes separately.

These types of criminal information networks are not unique to California prison gangs. The Soviet criminal fraternity *vory-v-zakone* (thieves-with-a-code-of-honour) used similar mechanisms in the camps of the Gulag Archipelago, particularly in Perm (Varese 2005, 123-144). The *vory* operated behind bars, had clearly defined-membership, induction rituals, codes of behaviors, and mechanisms for adjudicating disputes (Varese 2005, 145-166). A member’s standing was recognized when he was transferred to a new facility, and communication processes aided the groups’ coordination of

⁹Correctional officials at San Quentin State Prison also reported to the author that inmates use notes to provide information on other inmates and gang activity when transferring between locations.

rule enforcement. For example, just as the Nuestra Familia has a Bad News List to facilitate punishment, the vory have criminal courts that judge conflicts and decree punishments to other prison camps (Varese 2005, 157-159). Like many California prison gangs, *vory* tattoos provide credible information about an inmate's gang membership, standing with the group, past crimes, and acts of valor and courage conducted for the organization. By establishing a more centralized process that designates specific people to collect, assess, and distribute information about inmates and specific people assigned to punish unacceptable behavior, prison gangs provide an important organizational alternative to norms.¹⁰

2.2 The Use of Norms and Organizations

Past research suggests empirical propositions about when norms will be less effective. First, norms are less effective at governing large communities because there are more people interacting, more opportunities for defection, and obtaining information about other people is more costly (North 1987; Posner 2000, 16). Norms rely on decentralized governance mechanisms, and they can be successful in small, close-knit communities. Rural neighbors in Shasta County, for example, keep track of each other's behaviors at low cost (Ellickson 1991). However, the number of possible relationships and interac-

¹⁰It is important to note that both norms and organizations rely, in part, on violence to create order. The difference is that norm-based governance is less robust to demographic changes. Larger populations may also make organizations less effective if those new inmates are resistant to the previously accepted rules, or as was the case of the *vory* in Russian prison camps, the influx of trained military personnel (Varese 2005).

tions increases exponentially as communities grow, and this overwhelms the decentralized information mechanisms used to monitor norm violations.

A second reason that norms are more effective in small communities is that it is easier for people to overcome the collective action problem of punishment. Punishing a norm-violator is costly and has external benefits, so people have an incentive to free ride in contributing to decentralized punishment. People in larger communities face greater monitoring costs and each individual's contribution is less important, so free-riding on punishment of norm-violations is more frequent.

Hypothesis 1: Self-ordering communities cannot rely on norms to provide governance in large populations.

Related, inmates have a greater demand for governance as resources become more scarce. For a given capacity, a growing population increases the scarcity of physical space and other resources. The increased value of resources requires greater governance to secure property rights and prevent rent dissipation (Demsetz 1967; Anderson and Hill 2002). Norms can be effective when inmates have ample living space and sufficient access to resources, but conflict increases when facilities become more crowded. These conflicts reflect a need for more effective governance mechanisms.

Hypothesis 2: Self-ordering communities cannot rely on norms to provide governance when correctional facilities are becoming overcrowded.

Norms are most effective in communities that are homogenous (Ostrom 1990,

166; Ellickson 1989, 1991, 167-183). In close-knit communities, people recognize and respond to accepted norms, and their continued interactions allow them the information and ability needed to exercise social control. Some self-governing communities rely on religious homogeneity and low social distance to encourage enforcement of norms, and establishing a corporate culture can solve internal governance problems (Landa 1981; Bernstein 1992; Munger 2006; Leeson 2008; Kreps 1990).

In the inmate social system, new inmates must learn a complicated and unusual set of norms that differs substantially from those operating in the free society (Kaminski 2004). The Importation Hypothesis (Fleisher 1989, 131) argues that when inmates arrive, they import street-based norms into the prison. However, empirical work finds that street norms often differ from prison norms (Hunt et al. 1993). Some inmates will learn the norms quickly; others may never fully grasp them. An inmate's first prison commitment will likely entail the greatest ignorance of the inmate norms. Cooperation becomes less likely because new inmates' ignorance leads them to misinterpret the signaling function of norms (Posner 2000, 18-27; Kaminski 2004). An inmate who has already been to prison will be more likely to know and follow the prison norms. Norms are less effective as the percentage of arriving inmates who have served a past prison sentence declines.¹¹

Hypothesis 3: Reliance on norms will be less effective in self-

¹¹This does not explain why prison gangs arise, as new inmates would also have to learn the role that prison gangs play. However, more first-time inmates will make norms less effective, giving rise to a need for alternative forms of governance.

ordering communities when a greater proportion of arriving inmates have never served a prison sentence.

These three hypotheses predict when norms will be insufficient to meet inmates' demand for governance. A related empirical implication is that when norms fail, there will be an increase in inmate conflict. This conflict will lead inmates to seek alternative methods of providing governance.¹²

When norms fail to secure property rights, people will seek new ways to limit access to resources and to secure rents (Anderson and Hill 2002). In the illicit context, criminal organizations form specifically to secure property rights over illicit rents (Leeson and Rogers 2011). In prison, the failure of norms leads inmates to seek alternative solutions in the form of organizations.

Hypothesis 4: If norms fail to provide the governance needed in a self-ordering community, then inmates will create organizations to provide governance.

If the inmate social system more closely resembles a primitive society than a developed civil society (Costa and Kahn 2007) and gangs can be understood as quasi-governments or primitive states (Baumol 1995; Skaperdas and Syropoulos 1995), then the literature on the origins of the state is relevant for understanding governance in the inmate social system. Benson (1999) argues for a coercion-based theory of the state arising from hunter-gatherer communities. Anthropological and historical evidence show that primitive societies

¹²The ineffectiveness of norms does not imply that inmates will have no norms whatsoever or that they will play an unimportant role in the inmate social system. Rather, just as inmates cannot rely solely on official mechanisms of social control, these changing demographics mean that they also cannot rely on norms.

develop mechanisms of cooperation to facilitate order within groups. However, as some groups develop a comparative advantage in violence, they will begin to plunder others. The result is that “while cooperation dominates within primitive groups intergroup conflict appears to be a ubiquitous characteristic of human history” (Benson 1999, 135).¹³

The state develops from these organizations. Throughout history the “formation of states came from a tightly knit and ruthless group of excessively violent people who conquered, levied tribute, and if circumstances permitted, established their authority over the territory and its population” (Volkov 2002, 712-713; see also Lane [1942] 1966, 1958). Oppenheimer (1914) argues that the state “is a social institution, forced by a victorious group of men on a defeated group” whose “basic justification, its *raison d’être*, was and is the economic exploitation of the subjugated (Oppenheimer 1914, 15, 20). Carneiro (1970) explains that “force, and not enlightened self-interest, is the mechanism by which political evolution has led, step by step, from autonomous villages to the state.” The defining characteristic of government is as an “organization that has the ability to finance its activities by compulsory contributions from all individuals in a given geographic area” (Holcombe 1993, 86). Extraction of tribute in exchange for “protection” is especially effective in contexts like prison where exit is costly (Holcombe 1993, 89).

¹³See Bates et al. (2002) on the role of organized violence, property rights, and the state in primitive societies.

It is not inevitable or necessary that powerful groups become predatory. Internal motivations, such as moral or normative principles, can constrain predation (Stringham 2011). Non-group members may lack sufficiently valuable resources to warrant monopolizing the provision of protection services and appropriating resources (Dourado 2011). The very act of predation might make group members' less safe because the victims' response endangers their security. Members might be harmed in the predation process. Alternatively, preying on others can lead victims to invest in technologies of violence that make them a threat. Predation can lead other non-affiliated groups to join together, and thereby present a new risk to the safety of group members. In some cases, a group will constrain its predatory actions in the present to increase the total tribute it can extract over time (Skarbek 2011).

Research on state formation suggests these constraining influences were not sufficiently strong in primitive societies, so powerful groups preyed on others. In the absence of constraining influences behind bars, inmate protective associations will evolve into predatory quasi-states.¹⁴

Hypothesis 5: Powerful inmate organizations will extract resources from other inmates.

