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What is a Gang and Why Does the Law Care?

Philip A. Curry
Steeve Mongrain

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Philip A. Curry  
Simon Fraser University

Steeve Mongrain  
Simon Fraser University

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Abstract

The economic theory of optimal punishments states that the expected penalty for a crime ought to be equal (or at least proportional) to the social harm caused by the act. The Criminal Codes in both Canada and the United States allow for criminals to be penalized to a greater degree if they are a member of a gang. According to the economic theory, this would be optimal if either: 1) the social harm from a criminal act is greater for a gang member than for an independent criminal, or 2) the probability of conviction is lower for a gang member. We examine the extent to which both of these possibilities are true and use the findings to develop a (perhaps improved) definition of a gang.

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*Author’s E-mail: pcurry@sfu.ca and mongrain@sfu.ca, and corresponding address: Department of Economics, 8888 University Drive, Simon Fraser University, Burnaby, BC, V5A 1S6, Canada.
1 Introduction

Both Canada and the United States have stipulations in their Criminal Codes that specify larger penalties for members of gangs or criminal organizations.\(^1\) Unfortunately, the attempts to deter the formation of gangs has met with little success\(^2\), for reasons that will be discussed below but are tied to how a gang is defined. This paper examines why society would want to deter organized crime and uses its findings to propose a different definition of a criminal organization.

The Criminal Code of Canada defines a criminal organization as “a group, however organized, that (a) is composed of three or more persons in or outside Canada; and (b) has as one of its main purposes or main activities the facilitation or commission of one or more serious offences that, if committed, would likely result in the direct or indirect receipt of a material benefit, including a financial benefit, by the group or by any of the persons who constitute the group. It does not include a group of persons that forms randomly for the immediate commission of a single offence”.\(^3\) The incremental penalty for being a member of a gang while committing a crime is no more than 14 years imprisonment.\(^4\)

At the federal level of the United States, as well as within many states, there exist provisions for high-level members of drug-dealing gangs to receive harsher sentences: the so-called ‘Kingpin Laws’. For example, in New Jersey, the Kingpin laws are

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\(^1\)While the terms ‘gang’ and ‘criminal organization’ may have slightly different connotations, we use them here synonymously, and generally use the former.


\(^3\)Criminal Code of Canada, subsection 467.1.

\(^4\)Criminal Code of Canada, subsection 467.12.
designed to “disrupt organized drug trafficking networks by targeting key network members,” and impose minimum sentences of 25 years. In order to qualify for the additional sentencing, it must be demonstrated that the individual was an “organizer, supervisor, financier or manager”.  

We argue that the current definitions that must be satisfied are problematic and allow for too little deterrence. Currently, Canada has been unable to convict criminal members of the Hells Angels as members of a gang, primarily because they cannot prove that the commission of crimes is a primary reason for the group. Convictions under the US Kingpin Laws are contested based on whether the person in question was high up enough in the gang.

In order to come up with an improved definition of a gang, we begin by looking at the economic theory of why society would want to punish gang members more than independent criminals. We find that using such an approach presents a working definition of a gang based on its presence in a market for illegal activity rather than on the nature of the network.

The rest of this paper is organized as follows. In the next section we exposit the economic theory of optimal punishments in order to demonstrate that the level of punishment should depend on the social harm incurred and the probability of conviction. We then examine how gangs may differ from independent criminals in these regards in sections 2 to 4. In section 5, we consider how these differences can be used to construct a definition of a gang, or criminal organization, and comment on some aspects of the design of anti-gang laws.

