THE POLITICAL ECONOMY OF POLICING

by

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A Dissertation
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DEDICATION

To Lea and our (future) children.

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ABSTRACT

THE POLITICAL ECONOMY OF POLICING

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This dissertation applies the concept of economic calculation to the provision of security and the implications of the presence or absence of institutions that enable its use. The inability of state police agencies to engage in economic calculation leads to several issues that are explored. Chapter 1 contrasts the institutional differences between public policing and private security and the implications these differences have for the implementation of the community-oriented policing philosophy. Chief among these differences is the ability of private security to use economic calculation to determine whether the allocation of security resources resulted in an outcome in which the costs of those resources were less than the benefit they created in terms of losses prevented or increased capital values. Government police departments, being unable to engage in economic calculation, have to employ some other means to evaluate performance. The lack of ability to engage in calculation presents a real barrier in determining whether police are producing the basket of outputs most desired by the community. Chapter 2

further explicates the implications of police bureaucracies' inability to engage in calculation, arguing that a number of contemporary issues in policing stem from this muted capacity to negotiate trade-offs among competing ends desired by the heterogeneous consumers of policing services. These issues include the trade-offs between civil liberties and security, the use of force and police effectiveness, and police officer compensation and misconduct. Without the institutions that enable the ability to engage in economic calculation, the optimal trade-off between these competing values cannot be determined. Chapter 3 analyzes the political economy of police unions and the privileges they obtain for police officers, showing how these privileges undermine almost every avenue for holding police officers accountable. It is argued that these protections serve as compensating differentials allowing municipalities to pay police lower monetary wages, but undermines officer accountability. The main implication for policing reform is that greater officer accountability will come at the cost of higher wages.

INSTITUTIONAL INCENTIVES AND COMMUNITY POLICING

1. Introduction

In the battle of policing philosophies, community-oriented policing (COP) dominates. In contrast to traditional policing's focus on crime control through patrol and rapid response to calls for service, the goal of COP is to build greater trust between the police and the community, maintain order and quality of life, and solve problems that contribute to crime and fear of crime.[1] By 2013, 7 in 10 local police departments, as well as 9 in 10 departments serving populations of 25,000 or more, had a mission statement that included a COP component, incorporating 88 percent of all local police officers. The vast majority of departments in cities of 10,000 or more provided new recruits at least 8 hours of training in COP strategies, including problem-solving and building community partnerships (Reaves, 2015).

Despite the appeal of the philosophy and widespread efforts to implement it, many scholars believe it has failed to live up to expectations (Greene et al., 1994; S. D. Mastrofski et al., 2007; S. D. Mastrofski & Willis, 2010; Rosenbaum & Hanson, 1998; Sadd & Grinc, 1994; Tien & Rich, 1994). Several reasons have been offered by criminal justice scholars for why this is the case. These include inadequate resources (Mastrofski et al., 2007), cultural resistance by rank-and-file officers (Hartnett & Skogan, 1997;

[1] COP is further described in Section 2.

Herbert, 2006; Moore, 1992; Zhao et al., 1998) as well as management (Engel, 2002), and inability to develop effective police-community partnership (Lyons, 2002; Rukus et al., 2018; Skogan et al., 2004).

Economists have contributed further insights. Boettke, Lemke, and Palagashvili (2016, p. 306) note that the above explanations are incomplete; they lack analysis of the institutional structures and policies that alter the incentives that police face in implementing community policing. They argue that federal subsidies to local police departments have distorted priorities away from community policing and toward federal initiatives, and have encouraged the militarization of the police and the dissolution of genuine police-community partnerships. Boettke, Palagashvili, and Piano (2017) contend that the federal government softens the budget constraint faced by local police departments through civil asset forfeiture sharing programs, the 1033 program, and grants, undermining Tiebout (1956) competition that would lead to greater accountability to the community. However, what has been neglected in the economics literature regarding COP is a more fundamental institutional issue that presents a barrier to the successful implementation of community policing. That is, even absent the substantial effect the federal government has had on local police priorities, efforts to implement COP would still likely be unsuccessful. The root of this barrier is the knowledge-generating properties of local police bureaucracies and the incentives they create. Fundamentally, due to their inability to engage in economic calculation and the difficulty of measuring the outputs of policing, police departments are hindered in their ability to determine whether they are meeting the desires of the community. By contrast, due to the fact that

private entities providing similar services are able to engage in economic calculation, they present an alternative institutional framework that is more conducive to COP.

This paper fills this gap in the literature by using the tools of economics to contrast the institutional natures of public policing and private policing, highlighting the differences that relate to the successful implementation of COP. There are several reasons why private policing serves as a useful comparison to public policing for the purposes of understanding the implementation of COP. One is the fact that a number of policing scholars have identified community-oriented policing as public police acting like private security (Bayley, 1988, p. 233; Shearing & Stenning, 1981; Sherman, 1995, p. 339). Answering the question of why private security has successfully implemented COP is instructive for understanding why most police departments attempting to do so have failed. Another reason is the prevalence of the private security industry, and the growing demand for its services. It is not the case that private security is a small exception on the periphery of the provision of public safety. According to the U.S. Census Bureau's 2016 *County Business Patterns & Nonemployer Statistics*, there were 142,093 business establishments employing 1,049,451 individuals providing investigation and security services.[2] This, however, understates the prevalence of private security as it only includes firms that specialize in providing these services, and not firms that produce them internally. By comparison, the Bureau of Justice Statistics estimates that in 2016 there were 701,169 full-time sworn officers among 15,328 general-purpose law enforcement

[2] These firms and occupations are categorized under "5616: Investigation and Security Services" in the North American Industry Classification System. These include private detectives, bodyguards, security guards, armored car, security systems, locksmiths, polygraph, fingerprinting, guard dog, and parking security services.

agencies (i.e., municipal, county, and regional police departments, most sheriff's offices and primary state and highway patrol agencies) (Hyland, 2018). A third reason is that, while it is possible to address the institutional features of public policing that present barriers to the successful implementation of COP without reference to private policing, comparisons with empirical examples of private policing illustrate why institutional differences and the incentives they create matter.

Section 2 provides a working definition of "community-oriented policing" as defined by various scholars and government entities. Section 3 explains the institutional differences between public and private policing that lead to different epistemological properties and the incentives they create. Section 4 provides a comparative institutional analysis between public and private, explaining how the institutional environment of the latter is more conducive to achieving the community policing goals of community engagement, order maintenance, and problem-solving. Section 5 concludes.

2. Community-Oriented Policing Defined

There is no single agreed upon definition of what community-oriented policing is, though most definitions emphasize similar themes. Citizens are to perceive police as friendly service providers, rather than distant bureaucratic professionals. Indeed, one of the main impetuses for reform was dissatisfaction with the 'professional era' of policing, in which the primary role of the police was crime control through vehicular patrol and rapid response to calls for service. The role of citizens in this style of policing was to be the eyes and ears of police, reporting crimes and serving as witnesses. This was the extent of community involvement in the coproduction of public safety.

By contrast, under community-oriented policing, police are to build partnerships with the community in order to solve problems. Trojanowicz, Kappeler, Gaines and Bucqueroux (1998, p. 3) define community policing as "[A] new philosophy of policing, based on the concept that police officers and citizens working together in creative ways can help solve contemporary community problems related to crime, fear of crime, social and physical disorder, and neighborhood decay." In one of their publications, "Community Policing Defined," the U.S. Department of Justice (2009, p. 3) describes the concept as "A philosophy that promotes organizational strategies, which support the systematic use of partnerships and problem-solving techniques, to proactively address the immediate conditions that give rise to public safety issues such as crime, social disorder, and fear of crime." Reisig (2010, p. 6) considers partnerships between the police and the community to "lie at the heart of community policing."

These partnerships are to serve multiple purposes. One of these purposes is to create positive interactions between the police and the public, which in turn fosters trust between both groups. One of the shortcomings of the traditional style of policing, where a large portion of police interactions with the public are in reaction to calls for service, is that most contacts tend to be confrontational or reveal citizens in their worst circumstances, straining the relationship between the police and the public (Thurman et al., 2001). Therefore, community policing calls for officers to seek out friendly relationships with community members in order to build mutual trust.

Learning what the most important problems in the community are from the citizens' points of view is another important purpose of these partnerships. Thurman,

Zhao, and Giacomazzi (2001) note that citizens often consider relatively less serious, but more frequently occurring, disturbances more of a problem than the serious and violent crimes upon which police focus. In addition to learning what the most pressing problems are, police are to collaborate on crafting solutions with the communities affected by those problems. In the philosophy of community policing, a major role for police-community partnerships is the coproduction of public safety, in which police incorporate citizens into problem-solving efforts. "The goal is for the [community police officer] to recruit as many volunteers as possible, so that the community has dozens of people working together to make a difference" (Trojanowicz, Kappeler, Gaines, & Bucqueroux, 1998, p. 11).

Another important aspect of community policing is its focus on not just crime but also fear of crime, disorder, and quality of life. A very influential article in this vein was Wilson and Kelling's (1982) "Broken Windows," which argued that individuals not only fear violent crime but also fear being bothered by disorderly people, such as drunks, panhandlers, prostitutes, addicts, and rowdy teenagers. This is why the Police Foundation's (1981) study of foot patrols in Newark found that residents of communities in which foot patrol were employed felt more secure, were more likely to believe that crime had been reduced and take fewer steps to protect themselves from crime, even though the foot patrols did not result in lower crime rates. Wilson and Kelling (1982) also theorized that a community perceived to be tolerant of small acts of incivility, such as public drunkenness, graffiti, or broken windows being left unrepaired, indicated to potential troublemakers that more serious criminal acts could be undertaken with

impunity. Police, by dealing with these small problems before they could grow into more serious ones, could prevent the conditions that lead to high crime areas. As such, COP is to be proactive in preventing crime, rather than reactive as in traditional policing.

3. Institutional Differences

There are institutional differences between a bureaucratically organized police department and privately hired security that have important epistemological implications that affect the incentives of those who operate in and interact with these organizations. These differences in turn affect the ability to implement COP. A municipal police department is managed bureaucratically, meaning that instead of being managed based on profit and loss calculation, it is managed according to detailed rules that are meant both to ensure the execution of the organization's objectives as well as to protect the citizen's rights and freedoms (Mises, 2007, p. 37). Municipal police departments do not have market prices for their outputs and therefore are unable to determine through economic calculation whether they allocate their inputs (such as the labor of police officers) to ends more highly valued than alternative uses of those inputs. This is a result of the fact that police department revenue comes primarily from taxation and not voluntary exchange.

Economists have recognized that this institutional difference has implications for preference revelation and aggregation. Musgrave (1939, p. 214) attacked the idea that the state's "revenue-expenditure process as a phenomenon of economic value and price [is] determined by fundamentally the same 'laws' that govern market price in a private economy." In a similar vein, Samuelson (1954) contended that collectively consumed goods produced by governments lack a reliable preference revelation mechanism. In

response, Tiebout (1956) presented a model in which this problem can be solved for goods provided by local governments, where individuals sort themselves spatially into jurisdictions that provide their preferred combination of government services at a price they are willing to pay. In order for such sorting to be possible, Vincent Ostrom, Charles Tiebout, and Robert Warren (1961, p. 831) conceptualized metropolitan systems of government as "polycentric political systems" where, ideally, the scale of public organizations would correspond to the scale of the public goods they produce. The empirical question of the optimal scale of police provision was studied by Elinor Ostrom and her colleagues at the Workshop in Political Theory and Policy Analysis at Indiana University (E. Ostrom et al., 1973; E. Ostrom & Whitaker, 1973, 1974). Their findings challenged the accepted view that consolidated, city-wide police agencies were more efficient, as measured by citizen evaluation surveys and per capita expenditures, than small, neighborhood departments. However, even if such polycentric arrangements improve the quality of government services, public bureaucracies are still limited in terms of their epistemic properties and subject to quasimarket failure (Boettke et al., 2011). That is, while Ostrom et al.'s (1973) method of evaluating police efficiency is able to compare police organizations serving similar jurisdictions in terms of citizen evaluation and cost per capita, all this provides is an ordinal ranking of one arrangement against another. It cannot determine whether the outputs produced by those departments were more highly valued than alternatives uses of the inputs to produce them and does not solve the economic calculation problem.

Because of this, police departments must find alternative ways of measuring their performance if they are to do so in an absolute, rather than relative, sense. Elinor Ostrom (1971, p. 454) notes that bureaucracies, including the police, generate records that provide the basis for developing measures of agency performance. However, she argues that the data produced by the routine operation of police departments do not adequately measure outputs valued by consumers. Numbers of arrests and citations, while measures of police activity, do not directly translate to public safety, and therefore focusing on them as measures of police performance may be misplaced. Part of the impetus for the transition to COP was the recognition that traditional measures of police output (and the bureaucratic rules that emphasized these measures), were ineffective means of crime control (Kelling & Moore, 1988). Reform proponents argued that police should instead focus on order maintenance, problem solving, and quality of life issues as defined by community members, and have the discretion necessary to do so. Such a change, however, presents problems for police management in terms of monitoring and measuring the output of rank-and-file police officers. Part of the reason data such as arrests, citations, and response times have traditionally been emphasized by police departments is that they are low cost: they are produced incidentally from police activity. They are also "objective" in the sense that management does not have to directly monitor officers to produce these data as they would with COP measures, nor do they need to engage in the complex and costly tasks of determining whether problems were solved or quality of life was improved. Consequently, these monitoring and measuring issues are part of why police departments attempting to implement COP have tended to revert back

to more traditional forms of policing (Zhao et al., 2001). The traditional measures are low cost forms of monitoring, and officers focus on what gets measured in order to demonstrate their productivity to supervisors.

By contrast, when policing services are provided through voluntary means, economic calculation is possible. In the institutional setting in which private policing is provided, consumers are able to compare the value of output either ordinally against the cost of producing or purchasing it (that is, the evaluator of the output also is able to evaluate alternative uses of the inputs) or cardinally (the purchaser of security services can compare the cost of production with its contribution to revenue, losses prevented, or changes in capital value of the asset protected). Examples of the former include activities at the individual level, such as installing home alarms, the use of anti-theft devices, and the carrying of weapons; it can also include voluntary group actions such as group watches and patrols, community youth programs, and neighborhood improvement efforts. In these cases, it is possible to determine whether there is a "psychic profit" because the individual weighs their subjective value of the safety provided by the good or service against the opportunity cost of purchasing or producing it. Examples of situations in which cardinal measurement is possible include commercial and industrial enterprises purchasing contract security or providing security 'in-house.' Clients of contract security agencies include recreational facilities, hospitals, community colleges, universities, office buildings, warehouses, industrial plants, shopping centers, transport companies, financial institutions, construction companies, apartment complexes, hotels, private homes, computer companies, and insurance companies (Business Round Table, 1994; Jones &

Newburn, 1998; Kandt, 1974; Shearing, Farnell, & Stenning, 1980). These organizations are able to compare the cost of security with a benefit whose value can be measured monetarily, whether it is additional revenue, higher capital value, or losses prevented.