To summarize, inmates rely on norms to provide extralegal governance services behind bars. However, norms become ineffective at solving social dilemmas when the inmate population is large, overcrowded, and populated by a

¹⁴These do not meet Holcombe's (1993) definition of a state because they lack the ability to force contributions from all member of the community.

greater proportion of first-time inmates. Inmate conflicts increase because norms provide less governance than inmates demand. Inmates seek alternative sources of governance in the form of organizations with clearly defined membership and explicit information transmission and punishment mechanisms. Once these groups form and have a credible threat of violence, they will have an incentive to prey on other inmates and will have a comparative advantage in contraband markets.

3 Extralegal Governance in the California Correctional System

3.1 Norms Previously Worked Well

Prison gangs currently have a substantial influence within the inmate social system, but they have not always existed (Blatchford 2009). There is no evidence of organized prison gang activity inside California facilities prior to the 1950s, and during that period, decentralized norms were the important governance mechanism within the inmate social system (Irwin 1980). During the 1960s and 1970s, this changed dramatically as ethnically based prison gangs rose to prominence (Camp and Camp 1985, 92-116; California Department of Corrections and Rehabilitation 2010, 372).

Until the 1950s and 1960s, a set of norms known as the convict code constrained inmate behavior (Irwin 1980, p. 13). It established a status

ranking based on one's conformity with its behavioral prescriptions, which forbid informing on others, showing weakness, cooperating with staff, and victimizing most other inmates (Irwin 1980, 12; see also Sykes [1958] 2007; Irwin and Cressey 1962; Williams and Fish 1974, 17-99; Carroll 1974; Bunker 2000, 118; Koehler 2000). The more closely an inmate followed the convict code, the higher his status among other inmates. For example, an inmate who was known to snitch to correctional officers would be verbally accosted, ostracized, or physically assaulted. His deviation from the accepted behavior reduces his status in the community, restricts his access to resources, and makes him vulnerable to victimization.¹⁵ Inmates incarcerated for sexual offenses, like rape or child molestation, are often attacked because many inmates feel that only weak people commit crimes against women and children. As a result, inmates who assault sexual offenders gain status in the inmate hierarchy. The esteem afforded by inmates to those who conform to the code limited inmate-on-inmate victimization. By generating a consensus about acceptable behavior and signaling one's cooperativeness when exchanging contraband, the inmate norms also provided the "legal environment of the sub rosa system" (Williams and Fish 1974, 53, also 41-2).

Informal groups aided the resolution of inmate conflicts (Irwin 1980, 58-60). These groups lacked a formal structure and well-defined membership, and they were mainly "extended social networks or crowds that were loosely

¹⁵Recent research incorporates esteem (Brennan and Pettit 2004) and the role of internal moral constraints (Stringham 2011) into economics.

held together by shared subcultural orientations or preprison acquaintances” (Irwin 1980, 58). These groups were overlapping and interconnected (Irwin 1980, 58; Bunker 2000, 112).

Writing in the 1990s, Irwin explains, “there is no longer a single, overarching convict culture” (Irwin [1970] 1990, vi; see also Hunt et al. 1993). By 1974, norms were no longer the most prominent governance mechanism in prison, and violent inmates “who, in the pursuit of loot, sex, respect, or revenge, will attack any outsider have completely unraveled any remnants of the old codes of honorviolence-oriented groups dominate many, if not most, large men’s prisons” (Irwin 1980, 192; also Hunt et al. 1993; Blatchford 2009). The inmate social system changed dramatically during the period, as norms became ineffective from roughly 1950 to 1970.

3.2 The Decline of Norms

The first hypothesis predicts that norms will be ineffective at providing governance in large communities. The earliest period of notable increase in the inmate population took place from 1944 to 1969. The year-end inmate population grew from 5,710 to 27,535 inmates, increasing nearly five times (Figure 1). In its one hundred year history, the corrections system had never before experienced a population increase this large. Consistent with the first hypothesis, there was a substantially larger inmate population during the period that norms became ineffective. This period also corresponds with the years when prison gangs first formed-1956, 1966, 1967, and 1968 (California

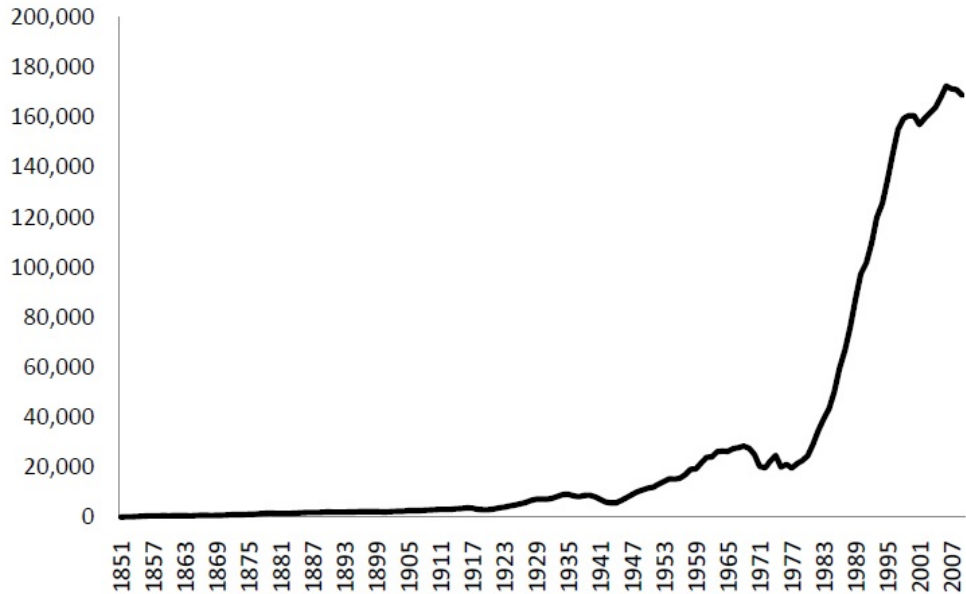


Figure 1: Total Year-End California Inmate Population, 1851-2009

Department of Corrections and Rehabilitation 2010, 372).¹⁶

The second hypothesis suggests that norms will provide an insufficient amount of governance in the inmate social system when there is greater scarcity of resources. An increasing number of inmates increases demand for resources. This requires greater governance to secure property rights. This occurs when the inmate population grows faster and when it exceeds the design capacity of the facility.

The inmate population was increasing at the specific facilities where

¹⁶The lack of quantitative data on prison gang membership at the institution-level makes systematic analysis difficult, but anecdotal evidence of minimal gang activity in rural, county jails where populations are smaller is consistent with this theory.

prison gangs formed. The first California prison gang formed in 1956 at the Deuel Vocational Institution (a prison in Tracy, CA). The inmate population had increased 7 percent in the last year, and in that year, the facility first exceeded its designed capacity. From 1949 to 1963, the only years where institution-level data are available, the population at Deuel Vocational Institution increased by 321 percent. From 1959 to 1961, CDCR transferred the first prison gang members from the Deuel Vocational Institution to San Quentin Prison. The population at San Quentin increased during this period to a total 5,424 inmates-more than a thousand new inmates within two years.

The CDCR system exceeded capacity in fourteen years, between 1949 and 1970, averaging 111% overcrowding for the period. In 1974, San Quentin had the highest density of inmates per one hundred square foot of buildings and grounds of all CDCR facilities, 16.21 compared with a mean and median for all facilities of 6.94 and 4.55 (California Department of Corrections and Rehabilitation 1975, 20). Overcrowding first became a serious issue in the four years prior to the first prison gang's formation. According to the 1952 annual report on prisons, "there is a 30 percent overcrowding in the male institutions of the Department. Actually, the capacity of the institutions in terms of permanent buildings takes care of only one-half of the present resident population" (California Department of Corrections and Rehabilitation 1953, 3). Overcrowding persisted, and in 1954 the CDCR reported that it has "faced the tremendous problem of reorganizing the California prison system to provide additional housing facilities to care for this increased population"

(California Department of Corrections and Rehabilitation 1955, 11).

Physical space became more scarce as the inmate population grew and exceeded the physical design capacity of correctional facilities. The increased value of resources—including the number of inmates per cells, physical space on tier blocks, cafeterias, and recreation yards and the availability of showers, toilets, and basketball courts—required greater governance to secure their property rights.¹⁷

Consistent with the first two hypotheses, the period during which the convict code was in decline corresponds with both an unprecedented increase in the size of the inmate population and severe overcrowding.

