Econ. Gov. (2001) 2: 173–202

Economics of Governance


# The political economy of organized crime: providing protection when the state does not*

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**Abstract.** Organized crime emerges out of the power vaccuum that is created by the absence of state enforcement, and which can have many sources: geographic, social, and ethnic distance, prohibition, or simply collapse of state institutions. Mafias and gangs are hierarchically organized and can be thought of as providing primitive state functions, with economic costs that are typically much higher than those associated with modern governance. Though organized crime cannot be completely eradicated, its control is necessary, since it can easily corrupt existing institutions of governance. Some thoughts on what can be done to control organized crime are offered.

**Key words:** anarchy, conflict

**JEL classification:** H1, K0, L8

## 1. Introduction

The Italian and American mafias have been familiar from the popular press and Hollywood for some time now, but recently attention has been shifting to other organized crime groups that have sprang up in post-Soviet republics and other transition economies. Organized crime though is a phenomenon that can be found in almost every country – from the Yakuza in Japan, to the Triads in Hong Kong, to the drug cartels in Colombia and Mexico, to the numerous youth gangs of large urban agglomerations everywhere. Perhaps the Vatican is the only country in the

* I would like to thank Jennifer Wu for excellent research assistance, and Jacob de Haan, Paul Klemperer, Kai Konrad, Kathryn Rocket, and two referees for their constructive comments. Financial support from Global Peace and Conflict Studies at the University of California, Irvine, is gratefully acknowledged.

world that does not have gangs or mafias in its midst, but we cannot even be sure of that as some Swiss guards have been engaging in strange behavior lately.

The defining economic activity of organized crime is the provision of *protection* or its more respectable variation, *security*. Gangs and mafias, however, can well expend the bulk of their activity in the production and distribution of a wide range of goods and services, both legal and illegal – from drugs and gambling, to construction, even to investment banking (Dawkins, 1997). Because of this wide involvement of organized crime in the production and distribution of goods and services, gangs and mafias are sometimes viewed as firms and thus are thought to be subject to the same type of economic analysis as regular business firms. The markets for the goods and services that gangs and mafias provide could in principle be similarly analyzed. Also, if these goods and services are illegal, such an analysis has links to the economics of crime.

However, such an analysis ignores the defining element of organized crime. An economic analysis of organized crime needs to focus on the issue of protection. This becomes particularly important when we examine the effect of competition, as we shall see later. Protection is not any ordinary economic service. It is supposed to make the ownership of other goods and services safe from theft and make their contractual exchange enforceable. But how does one make the provision of protection enforceable when what is provided is itself the means of enforcement? What if the guns that are supposed to be aimed at potential transgressors are turned against those they are supposed to protect? Therein lies the puzzle and the peculiarity of protection that makes gangs and mafias less akin to firms and more similar to the traditional provider of protection, the state. In particular, I will argue that organized crime groups are more similar in their structure and economic impact to pre-modern forms of predatory states.

This article will employ an economic perspective in trying to understand the phenomenon of organized crime, its effects, and its quick emergence in areas with a power vacuum, including those of many transition economies. The analysis will draw upon recent economics research on organized crime (a recent example is the volume edited by Fiorentini and Peltzman, 1995), but will also refer to much work from other social sciences, especially since the bulk of case studies and other empirically-oriented research has been undertaken by other social scientists.

After providing a sense of how wide-spread organized crime is, I will describe the conditions that typically lead to its emergence. They include transitional times following significant regime change and revolutions, the legal prohibition of commodities in high demand, and geographic and social distance from the centers of political decision-making. I will then discuss the internal organization, market structure, and welfare effects of organized crime. Contrary to ordinary economic markets, I will argue that the effect of greater competition in the protection business is lower welfare.

Because the conditions that lead to organized crime can never be completely eliminated, I will then argue that the struggle to control organized crime is a never-ending process, not a battle or a war that can be completed within the foreseeable future, and that there is much to be done in this process. The general

guidelines I develop and policy issues I examine include trying to distinguish reality from rhetoric; professionalizing the police and the state; discussion of the issue of prohibition; the incorporation of affected communities into the mainstream; and transnational cooperation and governance. An Appendix develops a simple framework in which the internal organization, market structure, and welfare effects discussed in the main text are formally derived.

## 2. The prevalence of organized crime

I begin with a brief overview of organized crime activities in different countries with emphasis on the recent past. Although my coverage will be highly selective I will attempt to provide a sense of the extent and range of activities of organized crime throughout the world.

The Sicilian Mafia is perhaps the most well-known organized crime group. (Studies of the Mafia include Hess, 1973, Arlacchi, 1986, Gambetta, 1993, and Nicaso and Lamothe, 1995.) Its origins are uncertain but its history can be traced at least as far back as the time of the unification of Italy during the latter half of the nineteenth century. Private protection has been its main line of business. "Landowners, herdsmen, olive and orange growers, peasants, entrepreneurs, politicians, doctors, shopkeepers, purse snatchers, smugglers, drug traffickers, arms dealers: all of them have at one point or another been protected" (Gambetta, 1993, p. 54). Contrary to earlier work (e.g., Hess, 1973) that attributed a rather informal structure to the Mafia, more recent research, partly based on the evidence collected by assassinated Judge Giovanni Falcone and his associates, indicates that the Mafia has a had a more formal, hierarchical structure (Gambetta, 1993, Nicaso and Lamothe, 1995), although the degree of its cohesion has fluctuated significantly over time as have its fortunes. Tacit or open collusion with the police and other governmental authorities has also fluctuated through time. Even the involvement of a former Prime Minister, Giulio Andreotti, came to the surface in the midst of the other corruption scandals that rocked Italy's political system during the early 1990s.

In other parts of Italy organized crime groups have different names and not necessarily the same organizational and other characteristics of the Sicilian Mafia. The 'NDragheta has its base in Calabria and, reportedly, began as a defense mechanism of impoverished peasants against oppressive landlords (Nicaso and Lamothe, 1995). The 'NDragheta is also less hierarchically organized than the other mafias and blood relationships or inter-marriage are important for membership. Contrary to the rural origins and extensive rural activities of the Mafia and the 'NDragheta, the Camorra originated in the city of Naples. All Italian organized crime groups have been involved in the drug trade at least since the early 1980s and have cooperated with organized crime groups in the rest of the world, from the American mafias and the Colombian drug cartels (Clawson and Lee, 1996, Ch.3) to recent reported links of the Camorra to gangs in the former Soviet Union (Nicaso and Lamothe, 1995).

The American Mafia, or Cosa Nostra, traces its origin to the Sicilian Mafia. It expanded rapidly during the time of alcohol Prohibition (1920-33). The knowledge of bootlegging, the abundance of fresh immigrant recruits from Sicily, and most importantly with the organizational know-how gained back home, it was a perfect fit. (For brief, illuminating overviews of the history of the American Mafia, see Worsnop, 1992, and Reuter, 1995. For an early economic analysis of the industrial organization of American organized crime, see Schelling, 1984, Chs. 7 and 8.) By the time Prohibition was repealed, the Mafia had control of many labor unions which were in turn used to get into at least a dozen different types of business, from construction to fur manufacturing. Among the activities of the Mafia was the maintenance and enforcement of cartels in different industries. By the 1960s, as described by Reuter, ".. the Mafia had mostly shifted from direct provision of illegal services, like bookmaking and loansharking, to selling services to bookmakers, loansharks, and other criminal entrepreneurs. The organization's reputation for being able to deliver on threats was good enough that it could, in effect, sell these entrepreneurs contract insurance and dispute-settlement services. A bookmaker could insure himself against extortion by other gangsters or customer welching by making regular payments to some mafioso. The organizational reputation, painstakingly and bloodily acquired earlier, was now the principal asset" (Reuter, 1995, p. 90).

From the 1920s, the Mafia could buy up whole police departments and also had significant influence in local and city politics. They are even reports that the small, questionable margin of victory in President Kennedy's election can be attributed to the actions of Chicago mobster Sam Giangana. During the post-war years, the U.S. federal government attempted to crack down on the Mafia at different levels, yet up to 1980 the mayors of major American cities like Boston, Philadelphia, and New York were still credibly associated with the local Mafias (Reuter, 1995). Although it now appears that the U.S. government's wars against the Mafia have been successful, it is unclear by how much this massive attempt has reduced the total business contacted by organized crime in the U.S. For much of the business formerly belonging to the Mafia, especially in drugs, is now controlled by other ethnic organized crime groups – Colombian, Mexican, Chinese – and at the retail level by numerous youth gangs.

