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# **Prosecution Associations in Industrial Revolution England: Private Providers of Public Goods?**

**Mark Koyama**

## **ABSTRACT**

In early nineteenth-century England, there was no professional police force and most prosecutions were private. This paper examines how associations for the prosecution of felons arose to internalize the positive externalities produced by private prosecutions. Drawing upon new historical evidence, it examines how the internal governance and incentive structures of prosecution associations enabled them to provide public goods. Consistent with the reasoning of Demsetz (1970), I find that prosecution associations were economic clubs that bundled the private good of insurance with the public good of deterrence. Associations used local newspapers to advertise rewards and attract new members. Price discrimination was employed in order to elicit contributions from individuals with different security demands. Selective incentives helped to overcome free-rider problems between members.

[A]n Association for the more effectual bringing to Justice every Offender who shall hereafter be guilty of felony against the person or property of any of the Associators, will not only be the most likely method to preserve the persons and properties of said Associator safe from felony, but will at the same time conduce greatly to the *Public Good*. [Association for the Prosecution of Felons 1799, p. 3]

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## 1. INTRODUCTION

How were public goods produced prior to the rise of the modern state? How was security provided before the first professional police? It is well known that private firms are capable of providing security for their customers. This paper asks under what circumstances will, and through what institutional mechanisms can, private clubs provide security on a wider basis. Drawing upon historical evidence from England in the eighteenth and nineteenth centuries, it examines how private associations for the prosecution of felons were able to fund the public good of deterrence.

Until the middle of the nineteenth century, England lacked a nationwide professional police force. During the period of the Industrial Revolution, responsibility for the prevention of crime and the security of property lay with local magistrates, justices of the peace, hired watchmen, and private individuals. In contrast to the situation in the rest of Europe, prosecutions remained private and, as going to court was costly, disputes were often settled informally. Many police functions were performed by private societies called associations for the prosecution of felons, which subsidized prosecutions, provided legal expertise, and sometimes maintained local watches and patrols.

This system of law enforcement was criticized as out of date and unable to cope with the increase in crime brought about by population growth, urbanization, and increased migration. However, the question of how to reform the system remained open. Could the flaws in the system of private prosecutions be overcome through bottom-up measures such as prosecution associations, or was a centralized publicly funded system needed?

The chronology is well established. A professional police force was introduced in London in 1829 and into the rest of the country from 1839 onward.<sup>1</sup> From 1856, every county and borough had to maintain its own police through local taxation. The police gradually took on the role of prosecuting criminal cases, while high-profile cases became the responsibility of a public prosecutor (Godfrey 2008). This paper addresses a series of economic rather than historical questions: it shows how private prosecution associations functioned and how they overcame

1. The Metropolitan Police Act of 1829 established a centralized police force in London and some parishes in Middlesex and Sussex. In 1839, the County Police Act enabled justices of the peace to establish police forces in their counties. This formalization was made compulsory by the County and Borough Police Act of 1856.

free-rider problems, and it examines the internal governance mechanisms they employed to attract subscribers.

I develop a case study that generates new insights into how deterrence can be privately provided (for more on the theory of private law enforcement, see Becker 1974; Landes and Posner 1975; Polinsky 1980). The economic theory of deterrence suggests that crime should be reduced by increasing its price.<sup>2</sup> This paper shows that a private-order institution was able to provide the public good of deterrence by tying it in with a private good (mutual insurance) along the lines suggested by Harold Demsetz (1970).<sup>3</sup> Associations made use of—and, in turn, reinforced—existing norms of voluntarism, neighborliness, and cooperation. They were innovative in making use of the growth of newspaper advertising and in designing incentive schemes to overcome the revelation problem that typically hinders the efficient provision of public goods. Because they were voluntary societies that had to attract subscriptions, they reflected the preferences of members and adapted to local conditions.

This paper also outlines the limitations that associations for the prosecution of felons faced in attempting to overcome the problems posed by free riders. However, in so doing, it sets these deficiencies against the shortcomings of the professional police in their first decades of existence and against the general problems that beset all attempts to provide public goods. Finally, it suggests reasons for the ultimate demise of prosecution associations.

The evidence used in this paper comes from a number of sources. The rule books and constitutions of a small number of prosecution associations are kept by the British Library and the Cambridge University Library. In addition to information available in Parliamentary inquiries, the bulk of the evidence we have for many associations comes from a number of eighteenth- and nineteenth-century British newspapers.<sup>4</sup> For

2. This argument goes back to Beccaria ([1767] 1995) and Bentham (1843). It was formalized by Becker (1968).

3. Prosecution associations have previously been studied by several historians (see Schubert 1981; Little and Sheffield 1983; Philips 1989; King 1989; and Davies 2002). Friedman (1995) considers their role briefly from an economic point of view, but this paper is the first to examine the economics of these associations in detail.

4. The list consulted includes the *Derby Mercury*, the *Leeds Mercury*, the *Leicester Chronicle*, the *Hull Packet and East Riding Times*, the *Ipswich Journal*, *Jackson's Oxford Journal*, the *Newcastle Courant*, the *York Herald and General Advertiser*, the *Sheffield Independent and Yorkshire and Derbyshire Advertiser*, the *Bury and Norwich Post and East Anglian*, and the *Gazetteer and New Daily Advertiser*.

a more detailed picture of the finances of a small number of associations, I have made use of handwritten account books and minutes from the Borthwick Institute for Archives in York; local studies libraries in Doncaster, Sheffield, and York; and the London Metropolitan Archives.

The remainder of the paper is organized as follows. Section 2 outlines why the traditional criminal justice system was seen to be in crisis by the early decades of the nineteenth century. It specifies the externalities that meant that the private level of prosecutions was likely to be less than the socially optimum level. Section 3 examines the institutional forms associations developed to attract members and prevent free riding, how they helped bring criminals to court, and how they tried to limit rent-seeking behavior. Section 4 concludes by considering the limitations facing the private provision of public goods in the nineteenth century.

## **2. PRIVATE PROSECUTIONS AND DETERRENCE**

The English legal system in the eighteenth century was an amalgamation of the private and the public. The law was publicly provided. Judges were paid out of a mixture of court fees and tax revenues. In theory, law enforcement was based on the medieval principle of collective responsibility (Critchley 1967, p. 21). In reality, practices such as the Hue and Cry had long since fallen into abeyance. Prosecutions were private and the responsibility of the victim.<sup>5</sup>

Prosecuting was costly. The prosecutor had to give evidence before a magistrate, assemble witnesses, collect depositions, and hire legal counsel. The trial itself was a major expense in terms of both time and money (Hay and Snyder 1989, p. 26). For example, the costs of prosecuting Thomas Mills in 1829 totaled £6 6s. 8d., including the cost of taking him to Buckingham to be examined, paying witnesses, hiring a conveyance to the jail, and rewarding an informant (*Evidence Taken by the Constabulary Force Commissioners* 1839, p. 29).<sup>6</sup>

5. Until the nineteenth century, the state prosecuted only offenses such as treason or coining (Godfrey 2008, p. 172). In the cases in the Staffordshire and Worcestershire Quarter Sessions that he examined, Philips found that in 1836, roughly 80 percent of cases were brought by the victims themselves (1977, p. 101). The police started prosecuting serious offenses such as murder and rape from their inception but began to prosecute more minor offenses only in the 1870s and 1880s (Godfrey 2008, pp. 172–73).