The third hypothesis suggests that norms will be less effective when a greater proportion of arriving inmates have never served a prison sentence. It takes time and effort for new inmates to learn the norms governing the inmate social system, so an increase in the percentage of first time inmates will increase the relative cost of using norms. Without knowledge of the norms, new inmates misinterpret and disregard signaling mechanisms and disrupt the social system more frequently. When punishing defection requires coordinated activity, the decline in consensus caused by the influx of new inmates reduces the effectiveness of governance through norms.

¹⁷A recent Supreme Court ruling finds that overcrowding in California correctional facilities entails “serious constitutional violations.” The decision argues that overcrowding leads to severe shortages in medical and mental health care for inmates, increases the incidence of infectious disease, and creates “violent, unsanitary, and chaotic conditions,” leading to more inmate lockdowns, longer wait times for medical care, and less safety (Brown v. Plata et al., No. 09-1233 [Sup. Ct. May 23, 2011]).

During the 1950s and 1960s, the system received an increasing number of young offenders who either did not know or adopt the norms dictated by the convict code (Irwin 1980, 189). Interviews with felony offenders with long criminal histories in California found that older inmates perceived young inmates to be more disruptive, and they attributed the change in the inmate social system to the behavior of new inmates (Hunt et al. 1993). There was a divergence in the norms of young and old inmates. The study finds that young inmates show “little or no respect of the older inmates, many of whom had long histories of prison life which normally would have provided them with a high degree of status” (405). New inmates “had not been socialized into the convict culture. The dominance of these groups soon led to an environment where the rules and codes of behavior were no longer adhered to” (406).

Data collected from CDCR records provide evidence from 1945-1984 on the percentage of arriving inmates with no prior prison commitment (Figure 2). Consistent with the third hypothesis, the percentage of inmates with a prior prison commitment fell from 36.5 percent to 25 percent throughout the period that norms were declining in importance.

The respondents in Hunt et al. (1993) suggest two reasons for why prison norms are different today. One is that inmates enter prison with norms that differ from the convict code, for example, by not respecting inmates who have served long sentences. A second observation is that young inmates are more disruptive in the inmate social system. Consistent with the respondents’

observations, the percentage of arriving inmates aged 25 years or younger increased from 26.7 percent in 1950 to 40 percent in 1970. Similarly, inmates aged younger than 20 years old increased from 2 percent to 5.4 percent of newly arriving inmates. A CDCR study on prison stabbings from 1960 to 1975 found that younger inmates are more likely to be a “stabber,” and the study attributes this finding to the fact that “younger inmates are less experienced in dealing with the pressures of prison life because they are less likely to have served a prior prison sentence” (California Department of Corrections and Rehabilitation 1975, 67, xiv). Norms became less effective at the same time that more inmates arrived who were young and who had never served a prison sentence.

Qualitative research identifies the period from the mid-1950s to the 1970s as marking the decline of the effectiveness of norms for governing the inmate social system. The demographic data on the size of the inmate population, the growth rate of the population, the designed capacity of the institutions, and the proportion of newly arriving inmates who had never served a prison sentence are consistent with theoretical reasons for the ineffectiveness of norms. If the evidence showed that the inmate population was small or falling, overcrowding was less problematic, or more inmates arrived with a prior prison commitment, then we could reject either at least one of these hypotheses or their combined explanatory power.

As norms were becoming less effective, the inmate social system experienced more conflict. The 1960s saw a rise in inmate-on-inmate assaults.

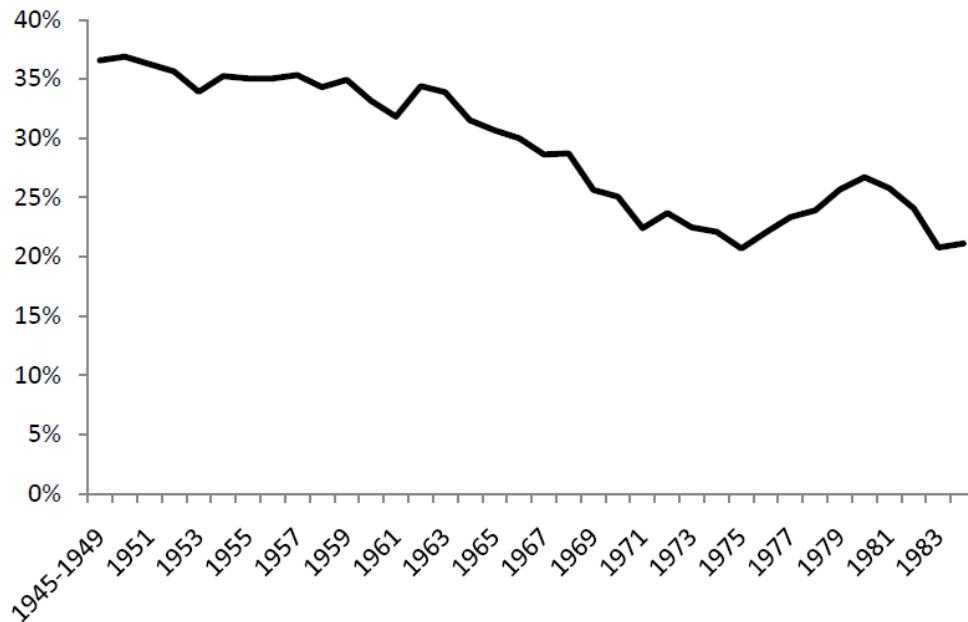


Figure 2: Percent of Arriving Inmates with a Prior Prison Commitment, 1945-1984

Corrections officials conducted a study on the causes of inmate stabbings because “prisons in the State of California have experienced increased violence by prisoners” since the early 1960s (California Department of Corrections and Rehabilitation 1975, iii). They found that the number of inmate stabbings increased six times between 1960 and 1973. The study found that “larger prison populations strongly correlate with increased prison violence” (California Department of Corrections and Rehabilitation 1975, xii, 51-52). Crowding was the second most important factor explaining inmate stabbings at the institution level, and “increased building and ground area (sq. ft.)

within the security area strongly correlates with reduced prison violence” (California Department of Corrections and Rehabilitation 1975, xii, also 51-52). This evidence is consistent with the argument that demographic changes made norms less effective and led to more inmate conflict.

4 Prison Gangs as Protective Associations

In the face of increasing inmate conflict, inmates sought alternative governance institutions. The fourth hypothesis suggests that the inability for decentralized norms to effectively provide governance will lead inmates to form organizations to do so (Leeson and Rogers 2011).¹⁸ To mediate conflict in the face of changing inmate demographics, inmates created protective associations-prison gangs-to serve this need.

Forming in 1956, the Mexican Mafia is the first California prison gang (Camp and Camp 1985, 20; Pyrooz et al. 2011).¹⁹ The gang developed to protect Hispanic inmates from predatory white inmates and to reduce conflict among rival Hispanic street gangs (Mendoza 2005). The Mexican Mafia started in the Deuel Vocational Institution after “several Latino inmates

¹⁸An inmate will also benefit more from creating a protective association the longer his sentence is. This is consistent with the findings that prison gangs initially formed in state prisons, rather than county jails.

¹⁹This paper focuses on California, but the relationship between norms and organizations is likely to apply in other prisons. For example, to the extent that European prisons are less overcrowded, have fewer inmates, and have more liberal drug laws that prevent large numbers of drug users from entering the system, prison gangs should be less prevalent. While this seems to be true, there is no systematic research on gangs in jails and prisons in Europe, outside of the UK (Pyrooz et al. 2011).

organized a protection group and dedicated themselves and their resources to equal and fair treatment for Mexican-American inmates” (Fuentes 2006, xv-xvi; see also Blatchford 2008, 5; Morales 2008, 55; Davidson 1974, 81). By grouping together, these inmates generated a credible threat of violence and protected themselves from other predatory inmates. Hispanic inmates “gave up their street gang identity for the collective purposes of mutual protection, to run illicit businesses in the prison, and to gain power over other inmates” (Camp and Camp 1985, 93).