A consequence of the ability to engage in economic calculation is that, over time, only those uses of resources that consumers value more than the costs will continue. Surveys of citizen evaluation of police performance are unnecessary in determining whether private police are allocating resources in such a way that citizens desire. Moreover, private police agencies have measures (market revenues and monetary costs) to determine whether they are producing what consumers value.

Additional institutional differences relevant for how well public and private police are able to implement COP are the domain within which they operate and the sources of their authority. Public police primarily operate within the public domain, which is not privately owned and traded and therefore has no market value. As such, contributions by public police to the orderliness or other desirable aspects of the public domain cannot be measured through the price system. By contrast, since private police primarily operate on private property, such contributions can be measured. As agents of the state, public police are constrained in terms of the rules they enforce – statutes passed by legislatures – and the manner in which they enforce them, which must be in accordance with constitutional guidelines regarding due process and civil liberties. Private police are constrained in a different way. While they are not subject to the same constitutional restrictions in terms of the rules they may enforce while on the private property of their client, they are constrained by competition and lack the immunities enjoyed by public police. The

implications these differences have for implementing COP are explained in the following section.

4. Differences in Implementing COP

4.1 Community Partnerships and Involvement

A pillar of community-oriented policing is that police build partnerships with the community in order to facilitate the coproduction of public safety and the solving of community problems. Friedman (1994, p.265) provides an example of what he considers to be a successful police-community partnership in Chicago's 24th Police District, which he characterizes as "one of Chicago's most ethnically diverse, a mixture of moderately high- and low-income areas, of middle income and poverty, renters and homeowners." The neighborhood had a number of problems, including open air drug dealing and absentee landlords failing to maintain buildings that came to be used for prostitution, loud parties, gangs, and drug dealing. Within the neighborhood was the Jargowood Block Club, whose leadership was involved in the Chicago Police's Task Force campaign for community policing. The key leaders had attended trainings and forums on the subject of community policing. They were told by their liaison with the Task Force that officers could arrest the dealers, but they would be back; a longer term solution required more creative thinking. With the help of volunteers, block club members identified the owners of the problem buildings and urged them to evict certain individuals. They visited the bank that held one of the owner's mortgages, getting them to pressure the owner. They also called the owner's suburban home when his tenant's parties got too loud or illegal activity was observed. For a period of six weeks, forty to seventy volunteers spent

Thursday, Friday, and Saturday evenings occupying the open air drug market, taking down customers' license plate numbers in an attempt to be a nuisance. The role of the police in the campaign was to occasionally arrest visible dealers, periodically join the residents during their loitering of the drug markets to protect them, and help get the city to inspect the buildings and write code citations. These efforts eventually paid off in better tenants, a quieter area, and lack of street corner drug dealing.

Friedman notes that this effort was mostly on the part of the community and involved only occasional police intervention. From his study of this example, Freidman lists four conditions that must be met if problem-solving partnerships are to be effective: there must be "(1) grassroots organizations through which volunteers can work and be educated, (2) informed local leadership, (3) the presence of independent, staffed organizations that can support local efforts and provide them with training, education, and technical assistance, and (4) an appropriate problem-solving target" (1994, p. 268). Further, he argues that it is not the job of police to engage in community organizing,[3] as they lack the desire and skills, but more importantly, community organizations should exist independently of the police, as the long-term quality of life in the community depends on them and is more than just a criminal justice matter. In this example, successful problem-solving via a police-community partnership was mainly the result of highly motivated individuals involved in pre-existing community organizations,

[3] Not all scholars agree with this contention. Trojanowicz et al. (1998, p. 11), for example, believe COP officers should play a major role in helping to organize communities, including attempting to recruit parents to be softball coaches for at-risk youth.

recruiting police assistance in tasks requiring their unique authority. In other words, it was not police-driven.

However, as noted above, one of the major difficulties police departments have faced in implementing COP is the lack of community involvement. Very few communities with serious criminal problems have the level of organization Friedman says is necessary for police-community partnerships to be successful. Rather, it is those communities with the highest level of organization that are least in need of effective police interventions (Rukus et al., 2018).

While one of the goals of COP is for police officers to have more "face time" with the public (i.e., positive interactions not in the context of law enforcement or emergency response) in order to get to know the residents of one's beat, their perspective on problems in the community, and build trust, officers claim that they have no time for such activities because they are still required to respond to calls for service. Some departments have responded to this issue by establishing dedicated units of COP officers who are not required to respond to such calls.[4] However, observations of these officers have found that they spend less than 20% of their shift interacting with the community and tend to interact with its more respectable members, rather than less pleasant individuals who may be more crucial in helping solve community problems (Mastrofski, 2006). In other cases, officers frequently left their beats in order to serve as backup to calls to which they were not required to respond, citing boredom. This indicated to evaluators that the goals of

[4] A common side effect of having special units as the implementers of COP, rather than it being an all-department-encompassing philosophy as its proponents advocate, is the stigma that officers in that unit are not pulling their fair share, and/or not doing real police work (Sherman et al., 1973).

interacting with the community were too vague (Sherman et al., 1973). It could also indicate that many individuals with whom police come into contact do not have any 'community problems' for police to solve, but rather only seek police attention when they have specific issues they want addressed by law enforcement.

Further, under public policing, not only are the problems to be solved often underspecified, but so is the *client*, particularly in a geographical sense. Private police tend to operate in areas that are privately owned and therefore there exists a residual claimant of their capital value. They have a direct incentive to address the disorderliness and incivility identified by Wilson and Kelling (1982), and, indeed, this is what they do. Wakefield (2003, p. 167), for example, in her field observations of three different private police forces, serving an arts plaza, a shopping center, and a night-time leisure complex, found that one of their primary activities was "housekeeping." Part of their patrolling was to check for any safety hazards, ensure maintenance and safety standards, and report any spillages or misplaced rubbish. Officers would also patrol for disorderly conduct from patrons, issuing warnings and asking those who refused to comply to leave. Loitering by the homeless and drunkenness were daily issues at the night-time leisure complex. The presence of such disorderliness interferes with the enjoyment of services by other patrons, and therefore affects the profitability of the commercial enterprise protected by the private police. Dealing with these issues after they occur is more costly than preventing them, and this is a major factor in explaining the observation that private police are more prevention-oriented than public police, who measure crimes they clear by arrest, not crimes they prevent.

Disorder and incivility that take place in the public domain, which is under the protection of public police, do not affect the capital values of those spaces, whether they be streets, corners, bus stops, etc., because they are unowned. Private individuals will tend to only exert efforts to help solve problems that take place in the public domain to the extent it affects them personally or is reflected in the value of their adjacent property. Ironically, for the same reasons that it is argued that there is a market failure in the private production of policing (at least in geospatial contexts where individual property holdings are small enough such that positive externalities from policing are not internalized), there will be under-provision of citizen involvement in the coproduction of safety and orderliness in the public domain. If public safety is a public good, such that individual citizens will tend to free ride on the efforts of others, why would citizen involvement in solving community problems not also be a public good? This is a reason why police intending to foster coproduction between police and individuals in response to problems occurring in the public domain have trouble garnering the support of the community.

Under private policing, police-client partnerships exist by default due to the voluntary nature of the relationship. Private security is purchased by clients to address specific problems, and the client will naturally assist in the coproduction of safety. While various factors contribute to some communities' refusal to cooperate with the public police (Goodman, 2017), it would be nonsensical for the client of private security to refuse to cooperate with their own hired help. Additionally, the client is able, through the use of economic calculation, to determine for which tasks the security provider has a

comparative advantage and which are lower cost if performed by the client, enabling an extended division of labor in the coproduction of safety.

It should be noted that not all of tasks performed by private security are necessarily security-related. Empirical observations of hired security operating in roles that interact with the public show that they are not only engaged in rule enforcement functions, but a number of activities that increase the value of the service received by consumers, just as COP advises. The multi-faceted role of private police allows for them to have natural interactions with the public in non-enforcement contexts. Wakefield (2003, p. 168) lists a second core function of the security officers she observed as 'customer care,' which was

> …evident in the customer-friendly image that their casual uniforms were designed to present and in the customer care training they had received. Customer care duties were carried out in the interests of public relations, and the officers usually acted as the first point of contact for customers needing assistance.

The most common reason for officers' contact with the public was to give information. Other customer care activities undertaken during the period of observation included dealing with lost and found property, relaying phone messages to customers, providing wheelchairs for disabled customers, as well as putting on a bear costume to entertain children. All of these activities under the function of customer care were "central to the property owners' objectives of manipulating the environment as an aid to profit-making" (Wakefield, 2003, p. 170). In the institutional setting of private policing, interactions with the public are in pursuit of a clear goal. Importantly, whether this goal has been achieved

can be determined through profit and loss calculation. Efforts of public police to foster positive, non-enforcement-related interactions with the public, whether through athletic leagues, block meetings, door-to-door contact strategies, or other means, lack a similarly clear measure of whether they achieve the ends of community policing.

It is interesting to note that these types of functions are labeled as "feminine" by Wakefield (2003, p. 168), bearing no resemblance to the "'macho,' authoritarian role that the security function might seem to embody at first consideration." Similarly, these preventative activities are called "mickey mouse" by Shearing and Stenning (1981, p. 218), who state that

> This categorization is interesting not only because it captures the common popular and public police conception of private security, but also because it serves to trivialize the most significant aspects of the phenomenon. Its "mickey mouse" nature means that private security work does not have the appearance of importance normally attached to apprehension-related activities (such as the making of arrests or laying of charges). This view of private security work, which incidentally makes it appear nonthreatening, arises from its most fundamental features.

It is these types of activities that some public police reject as 'social work' or not 'real police work.' While many scholars categorize such resistance by rank-and-file officers as being due to 'cultural' reasons, the reason private police perform such activities is not because of a cultural difference between them and public police, but because the

institutional features of private policing dictate that the activities that are most profitable are the ones that will be chosen.

4.2 Order Maintenance

An important institutional difference that leads private policing to be more conducive to order maintenance is the legal environment: the authority of private police to issue commands to individuals derives from the property rights of their client, whereas the authority of public police to coerce derives from state statute and is circumscribed by constitutional limitations. Barnett (2014, p. 220) summarizes the reason for this dichotomy:

> A society that includes extensive public property holdings is faced with what might be called a dilemma of vulnerability. Since governments enjoy privileges denied their citizens and are subject to few of the economic constraints of private institutions, their citizens are forever vulnerable to governmental tyranny. Therefore, freedom can only be preserved by denying government police agencies that right to regulate public property with the same discretion accorded private property owners. Yet steps to protect society from the government also serve to make citizens more vulnerable to criminally-inclined persons by providing such persons with a greater opportunity for a safe haven on the public streets and sidewalks and in the public parks.

Other scholars also have observed that constitutional constraints on public police can be an impediment to their ability to maintain order (Skogan, 1990; Wilson & Kelling, 1982). Skogan (1990, p. 163) notes that in the past, state codes prohibited certain disorderly

activities – vagrancy, loitering, panhandling, soliciting, public intoxication – but these statutes have been challenged on constitutional grounds. Some have been voided for vagueness, for being overly broad (and thus interfering with constitutionally protected activity), or for violating the 14th Amendment's equal protection clause by having the police intervene when there is no probable cause to believe that a crime has been committed.

Private police, on the other hand, are not constrained in their order maintenance activities by such constitutional limitations. This allows them greater leeway in deciding what kinds of conduct are prohibited on the private property they protect. They can prohibit behaviors that would be constitutionally protected in the public domain. This is illustrated by one of the longest standing private police forces in the world, the Beadles of Burlington Arcade, a 196-yard-long covered shopping arcade in London that contains forty high end shops. Inside Burlington Arcade, prohibitions against singing, humming, drunkenness, opening umbrellas and hurrying are all enforced by the Beadles. While part of the purpose of these rules is to maintain the historical decorum of the arcade, they also exist to prevent crime and other undesirable behaviors. Whistling is banned because it was used as a code between pickpockets. Making clucking sounds is also prohibited because of prostitutes who rented rooms above the shops and tried to attract the attention of men below (Country Life, 2019). In a study of two shopping centers with private security, Shapland (1999) found that a range of nuisance as well as criminal behaviors were unacceptable, and the security staff enforced rules through the continuous monitoring of visitors and exclusion of the offending individuals. Security officers

ejected street traders, vagrants, religious preachers, political demonstrators, people wearing offensive T-shirts and people collecting for charity.

Such rules, if enacted in the municipal codes of American cities and enforced by police officers, would be struck down as unconstitutional. Murray (1979) discusses a variety of municipal codes that criminalize not prostitution itself but acts associated with it, such as repeatedly beckoning passersby for the purpose of prostitution. Such ordinances have been attacked on numerous constitutional grounds, including vagueness, overbreadth (i.e., criminalizing protected activities such as speech), and violating the equal protection clause (since enforcement of the statute is mostly against women). As such, public police officers acting in the public domain are constrained in their ability to use their authority to maintain order. As Skogan (1990, p. 163-164) notes, "Disorder frequently involves more than behavior; the location and circumstances of the activity in question, its intent, and how others react to it, all must somehow be included in defining what is unlawful." The fact that lawmakers cannot specify all these conditions in legislation leaves officers without a legal basis for using coercion to maintain order in many circumstances that advocates of COP would consider desirable.

Since private police's authority derives from private property rights of their client, they have the ability to eject and exclude people who choose not to follow the rules. This is in distinct contrast with policing the public domain where every citizen must be permitted unless proved guilty of a crime. This presents a barrier to the ability of public police to engage in prevention, and partially explains why the traditional style of policing is reactive, rather than proactive as COP calls for. By being able to exclude those who

create the conditions that lead to fear of crime or disorder, private police are able to be proactive in maintaining order on the properties they police. Wakefield's (2003) observations of police in large commercial centers illustrate this. Officers observing disorderly behavior would ask the offender to cease their behavior, and notify them that they would be expelled if they failed to comply. The security teams kept log books on the occasions where exclusions were made, which listed the reason for exclusion. These reasons include drinking, vagrancy, youths playing disruptively, loitering, threatening behavior or fighting, begging, attempted theft, trespass in service areas, smoking cannabis, and indecent behavior. Regarding what behaviors were considered anti-social, Wakefield (2003, p. 183) notes that rather than being according a clearly defined set of rules, were defined in part by what customers – both tenants and visitors – and staff members considered to be a nuisance. Wakefield found "little evidence that the legitimacy of the security officers in policing the centres was called into question by visitors to the centres, so that most people appeared to comply with instructions issued by the security staff" (2003, p. 182). By being able to exclude such disorderly behavior without relying on violation of the criminal code, they are able to maintain orderliness in the commercial centers in a way that public police are unable to in the public domain.