6. Prior to decimalization, there were 240d. or 20s. to the pound. A guinea was 21s. Farm laborers earned around 22d. per day during the summertime, according to the 1834 Poor Law Commissioners Report (Clark 2007). Per capita nominal GDP is estimated as being around £24 in 1801 (Officer 2010). And this case was comparatively cheap. By the mid-nineteenth century, the average cost was between £20 and £50 at the Assize Courts

This private system of prosecutions was beset by at least three potential market failures. First, individuals often lacked the means or resources to pursue perpetrators. In principle, constables were supposed to assist victims, but in practice their help usually had to be paid for. Second, once a suspect had been apprehended, the costs of undertaking a prosecution were high, and individuals might be unable to pay them. Third, if a victim did successfully prosecute a criminal, he or she generated at least two distinct uncompensated social benefits: (1) by incapacitating the criminal in question, the criminal was prevented from committing further crimes and (2) by increasing the overall threat of deterrence, the supply of potential criminals was thereby reduced. I examine the deterrence externality in detail, but a similar set of incentives explains the incapacitation externality.<sup>7</sup>

### **2.1. The Optimal Level of Prosecutions**

Each individual's decision to prosecute affected the overall level of deterrence. There was no reason to suppose that the actual level of prosecutions would be at the socially optimal level. In fact, there were two externalities to consider: (1) a positive, deterrence externality and (2) a negative displacement externality. So long as these externalities were small, or if they balanced each other out, the actual number of prosecutions would remain close to the socially optimal level.<sup>8</sup>

The deterrence externality suggests that too few prosecutions would occur because the effects of each individual prosecution on the overall level of deterrence were not taken into account by any individual considering whether to prosecute. Moreover, plaintiff and defendant could

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and £8 at the Quarter Sessions (*Report of the [Royal] Commissioners for Inquiring into County Rates* 1836, p. 15). Minor crimes could be prosecuted before a magistrate and dealt with summarily. Indictable offenses had to be prosecuted at the Quarter Sessions, which met four times a year in each county. Serious crimes were punished at the Assize Courts, which were held twice a year in most counties.

7. As Levitt and Miles (2007) note, it is difficult to distinguish the incapacitation effect from the deterrence effect without an exogenous source of variation, as both work in the same direction. Contemporaries focused on the question of deterrence, but it is likely that both effects were working together.

8. This basic framework is based on the standard deterrence model (see Becker 1968 and Ehrlich 1996). As Friedman (1995) notes, the significance of the displacement externality depends on the elasticity of the supply curve for offenses. Shavell (1997) considers litigation costs as an additional reason that the number of private prosecutions might be suboptimal. No distinction is made between the deterrence effect and the incapacitation effect because for the purposes of this paper they are equivalent (see Polinsky and Shavell 2007, pp. 443–44).

settle before the case reached the court, and this practice—known as compounding—was a major reason that most minor crimes never ended up in court.<sup>9</sup> In deciding to settle a case out of court, individual victims had little incentive to consider how their actions encouraged future crime both by ensuring that a criminal would be free to commit more offenses and by weakening the overall effect of deterrence (thereby encouraging other potential felons).<sup>10</sup>

The second externality was a negative displacement effect. Individuals who were known to prosecute every offense against them—no matter how trivial—could acquire a reputation that could deter future crime. However, insofar as this reputation was a personal one, then it displaced crime onto others, less able or more reluctant, to initiate or conclude prosecutions. This negative externality would lead to too many prosecutions taking place.

Since these two externalities operated in different directions, it is not clear *a priori* whether a system of private prosecutions such as that employed in preindustrial England would result in too many prosecutions or too few. Theoretical considerations do allow us to isolate the empirical factors that were likely to determine which effect would dominate. The size of the displacement effect is dependent on the individual victims being known to criminals. It is likely to be strongest in a small-scale society: acquiring a reputation for prosecuting all crimes is valuable only if potential criminals know the identity of potential victims.<sup>11</sup>

## **2.2. The Effects of Industrialization**

Economic growth, industrialization, population growth, and urbanization began to accelerate in the second half of the eighteenth century. The Industrial Revolution challenged the traditional criminal justice system. Contemporaries convinced themselves that they were witnessing a crime wave, particularly after 1780 (Taylor 1998, p. 20). According to traditional accounts, “the breakdown in law and order marched in step

9. Compounding misdemeanors was encouraged by magistrates. One advantage of compounding is that it reduces the cost of prosecution. It was a crime to compound a felony—though individuals were almost never prosecuted for doing so.

10. The same reasoning applies to the incapacitation externality. A victim when deciding whether to prosecute does not take into account the social benefit he or she generates by preventing the criminal from committing further crimes on other people.

11. As the theory of repeated games makes clear, individuals have an incentive to take costly actions today in order to benefit in the future when they expect to interact with the same individuals in the future or when information concerning their actions disseminates rapidly among the community.

with the progress of the Industrial Revolution" (Critchley 1967, p. 21). Subsequent research indicates that property crime may have increased as inequality and opportunities for theft increased.<sup>12</sup> Standardized goods made theft easier and made it more difficult for stolen goods to be identified or recovered (Allen and Barzel 2011).

Under this pressure, the old system of law enforcement seems to have functioned less effectively than it had before.<sup>13</sup> Reformers such as Henry Fielding (1751), Patrick Colquhoun (1796), and Edwin Chadwick (1829) argued that the reluctance to prosecute was a principal reason for this rapid increase in crime.<sup>14</sup> This reluctance can be understood in terms of the above framework. Colquhoun argued that "many persons who suffer by means of small robberies, afraid of the trouble and expence of a discovery and prosecution, submit to the loss without enquiry, while others, from being strangers to the law, and to the proper mode of application, fall into the same mistake, which, by proving a great encouragement to thieves of every class, is of course an injury to the public" (1796, p. 212; for further evidence on the reluctance to prosecute, see Hay 1975, p. 41; Beattie 1986, p. 35; Philips 1989, pp. 115–16; Jones 1992, p. 5). The increasing anonymity of life in London or in the fast-growing industrial towns such as Manchester, Birmingham, and Sheffield reduced the incentive to prosecute and increased individuals' reluctance to prosecute because it weakened social norms against not prosecuting or compounding crimes and exacerbated the incentive to free ride.

To overcome this reluctance to prosecute, Colquhoun and Chadwick argued for a centralized police and a state prosecutor along French

12. Crime and disorder became a subject of intense debate (see Philips 1977 and Beattie 1986). See the responses collected in Report of the Select Committee on Policing of the Metropolis (1817). There are no reliable figures for the number of convictions prior to 1805 and no estimates for the number of offenses committed prior to the mid-nineteenth century. Violent crime was in fact declining, but there is some evidence that property crime increased during this period before declining later in the nineteenth century (Gatrell 1980).

13. The traditional system was "notably unsuccessful . . . in rapidly growing large towns, where such a sense of community had been lost." It was also badly equipped to deal with "serious disturbances and large-scale organized crime" (Philips 1993, p. 161; compare Armitage 1932, p. 14).