By 1961, the CDCR transferred many of these inmates to San Quentin Prison, where older and physically larger inmates confronted and threatened them (Blatchford 2008, 5). The group recruited new members, established a more formal organization, and retaliated against inmates who victimized them. The Mexican Mafia quickly established a reputation for their effective use of violence (Mendoza 2005, 17-18; Blatchford 2008, 4-11). According to a former member of the gang, from 1957 to 1959, the founding members began “establishing their reputation of terror” (Mendoza 2005, 16). The gang recruited members who were brave and willing to use violence. Within a few years of informally grouping together, these inmates formally created the Mexican Mafia. They agreed on a set of rules for how members should behave and how to conduct collective decision-making.²⁰

Consistent with Hypothesis Five, once the Mexican Mafia had a credible

²⁰For more on the internal organization of prison gangs, see Skarbek (2010a), Leeson and Skarbek (2010), and Skarbek (2011).

threat of violence to protect its members, they could also credibly threaten to harm other inmates. Mexican Mafia members “began robbing inmates of their possessions-prison ducats, canteen goods, and drugs-while making examples of those that would dare oppose their demands” (Mendoza 2005, 16). They intimidated, threatened, and assaulted other inmates (Mendoza 2005, 22). Unaffiliated inmates had “to surrender their prison luxuries and items of comfort such as wrist watches, rings, shoes and anything that could either be enjoyed by [the Mexican Mafia] or sold on the prison black market” (Mendoza 2005, 22-23).

These “attacks aroused and consolidated a large number of ‘independent’ Chicanos, who planned to eliminate the [Mexican] Mafia members” (Irwin 1980, 190; also Morales 2008, 20-3, 56-8). Hispanics from the rural regions of northern California “formed their own alliance for self-protection” (Camp and Camp 1985, 93). These Hispanic inmates formed the Nuestra Familia prison gang (Porter 1982, 10; Camp and Camp 1985, 92-101; Morales 2008, 7). The Nuestra Familia prison gang’s earliest written constitution outlines their intentions and internal organization, explaining that the “primary purpose and goals of this O[rganization] is for the betterment of its members and the building up of this O[rganization] on the outside into a strong and self-supporting familia” (Fuentes 2006, 5 emphasis in original). A federal indictment explains that NF “provided protection and security for its members and associates from rival organizations and gangs both inside and outside California correctional institutions” (United States v Rubalcaba et al. 2001,

2). Studying the Nuestra Familia in Colorado, former inmate and anthropologist Robert Koehler explains that the gang acts as a mutual aid society and “provides Familianos [members] with physical protection from rival gangs and supplies them with store goods at low cost or on low credit, and Familia serves as their emotional family” (Koehler 2000, 174). Consistent with the fourth and fifth hypotheses, as the need for governance increased, prison gangs protected its own members and then preyed on others.²¹

It may be that more people that are violent were incarcerated, and violent inmates formed prison gangs to engage in violence. From 1950 to 1970, the percentage of inmates arriving for a violent offense did increase from 51 percent to 63 percent. According to a CDCR study, “high concentrations of inmates with violent commitment offenses were the strongest influence on stabbings” at the institution level (California Department of Corrections and Rehabilitation 1975, 53). However, when they studied who actually becomes a “stabber,” they found that being incarcerated for a violent commitment offense was not statistically significant, and the study determined it was the “least important” out of twelve variables in explaining who becomes a stabber (California Department of Corrections and Rehabilitation 1975, 67). Gang membership is the second most important factor (*ibid.*). These findings suggest that prison gangs arise in dangerous contexts because of a need for

²¹The evidence is also inconsistent with the alternative explanation that street gang members simply imported their organizational structure into the correctional system and formed prison gangs. Street gangs existed for thirty to forty years before prison gangs formed (Moore 1991, 26) and many of the original founders of prison gangs were not street gang members (Fuentes 2006, xvii; Chicano Pinto Research Project 1970, 81).

protection, rather than simply that violent people use gangs as a vehicle for violence.

Protection is a common reason given for why prison gangs form. In 1985, the Department of Justice conducted a national study on prison gangs by surveying prison administrators. They found that the prison gangs' "purposes range from mutual caretaking of members to large profit-making criminal enterprises" (Camp and Camp 1985, 1). A veteran correctional officer in California writes, "most gangs in prison originally started out as protection groups" (Morales 2008, 6). A correctional officer at Corcoran State Prison explains, "When you come to prison, you have to join a gang. You have no choice. It's a must... Because you have no protection. You're on your own. And anything can happen to you." (MSNBC 2010). One prison gang member explains that the gang "controlled the [main population area] there by offering protection of numbers, protection of comradeship" (Porter 1982, 14).

In addition, extorting, exploiting, and endangering other inmates appears to be a general feature of prison gang activity. Camp and Camp (1985) asked prison administrators about nineteen different criminal acts that a prison gang might be involved in. They reported that five of the six most frequently reported criminal acts "demonstrate power over and abuse of weaker persons within the prison" (Camp and Camp 1985, 45). Their relationship with non-gang members in business frequently "translates into taking advantage of them. The gang's aim is to control other inmates" (Camp and Camp 1985,

43).

5 Prison Gangs Control Contraband Markets

Once established, prison gangs like the Mexican Mafia and the Nuestra Familia could protect its members from victimization. The increasing inmate population and the growing demand for narcotics behind bars increased market opportunities, so prison gangs expanded their scope of control to governing illicit contraband markets. They had a comparative advantage in illicit trade because they had credible punishment mechanisms to use in case of defection.²²

According to CDCR regulations (California Code of Regulations, Section 3006), inmates can only purchase a limited range of goods, and of course, these do not include items such as heroin and alcohol. As a result, most of the inmate economy operates in contraband markets. These markets provide an important source of economic goods to “virtually all prisoners” (Irwin 1980, 206-212; also Williams and Fish 1974) and are the basis of the informal inmate social system (Kalinich and Stojkovic 1985).

Although contraband markets operated prior to the formation of prison gangs, the increasing number of people incarcerated during this period meant the potential for market exchange had expanded. Since the 1960s, illicit inmate economic activity “has become much more complex and extensive and

²²Criminal organizations rely on a variety of internal governance mechanisms to affect collective action (Levitt and Venkatesh 2000; Leeson 2007a; Gambetta 2009; Leeson 2010).

interlaced with the clique and gang activity. By and large, when the violent cliques and gangs dominate the prison, they control most of the large-scale sub rosa economic systems” (Irwin 1980, 206). Individual proprietors, who lacked protection from a prison gang, were unable to participate in large-scale business, and they were frequently threatened and robbed (Irwin 1980, 211-2). Prison gangs currently control the inmate contraband markets in CDCR facilities (Morales 2008).

Soon after prison gangs formed, President Nixon increased the scale and scope of the drug war with the Comprehensive Drug Abuse Prevention and Control Act of 1970. This corresponded with an increase in the percentage of inmates addicted to narcotics and the number sentenced for narcotics-related offenses. CDCR annual reports have data on arriving inmates’ narcotics addictions (including marijuana) from 1959 to 1980. The percentage of inmates addicted to narcotics entering the system from the courts each year increased from 27 percent in 1959 to 73.4 percent in 1980 (Figure 3). The annual flow of inmates arriving from the courts who lacked a narcotics addiction declined from 3,936 in 1959 to 2,826 in 1980.