Youth gangs can be found among most low-income areas in the U.S. and in numerous cities throughout the world, from Sao Paulo and Rio de Janeiro in Brazil to Soweto and Durban in South Africa. Because, unlike adult gangs and mafias, they can play an important social and entertainment function for their members in addition to their economic role, youth gangs can be somewhat different from other organized groups. They can be less hierarchical, especially those that are smaller (as many Hispanic gangs of East Los Angeles are – Jankowski, 1991), and be more dependent on their community for their survival (a point, emphasized by Akerlof and Yellen, 1993). As the police and the justice system are often distrusted in their communities, a primary rationale for their existence is providing needed protection. But with drugs and other opportunities to make money, youth gangs branch out into the other business of organized crime, a

move that is accompanied by increasing professionalization, greater hierarchical organization, and which can possibly translate into lower genuine support within their community. Although youth gangs can be organized into "confederations" or "franchises" like the Crips and Bloods, youth gangs do not engage in the numerous economic activities of the Mafia, do not have the vertically integrated structure of the Colombian cocaine cartels, and do not develop the political influence of adult organized crime groups.

Groups that have recently expanded in the U.S. and have cultivated connections with European organized crime are the Chinese Triads. With their main base in Hong Kong during the post-WWII period, their most important economic activity has been heroin trafficking (Booth, 1990). However, the Triads have been involved both in the traditional business of prostitution and gambling and in the more modern activities of forging passports and Guccis, and pirating software. They had bought much allegiance from the police, both British and Chinese, and had political connections that are difficult to determine.

The origins of the Triads can sometimes be traced to traditional Chinese secret societies and their involvement in the wars and politics of the first half of the twentieth century has been substantial. Martin (1996) provides a fascinating account of the Green Gang of Shanghai and its leader during the interwar years. The prohibition of the opium trade in 1919 provided a major boost to the Gang which developed political connections with the French authorities in Shanghai and then with the Guonmindang, the Chinese nationalist party. The Gang was directly involved in suppressing the local Communists and reining in the labor unions. During the 1930s, its leader branched out into banking and shipping, and became a respected community leader and philanthropist.

At the forefront of modern business has been the Japanese Yakuza, at least that was true up to 1992 when new laws made it much more difficult for the Yakuza syndicates to operate as openly and legally as they had up to that point. Real-estate developers had used Yakuza specialists to induce tenants to vacate land needed for new projects (Delfs, 1991, p. 28). Such activities provided the opportunity and the expertise for the Yakuza to move into real estate investment and speculation. Earlier they had developed a special type of corporate extortion, *sokaiya*, according to which professional blackmailers would buy a company's shares and demand a payoff. If the payoff was refused, they would turn up at the stockholders' meeting to tell company secrets or just to make a scene (Kaplan and Dubro, 1986). In 1991 it was discovered that Nomura and Nikko securities, Japan's largest and third-largest stockbrokerage firms, had been collaborating with a major Yakuza organization in pushing up the share price of a conglomerate to which the organization had acquired a significant share. Complex networks of Liberal Democratic Party (LDP) members, rich individuals, rightist groups, and underworld figures have been reported (Delfs, 1991, p. 29), but of course they would be difficult to confirm. Since 1992 the Yakuza organizations have become less visible and are supposed to be in decline. However, as late as 1997 Nomura securities was embroiled in another scandal of sokaiya (Dawkins, 1997).

Colombia has some of the most dynamic, as well as violent, organized crime groups in the world. Cocaine manufacturing and distribution has been the primary activity of the Colombian groups, converting the coca leaves grown in Amazonian regions of Bolivia, Peru, and Colombia into cocaine and then smuggling it primarily in the U.S. and more recently in Europe. During the 1980s and early 1990s the Medellin and Cali cartels were the main coalitions of groups in the business and it is worth mentioning their differing approaches towards the Colombian state (which, in turn, had been receiving pressure to crack down on the cartels by the U.S. government). On the one hand, the Medellin cartel and its leader, Pablo Escobar, after an initial period of appeasement, pursued a violent policy against state institutions and even against the press. The strategy eventually proved counter-productive and led to the cartel's destruction and the death of much of its leadership, including Escobar. The Cali cartel, on the other hand, that became more active in the 1990s was working behind the scenes without a visible leader and it was busy bribing the police, the military, judges, and politicians. Even the funds used for the special forces that hunted down Escobar had secretly been provided by the Cali cartel (Clawson and Lee, 1998, pp. 51–55). It was later revealed that President Samper's 1994 election campaign received funding from the cartel, something that eventually led to his political downfall although not to his conviction. But at least 12 Colombian legislators and an attorney general were in jail for accepting money and favors from the Cali traffickers, and the numbers of those who received funds were obviously higher. According to Samper's campaign manager more than 70 Colombian congressmen were elected in 1994 with funds provided by the cartel (Clawson and Lee, 1998, p. 248). The revelations and the public outcry reduced the Cali cartel's influence and led to its fragmentation. However, the Colombian groups continue to be important and have branched out into heroin and legal businesses.

The fragmentation of the Colombian cartels opened opportunities for other organizations to grow in Latin America. Most notable is the rise of Mexican drug-trafficking groups that have taken over much of the cocaine shipping business into the U.S, are looking for further upstream and downstream opportunities, and are branching out into other business. The corrupt and sorry state of Mexico's various police agencies during the early 1990s has greatly facilitated this growth. Distrust of the police led the Mexican government in 1996 to appoint the army General Gutierez Rebollo as the head of the country's war on drugs. The move was applauded by the U.S. government as the army was considered less corrupt than the police and General Rebollo had previously engineered and presided over important drug busts. Soon after the General was appointed, however, incriminating evidence of bribes from drug traffickers was discovered. It turned out that General Rebollo was on the payroll of the Juarez cartel; the drug busts were directed against the rival Tijuana cartel (Oppenheimer, 1998, pp. 332–334).

Mexico is a good example of a country in which many police agencies can be fairly characterized as organized crime groups. They are not just being bribed by drug traffickers, but they run their own protection rings and specialize in particular types of business. For example, the state police in Tijuana were famous

for running car-theft rackets across the border in San Diego, California. "The Mexico city police force, on the other hand, was known to make its millions from taxi inspection, bribes [from] motorists, and – when times are hard – kidnappings from ransom" (Oppenheimer, 1998, p. 303). In an incident that drew national attention, but was hardly unique, in March 1995 Mexico state police agents, led by their commander, stopped a motorist and at gunpoint demanded his money and valuables. The motorist, however, turned out to be Ernesto Zedillo, the Mexican President's son, whose bodyguards soon showed up and arrested the policemen and their commander (reported in Oppenheimer, 1998, p. 304).

Visualizing a continuum of types of police with one end anchored by the ideal type of the incorruptible police agency that does everything according to law and with its other end being indistinguishable from a mafia, most police forces fall somewhere in the middle with many of them in developing countries and transition economies tilting more towards the organized crime end.

For much of Russia and other Eastern European countries, the police falls into this category. And, as amply reported in the press, much of the economy and politics of these countries is also dominated by groups of doubtful legality (see, e.g., Handelman, 1994, Hersh, 1994). As argued by Vaksberg (1991) and Anderson (1995), the origins of at least some of these groups can be traced back to Soviet times. The basic precondition for all the post-Soviet gangs and mafias is their ability to use force and therefore to be able to sell protection. Besides drugs, another traditional area of business that appears to be carried out in very large scale is the smuggling of women from the former Soviet Union to countries ranging from Israel to Northwest Europe. Government agencies other than the police, politicians, the military, and businessmen are all thought to cooperate in various degrees with the plethora of organized crime groups. Fear about the control of nuclear weapons and the technology of their production are also frequently expressed (e.g., Hersh, 1994). According to more recent reports (e.g., *The Economist*, July 4, 1998), there has been some consolidation of control and some predictability of who is the local boss that one has to pay, and that is a change from the more chaotic conditions that immediately followed the transition. However, much is in flux and other than the anecdotal journalistic accounts no comprehensive studies of organized crime and of their recent evolution exist of Russia and other Eastern European countries

In sum, organized crime groups engage in many different types of economic activities, both legal and illegal. Their ability to enforce their rule within a specific geographic or economic area requires that they have the means to use force and therefore providing protection is an element common to all mafias and gangs irrespective of their other economic activities. Since fighting is costlier than settling, police and state authorities not only learn to live with mafias but often are also bought into doing so or even actively help their cause. When political and bureaucratic control is weak, whole police agencies can become organized crime groups themselves. From Colombia to Italy and Russia, the connections of organized crime can permeate the highest levels of government.