14. Fielding, Colquhoun, and Chadwick were all critics of the traditional system of law enforcement. Fielding founded the Bow Street Runners and, along with his brother John, was an advocate of private policing. Colquhoun established the privately funded Thames River Police in 1797 (McMullan 1998). Chadwick was an advocate of a centralized and professional police force, and his writings influenced the County Police Act of 1839.

lines.<sup>15</sup> Individuals faced the wrong financial incentives.<sup>16</sup> A public prosecutor, acting in combination with a professional police force, would not “only remove that aversion which prosecutors manifest on many occasions, to come forward, for the purpose of promoting the ends of public justice; but it would prevent, in a great measure, the possibility of compounding felonies or of suborning witnesses” (Colquhoun 1796, p. 252). Calls for a professional police force and a state prosecutor came to Parliament’s attention on several occasions before 1839, but this reform was delayed for many decades because of the objections raised by members of the rural elite (see Philips and Storch 1999 for a detailed survey of these debates). Rural and urban policing demands were very different. A centralized system of police might impose inappropriate policies on local regions. Residents of rural areas were worried about police coming in from outside (see *Some Remarks* 1836). As E. C. Midwinter notes, a “strong school of thought believed that private enterprise was by far the soundest approach. Tradition, thrift, love of freedom and the apparently superior efficacy of private initiative were advanced as arguments in favour of such a system” (1968, p. 1). The most prominent private response was the association for the prosecution of felons.<sup>17</sup>

### **3. HOW PROSECUTION ASSOCIATIONS OPERATED**

Associations for the prosecution of felons were clubs whose members joined together to subsidize the cost of prosecutions and reward individuals who provided information that led to convictions. The precise

15. For Colquhoun’s views on the French system, see Colquhoun (1796, p. 387). The anonymous author of the “Code d’Instruction Criminelle” (probably James Mill) explicitly compared the French and English systems, noting that the former practiced the preliminary stages of criminal investigation to “a high degree of perfection,” whereas “*no provision whatsoever is made in English procedure*” for investigating crimes (*Edinburgh Review* 1810, p. 108).

16. Colquhoun noted that “experience” had taught him that the moral arguments in favor of prosecuting, “powerful as they are, will neither awaken in the mind of men that species of public spirit which shall induce” individuals “to become willing prosecutors under all the trying delays, added to the expence often of bringing a number of witnesses from the country, and keeping them hanging on in the court of justice, perhaps for several days together” (1796, pp. 246–47).

17. Another earlier response was the emergence of professional thief-takers, who were “mustered to protect and secure streets, houses and institutions and on occasion horse patrols were deployed to guarantee safety on outlying roads” (Styles 1987, p. 101). Thief-takers often faced perverse incentives, and there were reports of them paying thieves to commit robberies so that they could then claim a reward for recovering the stolen goods (McMullan 1996, pp. 91–92).

number of prosecution associations will never be known. Estimates suggest that there were perhaps as many as four thousand of them between 1750 and 1850 (King 1989).<sup>18</sup>

### **3.1. Bundling Private and Public Goods**

Deterrence has “public” properties but it can be produced privately. The defining characteristics of a pure public good, according to Paul A. Samuelson (1954), are nonexcludability and nonrivalry. Demsetz (1970) argued that this definition was misleading because the degree of excludability is, in many instances, not determined by the intrinsic character of the good but is a product of the legal or social institutions of the society in question. Even where excludability was impossible or highly costly, “the conclusion that collective goods cannot be produced in adequate quantities by private firms is too strong, for devices to further such production can be not only conceived, but actually have been used. . . . [I]t may be possible to tie in the consumption of a second product with consumption of the collective good, and private incentives may very well exist for the production of the tied-in good because exclusion is possible” (Demsetz 1970, p. 306). Demsetz’s reasoning indicates that the services provided by prosecution associations can be divided into two categories: the insurance function and the deterrence function, which were bundled together.

The origins of prosecution associations may have been as mutual insurance societies.<sup>19</sup> The insurance provided by membership in a prosecution association was rival and excludable. Only members were covered, and the funds of an association were limited, so a payout made to one member reduced the amount available for other members. Insurance is a service that predominantly provides benefits to the insured.

However, most prosecution associations did much more than insure

18. I have collected names for 534 separate associations. The figure Mokyr (2009, p. 377) reports of 450 associations in total between 1750 and 1850 is thus too low. Many small-scale or short-lived prosecution agreements did not leave records. Young ([1936] 1977, p. 53) supposed that there were 500 prosecution associations. It seems that this estimate comes from the *First Report from the Commissioners Appointed to Inquire as to the Best Means of Establishing an Efficient Constabulary Force in the Counties of England and Wales* (1839, p. 97). This figure, however, was an estimate of the number of prosecution associations active in 1839 and not an estimate of the total number that had existed. The higher estimate I report is based on local studies that have uncovered many associations that we previously were unaware of.

19. The Steeple Claydon Society for the Mutual Prosecution of Property focused, as its name suggests, on reimbursing members for losses resulting from theft (*Evidence Taken by the Constabulary Force Commissioners* 1839, p. 32).

their members. Prosecution associations could pay the difference between the court's allowance and the actual cost of bringing a prosecution. Most associations had a solicitor who represented clients in court. Associations were also able to pay for the cost of preparing a case. Prosecution associations provided club goods (Buchanan 1965). But unlike most clubs, some of the services that prosecution associations provided, such as subsidizing prosecutions, were only partly excludable, even if associations funded prosecutions only on behalf of their members. A robber who was successfully prosecuted and incarcerated or transported would not be able to steal from others, and this result would benefit members and nonmembers alike. Furthermore, because the supply of potential felons was not infinitely elastic, an increase in the probability of being convicted would deter others from committing crimes (Friedman 1995). Hence, associations internalized both the incapacitation and the deterrence externalities generated by the private system of prosecutions.

Associations were focused on deterrence rather than on the return of stolen goods (disgorgement). They offered rewards for information that led to the conviction of criminals and did not pay for the return of stolen goods.<sup>20</sup> For the same reason, associations committed their members to carry prosecutions through. Article 13 of the Tanworth prosecution association explicitly debarred members from making deals with defendants, demanding "that any Member entering into any such Compromise be struck off the List of Subscribers" (Tanworth Association for the Apprehension and Prosecution of Felons 1784, p. 10). The rules of the association go so far as to state what would happen if a member "shall neglect or refuse to give proper Evidence against the Offender." Any member "neglecting or refusing to give such Evidence, shall repay to the Treasurer all money that the said Treasurer may have paid or laid out on that account" (1784, pp. 7–8).<sup>21</sup>

20. Disgorgement may have been a concern for those associations that focused on horse and cattle theft (King 1989, p. 183). There are cases in which advertisements specified the details of the stolen goods, including one from J. Bayldon (1850) that mentions "a Four Year Old Wether Sheep, Marked with Rub on the Face, Head, and Back." However, even in this case, the reward offered by the association was conditional on the "apprehension and conviction" of the perpetrator and not on the return on the sheep, and so this reward suggests that the association was primarily concerned with incapacitating that perpetrator and deterring future crime.

21. Friedman makes a similar point: "By joining such an association, a potential victim committed himself to prosecute. The money had already been paid out" (1995, p. 485). This assessment is broadly correct. However, the details of an association's actions are

Associations sometimes funded a prosecution for a nonmember, particularly of nonmembers too indigent to contribute to the society. Article 11 of the Bolton Percy association's rule book reads: "That no person can receive the Benefit of this Association, unless he or she shall be (bonafide) a subscriber, at the time any Burglary, Felony, or Fraud, may be committed on him, or his effects; *excepting* he or she being a Labouring person, or not in a situation to pay the expense of a prosecution; this is to be decided upon by the Committee" (Association of the Parish of Bolton Percy 1825–90, p. 7).<sup>22</sup> It made sense for associations to do this because the externality—the gap between the marginal private prosecution and the marginal socially optimal prosecution—was greatest in the case of poor prosecutors.<sup>23</sup> Associations viewed their actions as contributing "greatly to the *Public Good*" (Association for the Prosecution of Felons 1799, p. 3).

### 3.2. Internal Governance

**Price Discrimination.** Private valuations of a public good like deterrence vary across individuals, and a central problem facing the provision of a public good is to elicit the true value of these private preferences. Individuals have an incentive to misstate their valuation of a public good in order to free ride on the contributions of others. This is a problem for both publicly and privately provided public goods, and for this reason the Lindahl equilibrium in which a public good is efficiently provided

somewhat different than the impression Friedman provides. Associations contributed to the cost of a prosecution but did not necessarily pay the full cost. Members committed themselves to an association by agreeing to its rules and the social pressure brought to bear by the members of the association at committee meetings rather than the simple fact of prepayment.

