The Organization of Illegal Markets:
An Economic Analysis
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The Organization of Illegal Markets: An Economic Analysis

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ABSTRACT

It is widely believed that monopoly control, based on violence, corruption or risk-spreading, is characteristic of markets for illegal goods and services, such as marijuana and bookmaking. This essay examines the effects on the organization of a market arising from changing the status of a good or service from legal to illegal.

In general, it can be shown that illegal enterprises are likely to be smaller than their legal counterparts. The most important reasons for this are the lack of external credit markets, itself a consequence of the non-existence of audited records, the lack of court enforceable contracts, and the need to restrict knowledge of participation in the enterprise. The inability to advertise or to create goodwill for the enterprise itself, as opposed to goodwill for its agents, is also significant. Corruption is likely to affect the organization of the market only under special circumstances, where there is a single agency which monopolizes enforcement. Though that condition held for most illegal markets thirty years ago, enforcement now is fragmented and overlapping, which inhibits an agency from granting a monopoly franchise.

The introduction of violence does not in general change this result. The use of violence to acquire market power can occur only where there is a ready focus for that violence. Most illegal markets lack either time or space consistency that would permit exclusion of competition. Some comments about the optimal use of violence are offered.

The final section offers some analysis of the plausibility of using illegal market enforcement as an instrument of organized crime control. There have been systematic changes in the set of opportunities available to organized crime members; illegal markets no longer are so central to the power and income of organized crime. The shift from gambling to narcotics markets has also weakened the link between organized crime and illegal markets.
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INTRODUCTION

This essay is motivated by an earlier study (Reuter and Rubinstein, 1982) of certain illegal markets (numbers, loansharking, and bookmaking) in New York in the mid-1970s. That study suggested that, contrary to common beliefs, these markets were populated by numerous, relatively small, often ephemeral, enterprises whose relationships were closer to competition than collusion. Certainly there were large segments of all three markets in which there was no restraint on entry (i.e., violence or denial of access to required factors of production) or any suggestion of price-fixing, the classic indicators of centrally controlled markets. Indeed, there was even direct evidence that one effort at price fixing in the sports bookmaking business had been an abysmal failure because the group that formed the cartel had been unable to identify and coerce all the bookmakers available to their customers.

These results are sharply in contrast with the claims of official agencies since the time of the Kefauver committee. Those claims, also reflected in a vast popular literature, state that illegal markets in many cities, including New York, are subject to central control by a single group, whose authority rests on a well-established reputation for commanding great forces of violence and/or control of corrupt police and political authority.

The obvious question arising from the empirical study is whether the results can be generalized. Might the findings be accounted for by the choice of site or cities and other products? Could they be generalized to other cities or product markets? Though the choice of product markets seemed unexceptionable, there was certainly some reason to be concerned about the impact of location. New York is by far the most populous metropolitan area in the U.S. and it is characterized by unusually fragmented political authority; for example, each

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1 E.g., "In large cities where organized criminal groups exist, very few of the gambling operators are independent of a large organization" (President’s Commission on Law Enforcement and the Administration of Justice, 1967, p. 2).
2 Market refers to the orderly sale of a good or service in exchange, generally, for money. The good or service must be sufficiently well defined to permit comparison of price among alternative sellers, though not all need sell identical products.
3 The gambling markets were chosen precisely because they figured so heavily in the standard account of organized crime. Numbers and bookmaking were also frequently surrounded by allegations of corruption. Loansharking was asserted by the 1967 President’s Commission to be the second most important market economically and one in which violence played an important role.
of the five boroughs has its own district attorney. The combination of sheer size and fragmentation (which makes more difficult the purchase of protection from law enforcement) makes the task of controlling an illegal market in New York substantially more difficult than in other large American cities. The fact that New York is believed to be the home of five autonomous families of the Mafia, while no other major city is thought to have more than one family resident in it, increases the suspicion that the finding of fragmentation or competition in rivalry, which creates conflicts within markets, may prevent centralization.

The purpose of this essay is to argue that the results are not likely to be unique to New York. There are in fact numerous economic factors which tend to produce small and ephemeral enterprises in illegal markets. Just as importantly, there are constraints, both economic and institutional, which inhibit the use of violence to restrain competition and establish dominance by a single group.

This is not a claim that no illegal market can ever be subject to such control. There is indeed considerable evidence that some major illegal markets have, in the past, been so controlled. However, the analysis does suggest that this is likely to be the result of political circumstances, especially centralized police authority, and of particular modes of marketing.

The rest of the essay is divided into four broad sections. The first is a summary of the sources of variations in the organization of legal markets. Some legal markets are characterized by large, diversified firms which operate in numerous product and geographic markets and which integrate within the firm many functions related to their final products. Other markets are characterized by many small firms, each specializing in producing the particular final product and plain its value variation. We can provide a framework for understanding the organization of illegal markets.

The second section considers the consequences of the illegality of a product for the way in which various participants (entrepreneurs, agents, customers, etc.) will seek to structure their relationships. The threat of police intervention, either to seize assets or to imprison participants, together with the lack of court-enforceable contracts, leads to the formation of small and relatively amorphous enterprises. The possibility that participants will provide information about others to the police in return for reduced penalties is the critical mediating factor. The addition of corrupt police does not change this result except where there is a single police organization with uncontested jurisdiction.

The existence of numerous small enterprises selling an essentially undifferentiated product would, in a legal market, assure a high degree of competition;

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4 The Enfauver Committee’s description of bookmaking in Miami certainly supports a conclusion of central control, resting on both corruption and the monopolization of a critical input, the wire service (U.S. Senate, 1951).

5 "Excess profits" is income earned by a factor of production, such as labor or capital, which exceeds the income earned by that factor in competitive markets, account being taken of the uncertainty involved in the particular use considered.

6 Anti-trust authorities attempt to prevent restraint of trade, which is particularly likely when there are small numbers of firms.
I. PRINCIPLES OF INDUSTRIAL ORGANIZATION

Why are some markets (e.g., the metal stamping business) characterized by numerous small firms, each specializing in a very limited range of activities, while others (e.g., the aluminum industry) are characterized by a small number of large firms each of which produces a wide range of final and intermediate products? Why do some firms enter a wide range of apparently unrelated markets while others specialize? Why are some goods sold in local markets while others are sold by firms that operate in every region of the nation? The examination of issues such as these constitute the field of economics called "industrial organization." A brief examination of the principles of industrial organization, in particular an emerging line of research which focuses on transactions costs (the costs of carrying out economic transactions either through the market or within an organization) will provide a useful background for our explanation of how illegal markets are organized.7

The central analytic focus of industrial organization has traditionally been the shape of cost curves, i.e., the relationship between number of units of output produced by a firm and the cost of producing those units. If cost curves decline continuously, which occurs when each additional unit of output costs less to produce than the previous unit of output, then the market can be captured by a single producer, since a monopolist will incur lower costs for a given output than any larger set of suppliers.

At the other extreme lie markets for products whose production is characterized by cost curves which turn upward (the cost of producing the next unit is higher than the cost of producing the current one) at an output which is small relative to the market as a whole.8 The markets for such products will be populated by numerous small firms, each producing at the lowest point on its production function. These are competitive markets in which no single firm controls the price or the quantity of the good sold and current producers cannot prevent the entry of new firms.

What determines the shape of cost curves? There are different classes of factors that can be listed. Some are physical; bear vats of 10,000 gallon capacity require less metal per gallon than do vats of 1,000 gallon capacity. This is simply the result of the capacity of a container increasing by the cube

7An excellent account of the field of industrial organization is provided by Scherer (1980).
8This statement is a condensation of a complex argument. The complication is that the size of the market (the amount of the good sold) is determined by the price. The statement refers to an equilibrium state; at the prevailing equilibrium price, the optimal size firm is small relative to the size of the market.
of its diameter while the area of its surface increases only with the square.\(^9\) Thus, the cost per gallon of large vats will be lower than for small vats. There are other factors which are technological, but not merely physical. Consider again the beer industry. The cost of reaching 10 million potential beer drinkers with an advertising message is less than 10 times that of reaching 1 million, because of the technology of television production and distribution.

Classical industrial organization has stressed such technological factors. Far more important for our purposes, however, is another class of factors, affecting the shape of cost curves, which is now becoming increasingly important in the field of industrial organization. These are factors relating to the difficulty of coordinating group activities. Although technology points to a confining decline in the costs of production, that will occur only if every individual involved in the production process acts in the best interests of the firm. However, the costs of monitoring employees' performance, to ensure that they do "shirk," may increase rapidly. The factor limiting the size of firms in a particular industry may be the cost of effectively monitoring individual performance in large groups.\(^10\)

As the economy moves increasingly from manufacturing to the production of services, the role of purely technological determinants of firm size has perhaps become less central. Since the illegal markets with which we are concerned are heterogeneous in nature, we may need to focus more on the non-technological determinants of the organization of a market. Gambling and loansharking, the case study markets, are both service industries as are the other major illegal markets, such as those involving the sale of a physical product, drugs. The bulk of the total cost of getting the final good to the consumer is not production but compensation to those involved in the distribution of the drug from production point to the final consumer; for heroin, the curve of a heroin distribution enterprise is likely to be determined by human factors.

Williamson (1975) has provided the clearest and most complete statement of the framework for industrial organization which emphasizes human factors. The issue that he puts at the center of his analysis is the choice between organizing a particular transaction (e.g., a purchase of an input such as labor) within the firm or executing it in the market, for it is that choice which determines the size and scope of firms. The choice depends in large part on the ease of monitoring performance, which in turn depends on the flow of information.