Some authors (Godson and Olson, 1995, Shelley, 1995) have brought attention to the increasing transnational connections of organized crime groups and sound the alarm about the threat this entails for international order. It is indeed evident that such connections have increased under the influence of greater openness, the ease of communication and transportation, and other conditions that have led to a more globalized economy. However, there does not appear to be a qualitative shift in the way organized crime groups do business and the degree of economic and political control than traditionally exerted. For, as we have seen, even within the U.S. the political influence of the Mafia was extensive for many decades of the twentieth century.

## 3. Why is there organized crime?

A short answer to this just-posed question is "because of the existence of a power vacuum and the shortage or absence of ultimate enforcement." Such an answer of course leads to more questions than it answers. How is a power vacuum or "anarchy" or "state of nature" created in the first place and how can it persist? Why don't state authorities, instead of gangs and mafias, immediately fill whatever power vacuum emerges? And, as we are economists, wouldn't a power vacuum be a great thing, leading spontaneously to the maximally efficient and unfettered exchange of goods and services? For the reader who does not have a ready answer to this last question I will postpone a fuller discussion until the next section. For now, I will try to elaborate on how a power vacuum could possibly emerge and how organized crime groups step in to fill the vacuum.

### *3.1. Geographic distance*

No states today and even more so in the past had the absolute monopoly of the use of force within their territories. In addition to simple robbers and bandits, there are or have been areas with little economic or other interest to state authorities to be worth extending direct control. Mountains, jungle, desert and other areas have thus been the breeding grounds of bringandage, rebellions, and independence movements. Thus, geography can play a role in creating a power vacuum that can then be filled by an organization that plays the role of a quasi-government. The Amazon jungle, for example, has been a place in which Brazil, Peru, or Colombia have had little control over their respective areas. Private armies financed by landlords or drug traffickers, guerillas, and paramilitaries fight among themselves and, sometimes, against governments for control over territories.

### *3.2. Prohibition*

Colombia, which has a history with an above-average number of revolts and internal conflict, is also a good example of a power vacuum that is created from

another source: the legal prohibition of the production and distribution of certain goods and services. Drugs are the foremost example, but gambling, alcohol, and prostitution have been intermittently important areas of action for mafias and gangs. Exclusive government monopolies in the sale of salt, matches, or tobacco in the past have also invited smuggling and protection by organized crime groups. When the production and sale of a good or a service is prohibited, and there is reasonable demand at high prices as there is for drugs, some demand is bound to be filled at high prices. Along the supply chain from primary producer to final consumer, however, there are a host of contractual enforcement and financing problems that have to be solved without recourse to the police, the legal system, or to mainstream financial institutions. That is, with prohibition private parties cannot write and enforce contracts through the normal legal channels, and thus an effective power vacuum is created around the production, distribution, and financing of the prohibited commodity and its inputs.

Take cocaine as an example. Starting from the bottom of the supply chain, the Peruvian peasant who produces coca leaves does not just face the danger of being discovered by the authorities, have his bushes destroyed, and possibly face prosecution and jailing. He also has to face buyers whom he cannot sue if they do not pay, who could possibly simply eliminate other potential buyers, and who have enforcement powers not typical of buyers of other crops. The conversion of coca leaves into coca paste and then into cocaine base requires different types of chemicals (the distribution of which is often controlled by governments as a way of making the production of cocaine more difficult), implements like drums and heat lamps, as well as a physical location, a "factory." Conversion into cocaine requires additional chemicals, heat lamps, microwave ovens, or fans and a location. The buying of the many fixed and variable inputs to these processes and their financing do not just have to be undertaken outside the normal legal channels, but they also have to be hidden away from the authorities. The hiding itself has to be enforced by carrot and stick, money and guns. The shipping of cocaine over international borders can involve many different modes of transport from small planes to concealment inside ship containers, and can involve the creation of an elaborate system of front companies. Such activities involve many people who have to be adequately compensated for the risks they undertake and who need to feel sufficiently threatened not to rat on their associates and superiors. Whole shipments worth tens of millions of dollars can be lost and no commercial insurer will provide insurance coverage. The wholesale and retail distribution of cocaine, including its possible conversion to crack cocaine, have their own enforcement problems that are more common to those of other drugs and other prohibited commodities. The laundering and safe repatriation of sales proceeds is another area of concern.

The multiplicity and variety of contractual enforcement problems that exist along cocaine's supply chain cannot be solved realistically through each individual agent along this chain just taking their own defensive and private enforcement measures. The conditions cry for an ultimate enforcer, a "hegemon," at least over substantial parts of the supply chain. The reasons for such an arrangement are

similar to those that make states have the notional, if not always the de facto, monopoly of enforcement within their territories. For now, we could compactly characterize the rationale for a single enforcer within a certain area as being due to "increasing returns" in enforcement. In the case of the Andean cocaine industry, the enforcement problems were apparently solved through a number of typically non-overlapping networks of about ten groups that had a significant degree of vertical integration, often beginning with contact at the coca grower level and ending at the wholesale level of the country of final consumption (Zabludoff, 1994, as described in Clawson and Lee, 1998, pp. 19–21). The groups themselves would cooperate at different levels in cartels like the Medellin and Cali cartels. The groups and cartels would also naturally perform the other strictly economic functions of the operation, ranging from organizing the supply of the appropriate chemicals, to financing and money laundering, to arranging export insurance among the different members. In case of disputes, a figure like Pablo Escobar of the Medellin cartel would become the arbiter and ultimate enforcer, who would also levy "war taxes" on cocaine shippers to finance the political and military activities of the cartel (Clawson and Lee, 1998, p. 47).

It should be emphasized at this point that drugs or any other economic activity of organized crime cannot exist without providing protection and enforcement, whereas organized crime groups can exist just by providing protection and not engaging in other activities, although they rarely do so. This is similar to the customary Weberian definition of the state as the monopolist in the use of force, despite the fact that states do a lot more than providing internal and external security.

Another type of economic activity that could be technically included in this subsection is cross-border illegal migration. (For much migration is prohibited.) Press stories regularly report on organized transport rings that, for a price, attempt to deliver Eastern Europeans, Africans, and Asians into Western Europe or many other nationalities into North America. Although it appears that those rings have ties to organized crime, I am not aware of systematic studies of that link. This is currently a growth area for the business of organized crime.

### *3.3. Major political change*

A power vacuum can also be created by revolutions, wars, and major political change. With the previous political authority and institutions gone and, in the better circumstances, new effective ones typically taking time to develop, there can be long periods of time during which people can face basic physical insecurity in addition to more complex problems of uncertainty and insecurity of contract enforcement. It is perhaps then no accident that the Sicilian Mafia grew significantly during the years immediately following the unification of Italy in an area that was previously under authoritarian rule for many centuries and in which republican institutions were unfamiliar compared to other parts of Italy.

For the former Soviet Union, it has been argued (Solnick, 1998) that the power vacuum preceded its break-up and was actually the precipitating cause of

the break-up itself. Bureaucratic control weakened considerably over the years, with individual bureaucrats or coalitions of them seizing control of the organizational assets they were supposed to be managing. Actually, the word 'mafiya' was used to describe the networks of corruption lurking inside regional and central ministries (Handelman, 1994). There appears to be some continuity in membership in these old Soviet-era mafiyas and the mafias and gangs of the post-Soviet world. However, uncertainty in the dealings among these networks has considerably increased as none of the old formal institutions and organizations exist, and enforcement by resorting to the barrel of the gun has become far more common. The danger then is that new governance structures are not given the chance to develop, the state remains weak, and governance is de facto provided through the checkered, fragmented authority of organized crime groups.

### *3.4. Ethnic and social distance*

American youth gangs have traditionally flourished in low-income areas often populated by a homogeneous ethnic group – Irish, African-American, Hispanic. Many residents of such areas typically have viewed themselves as being apart and discriminated by the larger society (See Jankowski, 1991). The police and the justice system have also been often viewed at best as indifferent to their welfare and at worst as agents of repression. Therefore, ordinary crime becomes difficult to control in such areas, and gangs step in to fill the gap that is created, but also further contribute to violence in a more organized fashion. The townships of apartheid South Africa were perhaps extreme examples of alienation of a population from state authorities and, unsurprisingly, the levels of insecurity and violence there had been extremely high (see, e.g., Carver, 1992). Although there is little reporting, let alone systematic research, on the presence of youth gangs in European cities, the conditions for them are ripe in areas with high unemployment or concentrated poor immigrant groups that may feel alienated from the larger society (see, e.g., *the Economist,* 1999a).