22. Philips found more than 20 associations that offered to pay for prosecutions on behalf of poor nonmembers, but it is difficult to find evidence of this transaction actually happening. There was a case in which the North Elmham Association paid a total of £12 13s. 2d. for the prosecution of a felon who stole two donkeys from two poor men of the parish (Philips 1989, p. 140).

23. The offer to pay the costs of poor prosecutors was always discretionary. In keeping with Hay's (1975) thesis that the eighteenth-century elite controlled their social inferiors through their discretionary control of the justice system, Article 21 of the Hemsworth association rule book promises that if "the domestic servant or servant, of any member, shall be robbed, or other felony committed, on his, her, of their property, the offender or offenders, shall be prosecuted at the expence of this association, provided a prosecution, in such case, is recommended by his, her, or their master, or mistress, and has also the sanction of a majority of the committee" (Hemsworth Association for the Prosecution of Felons, etc. 1821, p. 12).

by consumers facing personalized prices is typically unobtainable (Young 1982; Cornes and Sandler 1985; Bergstrom, Blume, and Varian 1986).

The mechanism design literature suggests that appropriate revelation mechanisms can be designed to provide the correct incentives in order to elicit a true valuation from individual contributors, but these mechanisms are typically not implementable in practice.<sup>24</sup> Prosecution associations responded to the problem of the efficient provision of a public good through price discrimination and through selective incentives. These choices enabled them to practice something approaching Lindahl pricing. Price discrimination was possible because each individual household's demand for security was correlated with observable characteristics such as the amount of land owned and its uses. The small scale of associations thus enabled them to overcome some of the informational problems that often hinder public good provisions.

The first societies that we have records for were organized very simply. An eighteenth-century West Bromwich association required a fee of £10 6d. to join (Association for the Prosecution of Felons 1773). The subscription contributed to a fund managed by the treasurer of the association that would then be used to pay out expenses for prosecutions, rewards, and advertisements and to cover the costs of running the society.<sup>25</sup> In the nineteenth century, associations had more complex membership schemes. Table 1, with data taken from those associations whose published rule books survive, indicates that over time associations shifted away from charging fixed rates toward charging variable rates. Uniform fees minimized administrative costs but did not distinguish between potential subscribers whose demands for security might vary considerably and hence might deter smaller or poorer farmers from joining.

The fee structure for the Chaddesley-Corbett association was based on the county rate each household paid, varying from £1 to 10s. (Chaddesley-

24. See Myerson (1981) for the classic statement of the revelation principle. The Groves-Clark mechanism is perhaps the most well-known mechanism for ensuring efficient provision of a public good.

25. Some associations such as the Burnham society initially raised a fund on the basis of subscriptions without specifying how large or how frequent subscriptions would be in the future. The rules of the Burnham society stated that once the fund was reduced to £10, every member would have to subscribe again. This system had the advantage of flexibility (Burnham Association for the Protection of Persons and Property and the Prosecution of Felons 1833). In the event of a spate of crimes, this rule gave the society the ability to fund a large number of prosecutions. But it had the disadvantage that subscribers did not know how much they were liable to pay as members. Perhaps for this reason, annual dues were more common.

**Table 1.** Rules of Prosecution Associations

	Date	Committee Size	Fee on Joining	Annual Fee	Fixed Fee or Sliding Scale	Minimum Membership	Absentee Fee	Initial Members
West Bromwich	1773	3	10s. 6d.		F			
Tanworth	1784	6	5s.	5s. or more	F			2s. 6d.
Crowle	1814	5			F	5		2s. 6d.
Frankwell	1815	5	£1 1s.		F	5		3s.
Lancashire	1819	7	10s.	12s.-5s.	F	5		2s. 6d.
Clapham	1821	12	£1		F	5		51
Mansfield	1825	9	15s.-5s.		S			
Burnham	1833	5	£1 1s.-7s.		S			
Bradfield	1834	5	2s. 6d.	Variable	S			
Chaddesley-Corbett	1837	9	£1-10s.		S	5		2s. 6d.
Cambridge	1841	12	10s.		F			173
Cawthorne	1843	9			S	20		2s. 6d.
Ecclesfield	1843	12	Twice annual fee	Variable	S			41
Cheddleton	1858	8			S			41

Sources. Association for the Prosecution of Felons (1773); Tanworth Association for the Apprehension and Prosecution of Felons (1784); Crowle Association for the Prosecution of Felons (1814); Frankwell Association for Prosecuting Felons (1815); Association for the Prosecution of Felons and Other Offenders (1819); Clapham Association for the Prosecution of Felons (1821); Equitable Association of the Inhabitants of Mansfield and Neighbourhood (1842); Burnham Association for the Protection of Persons and Property and the Prosecution of Felons (1833); Bradfield Association for the Prosecution of Felons (1838-86); Chaddesley-Corbett Association for the Prosecution of Felons (1837); Town of Cambridge Association for the Prosecution of Felons (1841); Cawthorne Association for the Prosecution of Felons (1843); Ecclesfield General Association for the Prosecution of Felons (1843); Cheddleton Association for the Prosecution of Felons (1858).

Corbett Association for the Prosecution of Felons 1837). The association of Cawthorne in West Riding aimed at perfect price discrimination. Rule five demanded that each member provide “a full and correct description of the property occupied by him or her, in respect whereof he or she intends to have, or be entitled to the benefit of this Association, for the purpose of regulating and charging the amount of his or her subscription; and the Committee shall fix the sum which shall be then paid by each Member, as entrance-money to the Treasurer” (Cawthorne Association for the Prosecution of Felons 1843, p. 6).<sup>26</sup> Price discrimination not only enabled associations to increase the size of their membership, and therefore to maximize the funds they had available for subsidizing prosecutions, but also ensured that members with differing demands felt that their needs were catered to, a consideration that was important given that the association depended on members contributing time and effort as well as money. Members as residual claimants benefited from price discrimination.

**The Committee: Preventing Rent Seeking.** Prosecution associations were governed by rules and constitutions (often published) to limit opportunistic behavior. The running of an association was overseen by a committee in combination with a treasurer, a secretary, and sometimes a solicitor. The committee had considerable discretion to decide which cases to prosecute and how much to spend on solicitors’ fees, printing handbills, or taking out advertisements. In some associations, the committee had the power to raise new rates on subscribers.<sup>27</sup> Discretionary authority had to be limited to prevent the chair or treasurer from pur-

26. The Hemsworth association charged members with more than 100 acres of land “not less than £1 1s” and members with less than that amount of land “not less than 10 s 6 d” (Hemsworth Association for the Prosecution of Felons, etc. 1821, p. 8). In the Worsbro’ association, members paid per acre of land they wished to be included in the agreement, and they paid extra if they had a shop or warehouse that was to be protected (Worsbro’ Association for the Prosecution of Felons, Trespassers, and etc. 1880).

27. Article 8 of the Chaddesley-Corbett association reads: “That the committee shall have power, from time to time, to make a rate on the members of this society, in the proportion and manner already stated, either by way of anticipation or otherwise, by defraying all costs, charges, and expences, which may be incurred or considered necessary in promoting the objects of the association, and generally to do all things needful for conducting the affairs of the society” (Chaddesley-Corbett Association for the Prosecution of Felons 1837, p. 8).

suing their own agenda. Thus, positions were elected,<sup>28</sup> and there were term limits.<sup>29</sup>

Constitutions guarded against the danger that high-demand users imposed too large a burden on the membership at large. The constitutions were enforced by the fact that their members could vote with their feet. Nothing prevented members from leaving one association and forming another one. Several towns supported multiple associations for the prosecution of felons. Tiebout sorting ensured that prosecution associations satisfied the demands of local members.