Consider, for example, the choice between purchasing an input in the market or producing the input internally, expanding the firm to include related activities which are not currently carried out within it. Should an automobile firm produce its own steel or purchase it from specialized steel producers? By purchasing in the market, the firm is able to make use of price to search out the low-cost source of the input; it does not have to invest scarce resources in the management of additional and different productive activities. On the other hand, internal production reduces uncertainty as to availability and cost and ensures that the firm is not disadvantaged by small numbers of producers in the input market, which may allow suppliers to manipulate prices above competitive levels in bargaining.\(^12\)

This same approach can also help explain the geographic scope of markets and enterprises. Let us return to the familiar example of the beer industry to illustrate the issue. There is now a national market for beer; each of the major producers sells in all the major regions of the nation. A producer who serves a single city must compete in that city with these national brewers. Contrast this with the situation 50 years ago, immediately after repeal. Then each city was served by local brewers, who did not have to take into account the actions of brewers in other cities in making price, output, and marketing decisions.\(^13\)

The change is the result of a number of factors. Technology has improved so as to permit the storing and transporting beer throughout the nation from a single production point. The optimal size of a brewery, purely in terms of beer production costs, has also increased, i.e., the lowest cost is now attained in a larger brewery than was formerly the case. Perhaps most important has been the development of a national advertising market. It is now possible to reach a national audience at a lower per capita cost than a local brewer can reach the audience in his city alone.\(^14\) Indeed, the creation of national markets in most consumer goods may be the result primarily of this change in advertising together with the increased mobility of consumers. The growth of franchising supports that conclusion; McDonald's and Holiday Inns take advantage of both the national advertising media and the mobility of consumers, who frequently purchase meals and lodging in areas where they have no knowledge of local facilities. The familiar symbols serve as signs of predictable quality.

Related to the improved advertising technology, which has enabled advertising to reach a national audience, is the declining cost of communicating to distant points, which has allowed large national firms to monitor agents in remote locations. Technological advances in the national banking system now permit instantaneous transfer of funds, again reducing the transaction costs of running a national firm; the central office and branches of a firm are no longer handicapped by the necessity of keeping large balances at the branches to avert delays or costs in moving funds.

\(^9\)This example comes from Hay and Norris (1979, p. 42).

\(^10\)There is a growing theoretical literature dealing with this problem (e.g., Jensen and Meckling, 1976). However, it has so far had little influence on empirical industrial organization research.

\(^11\)Figures suggesting this are presented in National Narcotics Intelligence

\(^12\)A small number of steel firms might be able to use methods such as price leadership (i.e., all firms follow the lead of a particular firm) to evade anti-trust restrictions aimed at preventing prices rising above the competitive level.

\(^13\)For a discussion of recent changes in the structure of the beer industry, see Ornstein (1981).

\(^14\)Ornstein (1981) discusses the impact of advertising on the distilling industry but not on the beer industry. This oversight is curious since the most significant medium for advertising, television, is available to beer producers but not to distillers.
These factors are only a few of the elements that encourage the growth of national markets and firms. They are important here in part because they highlight the importance of human factors: the ability of managers to control activities very distant from them, which is dependent on other institutional developments. The national beer market is the result of the growth of national media, telephone, and banking systems, as well as changes in the technology of production. A beer industry which could not tap into these systems might look very different.

The final dimension of a firm which should be considered is its diversification across product markets. In recent years, an increasing number of firms have entered a number of apparently unrelated product markets; these are the conglomerate firms. The existing accounts for this phenomenon are uniformly unsatisfactory.15 The Williamsonian framework, with its stress on managerial and human factors, is perhaps most advantageous here. A conglomerate may be viewed as the integration of a financial firm, an allocator of capital, with a number of optimal size production firms. The advantage of integration is that information flows better to the internal capital source than it does to external capital markets. The financial center is able to make more rapid adaptations in investment allocations between the units than the capital market can.

In summary, our discussion shows that the characteristics of a firm are determined by a complex of technological, institutional, and human factors. They cannot be dealt with separately; it is their interaction which determines the optimal size and scope of firms. However, since the impact of product illegality is most directly on institutional and internal organizational issues, we shall focus attention upon these.16

We have focused so far on characteristics of the firm, with little discussion of markets. But ultimately our interest in the firm is related to the performance of markets. We present here a very brief statement of the central proposition about the effect of the structure of markets (here narrowly defined as the number and size distribution of firms in a market) on prices and profits.

In competitive markets, with numerous small firms, each firm takes the price for its product as given. A firm which raises its price above that level will make no sales. The large number of firms in the market will make it difficult for them to conspire together to set the price above the level at which all factors of production, including the entrepreneur, receive what they could earn in their next best paying use (opportunity cost). If, despite the large numbers, the firms are able to fix a higher price they would find, if there are no barriers to entry by new firms, that new entrants force the price down.

Contrast this with the situation faced by a firm which operates in a market with only a small number of competitors and which knows that new entrants will incur significantly higher costs than the current firms, perhaps because their products are unknown (Schmalensee, 1982). The small number of firms may agree to set a price above the competitive level; some factor of production can now earn a higher rate of return as a result. The agreement will have to be policed and there may be incentives to breach the agreement by shading prices and increasing market share as a result. But there is a history of such agreements in small number markets (Hay and Kelly, 1974).

Thus, a finding that illegal markets consisted of many small firms, all of which had to behave as price takers, would suggest that, except for chance, participants in such markets did not earn significantly more than they would in other occupations, criminal or otherwise. If members of organized crime are active in competitive illegal markets, they derive no special revenues from doing so.

On the other hand, if we identify factors which lead to noncompetitive structures in illegal markets, then there is the possibility that organized crime is able to control those factors which earn higher than competitive rates of return. It would be plausible, though not certain, that illegal markets were central to the revenues and power of organized crime. With this in mind, we turn to the consequences of product illegality.

15Scherer (1960, pp. 125-130) provides a good summary of the existing analyses of the conglomerate phenomenon, stressing their dependence on unexplained capital market imperfections.

16Omitted from this analysis is any consideration of the effect of institutional and human factors on technological development. In the long run, technology is a given, but is generated in response to the needs of firms. If product illegality affects the organization of firms, particularly the size of firms, it will also affect the kind of technology they seek. However, this is unlikely to be central for the service industries which make up the illegal sector.
II. THE CONSEQUENCES OF PRODUCT ILLEGALITY

It seems plausible that the legal status of a product will affect the way in which its production and distribution are carried out. For example, if beer were once again prohibited, it is unlikely that it would continue to be produced by such large and conspicuous brewing units, distributed nationally from a small number of central points, and marketed aggressively in a national market. Similarly, if market were legalized, it might well be produced and distributed by entities more like the tobacco companies (national production, heavy brand advertising by producers) than the small, vertically unintegrated enterprises that function in the current illegal market. 17

The purpose of this section is to explore the impact of the prohibition of a good on the manner in which its production and distribution are organized, focusing on the impact of illegality on the choice of transactional model. We shall argue that there are numerous economic incentives for illegal markets to be populated by small, localized enterprises, which are not vertically integrated and which operate in only one product market. They are also likely to be ephemeral. The analysis ignores the consequences of the possible use of violence by illegal market participants; these are considered in Section III.

This section is generally comparative in that it examines how illegality changes the organization of a market; it presents no theoretical results about the absolute size of the illegal enterprise. The case studies in Reuter and Rubinstein (1982) found very small enterprises in three major markets. Although the argument presented here suggests that the factors that produced these small enterprises are likely to be general, it does not show that only small units will survive but only that illegality will lead to smaller enterprises than otherwise.

Let us begin the analysis by listing some of the significant operational consequences of product illegality for participants in the trade:

1. Contracts are not enforceable in courts of law.
2. The assets of the illegal operation may be seized at any time that law enforcement agencies identify the operation and locate its assets.
3. All participants risk arrest and imprisonment.

17 Of course, this would depend upon the nature of the regulations imposed on the marketing. Limits might be placed on the extent of advertising. Although First Amendment considerations probably prevent a ban on newspaper advertising, it might be restricted from other media. This would somewhat reduce the comparative advantage of the national firms. Note though the national market for distilled liquors denied access to television.
If these are the fundamental operational effects of product illegality, it is clear that their significance for the organization of a market is likely to heroin dealers face high penalties, numbers retailers low penalties. Some markets to value added, others by low ratios; high fixed capital tries will be more affected. Finally, those less obviously, formal contracts of asset seizure and arrest, is the need to control the flow of information about him or her, his activities, particularly those involving other participants, so as to them to influence with whom and how many participants he is willing to transact, and how he structures the transaction.

Before considering the organizational consequences, we need to specify a critical factual assumption which will make its appearance at various points in the discussion. That assumption concerns police strategies. In illegal markets, the practice of police is to rank participants in terms of their significance in the trade. A less significant figure (i.e., an agent, employee, customer) will generally be able to retain his or her freedom by effectively informing against a more significant figure. This is well understood by all participants in the market.

Our analysis proceeds in terms of how members of different participant groups structure their relationships with members of other groups. There are six major roles in illegal activities: entrepreneur, employer, agent, supplier, creditor, and regulator (police). The entrepreneur interacts with each

18Note here that markets are not defined just by final products. Heroin in-19
sellers, selling to heroin wholesalers, constitute another market. There are of limited operational utility as evidenced in recent efforts to clarify the of what are of limited operational utility as evidenced in recent efforts to clarify the notion for Justice Department merger policy (Hendin, 1983).

20 For example, the Wholesale diamond trade is famed for its reliance on verbal agreements between individuals, often involving hundreds of thousands of dollars. On the other hand, very formal contracts characterize the retailing of automobile contracts signed by the customer.

21The term "police" is used here generically to refer to any representatives of government function which is to detect and help sanctify illegal market categories of police agencies and police officers.