The flow of new inmates who were sentenced for narcotics-related crimes increased as well (Figure 4). In 1950, only 168 inmates arrived to serve sentences for narcotics-related crimes, but by 2000, this number regularly surpassed 10,000 per year. These inmates had greater knowledge of narcotics and had connections with which they could continue their business behind bars. At the same time, the rise of street gangs in the illicit drug market

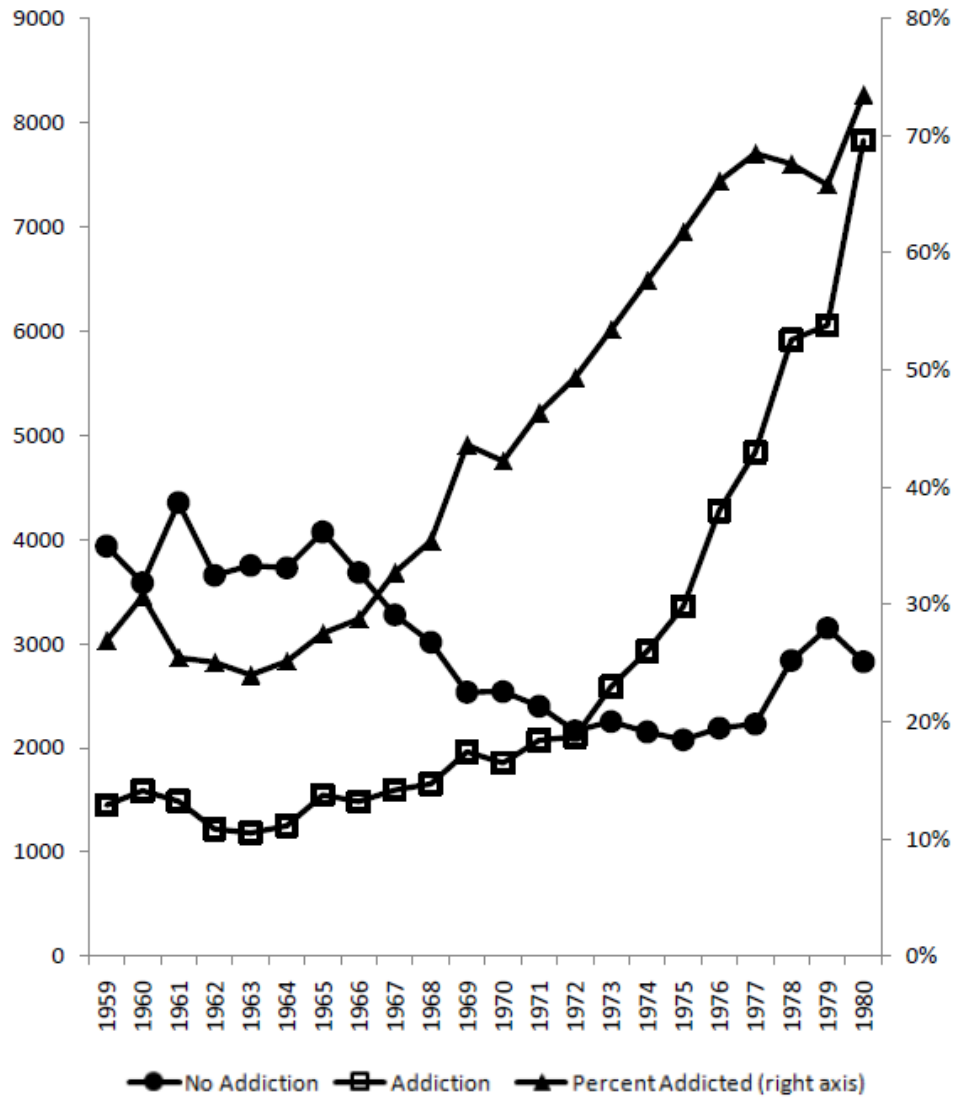


Figure 3: Narcotics Addictions of Arriving Inmates, 1959-1980

meant that ready-made organizations existed to facilitate the trafficking and importation of drugs into the prison system (Blatchford 2009).²³

²³The rise of street gangs does not diminish the role of prison gangs. First, the Mexican

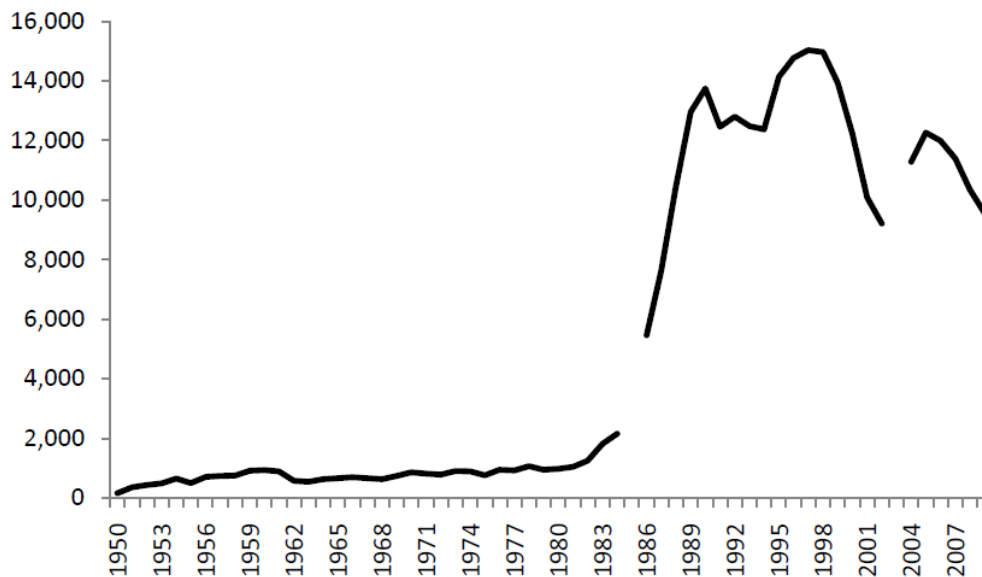


Figure 4: Inmates Arriving For Narcotics Offenses, 1950-2009

By 1964, the Mexican Mafia had control of “San Quentin’s narcotics trafficking as well as gambling, loansharking and other black market activities inside the prison walls” (Mendoza 2005, 20). A Nuestra Familia gang member describes their rival’s prominence in contraband markets, noting that the Mexican Mafia was “in charge of every drug transaction and prison pleasure” (Fuentes 2006, xvii).

At San Quentin, the Mexican Mafia “virtually controls the illegal eco-

Mafia formed, in part, to mediate conflict between street gangs. Second, it is rare that enough members of a particular street gang are housed in the same correctional unit to effectively protect themselves and control the illicit trade. For example, the average Hispanic street gang in Los Angeles has 52 members. It is unlikely that enough of them will be housed in one of the state’s thirty-three facilities to operate effectively as a prison gang. An incentive remains to organize a perennial, prison-based group.

conomic activities” (Davidson 1974, 96). They can govern economic exchanges and credibly threaten to punish defection. The prison gang

has an unquestioned stability because it has the power and means to collect and pay legitimate debts from one prison to another (or even on the streets)... This makes dealing with [the Mexican Mafia] a very positive, secure, yet serious matter. For example, [the Mexican Mafia] *will* collect or pay a legitimate debt, regardless of where the debtor or debtee might be transferred—even if he is released to the streets. In contrast, if a prisoner has financial dealings with an inmate, there is the constant threat that the inmate will be transferred to a different prison (or even be paroled or charged to the streets)—which would present serious difficulties in tendering payment or collecting a debt (Davidson 1974, pp. 96-97; emphasis in original).

The threat of violence—which prison gangs originally developed for protection—induces cooperative behavior with inmate consumers:

Anyone who consciously deals with [the Mexican Mafia] knows the seriousness with which members regard [the Mexican Mafia] activities and the extent to which they will go to protect [the Mexican Mafia]. Non-[Mexican Mafia] individuals who function on the lower levels of the prisoner culture understand the rules of the game, and even the extreme act of death to a snitch may seem justifiable to them. The mere possession of this knowledge usually is sufficient to keep prisoners from crossing [the Mexican Mafia] in any way... Members [of the Mexican Mafia] know very well that their group could never survive without such severe protective measures (Davidson 1974, p. 97).

The prison gang “gained both a monopoly over most major sources of contraband goods and an ability to control the price of many goods and services,” and as a result, they have become “the financial institution of the prisoner

economy” (Davidson 1974, 119; see also 118-125).

Officials confirm that the Mexican Mafia ran the drug trade in San Quentin and Folsom prisons in the early 1980s (Porter 1982, 18). Some evidence suggests that the Mexican Mafia’s role in the inmate economy improved market opportunities more broadly. The prison gang “increased the routine volume of goods available for all prisoners, making more goods available at lower prices than would be otherwise” (Davidson 1974, 124), and “the conditions of many Chicanos and convicts has been significantly improved. Many Chicanos claim that they are in a better position than any other group inside prison” (83).

