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Warren F. Schwartz

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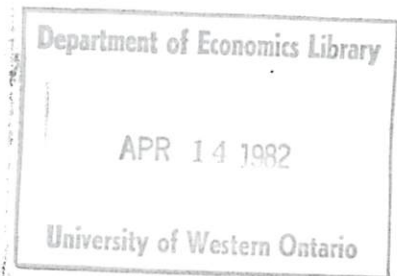
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TOWARD A POSITIVE THEORY OF BRIBERY:  
COMPETITION, COLLUSION AND CULTURE

by

Warren F. Schwartz



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Introduction

It is clear that in much of the world, in terms of population the great majority of the world, bribery of public officials is a customary means of dealing with government regulation. Despite the fact that both the popular and scholarly literature predominantly address the phenomenon from a vantage point of intense moral condemnation, and on the assumption that bribery is aberrant behavior which can be eliminated by the institution of appropriate corrective measures, the practice persists as a commonly employed means of responding to the threat of adverse action by governmental officials. It is also clear that the practice has a long history and occurs with great frequency in countries with extraordinarily diverse cultural traditions. On the other hand, the incidence of bribery seems to vary dramatically among countries, jurisdictions within countries, and types of transactions. All of this suggests that there are profound forces at work determining the extent to which bribery constitutes an essential adaptive response of the individual to the threat of adverse action by the government and an important determinant of behavior of government officials in enforcing the law.

There has, however, been little systematic theoretical or empirical work attempting to develop a positive theory of bribery. The theoretical work does make it plain why bribery

occurs. The private gains to the law enforcer from enforcement are less than the harm which the person affected by the legal system will suffer if the law is enforced. It does not matter if the harm is the imposition of a cost like a criminal sanction or the withholding of a benefit as in refusal to grant a license. As long as the gain to the enforcer from enforcement is less than the harm to the person affected by the legal rule "gains of trade," are available through settlement at a sum between the gain to the enforcer from enforcement and the loss if the law is enforced to the person seeking to avoid a sanction or secure a benefit dependent on some act of a public official.

Thus to understand the bribery transaction it is necessary to determine the private returns (negative and positive) to enforcement of law enforcers and persons subject to legal regulation. The enforcer may be rewarded in a variety of ways for enforcement or punished for failing to enforce the law. An increase in either the reward for enforcement or the sanction for non-enforcement will increase the minimum amount he is prepared to accept as a bribe for non-enforcement. The person subject to government regulation may pay a bribe to induce non-enforcement in order to avoid the imposition of a cost or secure a benefit. An increase in the cost which may be imposed or benefit which may be awarded raises the maximum bribe which he will be willing to pay. The private individual may also be sanctioned for paying a bribe. A positive theory of bribery then must explain how these parameters of the bribe transaction are produced.

## The Participants

The starting point is to postulate the objectives of the various participants in the "game." through which the amount of the bribe is determined. There are four types of participants: 1) private individuals subject to having a cost imposed or a benefit withheld by governmental action, 2) the public official with whom a bribe transaction is negotiated in order to avoid the cost or obtain the benefit, 3) other public officials who can provide perfect or imperfect substitutes for the "product." available from the official who is party to the bribe transaction and 4) still other public officials who may monitor the bribe transaction and impose a cost or offer a reward to the private individual and public official for having engaged in or refrained from engaging in the bribe transaction.

Each type of participant may have monetary and non-monetary objectives. The most important non-monetary objective which will be considered is the desire to avoid participation in a bribe transaction. Other non-monetary objectives such as the desire to have the law enforced according to its terms may also be important in explaining the behavior of the relevant actors. It is not, however, assumed that any actor necessarily assigns infinite value to any non-monetary end. Each private and public actor in principle has a "price." (an infinite price cannot be ruled out a priori) which represents adequate compensation for the failure to accomplish the non-monetary objective.

The amount paid as a bribe in any given transaction, then, should be determined by the interaction of the four types of

participants in attempting to maximize their utility, given their monetary and non-monetary objectives.

### Competition or Collusion - A Preliminary View

#### Introduction

I believe that there is no difference analytically between the case of an individual seeking to avoid a cost and that of an individual seeking to realize a benefit resulting from governmental action. For convenience in exposition I will consider only an individual who wishes to avoid a cost.