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5New Jersey Division of Criminal Justice Statewide Narcotics Action Plan, 1993, at p. 3.
6From http://www.judiciary.state.nj.us/charges/jury/ceds001.htm.
1.1 Economic Analysis of Optimal Punishments

Since Becker’s (1968) seminal work, a large literature has arisen focussing on crime and optimal deterrence. In particular, much attention has been paid to optimal punishments. To begin with, it is not optimal to have all punishments set at the maximum possible (such as the death penalty). If rape, say, were punished with the death penalty, then rapists would have incentive to kill their victims in order to reduce their chance of being caught. Further, if punishments were the same for all crimes, then criminals might have incentive to switch out of less serious crimes to more serious ones. This is known as the concept of marginal deterrence.\(^9\) Given that there are a large number of possible crimes, expected punishments should be an increasing function of the social harm caused by the criminal act.\(^{10}\)

Further, from a welfare perspective, there may be some crimes for which we would wish to include the criminal’s benefit from crime in the welfare function.\(^{11}\) In this case, efficiency requires that crimes be committed only when the criminal’s benefit outweighs the social harm. This will occur if the expected punishment is exactly equal to the harm caused.\(^{12}\)

Modifying the notation from Polinsky and Shavell (2000) slightly, let \(g\) denote the benefit to the criminal from the illegal act, \(\pi\) be the probability of conviction and \(f\) be the penalty. If criminals are risk neutral (as shall be assumed), they will commit a crime when \(g \geq \pi f\). Assume that \(f\) is costless to levy and that there exists a maximum amount that can be imposed, \(\bar{f}\). Further assume that the probability of

\(^{9}\)See, for example, Stigler (1970), Friedman and Sjostrom (1993), Shavell (1992) and Mookherjee and Png (1994).

\(^{10}\)Note that the expected punishment is the penalty times the probability of being caught.

\(^{11}\)See Polinsky and Shavell (2000).

\(^{12}\)Note that if prison sentences are used, then the cost of imprisoning the criminal should be included in the welfare analysis. For the most part, we will abstract from this case.
detection is a function of government expenditures, \( e \), where \( \pi'(e) > 0, \pi''(e) < 0 \). Let the benefits a criminal derives come from a random draw from the probability density function \( z(g) \) (and be known to the potential criminal before the act is committed), with associated cumulative density function \( Z(g) \). Welfare is thus maximized by solving

\[
\max_{e,f} \int_{\pi_f}^{\infty} g z(g) \, dg - [1 - Z(\pi f)] h - e
\]

The solution thus entails setting \( \pi f = h \) and \( f = \bar{f} \) so that \( e = \pi^{-1} \left( \frac{h}{\bar{f}} \right) \) where \( \pi^{-1} \) is the inverse of \( \pi \).

Note, however, that this analysis applies to the case of either a single crime, or where enforcement efforts can be customized to each crime. In the case where enforcement is general (as opposed to specific), there will be an optimal level of enforcement, \( e^* \), and the optimal punishment for a given crime is \( f = \frac{h}{\pi(e^*)} \) (see Shavell (1991)).

Given that it seems reasonable that enforcement is to a certain degree general, combined with the stories for marginal deterrence and welfare maximization, we can conclude that if criminal acts committed by gang members are penalized to a greater degree, then it must be that either: 1) the social harm from the act is greater, or 2) the probability of conviction is lower. We now examine these two possibilities.

### 2 Social Harm

As mentioned above, one possible explanation for increased penalties for gangs is that the social harm is higher if the crime is committed by a gang member. That is, the harm from a murder or a drug sale is greater when committed by a member of a gang than by an independent criminal. How might this be the case?
First, note that many gangs are involved with drugs and prostitution. Further, gangs generally try to create monopoly power for themselves within their local region. Many economists have argued that drug markets are somewhat non-competitive. Fiorentini and Peltzman (1995) argue that organized crime is more likely to flourish when there are economies of scale and monopolistic power. They also suggest that organized crime uses violence against other firms in the legal and illegal sectors. Gambetta and Reuter (1995) also pointed out that criminal organizations can use violence to maintain their market power. Similarly, Levitt and Venkatesh (2000) argue for the presence of market power in the illicit drug sector by looking at actual data on a Chicago gang. They noted that the use of violence plays a major role in sustaining market power. While independent criminals may also use violence in the course of doing business, the impact on the competitiveness of the market would presumably be less than the same act committed by a gang.