22On police recruitment of informants following arrest, see Manning (1980) and Skolnick (1966). The behavior is particularly important in the drug trade.
but he must also compensate employees for the hazard of working in the enterprise. After all, since the standard of proof of disloyalty must necessarily be less than that of others,24 for this the employee will require additional compensation.

While money and fear are the dominant strategic variables for ensuring loyal performance, there is another approach: attempting to create positive non-economic ties with employees. The recruitment of relatives as employees in one whose office was bugged during the of susp~on~s po~tive small will prevent the enterprise from taking advantage of economies of sequences of product illegality which will tend to keep illegal enterprises around h:. . The two administrative influences may not both play a role. If the ad­ from endanger ,him personally need be brought into this fictive family large numbers would strain credibility, as well as features. But the restrictions of this method are the employer may attempt to incorporate the employee into his extended family, who may inform against the enterprise as a whole, some submit of it, or even against him specifically. This last is a particular threat if there are employees of lower rank.

The larger the number of other employees of the same or lower rank with whom he must deal, the higher the risk. This is also true for the entrepreneur; the difficulty is that the employee cannot control the structure of the enterprise around him. The entrepreneur may find that the larger the enterprise he concentrates at a single location, the higher the wage he must offer each for the price of the product. As a result he may decrease employees in an attempt to reduce the risk to which each employee is exposed.

This analysis suggests that there are at least three employment related con­sequences of product illegality which will tend to keep illegal enterprises small will prevent the enterprise from taking advantage of economies of scale in the cost of managing a given size work force. The incentive of the entrepreneur to keep small the number of managers reporting to him directly may further con­strain the size of the illegal enterprise.25

Supply. Under the term supply we consider both forms of vertical integra­tion: forward and backward. Forward integration occurs when the enterprise carries out a function previously carried out by those to whom a good or service. For example, a numbers banker might integrate forward into retailing by purchasing and employing salesmen or controllers currently used.26 Backward integration occurs when an enterprise produces internally an input which it previously purchased from an independent enterprise; as an example, the entrepreneur might integrate bookkeeping and computer work within the enterprise, or he might employ pilots rather than contracting with an airlift supply company. These are both created as supply issues because they alter the number of autonomous enterprises with which the entrepreneur must deal. They are also analytically symmetric; backward integration by one enterprise is forward integra­tion by another.

Since the overwhelming share of the cost of production of illegal goods and services is payment to labor, involving compensation for both time and (more im­portantly) the assumption of risk,27 the issue of vertical integration is con­sidered in terms of the choice between employment and other agency relationships. That is, the entrepreneur in vertically integrating increases the number of em­ployees and range of skills in his enterprise, but not the capital investment, except in the case of transportation. Even for transportation the possi­bility of using existing equipment limits the necessary investment. In making the choice the entrepreneur must take into account the relative riskiness of the employment relationship compared to the alternatives, and the costs of managing an expanded and more diverse work force.

Will illegality raise or lower the incentive for internalising a function? There are factors pushing in both directions. Consider the inducements to inte­grate. Illegal markets are frequently characterized by high search costs; it may be time-consuming to acquire an alternative supplier for a particular service if the existing relationship is interrupted. It is also difficult to determine whether the price offered by the current supplier is competitive or whether there is a lower cost source. The loyalty of the supplier is uncertain, since he may be able to obtain relief from police interventions by promising the name of a few of his customers. Making the supplier an employee raises the certainty of provision of the input, increases his loyalty, and has relatively small cost in terms of loss of information about the market price of the service.

24 One anecdote suggests that perhaps even those with well-developed 25 administrative cost expands rapidly enough as the result of the necessity for keep­ing direct-contact subordinates than the entrepreneur would impose as a constraint, cost of reputation for command of his enterprise, Angelo de Carlo, a Mafioso in Northern New Jersey whose office was bugged during the 1960’s, was very suspicious that the manager of one of his numbers banks was cheating him. He tried frequently to verify his 26 Backward integration is more speculative than it looks. Wages paid in illegal market enterprises might be classified as the result of the necessity for keep­ing skills in his enterprise, but not the capital investment, except in the case of transportation. Even for transportation the possi­bility of using existing equipment limits the necessary investment. In making the choice the entrepreneur must take into account the relative riskiness of the employment relationship compared to the alternatives, and the costs of managing an expanded and more diverse work force.

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26. This example also suggests a definitional problem which is not directly dealt with by the industrial organization literature. When does an agency become a member of the enterprise, as opposed to an independent supplier to it? A non­exclusive commission agent, such as a runner (retailer) in the bookmaking business, might be classified as a non-member precisely because of the non-exclusivity. The ability of the bookmaker to direct the runner’s actions is very limited. A runner who worked on an exclusive basis seems to me to fall on the margin of membership. The very fact that he is paid on the basis of results tends to create a belief on the part of the entrepreneur that he cannot effectively control his agent’s actions.

27. The assertion about the relative importance of the two components of labor cost is more speculative than it looks. Wages paid in illegal enterprises are not strikingly high. A numbers clerk in New York in the mid-1970’s might rec­ieve a wage of $200 per week. While this is clearly higher than the market wage for low level clerical work (a bank teller in 1977 earned approximately $125 per week).
There are a number of factors working in the opposite direction. The employee, if apprehended, has only one enterprise which he can put at risk in return for continued freedom, namely, his employer’s, and his regular contact with the entrepreneur will increase the amount of information he can supply. Finally, he may form factions with other employees to supplant the entrepreneur.

No general conclusion can be drawn from this with respect to the relative degree of internalization by illegal and legal enterprises. As a matter of observation illegal enterprises seem to be quite unintegrated. Heroin distribution enterprises involve arm’s length transactions between different levels rather than integration of importing, wholesaling, and retail components. Marijuana importers buy their airplanes flight services from independent entrepreneurs, a fact which drug enforcement agencies have put to good use by setting up undercover service supply enterprises. Bookmakers do not hire exclusive sales agents, but retail through independent commission agents.

One possible explanation for the lack of integration is the instability of enterprises and relationships in illegal markets. The employment relationship is encouraged in legal contexts by the expectation that the employee will be a member of the enterprise for a considerable period of time; the employer can invest in training the employee to acquire general skills (for which the employee will receive below market wages during training) and skills dedicated to the firm (for which the employee will receive above market wages after the training).

The planning time horizons of participants in illegal markets are likely to be much shorter. The employees include a disproportionately number of unreliable workers, who are also subject to imprisonment from time to time. The enterprise is more ephemeral for a variety of reasons, including the probability that the entrepreneur himself will be arrested occasionally. The result is that one of the opportunities for entering into an employment relationship: the opportunity it provides for both sides to make skill investments—is greatly reduced.

For an analysis of on-the-job training, see Becker (1975). Moore (1977, Part I) analyzes the New York heroin market in terms of vertically non-integrated enterprises. Details about certain heroin enterprises provided in court documents support this assumption. However, heroin dealers at high levels regularly selling multi-kilo lots, do seem also to sell smaller lots when the opportunity presents itself. Since the whole purpose of the non-integration is to cut down on the number of persons who can put the high level dealer at risk, that appears ill-advised. Probably, high level dealers are willing to sell to low level customers whom they know well, since they perceive such sales as low risk. This perception is, of course, a questionable one: a small time dealer who can give the police a very high-level dealer is likely to receive particularly lenient treatment.

There is another general factor which reduces the attractiveness of the employment relationship in illegal enterprises. Illegal workers often demand coverage for their risks, making it difficult to monitor their performance. Yet the employment relationship, if it includes wages as well as a commission or profit sharing, requires this monitoring, which is more expensive under such conditions. This increases the attractiveness of buying the same services in the market.

Credit. It has been noted for over fifty years that a critical characteristic of the modern firm is the separation of ownership and management (Berle and Means, 1932). Whereas in the 18th or early 19th century the firm was identified with the owner/entrepreneur, by the end of the 19th century firms had acquired identities of their own. The retirement of a single individual was no longer a signal to the outside world that the firm had substantially changed. The firm could become an enduring institution, independent of any individual for its continued life.

This also permitted the development of external credit markets in which firms borrowed money from individuals or institutions without those creditors becoming involved in the operation of the firm itself. Prior to the 18th century, where sufficient evidence of collateral (i.e., that the borrower still retained the assets to which the lender would lay claim in case of a default) and the probability of prompt repayment. Specialized auditing firms developed which efficiently provided lenders with the necessary information to make and maintain loans.

These statements do not apply to illegal enterprises, for which three major factors inhibit the development of external capital markets. First, the enterprise cannot present audited books. Not only does the enterprise want to minimize its recordkeeping in order to reduce the evidence available to law enforcement, but it also finds it impossible to have the records verified by a reputable third party. Auditing firms would risk their reputations by auditing the records of illegal enterprises; they would not be allowed to continue as auditors if they were detected. The potential creditor is forced to rely on the borrower’s representations of the past performance of the enterprise and its ability to repay.

31 This is distinct from the problems presented by expanding the size of the enterprise. Integrating new functions within the enterprise requires the development of additional performance measures and management skills. Given that management skills are correlated with legitimate market earnings, the risk premium that must be paid to more skilled managers will be higher than for other kinds of labor used in illegal enterprises. Hence, it is likely that such enterprises must find simple structures that reduce the necessary competence of management for efficient functioning.

32 This raises an interesting question as to whether individuals might specialize as auditors for illegal enterprises. Apart from the risks involved in maintaining books in these enterprises, the auditing function is likely to foundar on two other related issues. The process of auditing requires giving the auditor access to a great deal of information about the enterprise generally. The auditor would become the ideally placed informant. His arrest would put many enterprises at risk. Moreover, the fact that an auditor is dependent on reputation for his income implies that he would be particularly vulnerable to detection by the police.
Second, the lender cannot obtain collateral without withdrawing it from the use of the borrower. The bank which lends to an airline has, as collateral for that loan, a claim to the planes the airline purchases with the loan. Several legal institutions have been created to give the lender confidence that the collateral can be recovered if the borrower fails to meet his obligations, even though the borrower uses the collateral up to the time of default or seizure. If the borrower were to remove the airplanes from the airport, the bank would have no basis for the collateral. 33 The lender cannot effectively monitor the disposition of the collateral without becoming involved in the management of the enterprise.

