ALTERNATIVE MODELS
OF
"ORGANIZED CRIME"
(A Very Rough Outline)

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I. Introduction

In general, our analytic approach to the problem of Organized Crime has been extremely casual. Partly on the basis of historical evidence, partly on the basis of the theoretical possibilities, and partly on the basis of sheer romanticism, we assume the existence of criminal syndicates which combine (and monopolize) an impressive set of capabilities. Among these capabilities are the following:

* Irresistible, contingent violence
* Large amounts of liquid capital
* Reliable influence over government officials
* Centralized authority permitting effective coordination of small, inefficient units
* Access to reliable, criminal personnel who are unknown in local jurisdictions

Then in looking for evidence of the existence, prevalence, location, scale, and characteristic operations of these institutions, we apply a much looser definition. The presence of any one of the capabilities of almost any scale is taken as evidence for the existence of the whole set of capabilities embedded in a single institution. Thus, behind a numbers runner is seen an organization with enormous capital and reliable influence over police officials; behind a loan shark is seen an army of unknown, discrete "hit men"; behind a heroin dealer is seen a calculating board of directors choosing to shift operations from France to Mexico.

We reassure ourselves about the validity of this procedure by hypothesizing relationships among these capabilities which lead to the conclusion that these capabilities are most likely to appear in combination, and to be monopolized by a single organization. Ususally the argument is built on one of two propositions:
* The presence of one capability in a single organization makes it easier for that organization to develop all the other capabilities.

* The supply of illegal goals and services at the scale and in the form we observe requires the existence of all the capabilities we have identified.

If one can argue convincingly that these propositions are likely to be true, then the presence of any single capability can be taken as strong evidence of the existence of all the others.

The purpose of this brief analysis is to shatter these comfortable bits of conventional wisdom by proposing specific, alternative models of underworld firms. We will strain to discover the variety of firms that might exist rather than assume that we are looking at a fairly homogeneous phenomenon that we call Organized Crime.

These alternative models of underworld firms are important for two different reasons. First, they discipline our search for and our interpretation of empirical evidence. In effect, the alternative models function as alternative hypotheses about the characteristics of specific institutions we can observe in the real world. As evidence about their organization, operations and capabilities become available, one hypothesis about the capabilities of the organization will look better than the other. Second, the models will assist our reasoning about the relationship between these underworld firms, the supply of illegal goods and services, and the overall pattern of crime in local areas. In principle, each different type of underworld firm may have a somewhat different effect on other crimes, and may be impacted differently by successful attacks against these other crimes. The implication is that policies designed to attack different crimes or different individuals may have much different results depending upon which kind of firm is operating in a specific area. Thus, in designing policies
and anticipating effects, it is vital that we be clear about the specific model which we think accurately describes the relevant piece of the world.

The method will be the following. First, I will drop the casual assumption that the fact that there are many people involved in routine violations of criminal statutes necessarily implies the existence of criminal syndicates which combine and monopolize all the capabilities outlined above. I will sketch a picture of an underworld that is not dominated and directed by criminal syndicates. Second, I will show that many of the capabilities imputed to criminal syndicates would be valuable in underworld businesses and professions, but that they need not always appear in combination, at large scales, and monopolized within small geographic firms. A variety of capabilities is possible. Third, I will explore some of the possible relations between firms possessing some of the capabilities we impute to criminal syndicates, but not all. Fourth, I will analyze some dynamics in the evolution of underworld firms to determine if the variety in the firms represents a disequilibrium position, or whether there is an equilibrium permitting combinations of only a few capabilities.
II. Underworld Firms

A great many people earn a large fraction of their income by routinely committing criminal offenses. Ordinarily, we think of gamblers, numbers runners, loan sharks, prostitutes, and drug dealers as people of this type. However, reflection suggests that professional burglars, hi-jackers, armed robbers, auto thieves and con-men also fit the description of being routine criminal offenders. Without doing violence to familiar definitions, one can think of these people as being engaged in underworld businesses, professions or enterprises. All this taken together could be defined as the crime industry.

In the tradition of standard economic theory, one can think of decisionmaking units within the crime industry as criminal "firms." All that is implied by the idea of a firm is that the behavior of people within the firm and the allocation of the firm's resources, will be guided by authoritative policy decisions. The individual interests of people within the firm can be over-ridden by an authoritative decision. Large fractions of the firm's resources can be moved in a coordinated way as a result of an authoritative decision. In making their authoritative decisions, the firm is guided by a fairly consistent set of objectives that embraces the interests of its employers.