These rules make perfect sense in light of the commonly held view that the old system of criminal justice was run in the interests of a small rural elite (Hay 1975). The system of voluntary magistracies and constables was widely perceived to be a source of patronage, a way in which the local aristocracy and the gentry could influence and control village life (Philips and Storch 1999). Prosecution associations ensured that similar charges could not be made against them.

**The General Meeting: Overcoming Free Riding.** Prosecution associations met once a year for a general meeting involving all members. These were occasions for sorting out the finances of the association, ensuring subscriptions were up-to-date, and paying out rewards to informers and expenses to those members who had pursued a prosecution. Meetings were important because prosecution associations relied on cooperation between members. Members had to share the burden of talking to witnesses and attending sessions of court.

Associations overcome potential free-rider problems in several ways. They fined members for nonattendance. Private goods were bundled with the club goods. One private good included in the membership package was the annual dinner that accompanied the general meeting. Several societies used subscriptions to partly cover the cost of the general meeting. These events were reported in local newspapers, in which much was made of the quality of the food and wine and the generosity of the host.<sup>30</sup>

28. A description of an election is provided in the *York Herald and General Advertiser* (1827). The elections were based on a show of hands.

29. The Mansfield association was run by a committee of nine members, three of whom would step down at the end of each year for another three to be elected (Equitable Association of the Inhabitants of Mansfield and Neighbourhood 1842).

30. For example, we are told that “a most excellent dinner was provided for the occasion by the host and hostess, scarcely anything in season being lacking” at the meeting of the Stockwith and Trentside Association (*Hull Packet and East Riding Times* 1846). Elsewhere

Prosecution associations also overcame the free-rider problem by staying small. Prosecution associations had to be close-knit, based around a relatively small geographical area, and focused on apprehending and deterring local criminals. Consequently, the membership of prosecution associations had to be much more geographically restricted than they would have been had their main function been supplying insurance. Insurance pools became more effective as they diversify; prosecution associations, which required members to cooperate and work together on cases, lose cohesion. Most associations limited their membership to those who lived within a radius of between 2 and 6 miles.

### **3.3. Providing Deterrence**

**Publicity.** Associations for the prosecution of felons were made possible by the growth of a local newspaper industry in the eighteenth century (Cranfield 1962). The idea of using newspapers to combat crime was an eighteenth-century innovation.<sup>31</sup> At the cost of 2s. 6d., an advertisement provided information and details of the crimes committed. In addition to newspapers, handbills, made possible by better printing technology, could be printed and distributed more rapidly than newspaper advertisements could be. Handbills circulated quickly even in areas where newspaper readership was limited, although they could not travel as widely, as they had to be passed hand to hand.<sup>32</sup>

The number of associations placing advertisements increased rapidly after 1780. Associations used advertisements differently than did private

we read that “[y]esterday the annual meeting of the Broadwell Association for the Prosecution of Felons was held at the Plough Inn, at Alwoscott, near this town. After the usual business had been transacted the members sat down to dinner. . . . The dinner was a capital one, and the wines were of that quality which are very seldom found at country inns, and altogether reflected much credit on the hospital landlord, Mr Hott” (*Jackson's Oxford Journal* 1843).

31. Although the circulation of local newspapers remained small, the effect that they had was greatly amplified, as it is thought that at least 20 individuals read each paper printed, and the information published in the newspapers disseminated rapidly among communities via word of mouth. As John Wade put it, newspapers “are the proper *hue and cry* of delinquency, and, by circulating in victualling-houses, taverns, and private-houses, everywhere make known frauds and robberies—the way in which they have been perpetrated and put society on the alert against the practices of swindlers and thieves” ([1829] 1972, p. 356).

32. Urban associations such as the Colchester association tended to use handbills more frequently. In contrast, newspaper advertisements, with their wider circulation, were a better place for advertising rewards for livestock, particularly horses, which could be quickly taken to another county (Styles 1989, pp. 71–75).

advertisers, typically making payment condition on conviction.<sup>33</sup> One advertisement reads as follows:

WHEREAS, early in the night of Friday, the 10th day of August, a valuable WAGGON HORSE, answering the description given below, the property of Mr THOMAS HALL, of Stoke Golding, was feloniously stolen . . . in the parish of Stoke Golding.

*Notice is hereby given*

That a Reward of Five Guineas will be paid by the said Mr. Hall, in addition to a further Reward of Five Guineas, which will be paid by the Treasurer of the before named Association, to any Person or Persons who will give such evidence as shall cause the apprehension and conviction of the Offender or Offenders

This wording was intended to induce the criminals themselves to volunteer information. It continues: "if two or more Persons were concerned in the above named Felony, and any one of them will impeach his Accomplice or Accomplices therein to conviction, he is hereby promised both the Rewards, and that the proper means shall be used to obtain for him a free pardon" (*The Leicester Chronicle; or, Commercial and Agricultural Advertiser*, no. 1144, August 25, 1832).

Newspapers were used to promote prosecution associations by attracting new members and deterring criminals from attacking the property of their subscribers. A successful association developed a reputation for prosecuting offenses against its members and, through this reputation, deterred further criminal activity.<sup>34</sup> Such a reputation allowed it to attract more members and to achieve a given level of deterrence at a lower cost.

Associations attracted members by advertising the ancillary social benefits of membership. This practice developed over time. In the eighteenth century, prosecution associations were sometimes mentioned in newspapers and journals, but newspapers were not used to actively advertise membership (see, for example, *Gazetteer and New Daily Advertiser*, no. 1791). This situation changed in the 1790s, and by the early

33. Styles ( 1989, p. 65) found that in the *Norfolk Chronicle*, 89 percent of advertisements placed made the payment for the advertisement conditional on a conviction being obtained.

34. A somewhat macabre advertisement placed by the Staffordshire association noted that in the 4 years it had been in existence, the members had spent £230 on prosecutions and had secured six convictions, four of which had resulted in hangings and two of which had resulted in transportations (Staffordshire Association 1790).

nineteenth century it became common practice for associations to advertise membership lists and the dates of general meetings.<sup>35</sup>

### 3.4. Rewards

Many prosecution associations published reward rates in order to get witnesses to come forward and volunteer information.<sup>36</sup> A selection of such rates is given in Table 2. Associations were predominantly concerned with crimes against property.<sup>37</sup> They applied the logic of cost-benefit analysis in allocating their resources. If an association paid the whole reward, the amount not only would bankrupt the society and its subscribers but also might induce members to become careless, and, therefore, the association supplemented the rewards offered by victims (see, for instance, *Derby Mercury* 1812; advertisements in the *York Herald, County, and General Advertiser*, no. 1188, June 5, 1813; and advertisements in the *Leeds Mercury*, no. 2791, November 7, 1818). Night-

35. For example, the Beverley and Nottinghamshire associations began to advertise their members' names in the 1790s (Styles 1989, p. 64). The Mansfield association membership list was published in the *Nottingham Journal and Review* (Equitable Association of the Inhabitants of Mansfield and Neighbourhood 1842, p. 8). The Rickinghall and Botesdale Association for Prosecuting Felons and Others published a membership list in the *Bury and Norwich Post and East Anglian* (1842). This newspaper coverage supports Alexis de Tocqueville's observation that there was "a necessary relation between associations and newspapers; newspapers make associations, and associations make newspapers" (2000, p. 494).