Gangs continue to operate actively in contraband markets throughout California’s correctional facilities. In fact, prison gangs’ prominent role in drug trafficking behind bars is an important reason for correctional officials’ attempts to disrupt them (Hunt et al. 1993, 400). Koehler explains that “the basis of Familia is capitalism. . . economic ventures allow Familia to counter the perceived hegemony of the guards/prison system and the threat of rival prison gangs” (2000, 170-171). A national survey of prison administrators finds that drug trafficking is the second most frequent criminal activity engaged in by prison gangs, and prison gangs are responsible for the majority of drug trafficking (Camp and Camp 1985, 44-5, 52-3). Administrators report, “almost without exception. . . the gangs are responsible for the majority of drug trafficking in their institutions” (Camp and Camp 1985, 52).

While it is clear that prison gangs prey on some inmates, they also engage

in contractual and productive activities. Camp and Camp (1985, 45) asked prison administrators to identify how often prison gangs engage in nineteen different criminal acts. Respondents' answers range from Very Frequent (5 points) to Very Seldom (1 point). The higher the rating score, the more frequently prison administrators believe prison gangs engage in that action. According to the survey, prison gangs engage in predatory actions often, including intimidation (148 points, the highest score), assault (134), abuse of weak inmates (133), extortion (131), theft (117), strong arm robbery (99), robbery (89), rape (83), murder (79), arson (61), and slavery (52). On the other hand, prison gangs also engage in activities that gang members and other inmates likely view as contractual and productive (even though administrators view them as crimes). These actions include distributing drugs (145, the second highest score), protection (131), and arranging prostitution services (88) and sodomy for sale (83).

The remaining four criminal actions in the survey are ambiguous. "Rackets" scores 96, but it is unclear if this refers to predatory or productive actions; this could include, for example, extortion or illicit bootlegging of prison wine (pruno). Prison gangs often commit crimes associated with "Contraband Weapons" (128), but the nature of this offense is not obvious. Inmates could use weapons either to prey on others or to provide protection. Similarly, it is unclear whether "explosives" (which rates the lowest, 47) entails predatory or productive activities, from an inmate's perspective. "Bribery" scores 71, an action that could assist gangs in supplying inmates with con-

traband or help conceal inmate intimidation.

The amount of points assigned to predatory and productive activities provides a rough measure of the nature of prison gang activity. Predatory activities consist of 58.6 percent of all activities; productive activities account for 23.4 percent. These data are imperfect for two reasons. First, they are based on the perspective of the administrators rather than the inmates, and administrators may have a biased sample. Voluntary drug exchanges, for example, are less likely to be observed than murder or assault. Second, these reflect the frequency that gangs engage in a behavior, not how important those behaviors are to the inmate social system. Murder receives a relatively low score, but an instance of murder is certainly more important than one of theft, which is engaged in more frequently.

6 Conclusion

The inmate social system responds to the constraints created by incarceration and the demographics of its population. Prison gangs engage in violence, but their actions are not arbitrary or irrational. People in the inmate social system previously relied on decentralized norms to limit conflict and provide governance. These norms became insufficient as the inmate population quintupled in size, exceeded design capacity, and more first-time inmates entered the system. With unmet demand for governance, inmates turned to alternative solutions and formed protective associations. Members of the

Mexican Mafia and Nuestra Familia established hierarchical organizations with effective information transmission and enforcement mechanisms. Once these groups could effectively deter predators, they used their organizations to participate in contraband markets. In the 1970s, an increasing number of inmates with narcotics addictions entered the system, and prison gangs provided the credible threat of violence that deterred opportunistic behavior in self-enforcing exchange.

This paper suggests several implications for the origin and development of inmate governance mechanisms and the role of norms and organization. Whereas past research on norms has focused on peaceful communities, including in rural neighborhoods (Ellickson 1991) and among professional diamond traders (Bernstein 1992), this paper provides evidence that norms become less effective in large populations, even in contexts where violence is a possible means of supporting norm-based governance. Second, creating governance mechanisms does not require a high-level of wealth within a community. Outside finance to create governance institutions is not a necessary condition for their provision. Third, groups that facilitate communication through organizations can increase cooperation, but the use of violence that induces cooperation carries a cost (Ostrom et al. 1992). Creating governance mechanisms is always costly, but there are substantial rewards to finding lower cost ways of doing so. Given the context of incarceration and inmate demographics, prison gangs appear to be the efficient providers of governance in the inmate social system.

While this paper has provided an argument for why prison gangs exist, this does not imply that it is a first-best solution to the problem of order in the inmate social system. Prison gangs do provide protection to some inmates, but they formed because of the failure of state-created institutions that were supposed to protect inmates. Gangs are the central players responsible for flourishing contraband markets. They increase wealth by responding to (illicit) market prices to provide inmates with goods and services that people voluntarily demand. According to prison administrators (Camp and Camp 1985), the productive activities of prison gangs constitute an important part of their activities. However, they also steal, assault, and intimidate many inmates who cannot opt-out of interactions with them. Prison gangs engage in predatory behavior nearly twice as often as productive activities (Camp and Camp 1985).

Acknowledgements

The author thanks two anonymous reviewers, Eli Dourado, P.J. Hill, Peter Leeson, Michael Munger, Matt Ryan, Emily Skarbek, Dan Smith, Dan Sutter, Michael Thomas, Georg Vanberg, and participants at the 2011 Ronald Coase Institute workshop for helpful comments. He gratefully acknowledges the support of the Searle Foundation.

References

- Adolphson, Mikael and J. Mark Ramseyer. 2009. "The Competitive Enforcement of Property Rights in Medieval Japan: The Role of Temples and Monasteries" *Journal of Economic Behavior and Organization* 71(3): 660-668.
- Anderson, Annelise. 1979. *The Business of Organized Crime: A Cosa Nostra Family*. Palo Alto: The Hoover Institution.
- Anderson, Terry L. and Peter J. Hill. 2002. "Cowboys and Contracts" *Journal of Legal Studies* 31(2): 489-514.
- . 2004. *The Not So Wild Wild West: Property Rights on the Frontier*. Stanford University Press.
- Balassone, Merrill. 2010. "2 Will Stand Trial in Turlock Rapper's Killing" *The Modesto Bee*. December 30.
- Bates, R., A. Greif, and S. Singh. 2002. Organizing Violence. *Journal of Conflict Resolution* 46, 599-628.
- Bandiera, Oriana. 2003. "Land Reform, the Market for Protection, and the Origins of the Sicilian Mafia: Theory and Evidence" *Journal of Law, Economics, & Organization* 19(1): 218-244
- Baumol, William J. 1995. "Discussion" in G. Fiorentini and S. Peltzman, eds, *The Economics of Organised Crime*. Cambridge University Press.
- Becker, Gary S. 1968. "Crime and Punishment: An Economic Analysis" *Journal of Political Economy* 76(2): 169-217.
- Benson, Bruce. 1989. "The Spontaneous Evolution of Commercial Law" *Southern Economic Journal* 55(3): 644-661.
- . 1990. *The Enterprise of Law: Justice without the State*. Pacific Research Institute.
- . 1998. *To Serve and Protect: Privatization and Community in Criminal Justice*. New York University Press.

- . 1999. “An Economic Theory of the Evolution of Governance and the Emergence of the State” *Review of Austrian Economics* 12(2): 131-160.
- Benson, Bruce, David Rasmussen, and David Sollars. 1995. “Police Bureaucracies, Their Incentives, and the War on Drugs” *Public Choice* 83: 21-48.
- Bernstein, Lisa. 1992. “Opting out of the Legal System: Extralegal Contractual Relations in the Diamond Industry” *Journal of Legal Studies* 21(1): 115-157.
- Blatchford, Chris. 2008. *The Black Hand*. New York: Harper Collins.
- Bowker, Lee H. 1980. *Prison Victimization*. Elsevier Science Ltd
- Brennan, Geoffrey and Philip Pettit. 2004. *The Economy of Esteem: An Essay on Civil and Political Society*. Oxford University Press.
- Brown v. Plata et al., No. 09-1233 (Sup. Ct. May 23, 2011).
- Buchanan, James. 1999. ”In Defense of Organized Crime?,” in G. Brennan, H. Kliemt, and R. Tollison, eds., *Federalism, Liberty, and the Law*. Indianapolis: Liberty Fund.
- Bunker, Edward. 2000. *Education of a Felon: A Memoir*. St. Martin’s Griffin.
- California Code of Regulations. 2011. Title 15, Division 3, Chapter 1, Article 1, Section 3006.
- California Department of Corrections and Rehabilitation. 1953. “California Prisoners 1952” *The Bureau of Criminal Statistics*.
- . 1955. “California Prisoners 1954” *The Bureau of Criminal Statistics*.
- . 1975. “Prison Violence in California: Issues and Alternatives” *State of California, Department of Finance, Program Evaluation Unit*.
- . 2010. *Operations Manual*.
- Camp, George M. and Camille Camp. 1985. “Prison Gangs: Their Extent, Nature, and Impact on Prisons” *U.S. Department of Justice, Federal Justice Research Program*.