We have seen the conditions that create a breeding ground for the emergence of organized crime: geographic distance, prohibition of the production and distribution of certain goods and services, major political change, and ethnic and social distance. As geographic distance is becoming much less of a problem with modern transportation and communication, it can be argued that the other conditions are exacerbated by the same ease of transportation and communication. Major political change and conflict creates more illegal immigration than was possible in the past, and organized crime fills the transportation niche very profitably. More seriously, the illegal immigrants themselves are at the mercy of organized crime and create new pockets of ethnic, social, as well as political, distance in the country of immigration. Other prohibited goods and services can now more easily go from one country to another and modern communications are making, in principle, cross-border cooperation of organized crime groups easier.

The globalization of economic activity thus can create both additional domestic and transnational opportunities for organized crime, and the greater appears the need to be for transnational cooperation on the part of governments.

## 4. Consequences

Having identified the conditions that lead to the formation of organized crime groups, much remains to be discussed about the particular form that mafias and gangs take, their market structure, and their economic effects. Why in their overwhelming majority are mafias and gangs hierarchically organized? What kind of competition do they engage in among themselves? Is competition good in the protection business? What are the costs of organized crime? These are the types of questions to which I now turn.

### *4.1. Internal organization*

The Sicilian Mafia is hierarchically organized and that is recognized to be so through formal procedures (Gambetta, 1993, Ch.5). Whereas some youth gangs, like Chicano gangs in East Los Angeles have a flat organizational structure with leadership that is only informally recognized, others, like many New York gangs, have a formal hierarchical structure with considerable differentiation of duties among its members (Jankowski, 1991, Ch.3). Although precise knowledge of the internal functions of most organized groups is hard to come by, it would be safe to extrapolate from the available information that the great majority of such groups are hierarchically organized, either formally or informally. Only some small youth gangs are a possible exception.

Since, as argued earlier, mafias and gangs emerge out of a power vacuum to provide protection, why don't those who need the protection band together as equals in a "social contract" and provide the needed protection themselves? Why do they have to pay up a mafioso who may actually artificially create his own demand and extort more than it would cost each one in the group of equals if they were to band together? In principle, for example, the shopkeepers and residents within a few city blocks could agree to form community policing groups against common crime. They could create patrols of residents and shopkeepers. Now, this could be done in certain cases, but too often the mafias prevail. Forming such self-governing protection groups involves substantial coordination costs and as group size increases the free-rider problem becomes more serious. These problems can be overcome with a small enough group of residents and shopkeepers who know one another. However, the main problem for the difficulty of such groups forming and surviving appears to be the presence of powerful mafias around that are looking to expand their protection rents as well as their other business. It is one thing to have community policing against common theft. It is an entirely different matter to get the same residents and shopkeepers to go into battle against the heavily armed deputies of Al Capone. Thus, residents and shopkeepers succumb.

They pay up, and smile, wave, and chat to their local protector. They are the only one they have and they'd better keep him happy.

For someone to become such a protector, a member of the organization, it will be necessary to have at least once applied force decisively against opponents or, as it can happen with youth gangs, against members of the organization itself. That is, mafiosi and gangbangers need to demonstrate the ability to use force and the sufficient ruthlessness that its use entails. Naturally, then, members of organized crime groups tend to be recruited from those who have a certain comparative advantage in violence. Once you are in, however, it is unclear whether greater capacity and predisposition for violence can help much more for advancement within the hierarchy. Other skills become important at the higher echelons: the ability to plan and execute tasks, sophisticated political and administrative skills, how well you can motivate those who work for you. These are skills that are necessary in any other organization.

As with ordinary productive organizations, motivating the employees is a critical determinant of an organization's success. Inculcating organizational loyalty and pride in work is a concern of virtually all organizations (for a nice discussion, though somewhat heretical within economics, see Simon, 1991). Abiding by norms and informal constraints reduces infighting and other transaction costs within the organization. (Part of the discussion that follows also draws from Skaperdas and Syropoulos, 1995). It is likewise with gangs and mafias, as they appear to develop and articulate cultures and ideologies, systems of beliefs about the world that have a certain internal logic that outwardly at least all its members appear to subscribe.

A core element of the ideology of many American youth gangs (Jankowski, 1991, Ch.3) is that American society systematically discriminates against their kind. Nearly all gangs believe that their ethnic group has been denied access to conventional opportunities that would allow them to live better lives. Their members subscribe to a social darwinist perspective according to which predatory behavior is how one gets ahead everywhere in society. The gang, then, contributes to the advancement of its members and their ethnic group, just as the more powerful networks contribute to the welfare of their own members in the larger society. With such a worldview, the activities of the gang that are considered reprehensible in the mainstream are thus rationalized by gang members. The poverty of their surroundings and the hostility of media and authorities help reinforce these beliefs.

The main job of the mafioso is not much different from that of the feudal knight: he provides protection or, to put it more respectably, security. In rural Sicily the mafioso used to perform straightforward intermediary and judicial functions that were conferring legitimacy from the community. It is therefore not surprising that the traditional Sicilian mafioso's self image even in cases of acts of extreme brutality was that of a "sacrifice which he makes for the benefit of the public weal" (Hess, 1973, p. 68) – like killing in times of war, it's a dirty job but it has to be done for the overall benefit.

Whether out of genuine conviction, guilt, or narrow self-interest, many major organized crime figures are also involved in charity and public service. The leader of the Shanghai Green Gang, Du Yuesheng, became a major community leader and philanthropist (Martin, 1996). Pablo Escobar and his associates donated several hundred new homes to poor slum dwellers of Medellin and constructed some eighty illuminated sports arenas in the area. Articles in the local newspaper – directed by Escobar's uncle – contrasted Escobar's public-spiritdness with the indifference of other businessmen and of the Colombian political establishment at large (Clawson and Lee, 1998, p. 48). Genuine propaganda or not, the outward projection of the provider-of-public-good image is often an important, if not necessary, component of organizations that have matured enough to compete with the state itself. As we have seen, in the case of Escobar the gambit did not succeed – perhaps he should have been as conciliatory with the Colombian state as he was with the Medellin area. For the Sicilian Mafia, however, the adaptation of seeing itself as a public servant worked reasonably well for more than a century. This is also not much different from the support that Wintrobe (1998) argues dictators typically enjoy.

### *4.2. Market structure*

The provision of protection has strong collective good characteristics. If you are guarding one home already, then the marginal cost of guarding the home next to it is much lower than that of the first home. There are therefore technological reasons for providing protection monopolistically within a certain area. However, there is neither a government regulator to oversee who provides the service and how much he charges for it, nor is there a "competitive fringe" of potential entrants who will step in to compete on price and quality.

What you have are enforcers who have established their right to sell protection through their guns. Their competitors are not going around lowering prices for customers. Instead they are always on alert to defend the turf that contains their customers and possibly fight to expand that turf against competitors who become weaker. The same turf is not just valuable for the "taxes" it confers to its holders for the protection services rendered, but it also becomes a captive market for the array of other goods and services that the mafia or gang can offer, with drugs often being the most important

Thus the type of competition that takes place among organized crime groups is very different from the one we are accustomed to studying in economics. It resembles more the competition among the lords, kings, and emperors that had been taking place for most of human history since the agricultural revolution. Competition takes the form of an arms race with your neighbors. If you have a large enough army you can deter your neighbors or take some of their turf; if not, you lose turf or you can be taken over completely. The market structure that could best describe organized crime, then, is a curious sort of monopolistic competition, whereby each gang has the local monopoly of protection within a certain area

and this local monopoly is maintained by the gang's capability of mobilizing and using force against other gangs. The absence of alternative providers of protection locally implies that the gang can use its enforcement powers internally to extract a price for its protection that is not just at its monopoly level but is extortionist – the gang can name its price and its quantity especially if the gang's time horizon is short or the area's population does not have the resources to move in areas without gangs.