How does monopoly power in the market for drugs and prostitution affect social welfare? This depends on one’s point of view. If one feels that society should be trying to minimize the amount of consumption in these markets, then it would be preferable to have gangs in charge of distribution than a competitive market with many independent sellers. As long as gangs are not able to price discriminate in these markets (a reasonable assumption), then monopolist gangs would restrict sales in order to charge higher prices and attain more profit. Laws against drug sales/use and prostitution would have the effect of increasing the cost to gangs, thereby reducing transactions further (see Figure 1).

The effect of higher penalties for gangs, however, is ambiguous. If the expected penalty for gangs is small enough, then it would have the effect of increasing costs, thereby reducing sales further. If the expected penalty is large enough, however, then the gang may not be able to make profits even as a monopolist, and so laws against gangs may actually have the effect of increasing consumption of drugs and
Figure 1: An increase in the penalty for selling drugs increases the marginal cost from $MC_0$ to $MC_1$ and decreases the quantity sold from $q_0$ to $q_1$.

prostitution, as demonstrated in Mansour, Marceau and Mongrain (2006). In general, however, any effect of a penalty for gangs could also be accomplished through an increase in the penalty on the transaction itself (independent of whether done by a gang member), and so penalties for gangs would not be particularly effective in this regard.

However, it is possible that the purpose of laws against drugs and prostitution is not to deter consumption, but to provide incentive for consumers to do so discreetly (see Curry and Mongrain (2008)). If the externality associated with drug use or prostitution is that it offends the moral sensibilities of others, then the efficient outcome may be for people to consume out of the sight of others. In this case, laws against drugs and prostitution can in fact implement the first best outcome. The first best would entail an efficient market with proper incentive to be discreet about consumption. However, since consumption is efficient in this case, the deadweight loss associated with monopoly is a social cost, and so higher penalties for gangs would
conform with the above theory.\textsuperscript{13}

Of course, involvement in the drug and sex trades are not the only crimes that gangs commit. Monopoly power in these markets is often enforced through violence (usually against members of other gangs, although innocent bystanders may also be victims), and gangs may also engage in extortion, human trafficking, and other crimes against the population. Note that if gangs are subjected to higher penalties because they cause greater social harm, it must be on a \textit{per act basis}, not because they engage in these activities to a greater degree.\textsuperscript{14} Why should there be greater social harm if a gang commits extortion as compared to the same crime committed by an individual? The answer may actually be that there is more harm \textit{per act} because gangs are better organized in their attempts to commit crimes.

The key to this insight lies in a proper definition of the harm caused by a criminal act. Note that the social harm must be greater than the loss to the victim. If it were equal, then the theft of money would have benefits to the criminal equal to the harm to the victim (assuming risk neutrality), and there would be no reason to punish the act. The reason that the social harm is greater than the loss itself is because the \textit{threat} of crime causes individuals to take precautions to avoid being victims. Such precautions could involve monetary expenditures, such as the purchase of alarm system, or they could involve changes to one’s lifestyle, such as avoiding certain parts of town.

Consider the following adaptation of the Polinsky and Shavell model, taken from Curry (2008). As before, gains to criminals are given by $g$, so that a criminal would like to commit an illegal act if $g \geq \pi f$. Potential victims, however, can take precau-

\textsuperscript{13}A possible exception to this would occur if gangs are better at ensuring discretion in the transactions.

\textsuperscript{14}It is possible that they engage in these activities to a greater degree than independent criminals because they have a lower chance of being caught. This is discussed in the next section.
tions to prevent the act from occurring. Suppose that expenditures, \( a \), by the potential victim reduce the probability of a successful crime by \( \alpha (a) \), where \( \alpha' > 0, \alpha'' < 0 \). Potential victims thus choose \( a \) to minimize their expected losses (comprised of losses to criminals and expenditures \( a \)). As the threat of crime increases, potential victims spend more in order to avoid encounters with criminals. If gangs represent a greater threat to potential victims, then victims will spend more, thereby increasing the social harm per act. In this case, it would be socially optimal to have higher penalties for crimes committed by gang members.