36. The committee had some discretion and could grant additional rewards in special cases. The Eckington association provided a Mr. Tasker with a reward of 50s. rather than the guinea (21s.) reward specified in Article 17 of its constitution because he had gone to extraordinary lengths in hunting down the criminals responsible for stealing and damaging a large quantity of vegetables belonging to a member of the society. This extra reward was publicized by the association in the *Sheffield and Rotherham Independent* (Eckington Association for the Prosecution of Felons 1854).

37. The majority of societies did not offer rewards for information leading to murder convictions. When they did so, the amount offered in return for information leading to a murder conviction was usually the same as that paid for a robbery conviction. This reward structure does not mean that murder was viewed as equivalent to or less important than horse stealing; rather, it reflects the fact that such cases were typically outside of their purview. Murder cases were likely to generate public outrage, and the effort of apprehending and prosecuting a murder suspect would not depend decisively on support of an association. Prosecution associations tended to reserve their resources for cases for which they could make a decisive difference between securing a conviction and letting a crime go unpunished. The only exception that I have found to this general rule is the Leamington Priors association, which offered a reward of £30 for murder and £10 10s. for robbery (Leamington Priors Association for the Prosecution of Felons 1983, p. 2). This sole exception is consistent with the fact that Philips (1989, p. 145) could find only two mentions of prosecutions for murder. I found an instance of attempted murder that was prosecuted by the Bradfield association in 1846 (Bradfield Association for the Prosecution of Felons 1838–86).

**Table 2.** Reward Structures of Prosecution Associations

	Murder	Robbery	Arson	Stealing Livestock	Stealing Poultry	Stealing Corn or Grain	Damaging Fences or Doors	Information
Tanworth	£10 10s.	£5 5s.	£10 10s.	£5 5s.	£2 2s.	£1 1s.	£1 1s.	£5
Lanvrechva	£5	£5 5s.	£5 5s.	£5 5s.	£1 1s.	£1 1s.	£2	
Burnham		£10	£10	£20	£5	£1		
Chaddesley-Corbett		£10	£10	£10	£5–£30	£2–£3	£2	
Cawthorne		£10	£10	£10	£10	£10s.	£10s.	
Cheddleton		£7	£7	£7	£3	£3	£2	
Stapenhill		£5 5s.	£5 5s.	£3 3s.	£1 1s.	£5s.		
Mugginton		£10 10s.	£10 10s.	£10 10s.	£2 2s.	£1 1s.		
Derby		£5 5s.	£5 5s.	£3 3s.	£1 1s.	£2 2s.–5s.	£10s. 6d.	
Eglington	£10	£10	£5	£5	£10	£2	£2	
Ripley	£5 5s.	£5 5s.	£5 5s.	£3 3s.	£1 2s.	£1 1s.	£1 1s.	
Norbury and Roston	£5 5s.	£5 5s.	£5 5s.	£5 5s.	£1 1s.	£1 1s.	£1 1s.	

Sources. Tanworth Association for the Apprehension and Prosecution of Felons (1784); Association for the Prosecution of Felons and Other Offenders (1819); Burnham Association for the Protection of Persons and Property and the Prosecution of Felons (1833); Chaddesley-Corbett Association for the Prosecution of Felons (1837); Cawthorne Association for the Prosecution of Felons (1843); Cheddleton Association for the Prosecution of Felons (1858); Stapenhill Association for the Prosecution of Felons, etc. (1834); advertisements and notices for the Mugginton association, *Derby Mercury*, no. 4369, February 1, 1816; advertisements and notices for the Derby association, *Derby Mercury*, no. 438, June 6, 1816; advertisements and notices for the Eglington association, *Derby Mercury*, no. 4329, April 27, 1815; advertisements and notices for the Ripley association, *Derby Mercury*, n.d.; advertisements and notices for the Norbury and Roston association, *Derby Mercury*, no. 4511, December 24, 1818.

Note. In West Bromwich and Crowle, the reward for a capital offense was £10 (Association for the Prosecution of Felons 1773; Crowle Association for the Prosecution of Felons 1814). In West Bromwich, the rewards for felonies were determined by the committee. In Crowle, rewards for felonies were set at £2, and £5 was the reward for an offense resulting in transportation.

time crimes were harder to deter and demanded greater vigilance from property owners, and these difficulties were recognized in the reward rates of several associations.<sup>38</sup> Arson attracted a particularly high reward because farms—particularly in harvest time—were vulnerable to fires and because arson was an endemic problem in rural England—“the most common form of malicious damage in the Victorian countryside” (Jones 1982, p. 33).<sup>39</sup> Prosecution associations pursued small crimes in part because it was believed that a number of small depredations encouraged others, a view that resembles the modern broken windows thesis. But they did not punish moral crimes or cases of disorderly behavior, gambling, or prostitution.<sup>40</sup> Nor did they target working-class lifestyles in the way the police would try to do in the 1830s and 1840s (for more on this, see Storch 1975, 1976).

### **3.5. The Economy of Esteem**

Why did associations for the prosecution of felons provide the public good of deterrence? One reason was that the benefits nonmembers enjoyed were a by-product of the services produced by the associations for members. This, however, is only part of the explanation. The economy of esteem literature can help to explain the remainder of the puzzle of voluntary public good provisions (Brennan and Pettit 1993, 2000).

Individuals formed and joined associations for the prosecution of felons partly because they were concerned with crime and law and order, partly because they wanted to be seen to be concerned with crime and law and order, and partly because they desired the good opinion of their

38. The Duffield association and the Belper association both differentiated between daytime and nighttime robberies. The former proclaimed that information leading to the successful prosecution for robbery of “any Dwelling house, shop, Warehouse, or Outhouse, Waggon or cart” was rewarded at the rate £1 1s. if the crime was committed in the day and £2 2s. if it was committed at night (Duffield, Makeney, Holbrook, and Little Eaton Association for the Prosecution of Felons 1791–94).

39. A particularly devastating fire that caused between £1,700 and £2,000 in damage led the Yorkshire Insurance Company and the Rudston Association for the Prosecution of Felons to offer a combined reward of £150 for information leading to the conviction of the arsonist (Yorkshire Insurance Company and the Rudston Association for the Prosecution of Felons 1843). Also see *The Times* (1844), which describes how in response to a fire in Peckleton, Leicestershire, a combined reward of £100 was offered for information leading to a conviction: £50 from the government, £20 from the owner of the premises, and £30 from the local association for the prosecution of felons.

40. There were, however, separate societies for the suppression of vice that prosecuted writers, publishers, and printers who violated obscenity laws. A William Benbow was prosecuted in 1823 by the Society for the Suppression of Vice for publishing a work entitled *The Chevalier Faublas* (*The Observer* 1823).

friends and neighbors. The importance of the desire to earn the esteem of their fellow residents cannot be discounted. The argument that a major reason that individuals voluntarily contribute to the financing of public goods is to acquire the esteem of others goes back to Adam Smith's *Theory of Moral Sentiments* ([1759] 2002, p. 1759). Brennan and Pettit (1993, 2000) and McAdams (1997) observe that we spontaneously form judgments about the actions of others: we esteem or disapprove of them, and these involuntary judgements are valued and can motivate individuals to take certain actions, such as contributing voluntarily to the provision of a public good.<sup>41</sup> In this respect, prosecution associations resembled the turnpike trusts studied by Klein (1990) and Bogart (2005a, 2005b).

There were also material incentives to be an active member of philanthropic associations, clubs, and societies in an economy based on "gentlemanly capitalism" (Mokyr 2008). Like other societies, associations for the prosecution of felons were "an expression of the 'clubability' of Englishmen so noted by foreigners: voluntary associations that combined social contracts by men of the same class with strong practical purposes of mind" (Hay and Snyder 1989, p. 27). These societies maintained social ties between individuals who might do business with one another and thereby helped to signal trustworthiness and to enforce cooperative behavior (Mokyr 2008).