The firms that conduct illegal enterprises can take a variety of forms. They can be large (e.g., a numbers "firm" which employs hundreds of runners and has gross revenues of millions of dollars); or small (e.g., a professional burglar who clears $15,000 per year, or a free lance prostitute who makes $20,000 per year). They can be short-lived (e.g., a temporary association to import several kilos of heroin, or a partnership to rob a bank); or
relatively durable (e.g., a single loan shark who has run a successful operation for many years). The firms can be rigidly locked into one business (e.g., a bookie who has taken bets on horses and sports events; or may be flexible and diversified (e.g., an armed robber who branches out into routinized extortion and protection rackets, or a pimp with many prostitutes and a stable location who begins selling drugs). Finally, the firms can be elaborate organizations involving divisions of labor and specialization (e.g., a gambling firm that imports alleged equipment, employs a large force of runners, and has specialized personnel to provide "muscle" or to "fix" arrests and prosecutions); or fairly rudimentary (e.g., a single man with an inexpensive hand gun).

Now, there may be some advantages for large scale firms in all of these enterprises. Large scale firms may be able to fully employ specialized or lumpy inputs. They may be able to exploit monopolistic or monopsonistic positions in local markets. And they may be able to internalize benefits or costs that would be treated as externalities by individual firms and thereby increase the total productivity of the entire industry. All of these potential benefits will motivate efforts to merge, expand and develop increasing concentration in the industry.

However, there will also be factors which constrain the development of large scale firms. To avoid arrest and prosecution, criminal firms will seek to maintain secrecy and to avoid creating durable evidence of their activities. Small size will be an advantage in maintaining secrecy. The desire to avoid creating evidence will make it difficult to establish the records and information processing systems that would allow for unified command and control of large numbers of individual units. Thus, size poses
a hazard for criminal firms. It may also prove difficult to prevent new
firms from entering the different criminal businesses. Thus, it is not
inevitable that all criminal businesses will eventually be operated by
large scale monopolies.

No doubt, these are interesting and complicated analyses which would
allow one to determine the equilibrium results of these countervailing
trends. Moreover, one could probably discover that the equilibrium results
would differ across the different criminal enterprises. For the moment
we will ignore these tempting possibilities. What is important to understand
at this stage is that large scale, monopolistic firms are not inevitable
in criminal enterprises; and that at any given moment, one is likely to
observe firms in all shapes and sizes. As the examples given above indicate,
the firms actually providing the illegal services or committing the various
offenses can differ in terms of size, longevity, flexibility, and complexity.

Regardless of the shape of these criminal firms, they will require
certain conditions, intermediate services, and intermediate goods to conduct
the operations. While it is possible that these criminal firms would be
vertically integrated, there is no reason to be confident that this is
true. It is possible that independent firms will develop which guarantee
the conditions or provide the intermediate goods and services. Examples
of intermediate goods and services are listed below.

Some conditions necessary to do business of any kind are so fundamental,
and apparently so easily provided to legitimate firms that they are usually
forgotten in any survey of "factors of production" among legitimate firms.
However, these fundamental conditions may be problematical for criminal firms.
Since firms operate in the midst of thieves; and since no police or courts
will respond to their complaints about thefts, fraud or broken contracts; it will be hard for underworld firms to protect property and guarantee transactions. Since publicly different information and written records of activity will justify arrests and support successful prosecutions, it will be hard for underworld firms to advertise and to control their operations.

A short list of the basic conditions necessary for business that are problematical for criminal firms is the following:

* A capability to protect their inventories and conduct their operations without fear of thefts or interference.
* A capability to enforce contracts and guarantee transactions.
* A capability to advertise for outputs (in the case of illegal goods and services.)
* A capability to advertise for inputs (in the case of all criminal offenses).
* A capability to create records of their activity to create incentives for employees and manage their operations.

Given the importance of these conditions in conducting almost any business operation, underworld firms will have to devote their own resources to provide these conditions, or will have to purchase some of this capability from independent suppliers of the services.

It may be difficult to imagine how one can purchase these conditions in the underworld. However, one can imagine specific firms providing these conditions. There may be some firms that will sell irresistible, contingent violence. These services could be purchased by underworld firms to protect their property and evidence contracts. Other firms may sell "brokerage services" that will allow underworld firms to locate required inputs or potential customers. These brokerage firms may guarantee reliability simply by knowing the histories of the various people, by conducting special investigations into their past, or by having some basis for reliable influence over the individuals. These "brokerage functions" will be valuable factors
of production. Still other individuals and firms can sell "staff functions" to underworld firms. They can spy on the subordinate units of the criminal firm and orally report whether the subordinate units are behaving consistently with the policy directives of the firms. All these capabilities which are so conveniently and inexpensively available in legitimate firms will have to be bought at high prices by illegitimate firms. They will show up in the ledgers of underworld firms as high cost inefficient services purchased from outsiders, or provided by highly paid specialized employees of the firm rather than as positive externalities available inexpensively to legitimate firms.