This should not be taken to imply, however, that private police (in enforcing the property rights of their client) are unconstrained in terms of the types of rules they can enforce or the discretion with which they can apply them. As noted in the block quotation of Barnett (2014) above, the reason agents of the state are constitutionally constrained in their ability to regulate public space, lest they become tyrannical, is due to the privileges

afforded to them and the fact they are not subject to the same economic constraints non-state actors are. Private police do not enjoy protections, such as qualified immunity, public police do, but more importantly, they (and their clients) are subject to competitive forces that severely constrain their ability to violate the person and dignities of individuals who interact with them. Private security engaging in invasive enforcement tactics that are commonly used by public police, such as stop-and-frisk, will only be able to continue doing so if the value of any gains in security (as evaluated by consumers) outweigh the costs of consumers taking their business elsewhere due to the indignity. The firms employing private police face real costs if they are perceived to be enforcing rules in a heavy-handed or unjustified manner, and it is in their own financial interest to avoid any enforcement actions that could be perceived as abusive. In this sense, the rules and the way they are enforced by private police are themselves subject to economic calculation, and the competitive process leads to the discovery of which rules and methods of enforcement are preferred by consumers.

4.3 Problem-Solving

COP attempts to shift the focus of police from 'crime-fighting' to 'problem-solving.' Instead of just responding to incidents as they happen, police are to recognize patterns in incidents, identify problems, assess the adequacy of the current police response, and engage in an exploration of alternative ways to address these problems (Goldstein, 1979). Goldstein argues police have focused on means – organizational and procedural matters – over the ends, which are solving community problems. Instead, they should be more directly concerned with the outcomes of their efforts.

While such a suggestion may seem obvious, there are reasons for this "means over ends" syndrome. The "traditional era" or "reform era" of policing to which COP is a response was itself a response to the "political era" of policing (Oliver, 2006), in which police officers served at the will of local politicians. Newly elected mayors could replace entire city police forces with their own favored constituents. The later reform era was intended to deal with the corruption and brutality of the police in the political era by centralizing control over the police, professionalizing them, and centering their focus on enforcement of the criminal code. The job of policing became more bureaucratized and proceduralized: the more narrowly defined the role of the police, the less potential there is for abuse of their power. A narrowly defined role also lends itself to more clear measurements of outputs, such as crime rates, clearance rates, and arrests. The use of such 'objective' measurements aids supervisors in making 'objective' assessments of the productivity of the officers under their command and also economizes on the costs of metering, whereas alternative measures of success, such as the problem-oriented policing Goldstein advocates, are necessarily more subjective and more costly to monitor. Implementation of the problem-solving aspect of community-oriented policing, by increasing the autonomy of rank-and-file officers to identify the problems to be solved and choose the means for solving them, decreases the supervisory role of sergeants and middle management, and therefore their ability to hold officers accountable based on clear standards. According to Mastrofski (1988, p. 59), "To the extent that police organizations retain the bureaucratic features essential to control abuses, they cannot be expected to provide officers the scope of discretion necessary to accomplish order

maintenance objectives." The same reasoning applies to problem-solving objectives, which, if anything, are more malleable and require more discretion. Furthermore, the issue is more than just one of controlling abuses but also includes having an objective clear enough to even have the capability of being evaluated. The reason why police departments have tended to stick with the traditional means of law enforcement is not because they have some sort of preference to be 'means-oriented' or have a cultural resistance to being 'ends-oriented,' but because the alternative of measuring success in terms of problem solving, rather than reported crime, is too costly. Supervisors would have to directly monitor the activities of rank-and-file officers, and develop criteria upon which to evaluate their efforts to identify and solve problems (which would be contrary to the goal of 'innovative' problem-solving). The bureaucratic and civil service nature of public policing is designed to minimize the discretion officers have over the completion of their tasks, as well as the arbitrary control of their supervisors. This ensures that the more traditional 'objective' measures of performance will take precedence.

Research of the implementation of problem-oriented policing strategies has generally found it lacks the comprehensiveness Goldstein had in mind: "Rather than conducting rigorous analysis of crime problems and developing tailor-made solutions, the officers generally attempted to control their places via aggressive order maintenance and making physical improvements such as securing vacant lots or removing trash from the street," (Braga & Weisburd, 2006, p. 140). Although Goldstein's problem-oriented policing strategy calls for the consideration of innovative alternatives in deciding how to best respond to identified problems, many projects relied heavily on traditional tactics

like arrests, concentrated patrols, and crackdowns, while neglecting other options (Capowich & Roehl, 1994; Clarke, 1998; G. W. Cordner, 1994; Read & Tilley, 2000).

The institutional factors of public policing that lead to this result are that they have only a few clear measures of output they are able to use. They are unable to use alternative measures that are available in private contexts, such as client-provided fees and changes in commercial revenue or property values, to determine whether a problem-solving effort has been effective. Since many of these problems occur in the public domain, there are few or no individuals who have a strong enough personal stake in helping the police maintain order. In their study of a problem-oriented policing program in Jersey City, Braga et al. (1999) observed that many of the locations where problems were identified were train and bus terminals, bus stops, abandoned buildings, vacant lots, and major thoroughfares. While it is likely that municipal bus services lose revenue due to having unsafe bus stops, they are structured in such a way that there is no residual claimant who has a personal interest in ensuring bus stops are safe. Thus, public police are essentially on their own to maintain order in spaces in the public domain over which individuals have little personal stake in maintaining. As such, the public police can do little other than respond with traditional enforcement tactics over the large tracts in the public domain that, as the public domain, are their responsibility.

Indeed, it seems that it is mainly in those parts of the public domain that are adjacent to private property or are otherwise relevant to its value that are conducive to sustainable problem-solving efforts. An illustration of this is downtown business districts that hire private policing services to maintain the attractiveness of the infrastructure

around businesses. One firm that specializes in this type of service, Block by Block, has over ninety clients (primarily business improvement districts) spread across thirty states. Their "ambassadors," specialize in various tasks, including the provision of security, cleaning services (such as removing litter, graffiti and weeds), hospitality services, outreach services (which are specifically designed to engage homeless persons to determine individual needs and work through local outreach agencies to connect them with help), and landscaping services. They provide information to business owners and tenants about keeping safe, reducing the prevalence of graffiti and vandalism, dealing with panhandlers, and how to keep the downtown area clean (Block by Block, 2019). What is noteworthy is just how much their multi-faceted approach, tailored to meet the specific problems of the clients who hire them, is consistent with what COP calls for in approaching problem solving. Like the private security observed by Wakefield (2003), the officers of Block by Block engage in order maintenance activities that need to be performed, such as picking up trash, but would be considered outside of the realm of 'real police work.' This characterization may be justified; the opportunity cost of the labor of sworn peace officers makes them inappropriate for some of these tasks. COP recognizes the necessity of a division of labor in implementing problem-solving activities, where "the community" performs those tasks that are not 'real police work.' These examples of private policing show how this division of labor can be provided within the firm in ways that a police department may lack the flexibility to replicate.

5. Conclusion

The community-oriented policing philosophy seeks to create police forces that are preventative rather than reactive, focused on overall quality of life rather than just crime, and operate according to the desires of the community rather than bureaucratically enforcing the criminal code. This paper has argued that the institutional features of private policing make private policing more conducive to achieving these goals. Public police agencies attempting to implement the philosophy of COP have mostly continued in their use of traditional methods. While the COP literature has attributed this to police culture or bureaucratic inertia, an economic approach to analyzing the institutional features of public and private policing and the knowledge and incentives they create reveals a better explanation. The above analysis has a number of implications.

Theories of COP need to account for the role of private policing in community policing's division of labor. Despite the prevalence of private security the COP literature barely acknowledges their existence, let alone designate any role for them to play in COP. This is puzzling, given COP's emphasis on partnerships between the police and a large variety of non-police entities, including other government agencies, schools, churches, block organizations, businesses, and so on. Part of this stems for the under-specification of public safety tasks, which tend to be categorized either as a job for the police or as something for 'the community' to do, meaning volunteers. There are certainly tasks that fit into neither category, because the use of public police officers to perform them is too expensive yet the task is too intensive for volunteers. Some problems may just require the hiring of a watchman who fulfills an intermediary function between

a volunteer serving in the Neighborhood Watch and a sworn peace officer. In this way, private police can serve a 'parapolice' function (McLeod, 2002), freeing up police officer time for more valuable uses.

COP partnership strategies need to more seriously consider the incentives for individuals to be involved in coproduction. If the benefit derived from solving a problem is a public good, one's individual contribution to the solution to that problem is not crucial, and participation cannot be bundled to other benefits, then involvement by citizens in coproduction will be minimal. It must be recognized that there is a reason that individuals did not take action to solve the problem prior to police involvement and therefore if coproduction is going to occur, police involvement must change those conditions that prevented the community from solving the problem on its own. This is not going to occur through police action to encourage the creation of community organizations, as Trojanowicz et al. (1998) assert, as the issue of why the community did not resolve the problem on their own is not because of the transaction costs of organizing (nor is it likely that the police can significantly decrease these costs).

COP and policing strategies focused on order maintenance need to account for the role of private property and the public domain in their analysis of the conditions that lead to problems and their consideration of how such problems can be addressed. While some spaces are in the public domain because of legal prohibitions on private appropriation, other spaces are in the public domain because the benefits of appropriation are too small (Barzel, 1989; Demsetz, 1967). If property rights can be re-organized in such a way that private individuals have an incentive to ensure that order is maintained, responses to

disorder will be more sustainable. This may involve privatizing spaces in the public domain or changing rules that affect the incentives of the owners of private property.[5] But what should be acknowledged is that if problems take place in spaces in the public domain in which no one has a personal stake in improving, public police will likely be on their own in addressing them.

[5] A guide to problem-solving from the Office of Community Oriented Policing Services cites the example of the Chula Vista Police Department's response to high numbers of calls for service from motels (U.S. Department of Justice, 2011). Part of the solution involved drafting a new ordinance that required motels to apply for an annual operating permit, one of the conditions being an acceptable call-for-service ratio based on the previous year's median, essentially outlawing motels with too many calls for service. The guide reports that calls for service to Chula Vista motels dramatically dropped, but is unclear on what the precise mechanisms were. What is notable is that part of the problem may have been the fact that calls for police service were in the public domain and motel owners were forced to find alternative means of order maintenance when calls for service were taken out of the public domain.

POLICING AND ECONOMIC CALCULATION

1. **Introduction**

Police departments are bureaucracies tasked with enforcing the laws within a jurisdiction and responding to requests for service. They have limited resources to do so and many competing demands for how those resources are allocated. Since individuals pay a zero price for calls for police service, there is greater quantity demanded than there is supplied. As a result, police have to find ways of rationing resources, leaving many demands unsatisfied. Because of their wide mandate and there being no reliable measure of output in terms of citizen satisfaction, it is impossible to determine whether police resources are allocated to their most highly valued uses. Even though police services are nominally to be provided equally to everyone within their jurisdiction, the reality of scarcity keeps such a goal from being obtained. The decisions police make on how to allocate resources are therefore necessarily controversial.

In recent years in the United States, well-publicized killings by police of minority citizens, especially that of Michael Brown and Eric Garner, have brought greater attention to the issue of police conduct, particularly regarding minority communities and the use of force. Some have argued that more aggressive policing tactics, such as the "broken windows" style adopted by the New York Police Department in the early 1990s, have reduced crime (Mac Donald, 2016). Consequently, they conclude that it is important

to have measures in place that protect police officers from being punished for doing their jobs in good faith so that they are not hesitant to engage in proactive policing. Others argue that some of these tactics, such as stop-and-frisk policies that are mostly carried out on law-abiding citizens, strain police-community relationships and delegitimize the police (Fradella & White, 2017). Similarly, there are controversies over the level of employee protections that should be afforded to police officers. Organizations such as Check the Police (Check the Police, 2016), an outgrowth of the Black Lives Matter movement, argue that these protections protect officers that engage in misconduct and should all be abolished. These protections also serve as a form of compensation to police officers, reducing the amount taxpayers have to spend on this public service. To maintain the same level of service and reduce the level of protections police officers enjoy would require that taxpayers pay higher monetary wages. It is unclear how much greater of a burden taxpayers are willing to bear in order to reduce police misconduct.

The purpose of this paper is to show how these controversies in contemporary policing are fundamentally due to the inability of police departments to engage in economic calculation. Since law enforcement agencies are provided bureaucratically and without market prices, they are unable to engage in economic calculation, leading to an inability to rationally allocate police resources to their most highly valued uses. This issue manifests itself in controversies over how police resources should be allocated, what constitutional protections individuals should enjoy from unreasonable searches and seizures, what the rules governing officer's use of force should be, and what employment protections police ought to have. It is argued that these problems are inherent to the

institution of state-provided policing and can only be ameliorated when security services are provided through competitive markets.

This analysis contributes to three strands of literature. The first is the literature on evaluating police performance. There is general agreement that police departments have focused their attention on what is measured: crime rates, arrests, citations issued, response times (Bayley, 1994; Chandek, n.d.; G. Cordner, 2014; E. Ostrom, 1971, 1973). These measures have been criticized on a number of grounds, such as their validity (E. Ostrom, 1971), that they measure outcomes largely outside of police control (Allen & Maxfield, 1983), or do not accurately reflect what police spend most of their time doing (Oettmeier & Wycoff, 1999). As an alternative, scholars have proposed systems measuring performance based on multiple dimensions (Davis et al., 2010; Maguire, 2003; Milligan et al., 2006; Whitaker et al., 1982), though very few departments have implemented such systems (Uchida, 2014). Some have explicitly contrasted the methods of measurement used by police bureaucracies and for-profit firms (G. Cordner, 2014; Mises, 2007; E. Ostrom, 1973). However, they treat the inability of policing organizations to engage in economic calculation as inherent to policing, rather than as a result of the institutional framework in which it is provided.[6] This paper fills a gap in this literature by explaining how the ability for policing to be subject to calculation is determined by whether the outcomes of policing can be evaluated through a consumer's willingness to pay or marginal contributions to a firm's revenue or capital value. As

[6] Ostrom (1973, p. 105), for instance, treats outcomes such as lack of traffic accidents, gambling, or drug dealing as jointly consumed benefits the value of which can, at best, only be primitively measured through citizen surveys. However, what Ostrom fails to note is that this limitation is not due to the fact that these goods are jointly consumed. Consumer evaluation of these features would be capitalized into the value of private property that features them.

elaborated upon below, this depends on the institutional arrangements in which security is provided.

A second strand of literature to which this analysis contributes is that on the epistemic properties of institutional arrangements and their relationship to governance (Boettke, Tarko, & Aligica, 2017; Hayek, 1945, 1974; V. Ostrom, 1993). According to Aligica, Boettke, & Tarko (2019, p. 17-18), the fundamental issue in the relationship between public choice, collective action, and the scope of the public domain is that public administration begins where economic calculation ends. To the extent that the provision of policing is subject to public administration, the knowledge-generating properties of the market process cannot be utilized. There is no possibility of aggregating individual preferences into a social welfare function that can be used as an uncontroversial basis for public policy. The problem this presents for public administration may be less of an issue for tasks with more clearly assessable goals and which can be performed according to detailed rules that constrain the discretion of the bureaucrat. This is not the case for the current policing role, which includes a wide-range of tasks (Bittner, 1979) requiring a considerable degree of discretion (Breitel, 1960). Thus, if a public police department is to be subject to strict rules, its role must necessarily be narrow. It cannot both have a wide mandate and be effectively bureaucratically administered.