Social norms and cultural values changed in the century prior to the Industrial Revolution (see Mokyr 2009; McCloskey 2010). Taylor notes that during this period, "perceptions of and attitudes towards crime appear to have shifted significantly. . . . [A]n older view, that crime was an inevitable but relatively marginal and unthreatening part of the natural order, was replaced by a newer view in which crime was a central (if soluble) problem of society" (2002, p. 6). The new attitude toward crime manifests itself in the associations for prosecuting felons; it was this new attitude and new set of social norms that advertisements, notices, and newspapers appealed to.

41. Economists have often argued that resolving free-rider problems by appealing to social norms only pushes the question back a stage further, for if individuals have no incentive to contribute to a public good, then why will they be prepared to sacrifice resources to punish those who violate a social norm that demands that they contribute to a public good (for a summary of this argument, see McAdams 1997, pp. 352–53). Brennan and Pettit (1993) and McAdams (1997) argue that this is a misleading way of framing the issue, as esteem is conferred involuntarily.

#### 4. AN ASSESSMENT

##### 4.1. Decentralization and Polycentric Tiebout Sorting

Associations for the prosecution of felons formed part of a polycentric system of law enforcement.<sup>42</sup> The size and scale of any given association depended on the preferences of local members, as did the scope and ambition of the association. As is consistent with the findings of Tiebout (1956), private prosecution associations developed individual and idiosyncratic characteristics in different parts of the country. Since they were voluntary societies that had to maintain membership in order to survive, they adapted to the demands of their members. Prosecution associations experimented in offering different levels of protection to their members, and, as we have seen, they tried out a variety of membership structures.

Rural and urban associations had variegated membership profiles and offered a wide range of services. The majority of countryside associations consisted of farmers—the main group in rural society who had property.<sup>43</sup> Prosecution associations also sprang up in towns such as Bishop Auckland, Cambridge, Colchester, Derby, Grantham, Kidderminster, Sheffield, and Worksop, where the membership profile was quite different. The full list of Cambridge members (see Table 3) demonstrates that the membership of urban associations included the lower-middle and upper-working classes: grocers, drapers, wheelwrights, butchers, bakers, carpenters, and ironmongers were represented in addition to the gentlemen, lawyers, and merchants who might be expected to form an association to defend private property. Rural associations focused on the theft of horses, cattle, sheep, and poultry or even farmyard supplies.

42. Ostrom, Tiebout, and Warren (1961) have argued that centralized public organizations set up to realize economies of scale may fail because they are unable to respond to local demands or make use of local information. Decentralized or polycentric forms of organization allow competition and variety and thus provide opportunities and incentives for dynamic improvements in performance and delivery.

43. The membership of countryside associations was drawn from the upper and middle tiers of rural society. The Cawthorne association was, for example, founded by John Spencer Stanhope, Esquire, a member of the local gentry. But in general, the size of most of prosecution associations—the Bury association had 60 members and the Wheldrake association initially had 50 members—ensured that they represented a broad selection of rural property owners.

**Table 3.** Membership of the Cambridge Association

	Merchants and Bankers		Professional Gentlemen Workers		Textile Retailers	Skilled Workers	Unskilled Workers
Number	28	9	9	36	42	26	8
Percentage	18	6	6	23	27	16	5

Source. Town of Cambridge Association for the Prosecution of Felons (1841), pp. 8–15.

Note. In addition to the above list of occupations, there was one farmer and two booksellers whom I did not categorize. There were two female members whose occupations were not mentioned. Percentages sum to 101 because of rounding.

London-based associations were less interested with the theft of livestock and more concerned with burglaries and street crime.<sup>44</sup>

The growth of larger commercial centers permitted a further specialized institution: associations that focused on prosecuting fraud and commercial crimes. In cities such as London and Manchester, associations for the prevention of fraud comprising merchants, shopkeepers, and traders focused on identifying and prosecuting passers of false bills, hucksters, and cheats. They were organized in the same way as prosecution societies, supported by entrance fees or annual subscriptions and run by small committees.<sup>45</sup> The Beverley society “for the protection of trade” had its own solicitor to prosecute “swindlers or other impostors” (Beverley Guardian Society for the Protection of Trade 1834).

#### 4.2. The Limits of Public Good Provisions

Most associations provided a limited amount of deterrence in the form of subsidized prosecutions. However, prosecution associations could, under certain circumstances, maintain patrols and police forces. The most famous subscription-based police force—the Barnet association, which by the 1820s was patrolling a circuit of 8–9 miles around Barnet—grew out of an association for the prosecution of felons. It began by adver-

44. The Society for Prosecuting Felons, Forgers, Cheats, etc. advertised that it had “in the course of the last Year, as well as in preceding Years, brought to conviction a number of Offenders, particularly SHOP-LIFTERS, who are the greatest pest to the Trading part of the community” (classified ad, *Oracle and Daily Advertiser*, no. 946, April 1, 1799).

45. The rules of one London-based association were as follows: “That the Committee may adjudge to any one giving notice of any fraud committed on a Member of this Society, or beneficially assisting in the discovery of, or bringing to justice, any person defrauding a Member, a reward, not exceeding the sum of ten guineas, and, if occasion requires, may advertise in the public papers, or otherwise, such reward, not exceeding ten guineas to be paid on conviction” (The Guardians or Society for the Protection of Trade against Swindlers and Sharpers 1816, p. 18).

tising its intention to offer rewards and prosecute any future crimes on the North Road out of London, a form of preventive advertising that protected members and nonmembers alike (Barnet Association for Prosecuting Felons 1798). A patrol was introduced that deterred criminals from being active in the area, thereby conferring benefits on nonmembers. Despite the incentive to free ride, the secretary of the association, Thomas Dimsdale, reported that only a small proportion of people who lived near Barnet were nonsubscribers. In the first year of operation, the group prosecuted 22 cases, but by 1828 this number was down to two, and this decrease was viewed as a measure of success in providing deterrence and incapacitating criminals (*Report from the Select Committee on the Police of the Metropolis* 1828, p. 212).<sup>46</sup>

What problems there were stemmed from the different demands that members placed on the society: "A few persons there are, of that sort, who when any little expense is incurred, run to us very readily for their expenses. It is a painful task, on my part, to cut them down by saying, 'We cannot give all our attention to you. If you are going to keep a private watchman, you know your expenses; but a private watchman we cannot give you.' 'Oh! then,' they say, 'the association does no good to me; I must resign, take my name off'. This, however, they rarely do" (*Evidence Taken by the Constabulary Force Commissioners* 1839, p. 63).<sup>47</sup>

However, associations that attempted to provide a preventive form of policing faced greater problems than did those associations that limited themselves to printing advertisements and conducting prosecu-

46. Other subscription forces included the Uxbridge establishment. There were paid watches in many parts of London, including Acton, Chelsea, Croydon, Kingston, Richmond, and Edgeware, in addition to the Bow Street Runners and the Thames River Police. The Edgeware watch was less successful because the population was predominantly poor and hence less willing to pay for watchmen (*Report from the Select Committee on the Police of the Metropolis* 1828, pp. 213–40).