### 3 Probability of Detection

Greater penalties for gangs members would also arise if the probability of detection is lower compared to independent criminals. We shall now discuss some of the reasons why a crime committed by a criminal organization may be subject to a lower probability of detection.

As mentioned above, gangs often create monopoly power for themselves in a market through the threat of violence. The above section examined the effect of this on social harm, but there are also implications for the probability of detecting a criminal act. Consider a hypothetical drug market with free entry, and a large number of many small suppliers. For a given quality, the price of the drug is set equal to the marginal cost of production and distribution, which includes all expected costs related to enforcement. Economic profits are driven to zero due to free entry. Now consider the case in which the supply of the drug is controlled a monopolist criminal organization. The presence of market power, however, brings two important features: lower quantity supplied and higher profits or surplus. Each of these two features influences the probability of detection.
3.1 Fewer Offences

As pointed out by Buchanan (1973) and Mansour, Marceau and Mongrain (2006), illegal markets dominated by one or a small number of strong criminal organizations will tend to produce less illegal output, leading to a smaller number of offences. In the context of a market for legal and homogeneous goods, fewer transactions simply implies that the marginal transaction is done at a higher price and with an individual who has a higher valuation for the product. In other words, with fewer transactions, each transaction is more profitable solely due to higher prices. As summarized by Caulkins and Reuter (2006), illegal markets for addictive goods in particular operate very differently. For example, there can exist a very different relationship between price and quantity. With illegal markets, the goods, and even the actual transactions, are rarely homogenous. Caulkins (2007) gives a clean example to support this affirmation: “The amount of heroin in a ‘dime bag’ might change over time and location, but by definition a dime bag always costs $10 (‘dime’ being street argot for $10)”.

He also gives many examples where purity varies from one transaction to another instead of quantity. Another important feature of drug markets is quantity discounting, where prices on larger transaction are significatively lower. Although, such price discrimination is also common in legal markets, the magnitude of the discount seems to be more drastic for illegal markets. Clements (2006) found significant quantity discounts for the case of marijuana, while Caulkins (1994) suggests that such discounts can be in the order of 40% for cocaine. All these facts suggest that a higher price is not the only way by which suppliers earn more surplus. Drug traders may increase the surplus they extract from a transaction by cheating on quantity, by diluting their product, or by even by concentrating on transactions that are less risky. It is this last point on which we wish to focus.

Such drastic quantity discounts can be seen to be optimal if we consider the prob-
ability of being caught in the profit maximization problem. Suppose that enforcement and penalties do not depend on the size of the transaction, but that once caught, the dealer is unable to complete any more transactions. If \( p \) is the price per one hundred grams, then the expected profits from a single transaction is \( 10(p - c) - \pi f \), where \( c \) is the cost of production. The expected profits from trying to sell one hundred grams in ten transactions is

\[
\sum_{t=1}^{10} (1 - \pi)^{t-1} (p - c) - [1 - (1 - \pi)^{10}] f
\]

. Thus the dealer would be willing to offer a discount up to

\[
10(p - c) - \pi f - \sum_{t=1}^{10} (1 - \pi)^{t-1} (p - c) + [1 - (1 - \pi)^{10}] f = \\
\left[10 - \sum_{t=1}^{10} (1 - \pi)^{t-1}\right] (p - c) + [1 - (1 - \pi)^{10} - \pi] f.
\]

If \( \pi = 0.1, p = 1, c = 0 \) and \( f = 2 \), we have that the dealer would be willing to offer a discount of 45%. Note that even if sanctions increased in the size of the transaction, discounts may still be offered. Consider the above example and suppose the penalty for dealing one kilogram is 20, instead of 2. In this case, the dealer would still be willing to offer a 38% discount. Thus such discounts would suggest that the probability of detection does factor into the behavior of dealers quite significantly.