The third strand of literature to which this paper contributes is that on constitutional enforcement under different institutional arrangements. Coyne (2018) analyzes how the operations of a constitutionally limited "protective state," which includes interpreting the appropriate role of the protective state, can eventually

undermine the liberties it is meant to uphold. Leeson (2011) argues that a system of clubs has institutional features that encourage constitutional compliance that a system of government lacks. The issue of police complying with constitutional restrictions upon their power arises due to the fact that levels of security can be increased when those restrictions are loosened. As Sherman, (2011, p. 589) notes, there is a 'democratic policing dilemma' due to the competing demands upon police to be "an effective means to prevent or intervene quickly in crime and disorder, while maintaining the fairness of lengthy democratic deliberation over how policing should be accomplished." Some have argued that this trade-off can be better negotiated through greater transparency in the process of creating rules that govern police (Rushin, 2017), or subjecting the ex ante regulation of policing to democratic processes, rather than over reliance on ex post adjudication by courts (B. Friedman & Pnomarenko, 2015). Choosing the rules that govern the police through a democratic process, however, does not resolve the controversies mentioned above. Friedman and Pnomarenko (2015), for example, identify controversial police practices they believe ought to be subject to processes of democratic governance, such as stop-and-frisk, police militarization, drone surveillance, civil asset forfeiture, and using juveniles as drug informants. If a concern is that the costs of these practices are mainly borne by racial minorities, it is unclear why subjecting the rules governing these practices to a democratic process would lead to better rules. The inability to determine the optimal rules is ultimately an economic calculation problem that cannot be resolved absent the institutions that allow for calculation.

The essay proceeds as follows. Section 2 discusses the theoretical framework of economic calculation and how it applies to policing. Section 3 argues that a number of issues in modern policing – including controversies over what constitutional protections individuals should enjoy from unreasonable searches and seizures, what the rules governing officer's use of force should be, and what employment protections police ought to have – are due to police bureaucracies' inability to engage in economic calculation and how these problems could be resolved if police agencies were able to engage in calculation. Section 4 concludes.

2. Theoretical Framework

2.1 Bureaucratic Management vs. Profit-and-Loss Management

The theoretical framework applied here relies on the analysis of Ludwig von Mises regarding the feasibility of economic calculation in the socialist commonwealth (Mises, 1949, 1990). Mises argued that socialism, i.e. an advanced industrial economy based on the extended division of labor with state ownership and direction of the means of production, is impossible. Mises (1944) extended this analysis to bureaucratic organizations operating within a market economy. While a bureaucracy such as a police department is able to use market prices to calculate the cost of inputs (such as labor, vehicles, radios, weapons, and other capital goods) because they are bought on the market, they are unable to calculate any market value for their output. Since policing services are provided free of charge and a department's revenue comes primarily from taxes, it cannot be determined whether a chosen allocation of resources is more highly valued than alternative uses of the money used to pay for them. This means that police

departments are not only unable to determine the socially preferred amount of resources to be allocated to policing generally, but also lack the ability to measure their performance in terms of consumers' evaluations of their output.

A primary goal of a police department is to produce public safety. The production process for this output primarily consists of responding to calls for service and, when an officer's time is not otherwise allocated, engaging in vehicular patrol while waiting for calls for service (Frank et al., 1997; Parks et al., 1999; Scott, 2000; L. W. Sherman, 1983; Smith et al., 2001). Police departments have worked under the assumption that increased officer visibility on the streets deters crime and having officers patrol widely in vehicles (rather than on foot), allows for rapid response to calls for service and thus can aid in dealing with crimes in progress. Police departments also allocate a substantial amount of resources to investigating crimes after they occur in order catch offenders and deter crime. While much of police activity is reactive in the sense of waiting for calls for service and crimes to occur, some of it is proactive, particularly in dealing with "victimless" crimes which are unlikely to be reported, such as drug trafficking and prostitution. In deciding how to allocate police resources among these various uses, police have no objective means of evaluating the value of marginal returns among them and there are too many infractions for police to be able to address all of them. Therefore, they must find some way of rationing resources and deciding how to allocate them among various uses.

One of the primary means by which they allocate resources is on a first-come, first-served principle. For the most part, police, when not otherwise engaged in patrol,

respond to calls for service as they receive them. This leads to the next decision they have to make, which is how to respond to these calls for service, and how much of their resources to allocate to which calls. Since police are a common pool resource for which a zero price is charged to call for service, they cannot prioritize calls based on the client's willingness to pay (Benson, 1994).

There are a number of ways police have decided how to ration resources in response to calls for service. The Leicestershire Police, for example, could not respond to all of the burglary reports they received, and decided to only respond to calls from houses with even numbers (Evans et al., 2018). The London Metro Police have decided as a matter of policy to not pursue property crimes such as vandalism, vehicle crime and fuel theft if the cost of the loss is less than £50 (Hamilton, 2018). These actions free up officer time for other uses, but without having some means of comparing the value of these alternatives, police are in the dark regarding whether these alternative pursuits are worth foregoing the investigation of burglaries and petty theft.

Since they are unable to engage in profit-and-loss calculation, they must find other ways of evaluating their performance. Police have traditionally focused on measures like crime rates, clearance rates, and arrests. These figures are deemed appropriate because of their relevance to the nature of the police's role as agents of crime control, and they are collected as a matter of course. However, Ostrom (1971; 1973) and Parks (1971) describe the limitations of such figures for use as measures of police performance, since many factors affect reported crime, clearance rates may be more of a

function of the type of crime rather than police efforts,[7] and arrests do not necessarily measure the ultimate end of public safety. Much of the research attempting measure the effectiveness of police strategies (see Sherman et al., 1998) focus on how they affect rates of reported crime. Even if these studies are methodologically sound and are fully able to determine the efficacy of different strategies in reducing crime, police would still have no accurate way of determining whether the costs of allocating additional resources into a certain strategy is worth the benefit of crime reduction. Some studies of police performance, such as Ostrom, Parks, and Whitaker (1973), and Ostrom and Whitaker (1973, 1974), attempt to account for costs and the value of policing services by measuring both citizen satisfaction and the cost per citizen in comparable jurisdictions served either by large metropolitan police agencies or by small, neighborhood agencies. However, citizen surveys do not overcome the calculation problem, as even if citizens judge the police services they receive to be preferable to that in a comparable neighborhood and the cost per person is lower, this does not mean that police allocated resources to more valued uses than the alternative ways in which taxpayers would have used it. While, ideally, public goods would be provided by a level of government that corresponded to the scale of the externality generated by their provision (Ostrom, Tiebout, and Warren, 1961), as well as financed according to the benefit principle (that individual consumers pay according to the benefit they receive from the good). Absent the institutions that allow individuals to demonstrate their preference for such a good

[7] Whitaker (1971) remarks in his research of the Indianapolis Police Department how the clearance rate of reported grand theft auto was much higher than any other type of larceny. What accounted for this result was misreporting – people had reported their calls as stolen when a family member had borrowed it – or the (temporary) theft was for the purposes of joyriding.

more than alternative uses of their individual contribution, whether they actually prefer that such a good be provided is undetermined (Rothbard, 1956).[8]

However, when provided under certain institutional conditions that allow for voluntary exchange, the provision of security can be subject to economic calculation.[9] That is, when it is part of a production process in which the value of output can be measured either ordinally against the cost of producing or purchasing it (that is, the evaluator of the output also is able to evaluate alternative uses of the inputs) or cardinally (the purchaser of security services can compare the cost of production with its contribution to revenue, losses prevented, or changes in capital value of the asset protected). Examples of the former include individuals purchasing security systems for their household, Lojack for their vehicle, pepper spray for personal protection, participating in neighborhood watch, etc. In these cases, it is possible to determine whether there is a "psychic profit" because the individual weighs their subjective value of the safety provided by the good or service against the opportunity cost of purchasing or producing it. Examples of the latter would commercial and industrial enterprises purchasing contract security or providing security 'in-house.' Clients of contract security agencies include recreational facilities, hospitals, community colleges, universities, office buildings, warehouses, industrial plants, shopping centers, transport companies, financial institutions, construction companies, apartment complexes, hotels, private homes, computer companies, and insurance companies (Business Round Table, 1994; Jones &

[8] The issue of Tiebout competition is addressed in the following subsection.
[9] See Beito et al. (2002), Foldvary (1994), Foldvary and Klein (2003) and Nelson (2005) for discussion on how various property arrangements enable the voluntary provision of a number of collective goods, including security.

Newburn, 1998; Kandt, 1974; Shearing, Farnell, & Stenning, 1980). These organizations are able to compare the cost of security with a benefit whose value can be measured monetarily, whether it is additional revenue, higher capital value, or losses prevented. As such, under such institutional arrangements economic calculation is possible.

It should be noted that the relative size of the security industry, as compared to public policing, is significant.[10] Shearing and Stenning (1981, 1983) attribute the growth in private security relative to public policing[11] to the rise of mass private property in which economies of scale of manned security can be exploited, and which are areas unlikely to be monitored by public police. To the extent that alternative property arrangements can internalize the benefits of policing to prevent free riding, non-excludability issues associated with policing are mitigated.[12]

2.2 What about Tiebout Competition?

In the model presented in Tiebout (1956) – where consumer-voters can costlessly move to jurisdictions that provide their most preferred bundle of services at a price they are willing to pay, they have full knowledge of differences in revenue and expenditure patterns, and communities are the optimum size for the provision of those services – municipal providers are able to engage in economic calculation. The fiscal equivalence and benefit principle of public finance are satisfied. There are a number of reasons to

[10] See pages 3-4 for figures on the prevalence of private security relative to public police.
[11] The earliest data for the Law Enforcement Management and Administrative Statistics survey come from 1997, in which the estimated number of full-time sworn officers in general-purpose law enforcement agencies was 648,688. The 1997 County Business Patterns reports 17,906 security firms employing 636,884 individuals.
[12] Benson (1994, 1998, p. 188-191) argues that while public policing is traditionally considered a public good, it is more properly categorized as a common pool resource due to the incentives arising from the definition of property rights, and that such incentives can be altered through alternative property rights arrangements.

doubt that the conditions in the real world closely enough resemble the assumptions of the Tiebout model such that municipal revenue serves as a reliable feedback mechanism for how well police perform in satisfying consumer-voter preferences.

Boettke, Lemke, and Palagashvili (2016) argue that federal subsidies to local police departments have distorted police priorities away from the demands of community residents and toward federal initiatives. This includes incentivizing the allocation of more resources devoted to drug enforcement through the civil asset forfeiture provisions contained in the Comprehensive Crime Act of 1984 (Benson et al., 1995), which allowed local law enforcement to bypass state restrictions on how the forfeiture proceeds could be spent. It also includes the militarization of the police to a greater extent than would have otherwise occurred, through initiatives such as the 1033 Program, through which the federal government provided law enforcement agencies with "body armor, aircraft, armored vehicles, weapons, riot gear, watercraft, and surveillance equipment" (Hall & Coyne, 2013, p. 497). By softening budget constraints and moving the fiscal attention of local law enforcement to federal priorities, federal grants and other programs undermine Tiebout competition (Boettke, Palagashvili, & Piano, 2017).

Leeson (2011, p. 305) describes two limitations to the Tiebout mechanism. The first is that, in a federal system, the ability to develop additional sub-governments is limited, both in terms of number and variety, undermining the competitiveness and assertiveness of governments compared to a system of clubs. The second is that individuals' constitutional contract with the central government is not self-enforcing. In the US, despite the fiscal disadvantages associated with the creation of clubs (such as

community associations) as compared to sub-governments such as municipalities,[13] about half of the new housing built between 1980 and 2000 was subject to the private governance of a community association (Nelson, 2009, p. 345). The fact that, overall, almost 40 percent of local government revenue in 2005 came from the states and federal governments (Nelson, 2009, p. 346) suggests that the perceived advantages to community associations, which do not receive such contributions, as a form of governance must be large. It also suggests that the tie between where people choose to reside and the direct effect is has on local revenue as a consumer-voter feedback mechanism for local government is not as strong as in the Tiebout model.

3. Calculation Issues in Policing

3.1 Search and Seizure and Constitutional Effectiveness

A free society requires limitations on the discretion of security providers to engage in searches and seizures of citizens' persons, houses, papers, and effects. In the US, federal, state, and local law enforcement are prohibited from engaging in "unreasonable searches and seizures," as stated in the 4th Amendment to the US Constitution and similar provisions in state constitutions. Of course, what constitutes an "unreasonable" search or seizure is subject to interpretation. Local law enforcement agencies currently employ surveillance technologies such as automated license plate recognition (which allows law enforcement to track the location data of thousands of cars

[13] In Maryland, for example, new municipalities receive 17 percent of the county income tax stream already being paid by the new municipalities' residents, and in some counties, such as Montgomery County, new municipalities receive compensation from the county for any services they take over (Nelson, 2009, p. 358). By contrast, residents of community associations are "doubly taxed" since they pay private assessments for privately provided association collective goods but receive no break on the property taxes or other local taxes to cover the costs of similar services provided by the public sector.

per minute), stingrays (which simulate cell phone towers, allowing law enforcement to access the communications content and location of cell phones that connect to them), and surveillance drones. The framers of the 4th Amendment could hardly have anticipated such technologies. While Coyne (2018) is correct in that constitutional interpretation in such an open-ended system can result in anti-liberty outcomes, lack of contractual completeness or of clarity in constitutional language are not the only issues. If Hasnas (1995) is correct, and the possibility of objective rules of justice being applied by judges neutrally capturing the plain meaning immanent within the law is a myth, then an additional underlying issue is the interpretation of law as a state monopoly. Further still, even if there is no dispute over the plain meaning of words in a constitutional contract, the system of constitutionally limited government is not self-enforcing (Leeson, 2011).

Part of the reason constitutional restrictions on the ability of police to engage in searches and seizures are not self-enforcing is that there can exist a trade-off between security and less invasive policing techniques. For example, a number of scholars credit the invasive tactics used the New York Police Department, such as stop-and-frisk, as playing a crucial role in the trend of decreasing crime in New York City starting in the early 1990s (Bellin, 2014; Bratton & Kelling, 2015; Mac Donald, 2016). Others question whether such tactics, even if they do reduce crime, are worth their costs in terms of the insecurity of individuals in their persons, the indignity of being frisked, the racial disparities in its application, and the strained relationships with the police. There is a conflict in how NYPD resources should be used. The NYPD cannot measure citizens' relative willingness-to-pay for crime reduction caused by prevalent stop-and-frisk vs.

willingness-to-pay for an environment where individuals would be less likely to stopped-and-frisked at an officer's discretion.