With profit maximization and free entry, in the long run we should expect the profits of gangs and mafias to be reduced to those available elsewhere in the economy. Does the greater competition that comes with free entry and the absence of excess profits imply a better economic outcome though? The answer is "No." Remember that competition takes place through resources devoted to fighting that then become unavailable for production. Therefore, greater competition implies that more resources are used on fighting and fewer are used in production. Hence greater competition in the protection business reduces total production and efficiency.[1]

Overall, the original hypothetical power vacuum is replaced by a landscape of intensely competing gangs and mafias that could even be worse in terms of productive efficiency than the organizationless power vacuum. This can be true even though gangs and mafias are technologically more efficient in the provision of protection than individuals are. All the rents that are created from the technological superiority of collective protection are competed away in unproductive competition among mafias and gangs. If cooperation or consolidation among the gangs could occur, economic efficiency would in principle be enhanced as fewer resources could be devoted to production. However, it is doubtful how much of the saving in costs would be passed down to the community in the areas controlled by the cooperating gangs. And, as the institutional safeguards for cooperation are weak – often based on personalized leadership that breaks down when a leader disappears from the scene – there is an inherent unpredictability and instability in the world of organized crime.

[1] The Appendix analyzes an extended example that formally develops the ideas presented in this section; that example is partly based on Konrad and Skaperdas, 1999. Other researchers have developed models of the for-profit monopoly provision of protection or of a public good. The include Findlay, 1990, Grossman and Noh, 1994, Findlay, 1995, McGuire and Olson, 1996, and Moselle and Polak, 1997. North (1981) and Levi (1988) were earlier studies of state organization employing an economic, rational-choice, though non-formal, approach; both can provide ideas and inspiration for further development of the formal models that could sharpen intuition. With regard to models that explicitly take account of competition among providers of protection, Grossman (1995) allows for competition between providers of protection, but that competition is based on the "price" or the "tax" the competitors charge to their customers who can freely choose which competitor to pick. As one would expect, Grossman's welfare results can be different from those presented here. Moselle and Polak's (1997) findings are closest to those reported, although they are based on a very different model and do not include any competition. Polo (1995) also has developed a model of the type of monopolistic competition examined here and has concentrated on the internal structure of mafias using a principal-agent approach.

### *4.3. Economic costs*

I have just discussed some of the effects of competition among organized crime groups. It is important to be clear analytically about the type of inefficiency that is identified there. It is not the allocative inefficiency that exists because of the suboptimal, but productive, employment of factors of production, although as I will shortly discuss that that can occur too. What has been discussed is the unproductive employment of economic resources that could be used elsewhere for directly productive purposes, in what has been variously labelled "appropriative," "redistributive," "conflictual," or "enforcive" activities.[2] Gang and mafia members spend their time making their presence felt in the neighborhood, defending against one another, and preparing to fight one another. Guns, locks, and steel bars also fall into this category of activities. They can be considered to contribute to security in an indirect way, but the same amount of security is compatible with many different levels of expenditures on such appropriative activities. Intense competition of many gangs can involve the expenditure of a lot more resources than complete hegemonic domination by one large mafia, and which in turn can involve the expenditure of a lot more resources than those of a modern state with an efficient police and judicial system.

Although the loss of welfare due to appropriation in areas with organized crime can be substantial, the spillover effects organized crime has on regular economic activity can be even bigger quantitatively. Legal businesses that have to pay for protection face higher costs of operation, invest less and bias the investments they make against anything that can be easily destroyed (Konrad and Skaperdas, 1998). For the same businesses, regular contracting through the mainstream legal system can become difficult even if it concerns perfectly legal matters, since the mafia can intentionally and actively discourage recourse to the legal system as it represents a challenge to its authority and a reduction to the rationale for its existence. There can be substitute contracting and other informal constraints, of course, as the mafia provides protection after all and has substantial enforcement powers within its area. Actually, the mafia could enforce contracts more effectively than the state because it can impose penalties that are much more severe – for example, physical punishment and even death. However, the arbitrariness that typically accompanies such penalties and the multitude of uncertainties that surround contract fulfillment in a mafia's territory are unlikely to be outweighed by the severity of penalties the mafia can impose. As a result of the multiple uncertainties and incomplete information that exists, violence, destruction of property, and death are more likely to occur in organized crime territory.[3]

[2] Haavelmo (1954, pp. 91–99) appears to have been the first economist to explicitly incorporate these activities in an economic model. More recent work that allows for these activities as an integral part of economic interaction include Brito and Intriligator (1985), Skaperdas (1992), and Hirshleifer (1995), and Robinson (2001).

[3] Bester and Warneryd (1998) show how open conflict can be an equilibrium phenomenon in a model with appropriation, whereas Garoupa (1997) and Konrad and Skaperdas (1997) show how violence is possible as a result of credibility problems in the business of organized crime.

The long-term effects of organized crime rule could be even more devastating that its immediate, static effects. The area's most able, entrepreneurial, and responsible youth can choose to become mafiosi and gangbangers, as Jankowski (1991, Ch.4) argues to be the case in American inner cities. Those are precisely the individuals who under different circumstances would provide a very different type of community support and leadership. Once human beings develop expertise – comparative advantage, if you will – in one area, it is very difficult for them to change later in life. Former guerillas, demobilized soldiers after wars, and gang members have difficulties adapting to conventional lives and occupations later in life. Many find bringandage, robbery, or reversion to organized crime a familiar and still more profitable lifestyle than its alternatives. Even after the destruction of organized crime in an area, it can take more than a generation before normalcy prevails as the old warriors don't easily fade away.

Overall, the costs of organized crime include the resources expended on appropriation instead of production, the various more conventional productive and investment distortions that emerge from organized crime rule, the contractual problems that develop outside the realm of modern governance, and the incentives for the development of human skills that are biased towards appropriation instead of towards production. These costs can relegate or keep a place in permanent third-world economic status.

## 5. Is there much that can be done?

If organized crime is so harmful, how can it persist in this post-industrial, information age? Why can it not be eradicated even in the strongest of economies? There is not a single reason for organized crime's persistence since, as we have seen, there are many circumstances that lead to its development. There will always be prohibited commodities as well as non-prohibited ones that mafias will try to smuggle at a profit. And, though geographic isolation has become less of a problem, the ease of transportation and communication coupled with economic stagnation and conflicts in much of the South (and East) increases the pressure for legal and illegal migration to the North (and West).[4] Immigration will therefore continue to feed the sizable pockets with culturally and socially distant populations in the North, whereas the indigenous underclass there cannot be expected to disappear anytime soon either. If anything, the conditions that feed organized crime can be expected to intensify in the medium run, if not for longer.

Short of building real and virtual new Walls to keep undesirable peoples, goods, and electronic (laundered) money transfers out, individual states in the North will have difficulty controlling at least some of the conditions that lead to organized crime. However, this does not imply that there is nothing to be done

[4] From now, as a shorhand, I will be using "North" to denote Western Europe, North America, and Japan, and "South" to denote the developing countries.

about countering organized crime. On the contrary there is much to be done, and if little is done there is a danger of being flooded and overwhelmed by it at some point in the future – who could have imagined ten years ago the drowning of state and society by organized crime in today's Albania, Chechnya, or Russia? Fighting organized crime is a never-ending process, not a battle or a short war that can be expected to end in the near future. It is more like the struggle of the Dutch against the sea – painstakingly building dike after dike before their value in reclaimed land will show while being prepared to be overwhelmed by freak storm surges, and always taking the long view. In the U.S. it took the better part of five decades to seriously cripple the Cosa Nostra and sever it from its political connections, and yet organized crime in its various reincarnations is alive and well in the U.S., although the political connections in high places are not there anymore – or so it is hoped. Without this effort, however, the everyday influence of organized crime could have spread beyond city governments, something that could have had very different political and economic consequences.

But there is a big difference between the struggle of the Dutch against the sea and the struggle against organized crime: the engineering. In particular, contrary to the engineering of dikes and water drainage, there are few noncontroversial (social) engineering principles in struggling to control organized crime that economists, other social scientists, and most of all politicians could agree on. What I have presented in the earlier sections is an attempted summary at the equivalent of the physics of the problem, and this cannot be free of controversy. Even without controversies, typically there is much work that intervenes between the physics and the engineering solutions to a problem. Instead of recommending very specific courses of action, therefore, I next turn to broad areas of concern and general principles that I think should govern the struggle to control organized crime.