Third, since the enterprise does not exist independent of the entrepreneur, the loan is made directly to the individual entrepreneur and not to the enterprise. His death or incarceration may deprive the creditor of repayment. As we shall see below, the enterprise has little, if any, value as an ongoing business, independent of the entrepreneur who created it. Indeed, even if it had, the creditor would have difficulty identifying the party to whom the claim should be made, i.e., the entrepreneur's successor. Since he may not know any other participants in the enterprise, they can always claim that the previous entrepreneur had not entered into a contract binding upon the successors.

This third factor might only result in loans to illegal enterprises or entrepreneurs having a high risk premium, i.e., that such loans would bear high interest rates to compensate the borrower for the uncertainty. However, the problem is more fundamental than that. It involves "moral hazard" or "impacted information." The borrower has positive information about his own performance that he cannot credibly communicate to the lender; this is a more general version of the problem of not having auditable books. He may assert that his enterprise is profitably and cautiously operated, but he cannot demonstrate it. The result is that entrepreneurs who actually have small likelihood of arrest (perhaps by their very reputation) and are good managers, are unable to provide credible evidence to potential lenders. The lenders may assign all bookmakers or heroin dealers to the same risk class, for lack of such information. Better ones are unwilling to pay the risk premium and do not borrow. This means being more cautious and are good managers, are unable to provide credible evidence on which he can rely to protect himself. The result may be to eliminate the external credit market for all but the highest risk borrower.

These constraints on外部 credit markets are possibly the most significant influence on the organization of illegal markets, for they severely limit the ability of the enterprise to grow. Absent smoothly working capital markets, the growth must be internally financed out of profits. In the heroin importing business, where each successful transaction may double the capital of the enterprise, 34 this may be a minor restriction. The dealer can move up one level after two or three successful deals. For a number of book, with a relatively modest cash flow and a need to maintain a substantial cash reserve, this may be a very important constraint.

The difficulty of obtaining external capital has other implications for the size of illegal enterprises. The informations on external credit markets extend not only to borrowed capital but also to equity financing. Partnerships, in which all members of the partnership are also involved in the operation of the enterprise, are possible, but may require generation of more written records than would be optimal for an illegal enterprise; partners can scrutinize the disclosure of profits through such records. Truly external investment, in which one individual lends to another in return for a share of the profits, exposes the lender even more clearly to the opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise.

Similarly, it may be difficult to establish a market value for "ownership" of the enterprise. In conventional markets, the firm is composed of individuals, relationships with customers (goodwill) and among employees, capital equipment, and technology. The owners of a firm will sell this collection of attributes to others. Although they cannot guarantee that some members of the firm will not leave it and thus possibly lessen the profits, the rest of the attributes can be transferred with a guarantee of their nature and title.

In the case of an illegal enterprise, the sale of the firm as a going concern is vastly more uncertain. The entrepreneur may be able to transfer the enterprise to another in return for a share of the profits, exposes the lender even more clearly to the opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise. The enterprise, if it is not a corporation, may deprive the lender even more clearly to the same opportunistic behavior that we discussed earlier. There are no audited books; the manager can always misrepresent the enterprise.

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and not to the enterprise itself, as illustrated in the case studies. When an illegal enterprise tries to create brand loyalty, it also provides the police with information. Moreover, it cannot cheaply prevent others from counterfeiting the name. The new owner must also contend with the possibility that members of the enterprise may attempt to acquire control of it through force. Since the loyalty of members of an enterprise is affected by the reputation of the entrepreneur, the control of force, the firm may be sold only to those few with the same reputational assets. This greatly reduces the value of the ongoing enterprise and explains why transfer often occurs within the same family group.

All this suggests that illegal enterprises lack the durability possessed by legal firms. The departure of the entrepreneur is likely to lead to such substantial changes that the enterprise itself may be regarded by the participants as terminated. If this is so, then it has an important consequence for the organization of illegal markets, for the size of the enterprise may be limited by the extent to which it grows during the operating lifetime of its founder. For the most efficient growth path of the enterprise, starting from the smallest size at which it can operate, may not be longer than the expected operating lifetime of one individual. This limitation results in illegal enterprises remaining smaller, on average, than their legal counterparts. This situation is further exacerbated by the great likelihood that the entrepreneur will have a short operating lifetime as a result of factors as homicide and imprisonment.

Since the entrepreneur will be able to reap returns from investments in the illegal enterprise only during the period he anticipates being in charge of it, he will adopt his investment behavior accordingly. There are some pieces of capital equipment that are used in these enterprises which have a market value separate from the enterprise, but the bulk of the investments are likely to be in the cultivation of goodwill. As he approaches retirement age, he will discount these over a shorter and shorter period. Alternative investment forms will become more attractive. If he wishes to leave his assets to his heirs, he may invest an increasing share of his profits in legal assets which he can pass on to them. The result is yet another dynamic constraint on the size of illegal enterprises.

Regulation. All illegal businesses, like most legal business in contemporary America, are subject to regulation by government authority. Although illegal businesses, the regulators are the police. As in the legitimate economy, the extent of regulation is a function of the nature of the product and the location of the business. In both types of markets, the regulator can impose costs on the entrepreneur and the entrepreneur may attempt to make improper payments to the regulatory official in order to reduce those costs.

Corruption, therefore, should not be viewed as unique to illegal markets since there are legal markets in which corrupting public officials seems to be a part of the operating routine of business. The recent announcement of indictments of the majority of building inspectors in Brooklyn and Queens and the recurrent meat inspection scandals illustrate the persistent problems of certain industries. A building contractor unwilling to make payments to inspectors may incur substantial additional costs as a result of harassment, and those costs might make it unprofitable to obtain the necessary permits. Nonetheless, corruption plays a more central role in illegal markets than it does in legal markets. Certainly, conventional industrial organizations have paid little attention to the impact that corruption might have on the structure and operation of illegal enterprises. To contrast, the small body of literature on the organization of illegal markets (reviewed in Reuter and Rubinstein, 1982, Chapter I) stresses the importance of corruption in illegal markets. The argument implicit in those analyses is that centralized police authority itself leads to monopoly in the illegal market. A public agency which can, in effect, create a monopoly franchise by enforcing laws against all but the selected operator may maximize its bribe income by doing so. Profits are increased on both sides by conferring the monopoly and dividing those profits between the police and the licensed operator. Schelling (1967) analyzed the Miami bookmaking industry, as described in the Kefauver committee hearings, in these terms. In that case, the initiative came from criminals outside of the police department who used the police as their licensing and tax collection agency. Schelling pointed out, however, that the opposite situation might have occurred if the police department had shown more initiative and centralized decisionmaking ability. The criminal enterprise could have become the collection and licensing arm for the police.

This argument applies only in situations where one law enforcement agency has exclusive jurisdiction. It ignores the complex structure of contemporary law enforcement in most American cities and the consequent riskiness of different
strategies that might be adopted by corrupt police. When one takes these factors into account, corruption on the part of law enforcement agencies could actually lead to more decentralized market structures than would a situation in which there was no corruption and random enforcement.44

In contrast to the situation that existed when the Kefauver committee conducted its investigation and the popular view on illegal bookmakers, enforcement of criminal law is now widely dispersed across agencies and levels of government. Consider illegal gambling in New York, a major focus of the committee's attention. In 1950, when Senator Kefauver conducted his famous hearings in New York, only the New York City Police Department had gambling enforcement responsibility.45

By 1970, there were at least three additional independent agencies with jurisdiction over illegal gambling. The FBI can investigate gambling operations involving interstate betting or more than $2000 per day in wagers. The IRS has authority to conduct criminal investigations in order to collect wagering excise and occupational stamp taxes.46 At the state level, the State Investigations Commission can conduct investigations of gambling and gambling-related activities. There is a similar fracturing of authority in every major city, for most important illegal products. In the case of New York City, the drug markets, the last decade, the state police of many states have acquired major investigative resources that enable them to intrude into areas that previously were left to large city police departments.

In terms of Rose-Ackerman's (1978) classification of bureaucratic structures, illegal markets are sub set to fragmented authority. No single agency or agent, except those specifically licensed by an illegal operator which will provide complete protection; each agency can only lessen the probability of arrest for an operator. How does this fragmentation affect the organization of the market?

This analysis draws heavily on the work of Rose-Ackerman (1978).

The District Attorneys in New York could investigate and prosecute members of the Police Department for corruption. Indeed, this happened shortly after the Kefauver committee had completed its work. That prosecution (known as the Harry Gross scandal) is briefly discussed in Kornblum (1976). However, the District Attorneys lacked independent investigative resources; they were assigned members of the Police Department for short periods of time. The prosecutors were not in a position to monitor routinely either the police or the illegal operations with a position to monitor routinely either the police or the illegal operations. Their investigations of police corruption were usually extra-ternally initiated.

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46Bookmakers are liable for two specific federal taxes. The more important is the Wagering Excise Tax (26 U.S.C. 4401) which levies a 2 percent tax on all wagers, as wagers. The more specifically a wager is, the less it is self-enforcing. A bookmaker's gross margin is only about 6 percent, which he shares with a gambler. The second tax is the Wagering Occupational Stamp Tax (26 U.S.C. 4411) non-exempt gambling businesses, among legal gambling enterprises, are not exempt. Tax collection figures suggest that only a trivial percentage of illegal bookmakers pay these taxes.