Enterprises that can engage in profit-and-loss calculation also have to make decisions regarding how invasive their security procedures are. Organizations make different decisions than others based on their particular circumstances, and some of these decisions are controversial. For example, a Kroger grocery store in the Atlanta metro area has recently experimented with putting in a new security installation that puts walls around a number of shopping aisles, creating only one entry and exit to them. Customers reported that the installation "feels like shopping in a prison just to buy toiletries or laundry detergent" (Kennedy & Wilkerson, 2019). Other shoppers reported that many people use products in the bathroom without paying for them, "but feel a less intimidating approach should be taken." Similarly, many urban convenience stores employ security measures that some consider unsightly or insulting, such as bulletproof Plexiglas barriers that completely separate the shopkeeper and merchandise from customers.

Although individuals may state a preference for less intrusive or imposing security, this raises the question of why competitors do not offer a similar service but without such security. One potential answer is that there is a profit opportunity being missed. Another answer is that the costs entailed by less stringent security are greater than consumers' willingness-to-pay to compensate for greater risk of loss or personal injury. But this can only be known through a competitive process in which consumers demonstrate their preferences regarding the trade-offs between convenience, security, and

price through their buying and abstention from buying. Although there is not a formal agreement between the consumer and seller regarding what security procedures to which the latter may former subject the (as there is theorized to be between the citizen and government), there are expectations and tacit understandings regarding what is appropriate and what is not. Such contractual incompleteness may be optimal, as fully specifying the security procedures to which a customer may be subject is costly.[14] Competition economizes on contractual specification by allowing consumers to exit and patronize another provider offering a preferable bundle.[15] As such, competition serves as a substitute to other means by which constitutional compliance can be encouraged, such as greater ex ante contractual (or constitutional) specification or ex post litigation over what the contract/constitution specified.

3.2 The Use of Force

In recent years, the issues of police misconduct and brutality have received increased media attention. Some argue that police officers are too well protected such that they cannot properly be held accountable for brutality. Others argue that such protections are necessary for police officers to effectively do their jobs. One of these protections is qualified immunity, which protects police officers from civil liability "insofar as their conduct does not violate clearly established statutory or constitutional rights of which a reasonable person would have known" (*Harlow v. Fitzgerald*, 1982). Advocates of this

[14] The public sector analog in this case would include all of the costs of litigation regarding what constitutes unreasonable searches and seizures.

[15] Boudreaux and Holcombe (1989, p.269) describe how in a system of clubs the drawing up of constitutional rules is an entrepreneurial decision that avoids the decision-making costs of achieving unanimous consent under a system of government. Reducing these costs lowers the overall cost of delivering public goods and increases the number of options available to consumers.

protection argue that if police do not have qualified immunity, they will be indecisive in potentially life-threatening situations because they will be concerned about their use of force decisions being scrutinized by juries who do not understand the difficulty of police work. Thus, to ensure that officers will not be afraid to use deadly force in emergency circumstances, protections like qualified immunity are warranted. On the other hand, some consider qualified immunity an unjustified protection for police officers that increases their propensity to use deadly force, even in situations where it is unnecessary. By lowering the costs of making a bad decision, qualified immunity can increase the number of bad decisions that are made.

The trade-off faced in deciding the level of protections provided to police officers is one of trying to minimize excessive force on one hand, while also minimizing depolicing[16] on the other. The inability to properly balance this trade-off stems from the inability of public police to engage in economic calculation. The use of force in the course of policing, when used for purposes such as maintaining order or apprehending a suspect, has both benefits and costs, and these can only be compared against one another in the contexts where profit and loss calculation is possible. For example, a business owner will only want to use force against patrons when the benefits outweigh the costs. Wakefield's (2003) observations of private police found that when they observed patrons engaging in some disorderly behavior, they would ask them to refrain and warned that refusal to do so would result in their being asked to leave. In most cases, patrons would

[16] "Depolicing" is the phenomenon of police officers choosing to disengage from proactive policing and "simply take calls for service and handle them with the least amount of effort afforded by departmental policy" (Oliver, 2019, p. 1). They do this to protect themselves from threats such as physical attack, unwanted media attention, and disciplinary action.

comply when asked to leave, but in cases where they refused and physical force was required to remove them from the premises, the public police were called. Such outsourcing of physical force, however, does not fully offload the costs of using force.

A well-publicized police altercation in a Philadelphia Starbucks in 2018 illustrates this. Two African-American men had asked to use the restroom and were told it was only for paying customers. After having sat in the Starbucks for some time, they were asked to either buy something or leave. Having done neither, the police were eventually called and the men were arrested. The incident received substantial negative media attention, and resulted in the Starbucks CEO personally meeting with the men and closing 8,000 Starbucks locations for a day in order that employees could receive racial bias training (Siegel & Horton, 2018). A similar incident occurred in 2017 when United Airlines had overbooked a flight and was unable to persuade enough customers to voluntarily deboard and wait for the next flight. The Chicago Police were called to forcibly remove a man from the flight, whose bloodied face was captured on a cell phone video that went viral, resulting in substantial negative press for United (Victor & Stevens, 2017). In each of these cases, even though it was public police carrying out the enforcement, they were doing so at the behest of private businesses that would bear the costs of using force. It is in the interest of business owners to tolerate nuisances until the cost of toleration becomes greater than the cost of using force and, in both of these cases, an entrepreneurial error was made. It turned out that the cost of using force was much greater than the cost of bearing the nuisance. If businesses engage in a type of security that uses force in a way that consumers consider illegitimate and overbearing to the

extent that they choose to take their business elsewhere, economic calculation alerts the business owner that they have strayed too far into the 'excessive force' side of the balance. Conversely, if security is lax and consumers feel unsafe or that they are required to bear an intolerable level of disorderliness such that they discontinue their relationship with the business, losses in revenue suggest that security could be more stringent. Competition between businesses encourages the survival of only those firms that manage to find the balance consumers most prefer.

However, outside of such contexts that enable economic calculation, police are in the dark regarding this trade-off. Public police agencies that engage in excessive force ('excessive' in the sense of consumer evaluation rather than in a legal sense) will likely not be able to detect losses in revenue due to it, nor will agencies that disengage from proactive policing. The feedback mechanisms that public police receive are muted at best and lack information about trade-offs. To the extent that Tiebout (1956) competition between departments exists, it is inadequate as a knowledge substitute. People move in and out of jurisdictions for a combination of reasons, and the quality of police service is unlikely to be a deciding factor. Even if one lives in a high crime area, due in part to de-policing, such an area tends to be more localized than the jurisdiction of a police department. That is, one can leave the high crime neighborhood without leaving town. As such, 'voting with one's feet' will only be a weak indicator of consumer evaluation of police services.

Complaints and civil rights lawsuits can be used as indicators of excessive force. However, there is less corresponding feedback against the over-correction of de-policing.

While some research has indicated that a trade-off of depolicing is higher crime (Rushin & Edwards, 2016), the direct connection between a particular officer's disengagement and crime is much harder to establish than the connection between an officer's proactive policing and complaints. From an individual officer's perspective, unless proactive policing is sufficiently rewarded (for example, through increasing the likelihood of promotion for making high-value arrests), the optimal strategy for an individual officer will be biased towards depolicing. This is suggested by Oliver's (2019, p. 68) interviews with police officers about the phenomenon of depolicing. One officer reported:

> When I first got on the department, I would see the older officers and think, "Man, they are lazy!" Then I realized the majority of them got in trouble for no fault of their own and were depolicing. They had good intentions, and whether it was a bad decision at the time or someone just flat out lied, they suffered the consequences…The funny thing about police work is that if you don't do anything – depolicing – you can't get in trouble. Its only when you do something, whether it be proactive or just regular work, you can get in trouble for it.

Public police agencies' feedback mechanisms do not reveal whether changes in policy regarding officers' autonomy in using force bring them closer or further away from the optimal level of use of force. Without the ability to engage in economic calculation, police agencies will navigate the trade-off between excessive force and de-policing based on criteria other than what consumers desire.

3.3 Employee Protections

Police officers enjoy a number of due process protections beyond those afforded to non-police, as well as employment protections. While many of these protections are negotiated in contracts between municipalities and police unions (Rushin 2017), they are also included in state and municipal codes (Walker 2005), as well as department policy and procedure manuals. These protections include delays between the occurrence of an officer-involved shooting and when the officer must provide a statement, the officer being provided all evidence against them prior to an interrogation, officers' disciplinary records being expunged after a certain amount of time, the prohibition of anonymous complaints against police officers, and officers being able to appeal disciplinary actions against them to independent arbitration, among other protections.

These protections have benefits for the taxpayer since, ceteris paribus, they allow municipalities to pay officers lower monetary wages, just as offering professors tenure allows universities to pay lower wages (Mckenzie, 1996). This is illustrated in negotiations between the City of Chicago and the Chicago Police union. At a time when the city was facing budget shortfalls, the Chicago Fraternal Order of Police, which engages in collective bargaining on behalf of the officers of the Chicago Police Department, was willing to accept greater protections for officers in lieu of wage increases (Chase & Heinzmann, 2016). These protections, just like tenure, are not costless. One of the costs of these protections is the greater difficulty of holding problem officers accountable. Chicago's Police Accountability Task Force has since recommended that these types of protections be removed or revised (Emmanuel, 2017;

Police Accountability Task Force, 2016). From the police officers' perspective, this is equivalent to reducing their total compensation. This is why, when Dean Angelo, Sr., the president of Chicago's Fraternal Order of Police, was asked by the city's lawyers what it would take to remove the protections identified by the task force, he replied, "Bring the checkbook" (Newman, 2017).

These protections, particularly the ability to appeal to binding arbitration, have allowed officers who would otherwise have been fired to keep their jobs. For example, Pittsburgh Officer Paul Abel was reinstated after being fired for pistol-whipping and accidentally shooting an innocent person in retaliation for being battered by someone else. A Minneapolis police officer who was fired after being convicted of an off-duty misdemeanor sex offense was later reinstated after the arbitrator decided dismissal was too harsh (deFiebre, 1993). That officer resigned a year after reinstatement due to being convicted of another sex offense (Michael Alan Kveen, 1997). Two Cincinnati, OH officers were fired for having sex with an intoxicated woman while on duty and later lying about it during the consequent internal investigation. The arbitrator later reduced their punishment to five days suspension for one officer and three days for the other (In the Matter of the Arbitration …, n.d., In the Matter of the Arbitration …, n.d.). Thus, while these protections allow municipalities to pay lower monetary wages, they involve a shifting of costs from taxpayers to the victims of police misconduct.

How to optimally negotiate this trade-off cannot be determined outside of the institutional contexts that enable economic calculation. For a public police department, the negotiation of this trade-off will be the result of the interaction of the relative

influence of police officers, taxpayers, and victims of police misconduct. The latter two groups are neither one and the same, nor are they mutually exclusive. The burden of taxation is not evenly distributed, but tends to fall more heavily on wealthier individuals. Conversely, victimization by police is disproportionately borne by less wealthy individuals. The composition of the compensation package, in terms of monetary wages and protections, will not be made on the basis of consumers' willingness to pay, but as a result of a political process.

The calculation problem faced by police departments is whether the composition of these compensation packages (as well as their amount) is economically justified based on the value of the services provided by officers. However, because public police departments are unable to measure the market value of their output, they are also unable to impute value to the factors they use in the production process, including labor. In long run competitive equilibrium, a laborer is paid his discounted marginal product. However, this is not necessarily true of laborers in the public sector. One thing we can say for certain is that a public sector employee is paid at least their opportunity cost, but this has no necessary relationship to their marginal productivity in the public sector. Being unable to measure the value of output, police managers are also unable to determine whether the wages paid to police officers reflects their marginal productivity.

The calculation problem resulting in the inability to optimally negotiate the trade-off between wages and protections does not exist in an environment of competitively

provided policing services.[17] Part of the reason these protections exist is to protect police officers from arbitrary disciplinary actions by management. The competitive process penalizes firms that fire qualified employees, as determined by consumer preferences. Public-sector organizations are not subject to the same competitive forces as for-profit firms, and thus public-sector managers have more leeway to make personnel decisions based on personal preferences. Managers of firms in a competitive environment attempting to do the same thing would be at a disadvantage. The compensation packages of employees would have to reflect their marginal contribution to overall output. Competition among firms for employees would lead to compensation packages that are commensurate with employee preferences and consumer desires. Only in a competitive system can the optimal compensation arrangements be determined. Compensation would have to be on par with the value of services provided to consumers, and job security would depend on the ability to continually provide that value, not on an arbitrator's idea of what is "fair."

4. Conclusion

This analysis has a number of implications. First is an implication regarding the theory of a system of clubs versus a system of government, particularly regarding the protective state. The security function of the protective state is under-specified. Buchanan's (1975, p.95-97) protective state is to protect the core rights of citizens via internal security, contract enforcement, and defense against external threats. Under a

[17] While most of the protections mentioned above would only apply to an organization with a government monopoly, one exception is the ability to appeal disciplinary decisions to binding arbitration, which is a common protection afforded to union-members in the private sector. According to Iris (1998, p. 224), "one survey of major private sector collective bargaining agreements found that almost 96% provided for arbitration as the final step in the grievance process."

system of government, any attempt to fully specify at the constitutional stage the limits to the protective state's power to achieve its tasks will be extremely costly (and likely impossible). The other means by which to ensure constitutional compliance in such a system is through post-constitutional litigation of any perceived violation of the highly specified constitutional contract. As mentioned in Section 3.1, a system of clubs, by allowing competition in the provision of governance, economizes on contractual specification and litigation (which will only be worth doing if the expected costs of changing clubs is too high). An area for future research in this regard, then, is the implications the literature on incomplete contracts has for the economic theory of constitutions.

A second implication is that the issues that arise due to the lack of police bureaucracies' inability to calculate cannot be resolved through reforms that maintain the bureaucratic process through which policing is provided. Without the ability of consumers to express their willingness to pay for various policing services in a market, it is impossible to determine the optimal points on the various trade-offs mentioned. A corollary implication is that when consumers have ends they would like the police to pursue that are different from others' and cannot express those preferences through a market, there will necessarily be political conflict over what the police do. When policing is provided in a one-size-fits-all fashion for an entire city, individuals that prefer less (or more) aggressive policing but are in the political minority are forced to live under a policing regime decided by others. This problem is exacerbated when the political

minorities live in neighborhoods that are differentially policed than are neighborhoods occupied by the political majority.

Another related implication is that bureaucratically-provided police cannot calculate the optimal scale for their service provision, but are mostly provided based on existing political jurisdictions. There is little reason to believe that these geographic areas are the optimal size for a single service provider (Fegley & Growette Bostaph, 2018; E. Ostrom et al., 1973; E. Ostrom & Whitaker, 1973, 1974; Southwick, 2005). The prevalence of private security with mass private property (Shearing & Stenning, 1981) suggests that there are scale economies to some security functions. With competition and calculation, firms can determine a more appropriate size and style of service than is possible bureaucratically. Individual neighborhoods can decide what style of policing they prefer without also having a separate neighborhood in the same jurisdiction having to agree (or be overridden politically).