Beyond efforts to guarantee these basic conditions, underworld firms will have need for specialized services or products that are not ordinarily required for legitimate firms. Many of the firms will wish to buy "protection" from arrest or prosecution. (From the point of view of legitimate society, this service is called "corruption" and we design procedures to try to guarantee that the service is not sold. The likely effect of our efforts is not to eliminate the "service," but to raise the price and dilute the value of the service.) From the point of view of the underworld firm, this is like purchasing a "license" to conduct operations. These licenses become valuable "factors of production." Similarly, the underworld firms will want to buy products that they need to conduct their operations, but which cannot be traced back to them. Stolen cars, unmarked guns, safe-house, opportunities to dispose of or liquidate "hot items," etc. will all be valuable to underworld firms. Again, in seeking these specialized services and products, underworld firms can seek to provide for themselves, or specialized institutions providing the intermediate services and products may spring up.
Given this discussion, it should be obvious that the underworld is likely to contain a great variety of criminal firms. There will be a set of "primary firms" which actually commit criminal offenses, or provide illegal goods and services to customers. These primary firms can differ in terms of size, longevity, flexibility and elaborateness. They will also differ in the extent to which they rely on themselves or other firms to provide the basic conditions to do business or to supply intermediate services and products. To the extent that these primary firms do not rely on their own internal capabilities to guarantee basic conditions or supply intermediate services and products, there will be a set of "secondary firms" to provide these necessary factors of production. These secondary firms can also differ in terms of size, longevity, flexibility and complexity.

Note that an underworld composed of this extraordinary variety of firms may be well-organized in the same way that the textile industry is well-organized. Everyone will respond in predictable fashion to changes in business conditions. Routinized patterns of interaction may develop among independent firms through that or explicit arrangements. However, they will not be organized in the sense of being a part of the same organization. It will not ordinarily be possible to force one firm to take a substantial loss in order to benefit the entire industry. The entire resources of the industry cannot be quickly or easily mobilized to do much different things than they are now doing simply on the basis of an authoritative decision. This is a very important difference in gauging the threat represented by the cost of underworld firms, and the efficiency of enforcement efforts targeted at specific firms.

Having suggested the possible complexity of the underworld firms, it
is important to try to control the complexity by creating some new analytic categories. It is clear that we need more terms than the single term "organized crime." But it will certainly be unmanageable to allow all the complexity that has been suggested.