- Carneiro, Robert L. 1970. "A Theory of the Origin of the State" *Science* 169(3947): 733-738.
- Carroll, Leo. 1974. *Hacks, Blacks, and Cons: Race Relations in a Maximum Security Prison*. D.C. Heath and Company.
- Chang, Juin-Jen, Huei-Chung Lu, and Mingshen Chen. 2005. "Organized Crime or Individual Crime? Endogenous Size of a Criminal Organization and the Optimal Law Enforcement" *Economic Inquiry* 43(3): 661-75.
- Chicano Pinto Research Project. 1970. *The Los Angeles Pinto: Background Papers and Advance Report of the Chicano Pinto Research Project*. Los Angeles, CA: University of Southern California
- Clay, Karen. 1997. "Trade Without Law: Private-Order Institutions in Mexican California" *Journal of Law, Economics, & Organization* 13(1): 202-231.
- Costa, Dora L. and Matthew E. Kahn. 2007. "Surviving Andersonville: The Benefits of Social Networks in POW Camps" *American Economic Review* 97(4): 1467-1487.
- Crawford, Sue and Elinor Ostrom. 1995. "A Grammar of Institutions" *American Political Science Review* 89(3): 582-600.
- Crist, Roger W. 1986. "Prison gangs: Arizona" *Corrections Today* 48(13): 25-27.
- Davidson, R. Theodore. 1974. *Chicano Prisoners: The Key to San Quentin*. Prospect Heights, Il.: Waveland Press.
- D'Amico, Daniel. 2009. "The Prison in Economics: Private and Public Incarceration in Ancient Greece" *Public Choice* 145(3): 461-482.
- Demsetz, Harold. 1967. "Toward a Theory of Property Rights" *American Economic Review* 57(2): 347-359.
- Dixit, Avinash K. 2004. *Lawlessness and Economics: Alternative Modes of Governance*. Princeton University Press.

- Dourado, E. 2011. "Anarchy and Equilibrium: When is Statelessness Stable?" Mimeo. George Mason University.
- Ellickson, Robert. 1989. "A Hypothesis of Wealth-Maximizing Norms: Evidence from the Whaling Industry" *Journal of Law, Economics, & Organization* 5(1): 83-97.
- . 1991. *Order without Law: How Neighbors Settle Disputes*. Cambridge, MA.: Harvard University Press.
- Fiorentini, Gianluca, and Sam Peltzman, eds. 1995. *The Economics of Organised Crime*. Cambridge: Cambridge University Press.
- Fleisher, Mark E. 1989. *Warehousing Violence*. Newbury Park, CA.: Sage Publications.
- Fong, Robert S. 1990. "The Organizational Structure of Prison Gangs: A Texas Case Study" *Federal Probation* 54: 36-43.
- Fong, Robert S. and Salvador Buentello. 1991. "The Detection of Prison Gang Development: An Empirical Assessment" *Federal Probation* 55(1): 66-69.
- Fuentes, Nina. 2006. *The Rise and Fall of the Nuestra Familia*. Know Gangs Publishing. WI: Jefferson.
- Gambetta, Diego. 1993. *The Sicilian Mafia: The Business of Private Protection*. Cambridge: Harvard University Press.
- . 2009. *Codes of the Underworld: How Criminals Communicate*. Princeton University Press.
- Garoupa, Nuno. 2000. "The Economics of Organized Crime and Optimal Law Enforcement" *Economic Inquiry* 38(2): 278-88.
- Glaeser, Edward L. 1998. "Economic Approach to Crime and Punishment" In Peter Newman, ed., *The New Palgrave Dictionary of Economics and the Law*. Pp 1-6. London: MacMillan.
- Greif, A. and D. Laitin. 2004. A theory of endogenous institutional change. *American Political Science Review* 98, 633-652.

- Hill, Peter B. E. 2003. *The Japanese Mafia: Yakuza, Law, and the State*. Oxford University Press.
- Hobbes, Thomas. [1651] 2009. *Leviathan*. Oxford World's Classic.
- Holcombe, Randall. 1993. *The Economic Foundations of Government*. New York University Press.
- Holderness, Clifford G. and Jeffrey Pontiff. 2009. *Hierarchies or Markets? The Survival of POWs during WWII*. Working Paper.
- Hunt, Geoffrey, Stephanie Riegel, Tomas Morales, and Dan Waldorf. 1993. "Changes in Prison Culture: Prison Gangs and the Case of the 'Pepsi Generation' " *Social Problems* 40(3): 398-409.
- Irwin, John. 1970 [1990]. *The Felon*. Berkeley, CA: University of California Press.
- . 1980. *Prisons in Turmoil*. Boston, MA: Little, Brown, & Co.
- Irwin, John and Donald Cressey. 1962. "Thieves, Convicts, and the Inmate Culture" *Social Problems* 10(2): 142-155.
- Jacobs, James. 1977. *Stateville: The Penitentiary in Mass Society*. Chicago: University of Chicago Press.
- Jennings, William. 1984. "A Note on the Economics of Organized Crime" *Eastern Economic Journal* 10(3): 315-21.
- Johnson v. California*, 543 U.S. 499 (2005)
- Kalinich, David B. 1980. *The Inmate Economy*. Lexington Books.
- Kalinich, David B. and Stan Stojkovic. 1985. "Contraband: The Basis for Legitimate Power in a Prison Social System" *Criminal Justice and Behavior* 12(4): 435-451.
- Kaminski, Marek. 2003. "Games Prisoners Play: Allocation of Social Roles in a Total Institution" *Rationality and Society* 15(2): 188-21
- . 2004. *Games Prisoners Play: The Tragicomic Worlds of Polish Prisons*. New Jersey: Princeton University Press.

- Koehler, Robert. 2000. "The Organizational Structure and Function of La Nuestra Familia Within Colorado State Correctional Facilities" *Deviant Behavior* 21(2): 155-179.
- Kollock, Peter. 1998. "Social Dilemmas: The Anatomy of Cooperation" *Annual Review of Sociology* 24: 183-214
- Kreps, David. 1990. "Corporate Culture and Economic Theory" in J. Alt and K. Shepsle, Eds. *Perspectives on Positive Political Economy*, Cambridge University Press
- Landa, Janet T. 1981. "A Theory of the Ethnically Homogeneous Middleman Group: An Institutional Alternative to Contract Law" *Journal of Legal Studies* 10(2): 349-362.
- Lane, Michael P. 1989. "Inmate Gangs" *Corrections Today* 51(4): 98-99, 126, 128.
- Lane, F. [1942] 1966. *The Economic Meaning of War and Protection*. In: *Venice and History: The Collected Papers of Frederic C. Lane*, Baltimore: The Johns Hopkins University Press, 383-98.
- . 1958. *Economic Consequences of Organized Violence*. *Journal of Economic History* 18, 401-417.
- Leeson, Peter T. 2005. "Endogenizing Fractionalization" *Journal of Institutional Economics* 1(1): 75-98.
- . 2006. "Cooperation and Conflict: Evidence on Self-Enforcing Arrangements and Heterogeneous Groups" *American Journal of Economics and Sociology* 65(4): 891-907.
- . 2007a. "An-arrgh-chy: The Law and Economics of Pirate Organization" *Journal of Political Economy* 115(6): 1049-1094.
- . 2007b. "Trading with Bandits" *Journal of Law and Economics* 50(2): 471-503.
- . 2008. "Social Distance and Self-Enforcing Exchange" *Journal of Legal Studies* 37(1): 161-188.