Finally, it should be noted that without changing certain institutional structures, some aspects of policing cannot be subject to economic calculation. For example, some of the costs of the decision to arrest (the use of the court system and, potentially, prison space), will be a common pool resource, and individual decision-makers will only consider their private costs and benefits in making the decision to arrest. By the same token, private inputs into such common access benefits (such as general deterrence through imprisonment of offenders) will be smaller when criminal justice institutions put the benefits in the commons. When victims have property rights to restitution, for example, they will be more willing to invest their time in costly activities such as

reporting crime to police and testifying in court than when the ultimate result of the arrest and prosecution process is imprisonment (Barnett, 2014; Benson, 1990, 1992). It must be determined what public policy goals that can be better achieved through public administration are worth the costs of being unable to engage in calculation, if such a thing can be determined.

POLICE UNIONS AND OFFICER PRIVILEGES

1.Introduction

On the evening of June 28, 2008, Officer Paul Abel of the Pittsburgh Police Department was celebrating his wife's birthday. During the celebration, he consumed four beers and two shots of liquor. After leaving the party, Mr. Abel claimed to have been sucker-punched in his car while stopped at a stoplight. He retrieved his Glock pistol from the trunk of his car and drove in pursuit of his attacker. Driving around the block, he spotted Kaleb Miller, a person he knew from the neighborhood and believed to be the one who punched him. Mr. Abel then pistol-whipped Mr. Miller on his neck and accidentally shot him in the hand. Witnesses testified that the assailant who punched Mr. Abel looked very different from Mr. Miller. Mr. Abel was later arrested.

Common Pleas Judge Jeffrey A. Manning found Mr. Abel not guilty of aggravated assault, reckless endangerment and driving while under the influence of alcohol. Chief Nate Harper, however, considered his conduct to be unacceptable and fired him. With the aid of his employee union, Mr. Abel was able to successfully appeal the decision to an arbitrator who reinstated him to his position as a Pittsburgh police officer within a year of the incident (J. L. Sherman & Lord, 2009).

In addition to having the benefit of engaging in arbitration to appeal disciplinary actions by his employer, as an officer in the Pittsburgh Police Department and a

beneficiary of the contract between the city and the Pittsburgh Fraternal Order of Police, Officer Abel has the benefit of citizen complaints against him being expunged from his record after a certain amount of time,[18] being protected from discipline by civilians, retaining his pay while suspended, and having his legal defense paid for him by the city of Pittsburgh in the event he is sued during the performance of his duties .

Although the fact that police unions[19] have a large impact on police practices and management is widely acknowledged, they have been neglected as a research topic (Walker, 2008). The National Academy of Science's comprehensive review of the literature on policing in America contained one reference to police unions in the index, the content of which was, "State laws also regulate the collective bargaining rights of organizations representing police employees. State laws regarding the appeal or arbitration of police officer discipline cases have an impact on accountability in local departments" (Skogan and Frydl 2004, 55). Furthermore, McCormick (2015, p. 59) notes, "Discussions in the legal literature about the way that police culture contributes to misconduct or efforts to stymie reform mention unions mostly in passing, without considering them separate from law enforcement officials."

[18] At the time he was re-instated, the Civilian Police Review Board was investigating three complaints against Officer Abel, including an incident in which he brawled with his brother-in-law in the hallway of the Allegheny County Courthouse.

[19] "Police unions" as used in this paper denote organizations with collective bargaining authority on behalf of police officers, as well as professional police associations that engage in lobbying on behalf of members. According to the 2013 Law Enforcement Management and Administrative Statistics (LEMAS) survey, 68% of local police departments have or have had a collective bargaining agreement (Reaves, 2015). According to the 2007 LEMAS survey, in which collective bargaining data was gathered for sheriff's departments, 28% had collective bargaining agreements (Burch, 2012).

However, the relationship between police unions and accountability[20] has begun to receive more attention in the academic literature. Harmon (2012), for example, recognizes that in the 36 states in which police departments are required to bargain with unions prior to imposing any new rule that could affect the terms or conditions of employment, any internal reform meant to address accountability issues, such as requiring the use of body cameras, must be approved of by the unions. "Collective bargaining therefore functions like an immediate tax on these internal department reforms" (Harmon, 2012, p. 799). Stoughton (2014, p. 2211) argues that many of the rules that affect police practices, such as state laws that govern collective bargaining by public sector employees, are incidental in that they are not intended to have any effect on police practices. The incidental effects Stoughton considers police unions to cause include rank-and-file officers embracing a more legalistic approach to policing and collective bargaining agreements specifying grievance procedures that "both discourage and frustrate attempts to discipline individual officers."

Rushin (2017) compiled union contracts for 178 cities with populations of over 100,000, noting that these contracts cover about 40 percent of municipal officers in states that allow police to collectively bargain. He found that 156 of the 178 contracts studied contained at least one provision that make it more difficult to legitimately discipline officers engaged in misconduct. Some empirical research suggests that provisions in these collective bargaining agreements may result in greater amounts of misconduct.

[20] Police "accountability" as used here is meant to denote the ability either of police management or external institutions such as the criminal justice system or civilian review boards to discipline officers for misconduct or other infractions.

Dharmapala, McAdams, and Rappaport (2017) exploited a quasi-experiment in Florida where in 2003 the state supreme court extended collective bargaining rights already enjoyed by municipal police to sheriff's deputies. Employing a difference-in-difference approach, they found that collective bargaining rights led to 27% increase in complaints of misconduct against the typical sheriff's office.

The contributions of this paper are to explain why politicians would find protections an attractive way to compensate police officers, to provide evidence that unionized departments have been more successful obtaining protections for their members than have non-unionized departments, and explain how these protections affect the mechanisms for disciplining officers.

The next section of this chapter provides a brief history of the development of police unions in America and an explanation of why they have obtained the aforementioned privileges. I then discuss how the privileges obtained by unions undermine the ability of the criminal justice system, civil law, and civilian oversight to hold officers accountable, and compares their prevalence large police departments with and without collective bargaining agreements. The final section does the same regarding privileges that inhibit the ability of police management and police officer standards and training commissions to discipline officers.

2. An Economic Analysis of Police Unions

American municipal police officers started to join unions in the late nineteenth and early twentieth century in order to improve pay and working conditions, as well as to provide mutual assistance. The Boston Police Strike in 1919 is commonly cited as the

event that retarded this process for several decades. Governor Calvin Coolidge responded to the violence and looting following the strike by calling in the National Guard, whose attempt to restore order resulted in nine deaths and twenty three wounded. Widespread public skepticism regarding the desirability of police unions led to the collapse of all American Federation of Labor affiliated police unions.[21] Police unions generally did not gain a permanent foothold in American police departments until the 1960s, an effort which Keenan and Walker (2004, p. 196) claim was partially a response by rank-and-file officers to Supreme Court decisions that hampered their ability to fight crime, civil rights protests against police brutality and discrimination, and management practices that kept officers out of the departmental decision making process. Juris and Feuille (1973, p. 19) cite four factors that served as the impetus for the growth of the police union movement: increased public hostility, law-and-order demands on the police, low pay, and poor personnel practices. "Public hostility" includes the aforementioned Supreme Court decisions, protests, and calls for civilian review boards. "Law-and-order demands" refer to the increasing levels of crime at the time and the expectation that containing it was the responsibility of the police. Poor personnel practices cited by officers include "the lack of internal civil and constitutional rights for officers being investigated for misfeasance and malfeasance" and "lack of a functional grievance procedure" (Juris and Feuille 1973, p. 21). Unionization was considered an effective means for addressing these concerns.

[21] Some unions did survive over this period, including the New York City Patrolmen's Benevolent Association, the Erie Club in Buffalo, the Rochester Police Locust Club, the Milwaukee Police Protective Association, and the Fraternal Order of Police Lodge #1 in Pittsburgh (Juris and Feuille 1973, p. 15).

Why might these issues arise in the first place? To explain this, it may be helpful to highlight some relevant differences between the private and public sectors. In long run competitive equilibrium, a worker is paid his discounted marginal product. However, this is not necessarily true of workers in the public sector. One thing we can say for certain is that a public sector employee is paid at least their opportunity cost, but this has no necessary relationship to their marginal productivity in the public sector. Police departments are bureaucratic. One of the defining features of bureaucracy is that it, as an institution, has no profit and loss accounting and therefore cannot engage in rational economic calculation (Mises 1944, p. 48). Being unable to measure the value of output, police managers are also unable to determine whether the wages paid to police officers reflects their marginal productivity.[22] The inability to measure the value of police output is also relevant in regard to the issue of the demand placed on police to control crime. Since police are a common-pool resource (Benson, 1998; Rasmussen & Benson, 1994) for which no price is charged, consumers of police services have little incentive to economize on their use of police resources. The result is that more policing is demanded than is supplied, putting a strain on police resources.

Additionally, given their inability to calculate profit and loss and the fact that their revenue does not come from market exchanges, police managers have more discretion than in the private sector when it comes to personnel practices; that is, if the manager creates a work environment that is suboptimal from the perspective of the rank-and-file,

[22] This is not to argue that if enterprises are for-profit that their employees' marginal productivity can necessarily be measured, but that competitive pressures put limits on how far wages can deviate from marginal productivity.

he faces little financial repercussion from losing employees to competitors in the labor market.[23] On the other hand, if he creates a work environment that is too accommodating for officers at the expense of other concerns (such as by neglecting to faithfully investigate accusations of corruption or other types of misconduct), he also faces relatively less repercussion than would a manager in the private sector. There are constraints at both ends of the spectrum, including through the ballot box (more specifically, through the ability of elected officials to replace police management) or citizens voting with their feet, but the greater discretion faced by police managers creates a wider range over which the price paid for police labor (including the value of working conditions) can be bargained over. Unlike in Tiebout's (1956) model, moving between jurisdictions is not costless, and so there is some slack between consumers' optimal level of police service and the point at which they will be willing to move to another service provider. This comparatively greater range over which to divide resources opens up a role for police unions to obtain benefits that officers acting individually may not be able to attain. The Florida Police Benevolent Association, for example, describes itself as "a politically proactive labor organization that represents law enforcement officers in negotiations for wages, benefits and terms of their employment," and states, "We give law enforcement officers a voice in the day-to-day affairs of their agencies and we fight to win them better pay, benefits and working conditions" (Florida Police Benevolent Association, 2017).

[23]Juris and Feuille (1973, p.27) state that "there is virtually no intercity mobility in the police industry except at the levels of patrolman and chief," suggesting that police management holds some monopsony power over some police employees.

Police employees do not enjoy the benefits of competition between employers to the extent that employees in the private sector do, particularly since their skills are relatively specific to public sector employment. Absent civil service protections, police managers will enjoy greater discretion regarding issues such as applying discipline, and thus it is understandable why police unions would bargain or lobby for protections. Why, on the other hand, would the politician negotiating on behalf of the city be willing to offer such protections? While officers gain protection from arbitrary discipline and greater job security, politicians benefit from having a way to compensate police officers in a manner that is budget neutral, at least in the short-run. A possible way the cost of these protections may manifest in the future is through the inability to discipline an officer whose misconduct creates greater future liability costs for the city.

This process was clearly illustrated in Chicago. At a time when the city was facing budget shortfalls, the Chicago Fraternal Order of Police, which engages in collective bargaining on behalf of the officers of the Chicago Police Department, was willing to accept greater protections for officers in lieu of higher pay (Chase & Heinzmann, 2016). Among these protections are rules that make it more difficult to discipline officers, such as requiring a "cooling off" period after an officer-involved shooting before the officer(s) may be interviewed, as well as prohibitions against internal investigations based on anonymous complaints and requirements that officers be informed of the complainant's identity. Chicago's Police Accountability Task Force has since recommended that these types of protections be removed or revised (Emmanuel, 2017; Police Accountability Task Force, 2016). However, from the police officers'

perspective, these protections can be considered a form of compensation. When Dean Angelo, Sr., the president of Chicago's Fraternal Order of Police, was asked by the city's lawyers what it would take to remove the provisions identified by the task force, he replied, "Bring the checkbook" (Newman, 2017).

It should also be noted that police unions offer their members non-collective benefits. According to Olson (1965), for a labor union to sustain itself, it must have at least one of the following properties: possess powers of coercion or the ability to offer non-collective benefits. Recently, police unions were dealt a blow in their powers of coercion as a result of *Janus v. AFSCME* (2018), in which the US Supreme Court held that public sector employees who are not members of a union, yet are represented by a union designated as the exclusive representative of a bargaining unit, cannot be compelled to pay an "agency fee," which is to pay for the union's collective bargaining activities, but not for political or ideological projects.[24] The Court decided that requiring such fees amounted to compelled speech in violation of the 1st Amendment. However, in addition to the benefits achieved through collective bargaining, police unions also offer non-collective benefits, which helps explain why police unions can still have a presence in right-to-work states, such as Florida. An illustration of this is the case of former Broward County Sheriff's Deputy Scot Peterson, who gained national attention after his inaction during the Parkland school shooting. Although he was covered by the collective

[24] An interesting example of the relatively greater power of police unions as compared to other public sector unions involves Wisconsin Governor Scott Walker. Despite his well-publicized support for a "right-to-work" measure that would prevent teachers from being forced to pay union dues, police unions were exempt from the law (Craver, 2014). This changed, however, with the US Supreme Court's decision in *Janus v. AFSCME* (2018); public employees now cannot be compelled to pay dues to unions of which they are not a member.

bargaining agreement negotiated by Broward County's Sheriff's Office Deputies Association, he was not a dues-paying member. Because of this, the union refused to provide him legal representation (Boehm, 2018).

The protections obtained through police unions have increased the compensation of police officers through improving their job security. These protections involve a trade-off in that, while they increase the compensation of police officers, they also increase the costs of holding police officers accountable for disciplinary problems. The following sections explain specifically how these privileges undermine most formal avenues of disciplining police officers and compare their relative prevalence in police departments with and without collective bargaining agreements.

3. Privileges and External Discipline Mechanisms: Criminal Law, Civil Liability and Civilian Oversight

The following sections will describe how protections contained in union contracts, municipal and state codes, and police policy and procedures manuals undermine various methods of holding police officers accountable for misconduct. These sections will also provide the relative frequency of these protections in the largest departments with and without collective bargaining agreements. The data on these protections come from three sources: Check the Police (2016), Rushin (2017), and the author's analysis of statutes and policy manuals. Check the Police's (2016) sample included the police departments of the hundred largest cities in the United States, 84 of which have collective bargaining agreements, of which they were able to obtain 81

through Freedom of Information Act (FOIA) requests. Their codification of privileges in these 81 cities is listed in Table 1.