The most obvious effect is that entertainment activities which discriminate in favor of the competitors who are paying that particular enforcement agency may tip off the other enforcement agencies.47 These entrepreneurs who are not making payments can provide information about corruption to the other agencies. In particular, it may not be in the interest of the corrupt agency to inform the target of the corruption, since that will greatly increase the probability that the other agencies will become aware of the corruption.

The risk from discriminatory enforcement takes two distinct forms. First, during the period in which the corrupt police are attempting to eliminate the competitors of their chosen franchisees, a relatively large number of persons motivated to inform against the franchisee will be well-situated to provide information to the non-corrupt agencies. Second, even if the corrupt police are able to eliminate the competition, they are then faced with the problems arising from the visibility of their franchisees, who will be the target of the enforcement efforts of the honest agencies.48

That is not to say that fragmented enforcement will lead to honest enforcement. Indeed, there are numerous opportunities for corruption by individual officers which have low probability of detection by other agencies. When having observed an offense, may still choose to accept payment for not enforcing against that offense, particularly if no third party is aware of the transaction. He may then have a lower price for overlooking a second offense. Of the many reasons for this phenomenon, the most compelling is that the corrupt officer is measured by the success of the first corrupt transaction that he has with whom he is dealing is not an informant.49 This assurance is particularly important when the police invest heavily in anti-corruption investigations, as they did in New York in the 1970's (Kornblum, 1976, pp. 113-115). Under fragmented authority, both the individual agent and the agency will have to adopt more cautious strategies, extorting lower payments for the lesser degree of protection.

47There is a hierarchy of effective investigative authority which deserves note here. Federal agencies investigate local police from time to time, but the local police almost never investigate federal agencies. Paying off federal agents would involve little risk of exposure to local police. However, the federal agents cannot provide the same routine protection as can the local police, with their vastly larger forces. Moreover, the federal agencies generally adopt more extensive anti-corruption measures.

48Indeed, one's impression from reading materials such as the wiretaps on the DeCavalcante and De Carlo (Zeiger, 1973, 1975) and on a New York numbers banker (Kettering and Manton, 1982, pp. 113-115) is that the police protection was not to suppress competition but simply to reduce the risk of interrupting the smooth operation of a business. The police, in turn, seem to have been willing to offer protection to any operator. That was certainly true of the major gambling protection ring in New York during the 1960's.

49There is one qualification to that argument. Criminals become informants as the result of particular incidents. It is not, in many cases, a continuing state. A police officer who has consumed a number of corrupt transactions with a criminal ought not be surprised if the same criminal makes use of that valuable information the next time he faces serious criminal charges from another agency. However, habitual transactions have diminished value to the criminal in providing him with evidence to use against the officer. Certainly, the officer has lower exposure from these transactions with a single criminal than from one transaction with each of three criminals.
One possible way in which the corrupt agency can minimize the risk of bribery income being detected is by focusing its actual enforcement efforts on the most aggressive or visible entrepreneurs. Since these entrepreneurs are the most likely targets of the honest agencies, they are also the most likely to be placed in a position where they will wish to trade information about corruption in return for protection. As a result, corruption may increase fragmentation in the illegal markets; the larger the enterprise becomes the higher its costs of purchasing favors from a corrupt agency.

This drawback depends on assumptions about the flow of information from markets to agencies, the price that can be offered by enterprises of different sizes, and the risk the corrupt police are willing to take. For example, historically agencies have acted as to maximize arrest rates. Therefore, agencies may hesitate to target the largest enterprises, which can invest most heavily in precautionary activities. The above analysis merely indicates the ambiguous impact of corruption on market organization in a world of complex enforcement structures.

Finally, final customers, those who actually consume the illegal goods, are a significant threat to the illegal entrepreneur. They are numerous in number, have small loyalty to the enterprise, and take few precautions against police surveillance because they face little risk from the police. Customers are the starting point for most investigations against illegal enterprises and the entrepreneur must deal with them cautiously.

In particular, he may use two strategies to reduce customer-based threats to the enterprise. First, he may seek to separate their dealings from the rest of the enterprise. The heroin dealer does not make sales from his cutting operation; the loanshark does not settle accounts at his wire room. Such dispersion may lessen the relative efficiency of larger enterprises.

Second, he can try to use his reputation to intimidate customers so that they are reluctant to provide information to the police and act cautiously in dealings with the enterprise. The loanshark, particularly vulnerable to his customers' potential for leniency. A customer of the police, will say "this is not Tony's money" to ensure that the customer will fear violent retaliation if he informs against the loanshark. The cost of that method is, of course, that he has provided a piece of information which is of value to the police and can be offered to them by the customer.

A significant consequence of the entrepreneur's need to deal cautiously with final customers has already been mentioned: an entrepreneur cannot advertise without adding to his risk, since advertising provides information to law enforcement agencies. It both informs them about which enterprises are most important and provides evidence about links between the different components of the enterprise. In addition, since it cannot openly use the conventional media, the illegal enterprise has very limited means of advertising. Instead, the entrepreneur is restricted to labelling his product. Even this is likely to be ineffective without recourse to the courts to prevent others from counterfeiting his label and gaining the advantage of his investment in product quality.

As a result, one of the major sources of economies of scale in legal markets is not available to the illegal enterprise. The customer's loyalty to the retail agent with whom he deals. The numbers better may be utterly ignorant of the identity of the bank with whom he bets; the marijuana customer knows only the name of the person from whom he buys his grass. The enterprise is unable to develop any customer goodwill; it all rests with the retailing agent. The enterprise can compete only for the service of retailers. Even there, the lack of advertising media restricts the ability of illegal entrepreneurs to tap the major sources of economies of scale for legitimate firms.

Geographic Scope. At this stage, let us turn to the issue of the geographic scope of illegal enterprises. Taking into account all the factors discussed earlier in this section, it is possible to identify a number of reasons for expecting illegal enterprises to be local in scope, i.e., not to include branches in more than one metropolitan area.

Perhaps the most significant factor is the difficulty of monitoring distant agents. A major task of the entrepreneur generally is to monitor the behavior of agents, in order to ensure that they work efficiently and honestly. The design of large modern corporations has been greatly influenced by the problem of monitoring. A desirable structure is one in which the monitoring can be done by a single, easily observed, performance measure, removing the need to make detailed observation of employees or agent behavior. For example, the divisional form of organization is intended to permit quantitative measures such as the rate of return on invested capital (or some similar measure) to monitor the performance of high level managers. As mentioned earlier, distance is now a minor impediment to such monitoring in large corporations because of the development of new cost means of rapid information transfer and communication.

Illegal entrepreneurs could conceivably avail themselves of similar performance measures. However, there is an element of performance which is difficult to monitor, but which can be critical to the success of the overall enterprise, and that element is increased exposure to apprehension by law enforcement. Although the agent obviously has incentive to avoid apprehension, he may not be as strong as the entrepreneur would wish. The agent may be more willing than the entrepreneur to take risks since he generally has a lower income and less wealth at stake than the entrepreneur does. In addition, he can misappropriate

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50 E.g., a typical numbers investigation will begin with observation of dense customer traffic at a store at particular times of the day. The customers leave the store without any visible purchases. The observation of this pattern by a patrol officer will provide the basis for a vice squad investigation. Since heroin customers face at least a modest prospect for short-term incarceration, they can be fairly easily persuaded to provide information about their dealer, as long as they have access to more than one so that turning in a dealer does not prevent them from getting heroin when they need it.

51 This assumes that such information is accurate. There is a cost to misrepresenting that it is Pat Tony's money, namely, that Pat Tony will learn of this and effectively discontinue the customer, having now learned that the loanshark is weaker than he. This argument is expanded in Rountree (1984b).

52 The divisional form and its evolution in modern American business is discussed extensively in Chandler (1962).

21 As an individual becomes wealthier, there are two reasons why he might become increasingly cautious in avoiding imprisonment. First, he has a larger
capital (both tangible and organizational) from the enterprise by informing against the entrepreneur.

Although these incentives exist for all agents of illegal entrepreneurs, the entrepreneur is less able to control the risk taking and punish the misappropriation when the agent is in a remote location. He cannot force the agent to act cautiously since he is unable to observe the agent's behavior. He will have difficulty punishing informants since he has less information and control of forces in remote locations.

A second factor which inhibits the geographic spread of illegal enterprises is the hazard associated with transportation and communication to distant locations. In order to use low cost forms of long-distance transportation, it is necessary to expose agents to risks of seizure penalties by delivering large amounts of the prohibited good. That hazard will be reflected in payments to the courier as a face-to-face link is required to reduce the risk of interception. That is not possible on a short-term scale of the activity rather than on its direct use of interstate facilities.

A third factor is multiplication of law enforcement agencies with an interest in investigating the enterprise. If the agencies are corrupt, the increased cost is that an additional agency must be paid. If the agencies are honest, the use of interstate facilities provides an additional cause for action by Federal agencies. Given the breadth of Federal jurisdiction, which is largely based on the scale of the activity rather than on its direct use of interstate facilities, this use of interstate facilities probably poses less danger. However, criminal

wealth which may be taken from him through the increased enforcement risk. Second, he will value his freedom more highly because he has more wealth to consume during that freedom.