- . 2009. “The Laws of Lawlessness” *Journal of Legal Studies* 38(2): 471-503.
- . 2010. “Pirational Choice: The Economics of Infamous Pirate Practices” *Journal of Economic Behavior and Organization* 76(3): 497-510
- Leeson, Peter and Douglass Rogers. 2011. “Organizing Crime” *Supreme Court Economic Review* Forthcoming.
- Leeson, Peter and David Skarbek. 2010. “Criminal Constitutions” *Global Crime* 11(3): 279-298.
- Leeson, Peter T., Christopher J. Coyne, and Peter J. Boettke. 2006. “Converting Social Conflict: Focal Points and the Evolution of Coordination” *Review of Austrian Economics* 19(2-3): 137-147.
- Levitt, Steven D. and Sudhir A. Venkatesh. 2000. “An Economic Analysis of a Drug-Selling Gang’s Finances” *Quarterly Journal of Economics* 115(3): 755-789.
- Mast, Brent, Bruce Benson, and David Rasmussen. 2000. “Entrepreneurial Police and Drug Enforcement Policy” *Public Choice* 104(3/4): 285-308.
- Masten, S. and J. Prufer. 2011. On the evolution of collective enforcement institutions: communities and courts. TILEC Discussion Paper 017.
- Mendoza, Ramon A. 2005. *Mexican Mafia: From Alter Boy to Hitman*. Corona, CA.: Ken Whitley and Associates.
- Milhaupt, Curtis J. and Mark D. West. 2000. “The Dark Side of Private Ordering: An Institutional and Empirical Analysis of Organized Crime” *University of Chicago Law Review* 67(1): 41-98.
- Moore, Joan W. 1991. *Going Down to the Barrio: Homeboys and Homegirls in Change*. Temple University Press.
- Morrill, Robert. 2005. *The Mexican Mafia: The Story*. Denver, CO.: Security Threat Intelligence Network Group
- Morales, Gabriel C. 2008. *La Familia - The Family: Prison Gangs in America*. San Antonio, TX: Mungia Printers.

- Munger, Michael. 2006. "Preference Modification vs. Incentive Manipulation as Tools of Terrorist Recruitment: The Role of Culture" *Public Choice* 128:131-146.
- MSNBC. 2010. Lockup raw: ganging up. Season 5.
- North, Douglass. 1987. "Institutions, Transaction Costs, and Economic Growth" *Economic Inquiry* 25(3): 419-28
- . 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge University Press.
- Oppenheimer, Franz. 1914. *The State: Its History and Development Viewed Sociologically*. Indianapolis: The Bobbs-Merrill Company Publishers.
- Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press.
- Ostrom, Elinor, James Walker, and Roy Gardner. 1992. "Covenants With and Without a Sword: Self-Governance is Possible" *American Political Science Review* 86(2): 404-417.
- Page, J. 2011. *The Toughest Beat: Politics, Punishment, and the Prison Officers Union in California*. New York: Oxford University Press.
- Porter, Bruce. 1982. "California Prison Gangs: The Price of Control" *Corrections Magazine* 8(6) December.
- Posner, Eric A. 2000. *Law and Social Norms*. Cambridge: Harvard University Press.
- Powell, Benjamin and Edward Stringham. 2009. "Public Choice and the Economic Analysis of Anarchy: A Survey" *Public Choice* 140(3-4): 503-538.
- Powell, Benjamin and Bart Wilson. 2008. "An Experimental Investigation of Hobbesian Jungles" *Journal of Economic Behavior & Organization* 66(3-4): 669-686.

- Pyrooz, David C., Scott H. Decker, and Mark Fleisher. 2011. "From the Street to the Prison, from the Prison to the Street: Understanding and Responding to Prison Gangs" *Journal of Aggression, Conflict, and Peace Research* 3(1): 12-24.
- Radford. R.A. 1945. "The Economic Organization of a P.O.W. Camp" *Economica* 12(48): 189-201.
- Reuter, Peter. 1983. *Disorganized Crime: The Economics of the Visible Hand*. Cambridge: MIT Press.
- . 1987. *Racketeering in Legitimate Industries: A Study in the Economics of Intimidation*. Santa Monica: The Rand Corporation 41.
- Schaeffer, E. 2008. Remittances and reputations in Hawala money-transfer systems: self-enforcing exchange on an international scale. *Journal of Private Enterprise* 24, 95-117.
- Schelling, Thomas. 1960. *The Strategy of Conflict*. Harvard University Press.
- Seals, A. 2009. Are gangs a substitute for legitimate employment? Investigating the impact of labor market effects on gang affiliation. *Kyklos* 62, 407-425.
- Skaperdas, Stergios. 2001. "The Political Economy of Organized Crime: Providing Protection when the State does Not" *Economics of Governance* 2(3): 173-202.
- Skaperdas, Stergios, and Constantinos Syropoulos. 1995. "Gangs as Primitive States," in G. Fiorentini and S. Peltzman, eds, *The Economics of Organised Crime*. Cambridge University Press.
- Skarbek, David. 2010a. "Putting the 'Con' Into Constitutions: The Economics of Prison Gangs" *Journal of Law, Economics & Organization* 26(2): 183-211.
- . 2010b. "Self Governance in San Pedro Prison" *The Independent Review: A Journal of Political Economy* 14(4): 569-585.
- . 2011. "Governance and Prison Gangs" *American Political Science Review* 105(4)

- Smith, Adam, David Skarbek, and Bart Wilson. 2011. "Anarchy, Groups, and Conflict: An Experiment on the Emergence of Protective Associations" *Social Choice & Welfare*, forthcoming.
- Sobel, Russell, and Brian Osoba. 2009. "Youth Gangs as Pseudo-Governments: Implications for Violent Crime" *Southern Economics Journal* 75(4): 996-1018.
- Stewart, James I. 2009. "Cooperation when N is Large: Evidence from the Mining Camps of the American West" *Journal of Economic Behavior & Organization* 69: 213-225.
- Stringham, Edward (ed) 2007. *Anarchy and the Law: The Political Economy of Choice*. Transaction Publishers.
- . 2011. "Embracing Morals in Economics: The Role of Internal Moral Constraints in a Market Economy" *Journal of Economic Behavior & Organization* 78(1-2): 98-109.
- Stringham Edward P. and Todd J. Zywicki. 2011. "Hayekian Anarchism" *Journal of Economic Behavior & Organization* 78(3): 290-301.
- Sutter, Daniel. 1995. "Asymmetric Power Relations and Cooperation in Anarchy" *Southern Economic Journal* 61(3): 602-613.
- Sykes, Gresham M. [1958] 2007. *The Society of Captives: A Study of a Maximum Security Prison*. Princeton University Press.
- Telser, L. G. 1980. "A Theory of Self-Enforcing Agreements" *The Journal of Business* 53(1): 27-44.
- Tiebout, Charles M. 1956. "A Pure Theory of Local Expenditures" *Journal of Political Economy* 64 (5): 416-424.
- Tullock, Gordon. 1985. "Adam Smith and the Prisoners' Dilemma" *Quarterly Journal of Economics* 100:1073-1081.
- Umbeck, John. 1977a. "A Theory of Contract Choice and the California Gold Rush" *Journal of Law & Economics* 20(2): 421-437.
- . 1977b. "The California Gold Rush: A Study of Emerging Property Rights" *Explorations in Economic History* 14: 197-226.

- . 1981. “Might Makes Right: A Theory of the Formation and Initial Distribution of Property Rights” *Economic Inquiry* 19: 38-59.
- United States v Rubalcaba et al. 2001. Indictment. Federal District Court, Northern District of California. April.
- Varese, Federico. 2005. *The Russian Mafia: Private Protection in a New Market Economy* Oxford University Press.
- . 2011. *Mafias on the Move: How Organized Crime Conquers New Territories*. Princeton University Press
- Volkov, Vadim. 2000. “The Political Economy of Protection Rackets in the Past and Present” *Social Research* 67(3).
- Weaver, Vesla M. and Amy E. Lerman. 2010. “Political Consequences of the Carceral State” *American Political Science Review* 104(4): 817-833.
- Williams, Vergil L. and Mary Fish. 1974. *Convicts, Codes, and Contraband: The Prison Life of Men and Women*. Cambridge, MA: Ballinger Publishing Company.