### *5.1. Trying to get hold of reality*

Perhaps the hardest aspect of the struggle against organized crime, before even one begins to talk about the engineering of the problem, is assessing reality. For it is difficult to see through the cloud of rhetoric and ideology that permeates much of the discussion of organized crime. The mass media, in their quest for ever-simpler explications, typically take a Manichean perspective by, at least implicitly, propagating the view that organized crime exists solely because there are evil human beings who become gangbangers and mafiosi. Now, the demonization of one's opponents has been as old as humanity has existed and it has been at times an effective tool for mobilizing support and resources for a community's common cause. Indeed, the outrage that follows some particularly grisly undertaking of organized crime is often followed by some form of police action that may result in a few arrests, but the effect of such isolated actions is similar to that of building a few meters' worth of dike and expect to hold back the sea for several kilometers. These attempts quickly dissipate the moment the media limelight moves elsewhere.

The Manichean worldview and the demonization of mafiosi also interferes with the pragmatic assessment of organized crime. By attributing the presence of organized crime to evil, it naturally leads to the evaluation that getting rid of a few individuals will solve the problem, to the underestimate of the material rewards and conditions that make the life of the mafioso attractive in the first place, and to a disregard of community support, the codes of silence, and other complications. That is, as far as battling organized crime is concerned, demonization and the Manichean worldview fall far short as an effective ideological tool because they tend to induce very inadequate assessments and short-term policies that, as argued earlier, are particularly unsuited in this case. It would be desirable to be able to maintain simultaneously the moral outrage that helps with resource mobilization and the cool-headed pragmatism needed for analysis, but the former usually interferes with the latter.

In many fields of economics that analyze illegal or undesirable activities – for instance, in the economics of crime or of tax evasion – it is taken for granted that individuals are not good or evil. They simply optimize within given insitutional constraints. They evade taxes or commit crime if the framework makes this behavior individually rational, and typically the level of such activities is strictly positive in an optimal institutional framework. The political economy of organized crime is different in some respects from these other fields as we have seen, but it also entails a problem of institutional design.

At the cost of sounding repetitive then, let me emphasize a few of the attributes of organized crime that I think are central to its pragmatic assessment: the individuals engaged in it are trying to make a living like the rest of us do; contrary to most other economic activities, however, organized crime does not add to material welfare, and competition does more harm than good; organized crime typically appears because the right material and institutional conditions allow it, not because of particular personalities; organized crime groups often enjoy significant support from their local communities and the self-image of its members is akin to those of knights and lords of other eras.

### *5.2. Professionalizing the police and the state*

When friends of the mafia in high places enter the picture like in Colombia, Mexico, or Italy, you can never be sure whether the guy who supposedly fights the mafia is not actually doing its job. However, Italy, Colombia, and Mexico have had the political and institutional strength to pursue some of this corruption within their states. The complexity of the problem goes up several notches when no independent institutions remain and the state itself is wholly permeated by organized crime, and for all practical purposes is an organized criminal enterprise. Mobutu's Zaire is perhaps the prototypical example, but there are many countries in the world today that fit the bill and I am afraid the list is growing.

The problem for this last case then is that of how modern governance can emerge out of a predatory state. Though extremely important and interesting, this

is an issue for which we can say little more than that it takes much time to build a modern state – it has certainly taken centuries to do that in the West – and no quick-fix recipes appear in the horizon.

As for cases in which there is already a functioning state with some checks and balances in place, I will only offer a somewhat obvious remark connected to Mexico's experience but which has implications for other countries. As discussed earlier, most of Mexico's police forces behave as mafias. One can see why this is the case if one looks into how policemen are often hired in Mexico, which is essentially off the streets, and how they are liable to lose their job when their political protector in the force loses his.[5] That is, policemen in most agencies in Mexico do not have the status of a civil servant, without the training, the privileges, and the obligations that accompany such positions. As amply documented in the historical literature, lifetime employment and the other characteristics of modern professional bureaucracies in Western states developed largely in response to the endemic political manipulation and corruption that existed before that. (For the U.S. case, see Johnson and Libecap, 1994. The ideal type of a modern bureaucracy and its historical origins have been masterfully discussed by Max Weber, 1978.) Thus, reforming the police agencies by professionalizing the hiring and training of policemen, and providing them with the customary civil protections, procedures, and privileges, as well as duties, you can at least prevent instances of naked extortion and perhaps a lot more. We hear hardly any kind words for bureaucratic organization lately, but we should not forget what preceded it – amateur and arbitrary rule.

By instituting such changes a jurisdiction can in principle buy more security with less public money. How come, then, countries do not immediately adopt more professional bureaucracies and police? There can be several reasons for being trapped in a suboptimal institutional equilibrium. First, you will need to hire far fewer policemen at a significantly higher compensation and, therefore, much resistance is to be expected from all the existing policemen who might become unemployed. Second, corruption can be so profitable that even those who would become professionalized – with regular salaries and pensions – prefer the status quo. Thus, the right conditions need to be found for institutional change, with the government having enough money to compensate those who will be left out and a slump in the returns to bribery. Of course, greater professionalization of the police and other government agencies does not guarantee reduction in the influence of organized crime, but just in the likelihood of it.

[5] Oppenheimer (1998, pp303-4) describes a Mexico city police department whistleblower's report as follows: "Recruits had to pay their superiors extra for a good pistol, a promotion, or for night duty, when it is easier to stop allegedly suspicious cars on the street and demand bribes. Most cherished was a patrol car, which required extra payment: "As a patrolman, if there is nothing going on here, you can go somewhwere else to rob or extort," he told a U.S. reporter."

### *5.3. Prohibition versus legalization*

We have seen the prohibition of drugs and other commodities is one of the main conditions that creates the power vacuum that induces the spread of organized crime. Since there are reasons for prohibiting such commodities the benefits of prohibition need to be weighed against the costs, including those from organized crime.

The views of mainstream policy experts other than economists, which are reflected in the policy of the great majority of governments, is that it is the consumption and availability of drugs that cause the problem. Therefore, prohibition and wars on drugs are considered the appropriate policy response.[6] A minority of policy experts and many economists (see, e.g., Miron and Zwiebel, 1995) take the view that drugs cannot be completely eradicated and their prohibition exacerbates many problems, including violence, petty crime, as well as organized crime. Various forms of the repeal of drug prohibition are possible, from decriminalization of the softer drugs to the legalization of all, combined with different degrees of government control of the production and regulation of the drugs.

The Dutch experiment is cited to bolster the arguments of both proponents and opponents of drug prohibition. In 1976 the Netherlands decriminalized the possession of limited quantities of cannabis products while harder drugs like heroin, cocaine, and LSD continued to be prohibited. According to Collins (1999), who evidently considers the experiment a failure, the number of Dutch addicts and the consumption of harder drugs has increased, the Netherlands have become a center of drug production and trade (and of drug "tourism"), and the consumption and possession of harder drugs have been effectively decriminalized because of the highly tolerant attitude that has followed the law of 1976. It would be difficult to attribute all these developments to the decriminalization of cannabis alone and, closer to our topic, its effect on organized crime is unclear. Because of the tolerant attitude of the Dutch authorities, prices of the harder drugs may be lower there and therefore there is not much money to be made by organized crime in the Netherlands, but that creates more profitable arbitrage opportunities for organized crime across Europe or even across the Atlantic Ocean and therefore could have led to an increase in the business of organized crime outside the Netherlands.

What the Dutch experiment then suggests is that "decriminalization in one country" inevitably leads to spillovers in other countries that would be difficult

[6] Official government positions, though, are typically considerably much more stringent than the private views of many politicians. During the U.N. drug summit that took place in New York in June 1998, the presumed position of the 153 countries represented there could be summarized by the slogan "A Drug-Free World...We can Do it." During the days of the conference the New York Times ran a two-page ad with an open letter addressed to the U.N. Secretary General signed by many prominent figures, stating: "We believe the global war on drugs is now causing more harm than drug abuse itself."

Among the signatories were George Shultz, the former U.S. secretary of state during the Administration that inaugurated the war on drugs; Oscar Arias, the former president of Costa Rica; and Javier Perez de Cuellar, one of Annan's predecessors at the U.N. (information reported in Sullum, 1998).

to predict ex ante. This is also theoretically corroborated in Konrad (1994). This also points to an additional reason for the need for transnational coordination. Furthermore, the path of legalization – whether for drugs, prostitution, or cross-border migration – is not unique. Many tactics and strategies become available. After all, the complete legalization of drugs, prostitution, and migration would still involve some regulation inevitably, and as long as this is true there would be some rents to be contested, but perhaps through the more respectable forms of rent-seeking. More importantly, such blanket legalizations can create problems of their own that can be as serious as those created by complete prohibition and are as inviting to organized crime. For example, cross-border migrations, whether legal or illegal, often create another breeding ground for youth gangs in the country of immigration. With respect to drugs, though, it appears that the pendulum has swung too far on the side of prohibition and it is time to consider seriously various forms of decriminalizations and with significant transnational coordination.