The weaker control of force in remote locations is a function of the returns to reputation, which in turn are positively affected by the composition of the relevant population; the investments which yield a reputation for being able to deliver threats have a higher return where the relevant population has numerous intersections. The probability that any individual will have heard about a reputation-enhancing act is an increasing function of the probability that he has contact, through a continuous chain of other persons, with at least one witness to the act. Persons in other cities have less likelihood of being in such a chain. For effective control of force in other cities, the entrepreneur must finance the costs of acquiring a reputation in those cities. The investments which may lead to illegal market conglomerates are the driving forces. Entrepreneurs are unable to tap economies of scale in production because they must disperse activities in time and space which raises the unproductive and production costs of large enterprises. They are unable to develop goodwill because information disseminated to consumers about the enterprise is likely to be uncorrelated with the increased enforcement risk they entail.

perceptions change slowly; ten years after the passage of a bill which gave the FBI authority against large gambling enterprises operating intrastate, some major bookmakers still were explicitly concerned with the relative dangerousness of interstate phone calls.

The inability to develop enterprise-based brand loyalty is the final factor inhibiting the development of national enterprises. For all the reasons given earlier, the illegal enterprise is unable to use the conventional media. A major avenue for the spread of national retailing and production enterprises, the ability to create national brand loyalty, is closed to the illegal enterprise.

Diversification. Not all illegal enterprises restrict themselves to production of a single good. Some bookmakers offer numbers betting also; many marijuana importers also handle cocaine. In these cases, they are responding to their customers' demands; a reasonable percentage of marijuana customers also use cocaine. They reduce their search costs by purchasing both from a single source.

Joint demand generates joint supply.

What about pure diversification, diversification into unrelated product lines? For illegal markets, the literature identified the incentive for diversification as the failure of external capital markets to allocate funds efficiently among enterprises. An internal capital source, with better information available to it, can allocate funds more promptly and efficiently. In light of the failure of external capital markets for illegal enterprises, there would seem to be great motivation for the development of illegal market conglomerates. The internal fund allocator, after all, should be able to obtain objective statements of the financial standing of the individual enterprises within the conglomerate, which the external creditor lacks.

This is a countervailing factor, though, which may account for the observed lack of pure conglomerates in illegal markets: the multiplication of exposure that comes from entering a range of activities. Each additional activity increases the number of enforcers with which the entrepreneur must contend. In an area with a single, centrally-directed police agency that has been bought by the entrepreneur, this presents no problem. However, where he is able to purchase either no protection or only protection from individual officers or units within agencies, the probability of investigation is increased more by extending the range of activities than by expanding involvement in an existing criminal activity.

Summary. The arguments in this section suggest that (leaving violence for later consideration) there are numerous economic factors which may lead to illegal markets being populated by localized, fragmented, ephemeral, and diversified enterprises. Concerning the literature about police intervention and illegal markets, the contracts are the driving forces. Entrepreneurs are unable to tap economies of scale in production because they must disperse activities in time and space which raises the unproductive and production costs of large enterprises. They are unable to develop goodwill because information disseminated to consumers about the enterprise is likely to be uncorrelated with the increased enforcement risk they entail.
The analysis can be played out in many dimensions. While it is impossible to place any quantitative estimates on the importance of each particular factor, there are no purely economic factors which would contradict the analysis by suggesting that illegal enterprises might tap economies of scale not available to legal enterprises. Before considering the implications of this, we must turn to the use of violence in illegal markets.

III. VIOLENCE AND MARKET ORGANIZATION

There are two reasons why the use of violence for economic purposes is a distinctive feature of illegal markets. First, the victims of violence, except for most customers, face costs in seeking police protection, since providing an informative complaint will yield information to the police about the illegal activities of the complainant. While this will not prevent all reporting, it certainly lowers the probability of complaints in response to violence. Second, participants in illegal markets lack recourse to state facilities for dispute settlement. Violence or threats may provide the only method of resolving disputes in at least some situations.

Since illegal entrepreneurs face sharply lower costs than legitimate firms in employing violence against their competitors, our analysis of the organizational consequences of product illegality might be irrelevant. Whereas all other economic factors may argue for the emergence of a competitive market, control of superior violence may enable the elimination of competition. That argument is a central component both of the official account (see Reuter and Rubinstein, 1982, Chapter I) and of academic writing on illegal markets. For example, Rubin (1973) asserts "Violence is used essentially for the maintenance of monopoly power, that is, for the prevention of entry" (p. 162).

In this section, however, through an examination of that proposition, we shall show that only in very narrowly defined circumstances will it be optimal to use violence to eliminate competition. In addition, we shall briefly deal with the internal uses of violence, focusing on their organizational consequences.

Competitive Violence. This analysis is governed by two interrelated assumptions about violent conflict in modern urban settings. First, such conflict differs from military contests in the international realm in that the quality of personnel training and weaponry is not likely to determine who wins the conflict. In conventional war the relative size of an army is only one factor determining its strength and likelihood of success. The repeated success of the Israeli army in recent testimony for this proposition. In contests between urban gangs, on the other hand, size is likely to be a far more important determinant since the skills of the members and the weapons available to both sides are very similar. Indeed, the weaponry of contemporary gangs seems significantly less powerful and sophisticated than that of gangs in earlier eras. Landesco (1929) refers to the routine use of submachine guns in the Chicago gang wars of the 1920's; such occurrences are now rare, though the South Florida drug wars provide an exception (U.S. Senate, 1980). More effective firearms law enforcement may account for this.

57 That is not to deny that the police may be very well informed about incidents of violence in illegal markets. That is one of the major yields from informants. But it is less for the purpose of arresting the perpetrator than to learn about relations between participants in these activities. The victim himself is less likely to provide the information to the police than is some associate.
change. Although the quality of leadership is possibly an additional factor in a gang's success, none of the available reports or studies mention martial admin­
istrative skill among modern gangsters.

The second assumption is that gangs can substantially increase their size quite rapidly. There are large numbers of young men in major American cities who are willing to accept paid employment to carry out acts of violence and do, expand at short notice. Probably recruitment of new members involves not so much raising wages as taking in persons whose loyalty and tenacity are less certain. Certainly informants regularly tell of incidents in which a "kid" in a local store was recruited to perform some violent errand, despite apparently little connection with the criminal hiring him.

If the size of a gang is an important ingredient in its successful use of violence, then violence itself can lead to monopoly; the entrepreneur with the largest group of paid employees may obtain the exclusive right to carry out acts of violence against them. He might find it optimal to force their exit from the market.

The introduction of violence as a competitive factor also suggests that a market can be controlled by an individual not actually involved in the market. A gang leader, employing violence only, may be able to extract the available monopoly rents (i.e., all profits beyond those available from competitive uses of the same productive factors) from existing enterprises by refusing to permit opera­tion without taxation. He is in the same situation as the owner of a site with unique locational value to some industry. He can set the tax structure so that only a single enterprise will be able to operate, since industry profits are maxi­mized by monopoly operation. With adequate information, he can optimize his own revenue so do others.

The gang leader's optimal strategy then is to set a fixed fee for anyone to operate a business in this market. By setting the fee at the level of profits that would be earned by a monopolist, beyond the costs of paying the necessary factors of production (including the entrepreneur) their opportunity costs, then just one business will be able and willing to meet his fee requirement. However, this requires that the gang leader be able to predict with certainty what entre­preneurs will be able to earn in this line of business. If he overestimates the projections, then no entrepreneur will be willing to meet his fee level. If he underestimates, then he will fail to extract all the available rents. He may, in light of this, choose to let entrepreneurs bid for the monopoly rights. With imperfect capital markets the bids may include periodic rather than immediate payments.

There are numerous potential constraints on violence based monopolies. Monopoly may have an associated cost in the form of more intense law enforcement against the monopolist. Police may allocate resources across markets so as to target monopolists.\(^{58}\) The optimal tax structure, taking into account the costs of arrest and conviction, may be one that supports a number of entrepreneurs. Also the productivity of armies, marshalled for the purpose of excluding illegal entrepreneurs, is affected by idiosyncratic aspects of the market, such as the

58It is difficult to make any definite statement about the determinants of resource commitments against illegal markets. However, it is plausible that the belief that a particular illegal activity is run by a single group will, on some occasions, lead to more intense enforcement.

59In a legal setting, the entrepreneur and the employee could take out a per­formance bond guaranteeing the employee payment in the case of the entrepreneur's death or other adverse contingency. This option is not available for illegal activities.

60The problem is actually symmetric. The gang leader must be concerned about false claims. Any recruit may assert that he was attacked by members of the other gang and suffered some financial or physical damage in consequence. The leader will have difficulty in determining the validity of such claims.
replace those who die or retire.64 Since the list of members is not a publicly available document (even the size of Mafia families is a matter of speculation, for it is difficult to determine the size of less well-known gangs), new entrants will have to make an assessment which reflects incomplete information. Given the costs of failure, it will be a risk premium by assembling a gang larger than "technically" necessary according to the mean estimate of the initial gang's size.62 This provides another barrier to entry, an additional cost which was not incurred by the current dominant gang leader.

Therefore, an entrepreneur who first creates a violence-based monopoly has established an enterprise that may grow in profitability over time. At the time the monopoly position is attained, the monopolist gains little, if any, excess profit. He recruits a gang large enough that no larger gang could possibly earn any rents. Having established that position, he can then substitute his reputation for costly personnel. The longer his monopoly is unchallenged, the more he can substitute, become recruits for rival gangs will demand higher wage and risk premiums. How much he will substitute reputation for personnel is a function of his attitude toward risk and the length of his planning horizon, i.e., how long he expects to maintain this position.63

A few observations are consistent with this scenario, though they scarcely constitute a rigorous test. The Mafia families which have a dominant reputation (in terms of their supposed capacity for carrying out violent threats) in the illegal economies of some major cities in this country arose through gang wars during the Prohibition Era. This is not to say that there was no Mafia prior to Prohibition, but that the gangs that now occupy the most prominent positions are direct descendants of groups that emerged in struggle with predecessor Mafia and other ethnic gangs. Hailer (1974) ascribes the success of the new Italian gang to their greater willingness to use sustained violence. During the 1920's, the members of the gangs included persons who were involved in the bootlegging industry itself, there appear to have been significant members who were essentially "soldiers," specialists in violence.