A simple supply and demand model demonstrates how a reduction in the number of transactions due to an increase in market power can lead to lower probabilities of arrest. Figure 2 displays the demand for an illegal good (or service). Curve \( D \) is the standard downward sloping demand curve, while curve \( MC \) represents the marginal cost of supplying an additional unit of the illegal good. This marginal cost is made of two components: the actual cost of production and distribution, which is assumed to be equal to a constant \( c \), and the additional expected cost due to law enforcement. This additional expected cost may be increasing even though the actual sanction remains constant.
Consider an environment in which times and locations for transactions vary in their discreetness (visibility to the police, perhaps). If a dealer makes a low number of deals in a month, he would choose to transact in the more discreet locations/times. As the number of deals increases, they would have to occur in more visible places, thus increasing the probability of detection. This yields the upward sloping MC curve depicted in Figure 2.

Now consider two different market structures: perfect competition and monopoly. Perfect competition is characterized by free entry, so the number of transactions is determined through a zero profit condition. In a competitive market, dealers will enter (transacting in riskier and risker locations) until price is equal to marginal cost. This yields a number of transactions $q^C$ and a market price $p^C$. A monopolist gang, however, maximizes profits by setting marginal revenue equal to marginal costs. In Figure 2, curve $MR$ represents marginal revenue, while $p^M$ and $q^M$ represent the monopoly price and quantity. Obviously, in a monopolized market the price is higher and the quantity distributed is lower. More importantly, the total marginal cost of
the last transaction is lower, meaning that the probability of detection is lower.

While this simple supply and demand model captures some features of the market for illegal goods and services, there are other characteristics, particularly relevant to the market for illegal drugs, worth examining. Drugs can be described as experienced goods, in the sense that quality is difficult to observe prior to consumption. This is the main reason why a ‘dime bag’ always costs $10. With unobservable quality, a uniform price can prevail, although quality varies as suppliers dilute their product. This environment can perhaps be best described using a search model in which consumers and drug dealers are matched at random, and trade only if both side agree (see, for example, Galenianos, Pacula and Persico (2008)). In such an environment, agents make separate decisions on price, quality and other characteristics such as the riskiness associated with the transaction. Reputation and the prospect of future transactions provide the supplier with the incentive to maintain some level of quality. However, there could be heterogeneity in quality and even in price in equilibrium. More importantly for this paper, more market power allows suppliers to be more selective when accepting or declining a transaction. Since the riskiness of each transaction contributes to the overall expected surplus, one can expect that with an increase in market power, suppliers will move away from more risky transactions.

3.2 Greater Surplus

Criminals, or criminal organizations, have incentive to expend resources (financial or otherwise) in order to reduce the probability of detection and conviction (or even potentially reducing the sanction). Malik (1990) mentions such types of activity as the installation of radar detectors to lobbying, while Lott (1987) argues that wealthier individuals (or organizations) are able to ‘buy’ justice by hiring better lawyers. Finally, Beck and Maher (1989) examine the case of bribery to suggest that competition can
reduce the incentive to take bribes (thereby increasing enforcement).

When gangs are able to create monopoly power for themselves, the achieve greater profit. With greater profit comes higher costs of seeing inventory being confiscated by the authorities. For example, on October 7, 2007, in what was the third biggest seizure of ecstasy in the US, the DEA confiscated 1.4 million tablets worth an estimated US$42 million. In 2005, a record year for cocaine seizures, the DEA confiscated more than 118,000 kilograms. These examples among others suggest that the loss of revenue associated with seizure are important. In some cases, the loss of revenue is almost the only cost incurred by the supplier. Easton (2004) highlighted the following facts:

In a sample of Vancouver marijuana growing operations ‘busted’ by the police, most (55 percent) of those who were convicted received no jail time. Five percent were sentenced to a single day or less and another 8 percent received sentences of between one day and 31 days. Of those that received longer sentences, 8 percent received 60 days and 11 percent were sentenced to 90 days. Of those who were repeat offenders, half were re-apprehended within the year. Of the 55 percent who were fined, the average fine amounted to less than $1,200: a small amount considering the size of most marijuana operations. Thus the major component of the penalty associated with conviction is the loss of product: police destroy nearly 3,000 marijuana growing operations a year.