### *5.4. Incorporation into the mainstream*

As has been discussed already, most organized crime groups, and especially youth gangs, typically develop in low income neighborhoods whose inhabitants feel apart from the larger society. Thus, besides the access to economic opportunities that youths in such neighborhoods have, the problem of youth gangs is essentially part of the larger problem of the successful integration of such areas into mainstream society and the modern nation-state.

Two main sets of agents of the state with which the youth and the population of such areas interact are the police and the educational system. Whether and how such areas can become integrated over time crucially depends on how these two institutions act.

*Policing by locals.* Residents do not object to force being used by the police, as long as they perceive such police action to be legitimate and not targeted against their kind for purposes other than security. But too often the police are outsiders and any successes they might have against members of youth gangs are fleeting, for they reaffirm the distrust with the locals and the reason that organized crime exists in the area in the first place. It appears then that having policemen who are residents of the area being policed can go some way towards reducing a major source of tension in such areas. In addition, how the police behave appears to be connected to the degree of political constraints faced by the police departments,[7] and having police department accountability to political authorities (and directly or indirectly to the local community) is another important mechanism for the police to become the effective providers of security instead of organized crime.

[7] According to Jankowski (1991, Ch.8) in Los Angeles (before the 1992 riots) the police department supported the use of physical force more than in New York or Boston. It also happened that Los Angeles policemen were more likely to be living outside the city and the Los Angeles police department (its chief) had fewer political constraints than those of New York and Boston.

*Education as the port of entry into the mainstream.* The educational system is important not just for the human capital it endows to prospective workers. Especially for immigrants and low-income groups, it is the primary place of socialization to the mainstream society and of learning to belong to a larger community. For many children schools are where they first learn the language of government and business. Up to relatively recently, all nation-states have been following the strategy of teaching one language and transmitting the ways of one (dominant) culture. For the older, Western European nation-states this had worked well up to relatively recently, but it is not clear that it is working now or that it will be working well in the future. (The degree of alienation of some immigrant areas from mainstream European societies that is observed now could be likened to the conditions that have been existing in many American inner cities for some time.) Besides, today there are powerful forces that tend to emphasize the multiplicity of cultures and languages and their translation into educational policy. To the extent that instruction in minority languages and cultures is accompanied by bilingual studies and an emphasis on more universal values, the distance from the mainstream society can be shortened quickly. But new types of multicultural education can also emphasize separateness and increase a group's isolation from the rest of society. How it is done can be vitally important for the future of large urban areas in Europe and elsewhere.

### *5.5. Transnational coordination and governance*

The need for international policy coordination, from trade to environmental regulation, has become a cliche of all discussions. So it is with organized crime, especially since it breeds in the nooks and crannies that are left untouched by state authority. Coordinating on drug policies is only one of the many and growing areas of concern. The monitoring of financial transactions and the ease with which the profits of organized crime can be laundered is another area. A bigger area of concern will continue to be migration from the South to the North, as organized crime always profits from the flow and then becomes lodged in the areas populated by immigrants. Since this migration is driven by income disparities, stemming organized crime is an additional reason for the North to have a direct interest in the economic well-being of its immediate periphery in the South.

But the biggest challenge could turn out to be the collapse of many states in the South and effectively their transformation into organized crime syndicates with an appetite for growth beyond their borders.[8] How could one coordinate then on all the other policies with such governments? Would this call for the abandonment of simple intergovernmental cooperation and for the expansion of supranational governance beyond its currently acceptable levels? It would be premature to answer such questions now, but it would help to be thinking about them before having answers becomes an urgent matter.

[8] As of this writing, major international media outlets like *the Economist (1999b)* consider Russian organized crime of concern to the North and the Russian state itself as a candidate for that role.

## 6. Appendix: Modeling the industrial organization of protection

In this Appendix I examine a simple extended example which formally shows: how a power vacuum induces the formation of organizations that provide protection; why these organizations are hierarchical (instead of self-governing) like the overwhelming majority of gangs and mafias are; why increased competition among gangs is welfare-reducing; and, how inefficiency varies with the rents created from prohibition and other sources. The example is partly based on Konrad and Skaperdas (1999) with an extension that allows for rents generated by, for example, drug-trafficking. The particular functional forms are employed here for illustration purposes but the findings are valid more generally. Its purpose is not to substantiate all the statements made in the text about the functioning of organized crime and the normative guideline, but to provide the reader with a flavor of the methods employed to arrive at the descriptions and prescriptions in the text.

### *6.1. When there is a power vacuum*

I begin with a very simple hypothetical setting with insecurity but without any organizations to provide protection or without any functionally equivalent norms that restrain appropriative actions. There are $N$ individual agents with some of them becoming producers and the remainder becoming robbers. Each producer has one unit of resource that he can distribute between output and private protection. Let $\rho$ denote the amount of private protection allocated by a producer. For simplicity, suppose the share of output kept by a peasant also equals $\rho$. (In general, that share can be allowed to be an increasing function $p(\rho)$ and other properties that can be rigorously justified.) The payoff of a producer then can be defined as follows:

$$V_p = \rho(1 - \rho) \tag{1}$$

Maximization of this payoff by the choice of $\rho$ yields an optimal choice of $\rho*=1/2$ and a maximal payoff of $V_p* = 1/4$.

Robbers do not produce anything. They prey upon peasants and receive a share of rents like those that may accumulate from the production and distribution of illegal drugs in outlying areas. Let $D$ denote the total quantity of the rents. Robbers extract $1 - \rho$ share of the output from each producer and receive in expectation an equal share of the rents and of the amount extracted from producers. Therefore, letting $N_p$ denote the number of producers and $N_r$ denote the number of robbers, the payoff of a robber under a power vacuum is as follows:

$$V_r = [(1 - \rho*)^2 N_p + D]/N_r = [N_p/4 + D]/N_r \tag{2}$$

Allowing for individual agents the choice of occupation and assuming that in the long-run the payoffs of producers and robbers are equalized, the numbers of the two occupations are as follows:

$$N_r* = N/2 + 2D$$
$$N_p* = N/2 - 2D$$

provided $D < N/4$ (otherwise, no one becomes a producer and everyone becomes a robber). Under the ideal conditions of everyone producing their maximal output, total output would equal $N$, whereas total output under the insecure conditions examined here equals $N/4 - D$. We can analytically distinguish among three sources of inefficiency: the fact that producers have to divert some of the resource towards private protection, that some individuals become robbers to prey on producers, and some become robbers as a consequence of the presence of rents $D$. Note that if the rents are high enough ($D > N/4$), there are no producers around and everyone lives off the rents.[9]

### *6.2. Collective protection*

Private protection is not the sole or the most important type of protection that is provided in practice. Having a street patrol, for example, is a typically more efficient arrangement than having each resident look individually after his own property. I therefore posit a collective protection technology that is more efficient than private protection in the following sense: If everyone within a group were to contribute a certain amount of resources to collective protection, the share of output they could each keep away from bandits would be greater than if each were to contribute the same amount to private protection.

For simplicity, suppose the collective protection technology is such that a member of a group could keep $\sqrt{\Sigma c_i/K}$ of output away from robbers, where $c_i$ is the contribution of member $i$ and $K$ is the size of the group and is a number greater that a certain minimum level . Thus, if $c_i = c$ for all $i$, the share of output that is kept away from bandits would be $\sqrt{c}$ which, given that $c < 1$, is greater than $c$, the share kept away from bandits if the same amount of resources had gone into private protection by each producer instead of into collective protection.

The same collective protection technology can be employed by a for-profit mafioso who has control of $n_{pm}$ producers and protects them from robbers with $n_{gm}$ number of *guards* whom he hires from the area population. For a producer who chooses $\rho$ as the level of his private protection, a $\sqrt{n_{gm}/n_{pm}} + \rho$ share is kept away from robbers. To be in business the mafioso also needs to hire an *elite corps* of a fixed number $e$, who are used to monitor the guards and as an all-purpose rapid-reaction force; the cost of hiring this elite unit represents the fixed cost of entering the for-profit protection business.