Since that time, though there have been occasional outbreaks of gang violence, it appears that the armies have disappeared. Certainly no gangster

61 Actually firing gang members is probably a risky strategy because that provides a signal of decline, which will be reinforced by statements by the fired members.

62 The gang leader may believe that the current gang has 100 members and that 110 will be enough to defeat them. However, there is a 10 percent probability that the true gang size is 105, for which a gang of 115 will be necessary for victory. The rival gang leader will then have to assemble a gang larger than 110 to optimize his investment. Exactly what size will depend on how long it takes him to exhaust his effort.

63 He may also take into account any information he has about the size of potentially rivalrous gangs. However, since it is likely that he can recruit additional gang members at least as cheaply and rapidly as any other gang leader, he may choose to disregard the size of other gangs.

64. Landesco's (1929) classic account of the battles in Chicago does not give figures for the numbers involved in individual conflicts. However, the language certainly suggests that raiding parties of 10 were common for major attacks.
Crime, at least until recently, appears to have been measured in terms of the number and seniority of Mafia members convicted.64 This suggests that one cost of having the reputation as the dominant gang is increased targeted enforcement activity. Given the long lags and historical ineffectiveness of law enforcement agencies, this need not change the cost of the reputation itself. This is significant because one common cause for the replacement of older leaders in the Mafia may revolve around younger members that period. The Permanent Subcommittee on Investigations are modest. It is with the demand curve and constant returns to scale,69 the rents available for the gang. One force, other major illegal franchises. The markets included bootlegging, prostitution, numbers, and of an army more. The markets included bootlegging, prostitution, numbers, and book-making. The extent of Mafia involvement in actual operations varied considerably.

Another strategic issue for the gang leader has already been briefly discussed, namely, whether to use his reputation to enter a particular market or actually to enter the market himself. There is evidence of an army which exerted from a number of illegal markets by establishing territorial franchises. The markets included bootlegging, prostitution, numbers, and book-making. The extent of Mafia involvement in actual operations varied considerably.

On the other hand, there is also ample evidence that, even in cities with strong Mafia families that have well-established reputations for command of great force, other major illegal markets are not subject to their enticement. This appears to be true of the marijuana market, at least according to police specialists; law enforcement agencies rarely include marijuana in the list of Mafia controlled markets.66

What determines whether violence can be used to acquire control of a market? One obvious factor is simply the return to monopolization. With a highly elastic market is inelastic. It is difficult, though, to find evidence that the demand for any major illegal product is highly elastic. Even with drugs there seems to be limited substitution between different narcotics so that, at least in the medium run, there is inelastic demand for specific drugs.70

More important may be idiosyncratic features of distribution. The difference between the distribution systems for narcotics and sports bookmaking illustrates the point nicely. Numbers bets are retailed face-to-face and sports bookmaking illustrates customer knows the identity and location of the retailer. Consequently, that retailer is easily threatened. Competitive violence has a ready focus.71

In contrast, sports bookmaking is a telephone business. Each agent deals with a relatively small number of customers and meetings may be arranged irregularly at varying locations. The agents are not exclusively affiliated with a single bookmaker, so that it is difficult for the gang to determine, once they have tracked down an agent, whether he is making transactions on behalf of another enterprise. While this does not make it impossible to create restrictive franchises in the sports bookmaking business, the cost of monitoring may be higher than in the numbers business.

Bootlegging required fixed and conspicuous locations for distributing the liquor. Bars provided a focus for competitive violence in the 1920's. With a relatively small number of customers, knowledge there seems to be limited substitution between different narcotics so that, at least in the medium run, there is inelastic demand for specific drugs. 70

It is interesting to note that the development of territorial franchises in the Chicago bootlegging business took some years. The early years of Prohibition saw remarkably high levels of violence as a result of efforts of individual bootleggers to expand their markets (Landesco, 1929). Haller (1974) identifies one of the sources of this violence as the factionalized political authority in Chicago, where individual ward politicians had a great deal of autonomous power during the 1920's. The lag in establishing territorial franchises was further increased by the mayoralty of William Dyer, who made some effort at enforcing the Prohibition laws by reducing police corruption and thus prevented the development of the centralized police corruption that later assisted franchising by the gang. above the competitive level will result in little additional profit. The constant returns to scale means that the monopolist does not get increased profits as the result of declining costs from having an output level higher than that of all the firms in a competitive industry. See Scherer (1980, Chs. I and II).

Moore (1977, Ch. I) argues that the demand for heroin may be elastic in the short-run because there is a substantial nonaddict population. At the long-run monopoly price, where only addicts are in the market, the demand may be quite inelastic. The low price of marijuana, relative to comparable forms of recreation, such as alcohol, suggests an inelastic demand. Cocaine demand, at the current very high prices (900 for an evening's entertainment), may be the most price responsive.

The fact that the retailer is the immediate object of the threats does not mean that only the retail end of the market can be so controlled. The exclusive dealing arrangements of retailers from the market will also lead to the exclusion of their associated banker.
Summary. Violence as a tool for coercing actual and potential competition in illegal markets has occasionally led to the creation of monopoly control. However, the discussion presented here suggests that this is not likely to be a universal occurrence.

If the assumption about the availability of violent labor is correct, then the profitability of obtaining a monopoly comes only over time, as the gang leader is able to deplete the size of his army and use his reputation and the uncertainty about his actual forces to bluff others from challenging him. The process of investing the necessary resources and incurring the risks, both physical and legal, to achieve a dominant position may require a longer planning horizon than most gang leaders have.

Moreover, the possibilities for monopoly control vary across markets, defined both by location and product. There are two identifiable sets of factors which influence the incentive to acquire a monopoly position. One set might be described as conventionally economic, such as the shape of cost and demand curves. The second set is specific to illegal markets and includes the risks of participation in the activity, the nature of the distribution system, physical characteristics of the good involved, and the policies of law enforcement.

IV. IMPLICATIONS FOR ORGANIZED CRIME CONTROL

This essay has argued that there may be a strong tendency for illegal markets to be populated with small and relatively ephemeral enterprises. This tendency is not greatly undermined by the use of violence to suppress competition among these enterprises. Such violence-based monopolies are limited in their effectiveness, except where there is corrupt centralized police authority. What implications do these conclusions have for efforts to control organized crime?

Campaigns against illegal markets have traditionally been at the heart of organized crime control efforts. During the last few years, the Federal agencies, at least, have broadened their strategies and have brought many successful cases against leading organized crime figures based on their criminal involvement in unions and legal industries. Nonetheless, there appears to be a continued belief in the importance of illegal markets as a source of organized crime power and income. As mentioned above, the recently announced Federal campaign against the drug traffic is based at least partially on the belief that the heroin business is dominated by "traditional" organized crime, a frequent political euphemism for the Mafia. The relationship between organized crime and illegal markets is thus an important one for policy discussions.

We must, unfortunately, begin with a definition of organized crime, since this is still a matter of controversy. I use here the rather discursive definition presented in Reuter and Rubinstein (1982, p. 11). A group may be called organized crime if it has hierarchy, durability, multiple criminal activities, a willingness to corrupt authority, control of violent labor, and nonviolent means for settling internal disputes.

The definition certainly includes the Mafia. It may also include certain of the recently prominent motorcycle gangs, though it is not clear that they have survived the generational change in leadership which will prove their durability. The definition, however, excludes most illegal entrepreneurs, whose businesses encompass a single criminal activity and who are clients rather than members of organized crime.

One consequence of the definition is that organized crime groups are likely to have a reputational asset, like goodwill, that arises from their durability.

72 An analysis of the centrality of campaigns against illegal gambling is presented in Reuter and Rubinstein (1982, Chs. V and VI).
73 GAO (1981) reported that the priorities of the Federal Organized Crime Strike Forces, as established in 1977, were "labor racketeering, infiltration of legitimate business, public corruption, narcotics conspiracies, and violence" (p. 11). This was very different from the effective priorities established when the Strike Forces began; gambling cases dominated their activities (GAO, 1977). A review of some of the successes of Strike Force effort against the labor racketeering and legitimate business interests is contained in U.S. Senate (1980).
and command of violence. Indeed, the argument of the previous section was that large-scale violent gangs were created in order to acquire a reputation, at least in the context of suppressing competition in illegal markets.

The critical issue in considering the relationship between organized crime and illegal markets is whether such a reputation is most profitably used to acquire control of illegal markets or whether there are better ways to use it. It may be used to gain control of certain legitimate institutions, such as unions and employer associations (Block, 1980). It may be used indirectly to acquire influence in certain industries, as appears to be the case with Nevada casinos. It may be used for opportunistic extortion or for settlement of certain kinds of disputes (see Rutter, 1983, Ch. 7). Finally, it may be used to acquire control over particular illegal markets.

The optimal strategy is determined by the set of opportunities available, the returns and costs associated with each opportunity, and the political structure within which organized crime operates. It is beyond the scope of this essay to attempt to give a complete account of the shifting forms of organized crime. However, it is possible to suggest, using this framework, that the involvement of the Mafia in illegal markets is of declining importance to its members.

There are three factors suggesting that organized crime involvement in illegal markets is diminishing. First, the most important set of contemporary illegal markets, those for drugs, are not among those which are readily controlled, given current supply sources. Second, the traditional markets are of declining importance economically compared to some related legal activities. Third, the continued growth of the Mafia's reputation, together with certain institutional changes external to it, provide new opportunities. We shall examine each of these in more detail.

**Drug Markets and Organized Crime.** Official estimates of the scale of illegal markets, in terms of gross operating income, indicate that three drugs (cocaine, marijuana, and heroin) are dominant (IRS, 1979; National Narcotics Intelligence Consumers Committee, 1982). They account for at least 75 percent of total illegal market income in these estimates.