Our point, then, is that since monopolists are able to command a higher price than competitive firms, gangs forego more profit from seizure. As such, we should expect gangs to expend more resources to avoid detection and be harder to catch, all else being equal.\textsuperscript{16}


\textsuperscript{16}Of course, it may not be the case that all else is equal. For example, monopolistic gangs may
3.3 Internal Organization and the use of Violence

As noted by Levitt and Venkatesh (2000), gangs may suffer from an agency problem in that the incentives of its members individually may not be perfectly aligned with the incentives of the gang as a whole. As such, violence is an instrument that may be used in order to overcome the moral hazard problem. While such violence is a quintessential feature of many movies and books, there are many real examples as well: in 1985, the internal purge done by the Quebec chapter of the Hells Angels resulted in the murder of five of their own members.\(^17\) Note that one aspect of the agency problem that gangs try to overcome is the incentive for members to provide evidence against each other in exchange for reduced sentences for themselves. Thus violence, or its threat, may be a key instrument in controlling the flow of information and preventing, for example, testimonies in order to reduce the probability of being sanctioned.

Perhaps more importantly, gangs use the threat of violence on their victims (and other witnesses) in order to reduce the probability of being caught. If an independent criminal threatens to kill a person if they testify against him, that person still may do so, knowing that they will be safe at least for the duration that the criminal is in jail. If a gang member makes such a threat, however, then it is much more immediate, as it may be carried by another gang member while the offender is in prison. Consider the 1996 indictment of Clarence (Preacher) Heatley, a gang leader from Harlem.\(^18\) Mary Jo White, the United States Attorney in Manhattan, gave the following explanation for why it had taken a long time to get to Heatley: “They were careful. They were smart and they intimidated all those around them, drug dealers and citizens alike.”

Further, in 1989, another member of Heatley’s gang had been acquitted of a killing in Baltimore after witnesses changed their testimony. Thus it would appear that gang members are better able to commit to violence in order to reduce their probability of conviction.

4 How Bad is Prison?

We have thus far considered how the illegal activities of gang members may either cause greater social harm or be harder to detect (as compared to independent criminals). There are a couple of other reasons, however, that may justify higher penalties for gang members. For instance, although the analysis above has assumed fines for penalties (in order to abstract from costs of punishment), most sanctions are in terms of imprisonment. The penalty therefore lies in the foregone income and disutility from being in jail. For a sanction of a given length, gang members may suffer less of a penalty than independent criminals.

First, the threat of violence in prison may be less for members of a gang, so that the disutility is not as severe. Also, if gangs are able to smuggle goods into prisons, the foregone consumption may not be as large. Finally, if gangs are able to smuggle drugs into prison, then the foregone income would also be smaller. As a result, longer sentences would be required to have the same penalty in terms of utility.

5 So What is a Gang?

We have thus far considered why the law should penalize crimes committed by gang members more severely than independent criminals. It is worth noting that all arguments entail that the gang perpetrate *multiple* crimes. Thus it would seem sensible
to somehow include the permanence of the group in the definition of a gang, as per the Canadian Criminal Code.

Also of note is that many of these arguments center on the exertion of monopoly power in an illegal market (either in the market for all crimes within a defined area, or in a market for a specific illegal good or service, or both). As such, we propose that the definition of a gang be linked to the presence of monopoly power.