Table 1 Protections in Union Contracts in 81 of America's 100 Largest Cities

City	Disqualifies Complaints	Restricts/ Delays Interrogations	Gives Officers Unfair Access to Information	Limits Oversight or Discipline	Requires City Pay for Misconduct	Erases Misconduct Records
Albuquerque		x	x	x	x	x
Anaheim				x	x	
Anchorage		x	x	x	x	x
Aurora						
Austin	x	x	x	x	x	x
Bakersfield				x		
Baltimore		x		x	x	x
Baton Rouge		x	x		x	x
Boston				x		
Buffalo	x	x	x		x	
Chandler		x	x	x		x
Chicago		x	x	x	x	x
Chula Vista						
Cincinnati			x	x		x
Cleveland	x	x	x	x		x
Columbus	x	x		x	x	x
Corpus Christi		x	x	x	x	
Dallas						
Denver						
Detroit		x	x	x	x	x
El Paso	x	x		x	x	
Fremont						
Fresno						
Fort Wayne		x	x	x		
Fort Worth		x		x		
Glendale	x		x	x		
Henderson				x		x
Hialeah	x	x	x	x	x	x
Honolulu		x	x	x		x
Houston	x	x	x	x		x
Indianapolis	x		x	x		
Irvine					x	x
Jacksonville		x	x	x	x	x

Jersey City	x	x		x	x	
Kansas City		x	x	x		
Laredo		x	x	x	x	x
Las Vegas		x	x	x		x
Lexington	x			x	x	x
Lincoln	x	x	x	x		x
Long Beach						
Los Angeles				x	x	
Louisville	x	x	x	x	x	x
Madison					x	
Memphis		x	x	x		x
Mesa				x		
Miami		x	x	x		x
Milwaukee		x		x	x	
Minneapolis		x		x	x	x
Nashville						
New York						x
Newark				x	x	
North Las Vegas		x	x	x		
Oakland				x		
Oklahoma City		x	x	x	x	
Omaha	x	x		x		x
Orlando		x	x	x	x	x
Philadelphia				x		x
Phoenix		x	x	x	x	x
Pittsburgh				x	x	x
Portland		x	x	x		x
Reno				x	x	x
Riverside				x		
Rochester	x	x	x	x		x
Sacramento	x	x		x	x	x
San Antonio	x	x	x	x	x	x
San Diego	x	x	x	x		
San Francisco		x	x	x		
San Jose	x			x	x	
Santa Ana					x	
Seattle	x	x	x	x	x	x
Spokane	x	x		x		x
St. Louis				x	x	
St. Paul		x		x	x	x
St. Petersburg	x	x	x	x	x	
Stockton				x		
Tampa	x	x	x	x	x	
Toledo	x	x		x		x

Tucson	x	x	x	x	x	
Washington DC	x	x	x	x	x	x
Wichita		x	x		x	x

Rushin's (2017) sample was of police departments serving cities of over 100,000 residents. Through FOIA request, examinations of municipal government websites, and online searches, he obtained contracts for 178 municipalities. For comparison, I analyzed the municipal and state codes, as well as the policy and procedure manuals available online, of the 16 largest departments without collective bargaining agreements in order to determine what protections they enjoy. These data are displayed in Table 2. The relatively small sample of the cities without collective bargaining agreements is due to the fact that large city police departments without a collective bargaining agreement are comparatively rare. According to the most recently available Law Enforcement Management and Administrative Statistics Survey, 93% of departments serving populations of 1,000,000 or more have a collective bargaining agreement. The same figure for departments serving between 500,000 and 999,999 is 90%, while for those serving between 250,000 and 499,999, the figure is 76% (Reaves, 2015).

Table 2 Protections in Largest Cities Without Collective Bargaining Agreements

City	Disqualifies Complaints	Restricts/ Delays Interrogations	Gives Officers Unfair Access to Information	Limits Oversight or Discipline	Requires City Pay for Misconduct	Erases Misconduct Records
Arlington				x	x	
Atlanta						
Charlotte		x	x			

Colorado Springs						
Durham			x			
Garland						
Greensboro		x	x			
Irving						
Lubbock						
New Orleans		x				
Norfolk						
Plano						
Raleigh						x
Scottsdale						
Virginia Beach						
Winston-Salem						
Data Source: State and Municipal Codes, Police Policy and Procedures Manuals						

Criminal Law

One way that unions insulate police from discipline is by protecting their members from criminal prosecution. Many collective bargaining agreements include clauses with due process privileges for officers who are being investigated for conduct which may result in discipline by their employer, as well as for criminal misconduct. They include provisions such as restrictions on how soon after an incident an officer may be interrogated,[25] who and how many may perform the interrogation, the manner in which the investigation takes place,[26] the incentives that interrogators may offer, and the

[25] These delays can range from a few hours to several days after suspected misconduct, including officer-involved shootings. Lawyer Peter Neufeld notes that such a waiting period "allows these officers to wait until the forensics come in before constructing a narrative. Sure, even if you were able to question them earlier in the process, you wouldn't get many cops who would confess. But you would get some who'd make false exculpatory statements, and that's a big deal" (Hager, 2015).

[26] In some collective bargaining agreements, questioning is to take place during the officer's workday or require that they be paid overtime. Most allow breaks that are not extended to non-police.

requirement that all other witnesses be questioned first. However, even though these protections are often only supposed to apply to internal investigations and not criminal investigations, they often de facto apply to the latter in cases where the department investigating the officer is the same department for which he works. The only way that these provisions would not apply is if an outside agency, such as the Department of Justice, were to conduct the investigation.

These protections afforded to police officers have the potential to impede criminal investigations. In the case of Freddie Gray, who was killed while in the course of being transported to jail, the officers involved could not be forced to give a statement for ten days after the incident, time which is ostensibly for the purpose of finding a lawyer (Hager, 2015).[27] This is vastly different from how a police investigation is usually conducted, where suspects are asked for a statement as soon as possible, one reason being that their testimony can be corroborated or impeached by evidence already known to police or later discovered. Allowing suspects to wait for longer periods before giving a statement allows them to tailor it according to the facts that are later revealed. Of the 178 collective bargaining agreements reviewed by Rushin (2017), 50 delay interrogations of police officers. None of the 16 largest police departments without a collective bargaining agreement have such delays.

Certain interrogation tactics used on civilians are prohibited when the subject of the investigation is a police officer. The Jacksonville, FL collective bargaining agreement, for example, limits the number of interrogators to one, thus precluding any

[27]Goering (2015) notes that this justification is moot as union lawyers are usually available to officers immediately.

use of a "good cop, bad cop" interrogation tactic. It also requires that interrogation periods be limited to a "reasonable period" and "allow for personal necessities and rest periods as reasonably necessary." In addition, some union agreements limit the kind of language that can be used in an interrogation. The San Antonio union contract, for example, prohibits "offensive language," and states that "No promise of reward shall be made as an inducement to answering questions" (*The City of San Antonio, Texas and the San Antonio Police Officers' Association*, 2009). Of the 81 largest police departments with a union contract, 50 have provisions that restrict interrogations. 3 of the 16 largest departments without a collective bargaining agreement restrict interrogations.

None of these protections are extended to non-police. This is not, however, to argue that they should not be, as aggressive interrogation tactics have resulted in the false conviction of a number of factually innocent people (Gross & Shaffer, 2012).[28] However, even if police officers were treated similarly to non-police, the criminal law would be ineffectual for disciplining officers who engage in misconduct that does not constitute a crime.

Civil Lawsuits

Civil lawsuits are another possible consequence of misconduct. Lawsuits can be filed in state courts under common law torts such as assault or in federal court under Title 42, Section 1983 (the Civil Rights Act of 1871) of the US Code for violation of constitutional protections (Cheh, 1996). According to Emery and Maazel (2000, p. 589),

[28] In a report describing the criminal exonerations in the US from 1989 to 2012, Gross and Shaffer (2012) found "false confessions in 15% of all cases, but the impact of this problem also extends to cases in which an actual or potential codefendant confessed and implicated the exonerated defendant as well. All told, in nearly a quarter of the exonerations the defendant either falsely confessed or was falsely accused by a codefendant who confessed."

"civil litigation is very effective at recovering money compensation. The great majority of civil rights suits actively pursued under 42 U.S.C. § 1983 conclude with a settlement for money."

Schwartz (2014) sent public records requests to the 70 largest law enforcement agencies in the US, as well as 70 randomly selected small to mid-sized agencies, regarding the total number of civil cases filed against sworn officers from 2006-2011, the total dollars paid in judgments and settlements, and what portions the officers personally had to pay. Schwartz found that, of the 44 largest agencies who responded, officers paid 0.02% of the total dollars awarded to plaintiffs in misconduct lawsuits. Of the 37 smaller agencies for which she was able to obtain data, officers contributed nothing over the period of study. In some cases, she found that officers were indemnified contrary to policy. New York City, for example, is not to provide indemnification for misconduct due to intentional wrongdoing or recklessness. Likewise, Las Vegas prohibits indemnification for "wanton and malicious" action (Schwartz 2014, p. 921). Despite the language of these policies implying that punitive damages won't be indemnified, Schwartz states that New York City and Las Vegas have indemnified officers contrary to law. Even in El Paso, which reported a practice of never indemnifying officers, no officer paid a judgment against himself during the period of study.

Requirements for governments to indemnify officers may be through statutes or union contracts. Of 81 collective bargaining agreements of the 100 largest cities in America, 40 have provisions that require cities to pay for the costs of police misconduct, including paying legal fees, civil judgments, and paid leave while an officer is under

investigation (Check the Police, 2016). Of the 16 largest departments without collective bargaining agreements, one was found to have a policy of indemnifying officers. However, given the contradictions between policy and practice when it comes to indemnification, it is unclear whether officers in departments with collective bargaining agreements are systematically enjoying indemnification at a higher rate than officers in departments without collective bargaining agreements. In Schwartz's data set, none of the officers in the handful (6) of departments without collective bargaining agreements were forced to personally contribute in civil judgments against them.

Civilian Oversight

The first officially established body of civilian oversight of a police department was Washington, D.C.'s civilian review board, created in 1948.[29] This body, called the Complaint Review Board, did not have much power and only investigated 54 cases between 1948 and 1964 (Walker, 2006). However, civilian oversight did not become a major issue until 1960s, when the civil rights movement began to push back against police misconduct in most major cities. By 2006, over 100 bodies of civilian oversight had been created. Police unions have tended to oppose civilian oversight. The head of the Boston Police Patrolmen's Association, Donald L. Murray, stated that the creation of a community appeals board indicated "the ruination of the Boston Police Department. I'm very disheartened…and I feel I've been raped and sodomized" (quoted in Iris, 1998, p. 220).

[29] Civilian review boards are one of the most common forms of civilian oversight, though a number of alternatives exist. See Walker (2006).

Early on some police unions were able to forestall the creation of civilian oversight, or even have them abolished, as was the case in New York City and Philadelphia in the 1960s, though both have been reinstated since (Bouza, 1985; Walker, 2008). More recently, however, unions have been less able to prevent the creation of civilian oversight. Wilson and Buckler (2010), in their study of Law Enforcement Management and Administration Survey data, found that departments that engaged in collective bargaining were no more likely to have citizen oversight than those that did not. The main impetus for the creation of citizen oversight in most cases was a well-publicized incident of police violence, usually against a minority. After such an event, police unions are typically unable to overcome the political will to create a body of civilian review.[30] This does not mean, however, that they are unable to use their influence to limit the power of these bodies.

One way in which they do so is by lobbying to limit the powers of civilian oversight to independently investigate complaints (some review boards may only review investigations performed by internal affairs departments), subpoena witnesses, or recommend disciplinary action. In some instances, due to collective bargaining agreements, the creation of civilian oversight must be approved by the police union (Walker, 2008).[31] This was the case in Spokane, where Washington state labor laws required that the creation of the Office of the Police Ombudsman be negotiated with and approved by the Spokane Police Guild (Steele, 2008). The Ombudsman was chosen by a

[30] While police management traditionally opposed the creation of civilian review boards, they now recognize them as useful for maintaining positive relationships with the public, especially racial minorities. Thus, unions are typically the only remaining opposition (Walker 2008).

[31] Examples of police unions suing cities trying to create civilian oversight of the police, claiming that it violated their collective bargaining agreements, can be found in Kramer and Gold (2006).

five-member committee, two of whom were selected by the Guild, and if the Guild had not liked the person chosen by the committee, it could have filed a grievance. This was not Spokane's first attempt at civilian oversight. They had previously had an all-volunteer Citizens Review Commission. That commission, however, had not reviewed a single case of alleged misconduct in the decade prior to the creation of the Ombudsman's office.

Some police unions have succeeded in making civilian review boards practically irrelevant. According to their negotiated agreement, police officers in Pittsburgh, for example, cannot be compelled to testify before a civilian review board. The Florida Supreme Court struck down the Miami Civilian Investigative Panel's ability to subpoena officers under investigation, claiming the ability violates the Florida Police Bill of Rights (Smiley, 2017). Such a power is important to a review board's functioning: after the Denver Police Protective Association advised members to ignore subpoenas issued by the civilian review board, a Denver County Judge upheld the subpoena power of the civilian review board, acknowledging that without it, the board would be "gutted" (Iris, 1998, p. 221).[32] According to Rushin (2017), 42 collective bargaining agreements of the 178 largest police departments in the US contain provisions limiting civilian oversight in some manner. None of the 16 largest departments without a collective bargaining agreement have policies or statutes limiting civilian oversight. By limiting the outside options through which misconduct can be investigated, more reliance is placed on policing organizations to police themselves. How unions have impaired the ability of these institutions to fulfill this role is covered in the following section.

[32] It is worth noting that according to Rushin's (2017) dataset, the Denver Police's collective bargaining agreement does not contain any "problematic provisions."

4. Privileges vs. Management: Internal Disciplinary Action

Internal Discipline

One way union contracts limit the ability of management to discipline rank and file officers is the mandatory purging of complaints against an officer, even those that have been substantiated, from his record after a specified period of time. 87 of America's 178 largest cities have provisions that erase records of complaints and misconduct (Rushin, 2017; Check the Police, 2016), while 1 of the 16 largest cities without collective bargaining agreements has a similar protection.[33] For example, the Baton Rouge Police Department erases complaints that were "not sustained" after 18 months, as well as ones that were "sustained" after the same amount of time if no similar complaints are filed (*Agreement between the City of Baton Rouge and Baton Rouge Union of Police Local 237, I.U.P.A. AFL-CIO - April 4, 2015 through December 31, 2016*, 2014).

Such a record, even of complaints that could not be substantiated, may be helpful for management in identifying problem officers for additional training or justifying termination to an arbitrator. Formal investigation of citizen complaints is expensive and, even when investigated rigorously, tends to produce a low substantiation rate (Liederbach et al., 2007; Prenzler, 2009). Complaints often have no other evidence on which to make a decision other than the words of the officer and those of the complainant. In these cases,

[33] It should be noted that the expunging of records may be at the discretion of police management. In the case of Raleigh, NC, officers may annually apply to expunge records of disciplinary action 3 years after they occur if the penalty was fewer than 2 days of loss of time or pay, or after 5 years if the penalty the penalty was a greater length of time or resulted in a final written warning, and expungement must be approved by the Chief (*Raleigh Police Department Written Directives*, 2016). This latter requirement is important, as the primary reason disciplinary records play a role in accountability is whether they are later used as evidence of patterns of abuse. When police management ultimately decides what records are expunged, an officer's ability to request expungement does not undermine management's ability to hold officers accountable. However, when expungement is mandatory, accountability can be undermined when arbitrators consider officer history in rendering judgments.

investigators must return a finding of "not sustained."[34] Thus, a low substantiation rate is not necessarily indicative of anything. This being the case, a record of complaints received against officers, even unsubstantiated ones, can be evidence of a pattern of misconduct or abuse, and thus helpful for managers.[35] Indeed, this type of data is crucial for the implementation of Early Intervention Systems meant to correct officer behavior (Walker & Archbold, 2014). Research of complaints to the Chicago Police Department found that citizen complaints can predict future allegations of misconduct by employees within the department and likelihood of civil rights litigation (Rozema & Schanzenbach, 2016).