There was a time when the Mafia apparently had control of the heroin market. At that time, prior to about 1965, heroin was imported through southern Europe, where it was processed from opium produced in Southeast Asia. The Mafia's control of that market in the United States seems to have originated in the import sector. There is probably a relationship that existed between mafiosi and the heroin processors in southern France and Italy, as well as its background of those involved in the major smuggling organizations prosecuted by the Department of Justice in recent years also suggest that it is a business into which entry is restricted only by a certain organizational skill and willingness to take risks. As at the distribution level, there is again no ready focus for extortion and control. Not only by a certain organizational skill and willingness to take risks, but also much of the retail activity is conducted in the same manner.

None of this is to say that individual members of the Mafia do not involve themselves in drug trafficking. The opportunity to make a large income is not easy to resist, even if there is substantial legal risk associated with it. But

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74 A good account of Mafia involvement in Nevada casinos is provided in Skolnick (1978), though Skolnick does not make use of the term Mafia.

75 Those estimates are extremely questionable (see Rutter, 1984a), but even the lower bound estimates leave drugs as dominant among illegal market source incomes.

76 It is difficult to identify any authoritative account of the Mafia's involvement in the heroin trade in earlier years. This description is placed together by a skeptical reading of such sources as McCoy (1972, Chs. 1 and 2) and the McClellan Committee report on narcotics (U.S. Senate, 1963).
the characteristics of the drug market do make it unlikely that Mafia gangs will dominate these markets, as they dominated, for example, the bookmaking markets during the period from 1930 to 1970. Being a mafioso does not, for most drug transactions, provide any economic advantage. In addition, drug dealers do not require Mafia services, such as the provision of dispute settlement services or short-term capital. Moreover, the very high penalties for being caught in the higher levels of the heroin or cocaine traffic may deter members of the Mafia, who have a variety of other revenue opportunities, more than specialized drug dealers, whose alternatives may be those of unskilled criminals generally.

The involvement of motorcycle gangs in certain other drug markets, particularly methamphetamine (U.S. House of Representatives, 1980), provides an interesting counterpart to Mafia involvement. Though these gangs have acquired a reputation for being able to administer great violence, they have not yet acquired many of the other assets possessed by the Mafia, such as local political power and reputations as skilled negotiators. The set of opportunities available to motorcycle gangs may be far more restricted for those reasons; hence their willingness to enter into the relatively risky drug business.

The Decline of Traditional Markets. It is impossible to provide an estimate of the scope of the major illegal markets in which organized crime has been active in the past. These forms of gambling (bookmaking, numbers, and casino games) were clearly very important in many cities. Loansharking was also of some importance in at least a few cities. Other illegal markets have probably been minor for some time. Even in 1967 the President's Commission on Law Enforcement and the Administration of Justice stated that "prostitution and bootlegging play a small and declining role in organized crime's operations" (p. 4); that trend seems to have continued.

We focus then on the opportunities offered by the three forms of gambling and loansharking. Since there are no hard data on the scale of these activities, at least since 1974, the following statements are essentially expectations about the effects of changing economic conditions on the market size and the demand for illegal gambling. The lack of formal dispute settlement in higher level heroin transactions arises from the low cost of establishing purity and weight, the absence of credit transactions, and the high cost of exposure to law enforcement.

Consider the difference between the set of legal opportunities available to the would-be bettor in New York in 1930 and 1980. In the earlier year, he had only one legal gambling outlet, namely, the racetrack. He could place a bet legally only if he travelled to the track itself. All other wagers were illegal.

By 1980, the set of legal opportunities had expanded substantially, the state offered a wide variety of lotteries, including a game which was almost identical to the illegal numbers game. It was now possible to place a bet on a horse without going to the track, through the Off-track Betting Corporation. Atlantic City provided relatively easy access to high quality casinos.

These developments may not have changed the behavior of persons who were accustomed to betting illegally, but they probably have affected the number of persons beginning to wager with illegal operators. Only the continued growth of interest in sports betting, for which there are no legal outlets apart from bookmakers in Nevada, provides illegal gambling operators with a distinctive product not available from legal sources.

There are arguments on the other side, contentions that legal gambling actually increases the demand for illegal gambling. The taste for gambling is cultivated by the promotion of legal gambling opportunities. The tax disadvantage of some legal forms of gambling, such as offtrack betting which levies an additional 5 percent tax on all wagers, gives illegal operators an advantage, enabling them to cultivate the clientele created by legal wagering enterprises. Nonetheless, the increasing sophistication of state lottery marketing efforts and the enormous growth of Atlantic City gambling revenues make it plausible that illegal wagering is a declining share of total recreational gambling expenditures.

So little is known about the scale and composition of loansharking that it is difficult to suggest what factors might have influenced its growth over the last decades. Some traditional markets, such as small loans to longshoremen, have probably contracted as longshoremen have become fewer and wealthier. The large number of government programs aimed at providing credit to lower income groups has also probably had a negative effect on the loansharking business. However, there is simply no way to determine whether the segments of the market are more important than providing large loans to small businessmen for high risk ventures or for ventures which legitimate institutions are not willing to finance. What determines the markets for these is unknown. Nonetheless, the growing financial wealth of the population over the last three decades, the shift of population from the areas in which loansharks were most active, and the development of an increasingly varied set of financial institutions serving small business all suggest the possibility that the overall market for loansharks has declined.

The Growth of Other Opportunities. Organized crime involvement in legal economic activities is certainly not a new phenomenon. Hutchinsen (1970) describes the immense power that members and associates of the Mafia acquired in various industries during the 1930's. Landsco (1919) pointed to the same problem in Chicago in the 1920's. The launching of Las Vegas as a national legal gambling center in the late 1940's has always been ascribed to the energies and investments of the Mafia and its associates.

Nonetheless, there have been changes in certain features of the U.S. economy which have increased the opportunities for members of the Mafia to obtain money from legal activities. Two are particularly important: 1. Growth of the casino industry. As already mentioned, there is continuing evidence that the Mafia has a major stake in the Nevada casino industry. This industry has grown extremely rapidly over the period in which was $197 million in 1960 to $2,273 million

80 The lack of formal dispute settlement in higher level heroin transactions arises from the low cost of establishing purity and weight, and the high cost of exposure to law enforcement.

81 Ronald Goldstock suggests that the Mafia's supposed role against minor participation in the heroin trade is explained by the very high penalties imposed on convicted high level dealers. This activates a member to offer information about the Mafia to reduce the sentence. Other Mafia activities, apart from homicide (sometimes necessary for the conduct of business), risk much lower penalties.
in 1980. The potential return from involvement in this industry has correspondingly grown over the same period.

2. Failure of efforts to remove organized crime members from positions of influence in certain major unions. The Teamsters, Laborers, and Restaurant Workers' unions are only some of those in which the Department of Justice has regularly been able to show that organized crime members have had control over the investment of pension and welfare funds. Though union membership itself is declining, these funds have grown substantially throughout the last three decades. The notorious Central States Teamsters Pensions Fund alone now amounts to several billion dollars.

Federal agencies have paid considerable attention to both these matters in the last decade. Nonetheless, there seems little doubt that many organized crime members are able to earn very large sums from their involvement in the casino industry and certain unions. One can certainly not, given the available material, go beyond broad impressions, but it seems plausible that these activities are "less risky than illegal market activities."

The Mafia's power within certain unions is a consequence of its reputation, which inhibits effective challenge. That reputation is cheaply sustained by rebuffing the occasional challenge in individual locals. The Mafia's current power within the casino industry is less easily explained. Certainly for many years the general unrespectability of the activity and the regulatory policies of the Nevada Gaming Control Board restrained entry by major corporations (Skolnick, 1978). Yet that has changed recently, as an increasing number of major hotel chains of the nation have entered the Nevada market. The explanation for the Mafia's continued power may lie in the history of many of the older casinos and the role that the major corrupt union pension funds have played in the casino industry.

The factors that have increased Mafia involvement in legal markets do not currently apply to other organized crime groups. They may simply be too young to have acquired the requisite reputation. Or there may only be opportunity for one group at any point in time, a result perhaps of the narrowness of media reporting, which can only accommodate one set of gangsters on a sustained basis. Our knowledge of the development of these gangs is simply too slender to permit a forecast of their likely role in legitimate institutions over time. Summary. The range of activities in which organized crime members are involved is now, as it always has been, impressively wide. No doubt the extensive list of legitimate and criminal industries which the Kefauver committee provided could be replicated 30 years later.

Nonetheless, there is both argument and evidence that the distribution of organized crime involvement in these activities has changed. There may be fewer opportunities to exploit the operators in illegal markets, both because of changes in the composition of these markets and changes in the structure of American policing. At the same time, new opportunities have arisen in the legitimate and traditional illegal market activities. The continued growth of the Mafia's reputation in these opportunities.

Though there are no hard data that would permit the testing of these hypotheses, there seems to be some consensus that such a change has occurred. Certainly Federal prosecutive strategies have changed in response to a perception of such a shift though formal doctrine has not.

Campaigns against organized crime involvement in illegal markets have a particular attraction to politicians. They place the politician in the position of attacking the targets about whose evils there is little ambivalence. Moreover, there is still a widespread belief that significant figures in the illegal markets are almost certainly members, or at least close associates of, organized crime.

The argument of this paper has been that illegal markets tend to fragmentation. Only under unusual circumstances will the markets lend themselves to domination by gangs with control of violent labor. Campaigns against illegal markets are likely to do little to strike at the power or income of mature organized crime. Other approaches, which take into account the optimal strategies of organized crime itself, are likely to be more successful.
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