Table 1 presents a typology of criminal firms defined in terms of their varied capabilities, with an example suggesting the plausible existence of this kind of firm. Note that all of these firms fit a loose definition of organized crime. However, only one of these firms looks like the institution that most people have in mind when they think of organized crime; that is the firm described as a "criminal syndicate." It is only this kind of firm that combines and monopolizes all the capabilities that we fear.
<table>
<thead>
<tr>
<th>Services, Products or Activities of the Firms [(Examples)]</th>
<th>Characteristics of Firms</th>
<th>Size</th>
<th>Longevity</th>
<th>Diversification</th>
<th>Specialization</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Primary Firms (No Vertical Integration)</strong></td>
<td></td>
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<tr>
<td>A. A Criminal Enterprise</td>
<td>A Bank Job; Free Lance Importation of Heroin; Stock Fraud</td>
<td>Small</td>
<td>Short-lived</td>
<td>None</td>
<td>Varies</td>
<td>Varies</td>
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<tr>
<td>B. Freeloze Criminal Entrepreneurs</td>
<td>A Gambling Casino; A Loanshark</td>
<td>Small</td>
<td>Durable</td>
<td>None</td>
<td>Varies</td>
<td>Small</td>
</tr>
<tr>
<td>C. Integrated Criminal Services</td>
<td>Extortion, Robbery, Shotguns; Loansharking, Gambling, Prostitution</td>
<td>Small</td>
<td>Varies</td>
<td>Significant</td>
<td>Some</td>
<td>Small</td>
</tr>
<tr>
<td>D. Large Scale Criminal Organizations</td>
<td>Gambling; Auto theft; Heroin Distribution</td>
<td>Large</td>
<td>Durable</td>
<td>None</td>
<td>Some</td>
<td>Moderate-Large</td>
</tr>
<tr>
<td>E. Specialized Criminal Monopolies</td>
<td>Gambling; Auto Theft; Heroin Distribution</td>
<td>Large</td>
<td>Durable</td>
<td>None</td>
<td>Some</td>
<td>Monopoly</td>
</tr>
<tr>
<td>F. Criminal Conglomerates</td>
<td>Gambling, Prostitution, Loansharking</td>
<td>Large</td>
<td>Durable</td>
<td>Significant</td>
<td>Significant</td>
<td>Large</td>
</tr>
<tr>
<td>G. Diversified Criminal Monopolies</td>
<td>Gambling, Prostitution, Loansharking</td>
<td>Large</td>
<td>Durable</td>
<td>Significant</td>
<td>Significant</td>
<td>Monopoly on Several Services or Activities</td>
</tr>
<tr>
<td><strong>II. Secondary Firms</strong></td>
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<tr>
<td>A. Firms Guaranteeing Basic Business Conditions</td>
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<tr>
<td>1. &quot;Muscle firms&quot;</td>
<td>Contingent Violence</td>
<td>Small</td>
<td>Short-lived</td>
<td>None</td>
<td>None</td>
<td>Small</td>
</tr>
<tr>
<td>2. &quot;Fixers&quot;</td>
<td>Licenses to do illegal things</td>
<td>Small</td>
<td>Durable</td>
<td>None</td>
<td>None</td>
<td>Small</td>
</tr>
<tr>
<td>3. &quot;Criminal Brokers&quot;</td>
<td>Arrange transactions among reliable Parties</td>
<td>Small</td>
<td>Durable</td>
<td>None</td>
<td>None</td>
<td>Small</td>
</tr>
<tr>
<td>4. &quot;Financiers&quot;</td>
<td>Capital</td>
<td>Varies</td>
<td>Varies</td>
<td>None</td>
<td>None</td>
<td>Small</td>
</tr>
<tr>
<td>5. Criminal Developers</td>
<td>Capital and Brokerage Services</td>
<td>Varies</td>
<td>Durable</td>
<td>Some</td>
<td>Some</td>
<td>Varies</td>
</tr>
<tr>
<td>7. Spics and Informants</td>
<td>Information about Behavior of Subordinate units</td>
<td>Small</td>
<td>Short-lived</td>
<td>Some</td>
<td>None</td>
<td>Small</td>
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<tr>
<td><strong>B. Firms supplying Intermediate Services</strong></td>
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<tr>
<td>Fences; Gun Dealers; Fixers</td>
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<tr>
<td><strong>III. Criminal Syndicates</strong></td>
<td>Diversified Criminal Monopolies; Plus Violence; Plus Corruption; Plus Brokering</td>
<td>Large</td>
<td>Durable</td>
<td>Extensive</td>
<td>Extensive</td>
<td>Monopoly in all areas</td>
</tr>
</tbody>
</table>
III. The Relationship Between Secondary Firms and Primary Firms

Many analysts of organized crime have assumed a close and vital relationship between the primary firms that provide illegal services and the secondary firms that guarantee basic conditions for doing business. Indeed, most analysts assume that they are part of the same firm. On the basis of this assumption, they predict that shocks delivered to the primary firms will also injure the secondary firms. They also argue that the existence of the secondary firms is necessary for or facilitates the operations of the primary firms. Consequently, if the secondary capabilities could be damaged, the primary firms would also falter.

The discussion above suggests that these facile assumptions need not be true. In fact, it is possible to discuss several possible relationships:

* Suppose that there are no economies of scale and no minimum economic size for firms guaranteeing basic business conditions to the primary criminal firms. In this case, the firms supplying these conditions will be small and competitive. Competition will force down the price of these intermediate services. As a result, primary firms will face low input prices, and the primary firms will expand.

* Now suppose that there are economies of scale, but that the minimum economic size on the firms guaranteeing basic business conditions is much smaller than the total demand for their goods. In this case, there will be a few large firms offering to guarantee the basic conditions, prices will be low to the primary firms, and the primary firms will expand.

* Now suppose that a single firm monopolizes the supply of services guaranteeing basic business conditions. The price of these services to primary firms will be high (though it can be partially offset by increased efficiency at large scales), and their aggregate activity will be reduced.

* Now suppose that the secondary firms that have the capability for contingent violence (whether monopolies or not) use that capability not only to protect property and enforce contracts,
but also to extort money from the primary firms. In this case, the secondary firms look like a group imposing taxes on the primary firms rather than providing goods and services. In this case, the secondary firms would have the effect of reducing the activity of the primary firms.

Thus, it is not clear that the existence of these secondary capabilities will tend to increase the scale of the primary activities. Monopolistic pricing of the necessary inputs, or simple extortion might tend to reduce the scale of the primary activity.