47. "There is a man, one of our subscribers; we do not turn him out; but he would have a man almost entirely watching him. I dare say, since he has been with us, we have generally lost money by his insurance every year. I cannot say what the reason is, whether it is that his temper is bad, or that he is disliked in some way; but it is the case that the lowest persons steal his ducks out of his pond even in the daytime. They make a point of annoying him" (*Evidence Taken by the Constabulary Force Commissioners* 1839, p. 63). Free-rider problems did limit the expansion of the society. Another nearby parish applied to join the Barnet association but could not because an intervening parish, Little Berkhamstead, refused to join. "Little Berkhamstead would have had the advantage of the Barnet police without contributing to the expense, if we had been admitted" (*Evidence Taken by the Constabulary Force Commissioners* 1839, p. 79).

tions.<sup>48</sup> Whereas the Barnet association demonstrated that it was possible to provide a police patrol on the basis of private subscriptions—notwithstanding the problem posed by free riders—the Hammersmith association struggled to provide security to its members and found it difficult to maintain an active night watch. “Depredations of various descriptions having been committed almost nightly upon the Persons and Property of the inhabitants of the hamlet of Hammersmith, more particularly, upon those of many of the members of this association . . . notwithstanding bills that have been printed [unreadable] offering rewards for the apprehending or giving information of the offenders and none of which have had the desired effect together with the maintenance of an extra watchman having been placed in different parts of the town further security—and which also has been of little or no avail” (Hammersmith Association for Prosecuting Thieves and Felons 1811).

The solution the Hammersmith association suggested was to form a force of 15 special constables—mostly unemployed laborers sworn in by a magistrate. However, this solution was extremely expensive. The Hammersmith association was a large one with 183 members, but although the association raised an impressive amount of money in its initial subscription period (£98 19s. 6d.), thereafter it struggled to get its members to pay regularly. By 1815, the size of the watch was reduced to eight men. The initial enthusiasm for maintaining a watch was not sufficiently strong to carry the society forward once the number of robberies fell. In 1818, the association was dissolved, and a new association was formed. This one lasted only a year, however, as the cost of the watch alone was £35 7s. 36d. per year.<sup>49</sup> A final attempt to establish the association without the additional expense of a patrol in 1824 also failed. This example demonstrates that there were definite limits to the private provision of public goods, but it is not necessarily a mark against the old system of prosecutions. Any decentralized or polycentric order must permit successes and failures, and it is not clear how the police system

48. One attempt by an association to provide a watch “satisfied two or three persons; the others saw that it was entirely inefficient and useless; and the farmers disapproved of the men being withdrawn from the public road into the private grounds of a few large subscribers, thus leaving the property of those who could not demand that privilege, unprotected” (*Evidence Taken by the Constabulary Force Commissioners* 1839, p. 87).

49. The association recognized the nature of the problem. The minutes of the November 1822 meeting note “that in consequence of the deficient state of the monthly collection that a fresh canvas of the hamlet be commenced particularly of those districts where the subscriptions are smallest” (Hammersmith Association for Prosecuting Thieves and Felons 1818).

in Hammersmith would have evolved in the 1830s had the Metropolitan police not arrived in 1829.

#### **4.3. Displacement**

Prosecution associations could have displaced crime (in addition to reducing it). Associations could have shifted crime onto nonmembers (within a given locality), or their existence could have led to criminals moving into areas where there was no association or where the local association was less well organized. This first form of displacement was unlikely unless criminals both knew the identity of their victims and had read the membership lists of the association. And, if displacement occurred, it increased the incentive for nonmembers to join. The negative externality generated by the formation of an association was internalized by the association simply taking on additional members or through the formation of a new association. Individuals who did not join were those for whom the costs outweighed the benefits (inclusive of a negative displacement effect); these individuals were likely to be either the very rich or those too poor to have property worth protecting or stealing.

Parliamentary commissioners were concerned that the Barnet association displaced crime onto neighboring areas. They asked Thomas Dimsdale: "Is it the effect of your police, to drive the thieves out of your circuit, and drive them into the adjoining parishes?" (*Report from the Select Committee on the Police of the Metropolis* 1828, p. 212). Contemporaries held to the migration thesis: improvements in policing in one area were seen to cause criminals to migrate to where pickings were easier (Hart 1956, pp. 411–12). This outlook was an inevitable feature of a decentralized system, but while concern with geographic displacement was certainly one reason that reformers such as Edwin Chadwick pressed for a centralized police force, it is not clear whether this was a flaw or a feature of a decentralized criminal justice system. Nicholas Marceau (1997) demonstrates in a formal model that the geographic displacement of crime in a decentralized system of law enforcement leads to overdeterrence and not underdeterrence. In early nineteenth-century England, additional deterrence was efficiency improving from the point of view of the theory of the second best, given the general tendency of the private system of prosecutions to produce too little deterrence.

#### **4.4. Decline**

Having seen how prosecution associations functioned, we can briefly consider why most associations gradually disappeared during the second

half of the nineteenth century. The demand for a preventative police force was felt most strongly in large cities, particularly London, where experiments with private police forces such as the Bow Street Runners and local watches had been taking place for some time. Elsewhere in the country, the combination of constables and magistrates and institutions such as associations for the prosecution of felons appear to have functioned effectively (Philips and Storch 1999). Prosecution associations functioned best in relatively small and homogeneous communities, and it is likely that the forces of urbanization and population growth would have led to their demise in the long run. However, the rapid emergence of a countrywide police force between 1828 and 1856 was not a direct response to the problems with decentralized law enforcement. Rather, a police force became acceptable to rural elites in the 1830s because the threat of social or political revolution loomed large. Faced with the possibility of revolution, residents' perception that providing the state with a new source of patronage and political power was dangerous receded (Silver 1967; Storch 1975, 1976; Philips and Storch 1999).

Once a police force was established, it was inevitable that private associations for prosecuting felons would be crowded out. In urban areas, this change occurred quickly. The Clapham association disappeared a year after the Metropolitan police expanded into the area (Committees of Vestry 1809–40). In rural areas, many associations survived for much longer and worked with the police much as they had previously worked with local constables (the Stockton association is an example; see *Daily Gazette* 1874). However, in the long run, the emergence of the police robbed prosecution associations of their principal reason for existing, particularly as the police began to take over the burden of prosecuting felons from the 1870s onward, and those associations that survived into the 20th century did so largely as social clubs.

##### **5. CONCLUDING COMMENTS**

Following North and Weingast (1989), economic historians have argued that security of property was a necessary condition for the Industrial Revolution to occur. But how was security of property maintained in a country lacking a nationwide professional police force? Mokyr argues that "day-to-day security depended more on social conventions and self-enforcing modes of behavior than on the administration of justice by an impartial judiciary" (2008, p. 73). This paper provides new evidence

in support of this assertion and demonstrates how these social norms were mediated through private-order organizations known as prosecution associations. Informal, private-order institutions, similar to those studied by Clay (1997), Greif (2006), and Leeson (2007), played a larger role than did formal institutions in creating the framework of law and order necessary for the Industrial Revolution.

This paper has shown how prosecution associations were able to play an important role in securing law and order in the period prior to the establishment of the police. They were a response to preexisting problems in the system of private prosecutions that had been exacerbated by industrialization, population growth, and rapid urbanization. Prosecution associations were able to induce members to reveal how much they valued being protected by the association through price discrimination. They demonstrated the institutional inventiveness of a decentralized system of public goods provision. Associations were only a partial response to the problem of crime in Industrial Revolution England, but this study of them should, nevertheless, lead scholars to revise upward their evaluation of the possibility of the private provision of deterrence.

Recent accounts of the British Industrial Revolution emphasize the importance of informal institutions and changing social norms (Mokyr 2008, 2009; McCloskey 2010). In showing how private individuals were able to overcome the deficiencies of the traditional system of law enforcement, this paper sheds new light on the robustness of informal institutions in Britain during the Industrial Revolution. A detailed examination of prosecution associations supports Mokyr's observation that "[t]he enforcement of property rights through private-order institutions reflects something deep and supremely important about British institutions in the eighteenth century" (2009, p. 381).

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