[9] If $D$ is generated by the prohibition of a commodity that has negative externalities, and prohibition results in a reduction of say $E$ in such extrernalities, then that quantity $E$ should be added to all calculations of welfare here and in the remainder of this Appendix. I would like to thank a referee for suggesting this point.

### *6.3. Competing for protection*

There are two ways of organizing collective protection. One involves the formation of self-governing communities in which its members contribute to collective protection voluntarily. The other way is to have mafiosi providing collective protection. Both mafiosi and community groups, however, need to defend their turf against one another. Mafiosi need to hire *fighters*, their number denoted by $n_{fm}$, whereas producers within a community group need to contribute *fighting effort*, denoted by $f_c$, to keep themselves independent of mafiosi. With $M$ mafiosi and $C$ communities with $K$ members each, a community can keep itself free of mafiosi if it undertakes enough fighting effort $f_c$ so that

$$\frac{f_c}{\sum n_{fj} + \sum f_i} N_p = K \tag{3}$$

where $N_p$ is a given total number of producers, and the two sums in the denominator are over the mafiosi and community groups. The number of producers mafioso $m$ can sequester in his turf is similarly determined by how many fighters he has relative to all other competitors:

$$\frac{n_{fm}}{\sum n_{fj} + \sum f_i} N_p = n_{pm} \tag{4}$$

In the remainder, I will first consider the behavior of community groups and mafiosi. I will then define appropriate equilibrium notions of organizational form, and finally determine whether community groups and mafiosi can co-exist.

#### 6.3.1. Community groups

Producers in self-governing community groups contribute to individual and collective protection voluntarily. Each producer, however, contributes an equal portion, $f_c/K$, to fighting the external threat. (If that contribution were voluntary too, then survival of the group would be even more difficult than it is now.) Hence, a producer $i's$ welfare, who chooses $\rho_i$ and $c_i$, is as follows

$$V_{pi} = (\sqrt{c} + \rho_i)(1 - \rho_i - c_i - f_c/K) \text{ where } c = \sum c_i/K \tag{5}$$

With $f_c/K$ given, there is a symmetric Nash equilibrium of choices for individual and collective protection that yields the following equilibrium welfare to each member of the group:

$$V_{pc}* = (4K^2 + 2K - 1 - 4f_cK)/8K^2 \tag{6}$$

Recall that under a power vacuum a producer has a payoff equalling $1/4$. $V_{pc}*$ is higher than that only if the fighting effort to maintain independence is very low. The larger the group is (i.e., the higher is $K$), the lower is the welfare of each producer. Although there is no free-rider problem on external defense by assumption, as the group gets larger not enough is contributed to collective protection internally because of the free-rider problem.

### 6.3.2. Mafiosi

As we have seen, mafioso $m$ hires guards, $n_{gm}$, to protect his producers from robbers, elite corps in the fixed number $e$, and fighters,$n_{gm}$, to keep his producers as described in (4) but also to capture a portion of the rents $D$ in fighting against other mafiosi. I suppose that each mafioso pays all those he hires the going wage, or what producers receive. Producers receive the difference between what they can keep away from robbers and the protection money they give to the mafioso. I assume that the mafioso can extract from producers exactly what robbers could in the absence of the mafioso, so that the mafioso extracts $\sqrt{n_{gm}/n_{pm}}(1-\rho)$ from each producer and each producer is left with $\rho(1-\rho)$, the same as under the power vacuum in (1). Therefore, each producer optimally chooses $\rho = 1/2$ with a payoff of $1/4$, the same as under the power vacuum. Therefore, guards, elite corps, and fighters receive the same payoff as well. Thus, for a given number of producers $N_p$,the mafioso's payoff function is as follows:

$$V_m = \frac{n_{fm}}{\sum n_{fj}} D + \frac{n_{fm}}{\sum n_{fj} + \sum f_i} N_p \sqrt{n_{gm}/n_{pm}}(1/2) - (e + n_{gm} + n_{fm})/4 \quad (7)$$

The choice variables of a mafioso are $n_{gm}$ and $n_{gm}$. Since producers already protect half of output from robbers ($\rho = 1/2$), it can be shown that it always optimal to set $\sqrt{n_{gm}/n_{pm}} = 1/2$, and therefore always hire guards that are one-quarter the number of producers in the mafioso's territory. That is, there is perfect security and there are not any robbers in each mafioso's territory. This fact, along with (3) and (4), implies:

$$\begin{aligned} V_m &= \frac{n_{fm}}{\sum n_{fj\,i}} D + \frac{n_{fm}}{\sum n_{fj\,i}} (N_p - CK)(1/4) - & (8)\\ &\quad \left( e + \frac{n_{fm}}{\sum n_{fj\,i}} (N_p - CK)(1/4) + n_{fm} \right) /4 & (9)\\ &= \frac{n_{fm}}{\sum n_{fj\,i}} [D + (N_p - CK)(3/16)] - (e + n_{fm})/4 & (10) \end{aligned}$$

where $C$ is the number of self-governing community groups with $K$ members each. Considering $n_{fm}$ as the strategy chosen by mafioso $m$, there is a unique, symmetric pure-strategy Nash equilibrium that is as follows:

$$\begin{aligned} n_{fm} &= 4(M-1)[D + (N_p - CK)(3/16)]/M^2 \\ &\quad \text{where } M \text{ is the number of mafiosi} \end{aligned} \quad (11)$$

Note how the number of fighters varies positively with the size of the rent $D$ and with the number of producers that are available for sequestering within a mafioso's territory.

### 6.3.3. Protection equilibrium

We are now ready to define an appropriate notion for the economy-wide organization of protection, starting with the notion for the short run.

A *short-run protection equilibrium* consists of a number of producers $N_p^\circ$, robbers $N_r^\circ$; for each community group $c$, a fighting effort $f_c^\circ$; for each mafioso $m$ a number of fighters $n_{fm}^\circ$ such that:

I. Each community group chooses $f_c^\circ$ so that it satisfies (3) with the other variables taken as given.
II. Each mafioso chooses the Nash equilibrium level $n_{fm}^\circ$ with the other variables also taken as given.
III. Each producer belonging to a community group chooses individual and collective protection strategically taking all other variables as given so that (5) is satisfied.
IV. $N_r^\circ = \sum n_{rc}^\circ$ where the sum is over all community groups and $n_{rc}^\circ$ is the number of robbers induced by the choices made in community group $c$. (Note from above that no robbers exist in mafia territories.)
V. $N = M + Me + Mn_{fm}^\circ + Mn_{gm}^\circ + N_r^\circ + N_p^\circ$ (The population exhausts itself among mafiosi, elite corps, fighters, guards, robbers, and producers.)

Given (10) and (3), it can be shown that a producer within a community group will need to contribute fighting effort that is higher than the highest quantity that would guarantee a payoff of $1/4$, the payoff under a mafioso or under a power vacuum. It follows, then, that *producers belonging to self-governing community groups will have lower payoffs than if they were to subject themselves to a mafioso!* Therefore, no such groups can be expected to form as intuitively discussed in Section 4.1. Only hierarchically organized mafias can be expected to prevail.

A *long-run protection equilibrium* is a short-run protection equilibrium in which every mafioso has an equilibrium payoff at least as great as that of a producer ($1/4$) and, if another agent were to become a mafioso, at least one mafioso would have a lower (short-run) equilibrium payoff than that of a producer. (I avoid defining the conditions for a community groups here, as I just demonstrated that the payoff of each producer would be lower than $1/4$. Of course, it is possible that under different circumstances self-governing community groups could be viable in the long-run and it would interesting to discover such conditions, if any.)

It is a matter of algebra to show that, in the absence of community groups, the short-run number of producers is decreasing both in the number of mafiosi $M$ and therefore *as competition intensifies, production is reduced* (as discussed in Sections 4.2 and 4.3). The number of producers is also decreasing in the size of the rents $D$. Thus, greater *rents created through drug and other illegal activities reduce production and increase the presence of organized crime* (but the reduction of such illegal activities could have the positive welfare effect of $E$). If the rents are high enough, the producers could even dry up completely and everybody would be competing for the capture of the rents through the different mafias.

(No guards are needed in such a case.) Even if the rents are not that high, it can be shown that in the long-run total output is almost the same as output under the power vacuum. All the extra output that becomes possible with the more efficient collective protection technology is wasted in fights among mafias.

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