Of course, this begs the question of how to demonstrate the existence of monopoly power. In the case of a market for an illegal good, such as drugs, a crude measure would be price. However, since price actually seems to be fixed while quality varies, quality (or a price to quality ratio) would then be the measure.

In a more metaphorical market for crime, where the gang is exercising monopoly power over the commission of breaking and entering, for example, such measures would not be feasible. However, as mentioned above, a key component to enforcing monopoly power is violence. If testimonials of violence disproportionate to the stakes can be found (such as killing or seriously injuring another dealer who happened to be in the same area), then this would be an indication of the exertion of monopoly power. In the cases of Clarence Heatley and the Hells Angels described above, examples of intimidation were not hard to produce.

It is worth noting that such a definition does not suffer from the problem of determining the extent of a gang. For example, if a subset of a social group were to commit crimes (and exercise monopoly power in doing so), they could be found guilty of being in a gang without implicating the rest of the social group as members. This appears to be a major problem with Canada’s current definition of a gang and the Hells Angels.\(^\text{19}\)

5.1 The Design of Anti-Gang Regulations

While Canada imposes an additional sanction for any gang member committing a crime, the US targets only key players within the organization. We argue that one aspect of the US design may be beneficial, while another may be counterproductive.

First, we consider the US Foreign Narcotics Kingpin Designation Act, commonly known as the Kingpin Act, that allows the US government to freeze the assets located within the United States of designated international drug traffickers. The law, enacted in 1999, created a list that now comprises seventy-five foreign individuals and entities. A common and important characteristic of criminal organizations is that they often operate across borders. Drugs are often produced outside of the United States, and human trafficking for the purpose of prostitution generally entails the importation of women from foreign countries. One solution would be to coordinate enforcement policies across countries, but such coordination is difficult, if not impossible. As such, there exist externalities in crime between countries or jurisdictions. For example, a reduction in enforcement in a drug-producing country increases exports to the receiving countries. The Foreign Narcotics Kingpin Designation Act is one way to deal with these externalities, especially when coordination is not possible. A similar argument was developed by Boylan (2004) to explain why more than one third of federal defendants are prosecuted for drug offenses even though they could have been prosecuted at the state level. As such, the designation of international Kingpins can help overcome problems associated with jurisdiction.

Less effective, perhaps are regulations like the New Jersey Drug Reform Act of

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20For more information see US Department of State website at http://www.america.gov/st/democracy-english/2008/June/200806261833531xeneerg0.6767084.html.

21These analysis of these externalities is very similar to the well-studied fiscal externality problem. See Wilson (1999) for a survey.
1986, as described in the introduction. As mentioned above, it imposes minimum sentences of 25 years to drug dealers tagged as kingpins, where a kingpin is defined as an organizer, supervisor, financier or manager in an illegal drug operation. The law thus stresses the ability to control others in a profit-making scheme to manufacture or distribute illegal drugs. Why is hierarchy important, and why should low ranked members of an organization be spared? On the surface, making it more difficult for gangs to recruit low ranked members could seriously handicap their ability to produce and distribute drugs. However, Levitt and Venkatesh (2000) provide a rationalization for this strategy. Using data on a Chicago street gang, they suggest that gangs are structured like a labor tournament. Low ranked individuals are willing to participate despite low wages, high chances of imprisonment, and death rates that can reach seven percent annually. The reason they are willing to participate is the promise of promotion within the gang, where they can earn considerably more than any other outside option. Given this structure, it seems unlikely that imposing longer sentences to so-called ‘foot soldiers’ would have much impact. Deterrence would be minimal, and there would be little incapacitation effect, since foot soldiers are easy to replace. Alternatively, targeting higher ranked individual can be more productive, since it reduces the benefits associated with promotion. Unfortunately, this analysis is predicated on the assumption that the structure of gangs is exogenous. As Easton and Karaivanov (2008) argue, the structure of a gang is sensitive to the laws in place. Designing a law to remove key individuals within a criminal organization would merely have the effect of inducing gangs to alter their structure.
References