Some departments have provisions requiring that certain information be provided to an officer prior to investigation. In 34 of the 178 largest cities, there is the requirement that officers be notified of all of the evidence against them prior to being investigated (Rushin, 2017), which is the case for 2 of the 16 largest cities without collective bargaining agreements. This obviously precludes police management from using a number of tactics for rooting out corruption and other misconduct, such as integrity tests and undercover stings (Prenzler, 2009). Other information requirements may have a chilling effect on complainants. Corpus Christi, among others, requires that the officer be

[34] The Office of Police Oversight (formerly Community Ombudsman) in Boise, Idaho uses a detailed taxonomy in its findings from complaint investigations. They include: Exonerated (when the officer performed the action the complainant alleges but the act was justified), Unfounded (the officer did not perform the alleged action), Sustained, Not Sustained (the investigation failed to discover sufficient evidence to clearly prove or disprove that the alleged violation of policy occurred), and No Finding (the investigation cannot proceed because the complaint was withdrawn, the officer involved cannot be identified, or the complainant is no longer available). (Office of Police Oversight, 2016).

[35] The unions of some departments attempt to limit the usefulness of misconduct records rather than erase them completely. When a complaint against an officer of the Portland PD is sustained, only the findings and the disciplinary action may be placed in the officer's personnel files (*Labor Agreement Between the Portland Police Association and the City of Portland*, 2013).

given the name of the complainant prior to being interrogated. Such a rule may discourage targets of police harassment from coming forward.[36]

In 25 of the 100 largest cities there are agreements that disqualify complaints if they are not submitted in a certain amount of time or prevent an officer from being disciplined if the investigation is not completed with a particular time frame, some as short as 90 days (Check the Police 2016). None of the 16 largest cities without collective bargaining agreements disqualify complaints based on time constraints.

Unions' contractual protections become especially relevant if disciplinary action is appealed through arbitration, a provision for which officers in 115 of the 178 largest departments have access (Rushin, 2017), which is the case for 1 of the 16 largest departments without a collective bargaining agreement.[37] Some protections have the potential to contribute to arbitrators overturning the discharge of officers. Adams (2016) analyzed 92 arbitration decisions involving a police officer appealing termination between 2011 and 2015, which were almost exclusively in jurisdictions where a collective bargaining agreement allowed disciplinary decisions to be appealed to

[36]Consider, for example, victims of sexual harassment by police officers. In a study of Florida police officers who had their license revoked for citizen mistreatment, almost every incident involved a woman stopped for speeding who was either sexually assaulted by an officer or who was not arrested in exchange for sex (Goldman, 2012). The Associated Press's review of state decertification for sexual misconduct from 2009-2014 found that 550 officers had their licenses revoked for sexual assault, and 440 were decertified for other sexual offenses and misconduct (including child pornography and voyeurism in the guise of police work). One third of the incidents involved juveniles. Several the victims who were interviewed expressed their reluctance to come forward out of fear of retaliation (Sedensky & Merchant, 2015).

[37] The exact method for selection of arbitrators varies by union contract, but typically involves either mutual selection by police management and the union representative or a procedure by which each party provides lists of potential arbitrators and names that appear on both lists are chosen. Alternatively, each party is allowed to strike names from such lists until a selection is made.

independent arbitration.[38] Of these 92 decisions, arbitrators overturned the decision to fire the officer in 43 cases (46.7%). Officers' "disciplinary records were raised by one or both parties in nearly every analyzed decision. A positive work history can be helpful to persuade an arbitrator to overturn an officer's discharge," (Adams 2016, p. 138). Adams provides examples of officers who were discharged for causing a fleeing suspect's death by ramming their vehicle or repeated on-duty sexual harassment of citizens being reinstated due to having a good work history, whereas officers terminated for similar reasons are less likely to be reinstated if they do not have a positive history. When adverse disciplinary history is eliminated from officers' records, it will not be available to arbitrators. In some cases, collective bargaining agreements may directly prohibit the consideration of prior discipline. Adams mentions one case where an officer, fired for firing her weapon at a fleeing suspect, was reinstated because management partially based their decision to terminate on previous disciplinary decisions against the officer made more than one year prior, which was prohibited in the collective bargaining agreement. 9 of the 43 overturned cases were due to such procedural errors.

The most frequent reason (21 of 43 cases overturned) an arbitrator cited for overturning a discharge is the department's failure to meet the required standard of evidence to prove the officer's alleged offense. Of these, the majority (86%) were due to inadequate investigations by the department (Adams, 2016). Unfortunately, Adams does not report the precise reasons for inadequate investigation, or what role contractual protections making investigations more difficult may have played in terms of internal

[38] Of the 36 arbitration decisions cited in the paper, I found 34 in the Bloomberg Law Arbitration Decisions database. Of those 34, all but one referenced a union and/or collective bargaining agreement.

affairs' or management's ability to gather evidence. Adams' findings are supported in other instances. The City of Oakland, for example, underwent a court-ordered investigation into why disciplinary decisions were being overturned by arbitration 75% of the time ("The Arbitration of Police Discipline," 2015).[39] The report noted that arbitration reversals were due to, among other things, inadequate investigation and poor representation by the Oakland City Attorney's Office (Swanson, 2015). Reinstatement is common enough that some union contracts, such as that in Columbus, Ohio, prohibit an officer's prior record of being fired and reinstated from being used as a factor in determining the propriety of disciplinary action in later investigations.

Courts reviewing arbitration decisions have recognized that the public interest is not being represented in the arbitration process and that, in some cases, it is independent arbitrators rather than courts that have the ability to decide what constitutes excessive force. The Supreme Judicial Court of Massachusetts reviewed an arbitration decision in which an officer was fired for using a choke hold in the course of arresting an unarmed suspect for disorderly conduct and making false statements in the subsequent investigation. The arbitrator decided to reinstate the officer with back pay. In their decision, the Court wrote:

> We are troubled by the prospect that any use of force not explicitly prohibited by a rule of conduct is essentially unreviewable. It is difficult to fathom why we elevate the values of "expediency" and "judicial economy" so high as to eclipse the substantive rights of citizens who have no seat at the bargaining table. We recognize, of course, that public employers may or may not choose to adopt rules for the protection of the public from the excessive use of force. Without the

[39] Research of arbitration decisions in Chicago (Iris, 1998) and Houston (Iris, 2002) found that decisions were nearly an even split, in favor of management about 50 percent of the time and the union 50 about percent of the time.

> benefit of such rules, however, arbitrators remain free to find reasonable any level of force that does not explicitly require termination. Absent legislative authority for a broader review of arbitration decisions, we are constrained in our ability to review the use of excessive force by public safety officials. [40]

Finally, some union contract agreements explicitly prohibit officers from being disciplined by civilian oversight bodies, while none of the 16 cities without collective bargaining agreements do. However, there currently is no civilian review board with the power to discipline police officers. They may only make recommendations to police management. But in the future, political demand for such a power could develop if police departments are seen as unable or unwilling to adequately investigate and discipline officers themselves.

Revocation/Decertification

Another method of ensuring police accountability is called "license revocation" or "decertification," which is designed to prevent an officer who is fired for misconduct from obtaining another law enforcement job elsewhere. States began authorizing license revocation in the 1960s; currently, 46 states authorize decertification.[41] In most of those states, a Peace Officer Standards and Training commission (POST)[42] sets basic and continuing education requirements (Goldman, 2016). The majority of these POST commissions also have the authority to hold administrative hearings and impose

[40] (*City of Boston v. Boston Police Patrolmen's Association*, 2017, p. 23)

[41] The states that have no decertification process for police officers are California, Massachusetts, New Jersey, and Rhode Island .While every other state authorizes decertification by statute, New York recently adopted decertification by regulation (9 NYCRR 6056.1-9, effective September 26, 2016).Hawaii created a Law Enforcement Standards Board with the ability to decertify (Haw. Rev. Stat. §139, effective July 1, 2018), although, as of August 2019, that body has not developed uniform standards for police in the state and is not currently decertifying any officers (KHON2, 2019).

[42] These organizations may be under different names in certain states, such as "Law Enforcement Standards and Training Commission." Here, "POST" is meant to describe any such agency.

sanctions upon peace officers, typically suspensions or revocations (Goldman and Puro, 2001). The use of revocation has grown over time (Goldman, 2003, 2012; Goldman & Puro, 2001). Between the years of 2012 and 2014, the state of Georgia alone decertified 1,727 officers, and, as of mid-December 2019, 45 agencies with the authority to revoke[43] have added 27,696 names to the National Decertification Index (NDI), a national database of decertified officers (NDI, 2019).[44]

There are three main approaches taken by different states when it comes to decertification (Goldman, 2012). The first is decertifying an officer after he has been criminally convicted. Some states will only do so for felonies, some for felonies and misdemeanors, and some for felonies and certain misdemeanors, particularly those involving 'moral turpitude,' such as sexually-related misconduct. Obviously, the extent to which unions are able to decrease the likelihood of members being convicted undermines the purpose of decertification in these states. Goldman (2012, p. 151) finds such an arrangement unacceptable and asks, "What other occupation or profession requires a criminal conviction before the license can be revoked?[45] Sixteen states require a criminal conviction for an officer to be decertified (Goldman, 2012).

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[43] These 45 agencies represent each state except the four states without decertification processes mentioned in note 23, Hawaii, and Georgia (which currently doesn't submit to the NDI). Each of the 44 other states have one reporting agency, with the exception of North Carolina, which has two agencies – the NC Sheriff's Education and Training Standards Commission and the Criminal Justice Education and Training Standards Commission – bringing the total to 45.

[44]Additionally, there are federal agencies, such as the Department of Defense and the National Park Service, that have the authority to decertify law enforcement officers, but do not currently submit to the NDI. One of the recommendations of President Obama's Task Force on 21st Century Policing was that the Department of Justice partner with the International Association of Directors of Law Enforcement Standards to expand the NDI to serve as a national registry of decertified officers with the goal of covering all law enforcement agencies within the US, but this recommendation has not yet been implemented.

[45] In all five states where police officers cannot be decertified, state authorities can revoke the licenses of barbers (Goldman 2012).

The second approach involves an administrative hearing before an administrative law judge to determine whether the officer has engaged in a statutorily prohibited act. Some states are more specific in what can be grounds for revocation (such as Illinois, where the only basis for decertification is perjury in a murder trial), while others include broad and vague definitions of prohibited conduct, such as 'conduct unbecoming an officer'.

The third approach is to revoke an officer's license when he has been fired or resigns in lieu of being fired. However, incorporating this approach can be difficult in practice, particularly due to union agreements that make firing a problem officer sufficiently burdensome.

There is variation in the extent to which POST commissions' decisions are independent from the decision-making of police departments and arbitrators. Some are completely independent. In Arizona, for example, the POST commission may still revoke an officer's certification after he has been fired even if a civil service board has him reinstated (Goldman and Puro, 2001). Other states, such as Washington, require that after a 'final' decision has been made; i.e., the POST commission may not revoke certification if the officer is reinstated. In these cases, it is not uncommon for chiefs to choose to incentivize the officer to resign, rather than terminate the officer, who would likely be reinstated by the civil service board (sometimes comprised of individuals with close ties to the union) anyway (Goldman and Puro, 2001). Florida splits the difference: if an arbitrator finds that misconduct never occurred, the Florida Criminal Justice Standards and Training Commission (CJSTC) cannot proceed with decertification (Conley, 2018).

However, if the arbitrator finds that it did occur but considers termination too severe a penalty, the Florida CJSTC can still decertify.

Police officer unions have been successful in reducing the range of conduct for which POST commissions may discipline officers, as was the case for unions and sheriff's departments in Florida, or repealing the POST commission's ability to cancel certificates, as occurred in California (Goldman and Puro 2001; Goldman 2016). In the states that do not have revocation powers, it has largely been due to the influence of the police unions (Human Rights Watch, 1998).

Revocation can be a powerful method for making sure that officers with a history of abuse are not re-hired. However, this only works, absent a conviction, when POST commissions are notified by law enforcement agencies. But given the relative difficulty of prosecuting a police officer and the power of unions to prevent or overturn terminations, problem officers are sometimes able to avoid decertification.

5. Conclusion

Police unions were created in order to address issues that arose due to the bureaucratic and monopsonistic nature of police departments, particularly perceived low pay and poor working conditions (including being subject to the arbitrary discipline or firing by superiors). The majority of police unions in the largest cities, through their collective bargaining agreements, have been successful in obtaining higher compensation for their members in the form of protections that raises the cost of most of the formal

means of disciplining them for misconduct.[46] They have been more successful than comparable non-unionized departments in achieving these forms of compensation.

One implication of the political economy of police protections is the redistribution of who bears the costs of compensating police. As mentioned in the case of the Chicago police, union representatives have expressed a willingness to give up protections in exchange for higher monetary compensation. Monetary wages are borne by the taxpayer. If it is the case that these protections lead to lower costs for taxpayers but higher levels of police misconduct, part of the cost of compensating police officers is redistributed from taxpayers to victims of police misconduct (as well as future taxpayers in the case of successful civil lawsuits).

This raises the question of the desirability of having a single police bureaucracy serve diverse urban populations with heterogeneous preferences. Do the gains from economies of scale in policing outweigh such costs? Empirical research suggests that returns to scale in policing are maximized when serving relatively small populations (Fegley & Growette Bostaph, 2018; Gyimah-Brempong, 1987; Lithopoulos, 2015; E. Ostrom & Whitaker, 1973; Southwick, 2005). However, such a question can only be definitively answered when there is an actual market for output, rather than the proxy measures on which research has relied. The inability of bureaucratic police departments

[46] One exception is federal consent decrees, which may override union contracts with cities if provisions in those contracts are determined to undermine civil rights. Another advantage according to Pierce Murphy (personal communication, July 8, 2016), former director of the Office of Professional Accountability of the Seattle Police Department (which is currently under a consent decree), is that it helps create the political will for reform, which otherwise might not exist. By specifying goals for the police department to meet and conducting periodic audits, the pressure for reform remains even when the outrage from the last high-profile incident subsides.

to engage in economic calculation renders them unable to determine the optimal scale at which to provide their services.

Ultimately, an important implication for police reform is that if these protections are deemed undesirable because they allow individual police officers who would otherwise be disciplined or fired for misconduct to continue in their role as police officers, as has been argued by Chicago Police Accountability Task Force, then removing these protections will likely require that police officers be compensated by other means. Compared to the typical transitional gains trap (Tullock, 1975), such a political exchange may have a greater chance of succeeding due to the presence of a collective bargaining entity that can lower transaction costs. The question is taxpayers' willingness to pay in order to lower the costs of holding police officers accountable.

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