Initially I will assume several of the determinants of the bribe transaction. There is in existence a legal system assigning different enforcement functions to various officials. All offenses which occur are known to all officials. No errors are made in determining whether a violation has occurred. There is a fine which can be paid and all possibility of adverse governmental action eliminated. It is assumed that the costs to the individual of whatever process is necessary for this fine to be assessed and paid are zero. Finally, the penalty for bribery both for the private individual and the public official are also fixed and known by the participants. I assume at the outset that this penalty is likewise zero.

The question then is what payment will an official accept in this simplified world in exchange for eliminating or reducing the probability of a private individual paying the fine which otherwise would be exacted for having committed the violation. Initially, it seems clear that it is virtually costless for the

official to supply "exoneration." If he accepts a bribe the "price" of a violation is reduced from the fine to the amount of the bribe payment. If this price reduction is anticipated by potential violators the number of offenses will increase. But the cost of this consequence to the official is the negligible decrease in his welfare as a member of the general public resulting from the increase in the number of violations which occur.

Whether exoneration is supplied at a price equal to the negligible costs to individual enforcers must depend on the competitive conditions which prevail. Two factors appear to be important in determining the competitiveness of the market.

#### Market Structure

The enforcement system itself can be structured in various ways which confer more or less "market power." For example, if at a border crossing there are several inspectors who can clear goods for entry, competition among them will drive the price for admitting goods upon which a duty should be paid virtually to zero. This case may be viewed as an example of what more generally can be characterized as horizontal competition. It applies whenever governmental action which is equally desirable to the individual is available from more than one official. It is horizontal in the sense that the officials are spatially distributed but at the same administrative level. It would apply whenever the population of violators is mobile and indifferent to the location for committing a violation. It may therefore be important for offenses like prostitution, gambling and dealing in



drugs. The general conclusion appears to be straightforward. The more inclusive the jurisdiction the greater the amount of market power.

In addition to horizontal competition of this type there may also be what can be characterized as vertical competition. If, for example, a policeman's report of a violation must be acted on by a prosecutor filing charges then the prosecutor and the policeman are competitors for the available bribe income since the failure of either to act will lead to no charges being brought.

The "product" offered either at the same level or subsequent levels need not, of course, be a perfect substitute in order to effect the prices which can be charged for the other product. If, for example, when a policeman does not report a violation there is some chance that someone else will the policeman's not reporting is an inferior product to say a prosecutor or judge who can with certainty bring the prosecution to a halt. Similarly, all locations may not be equally favorable for engaging in a particular type of criminal activity so that the right to engage in the conduct in one jurisdiction is not a perfect substitute for the right to do so in another.

The assignment of enforcement jurisdiction (collusion aside) thus determines the amount of market power each official enjoys. The basic point of how "market structure" in this sense influences the outcome is straightforward. If an act of a particular official is indispensable to securing exoneration he is in a position to act as a monopolist. The existence of

substitute forms of exoneration introduces competition. But how the assignment of enforcement jurisdiction affects the amount which an individual official can obtain as a bribe is, however, complicated.

If, for example, there are several policemen assigned to a particular area each of them might report a violation. But they are monopolists, not competitors, from the point of view we have been considering. Each of them represents a separate threat to report a violation. It is true that the value of inducing any one policeman not to report is reduced by the possibility that another will. Thus each has a less valuable product to sell. But as a group they offer the same value as a single policeman who covered the same area. Moreover this total value can be realized without the necessity of collusion among them. Each is a monopolist in his "sub-market." because a payment to the other does not eliminate the threat he represents. In this case the competition which reduces the monopoly power at the first level is not that among the group of policemen functioning at that level but rather the possibility of exoneration at the next administrative level or in another area patrolled by a different group of policemen.

Although the administrative structure of the enforcement system, in both its horizontal and vertical forms, does therefore seem to be relevant in determining the market power enjoyed by particular officials it is important to understand how the factors which we have temporarily put aside serve to define the actual impact which the administrative structure will have.

Basically there are two types of exoneration. What may be called de facto as in the case of a policeman not reporting an offense and what may be called de jure as when a judge acquits a defendant charged with a violation. The administrative structure places various officials horizontally and vertically so they can supply exoneration in either of these ways. One from which such exoneration can take has so far been simply assumed the penalty for the violation prescribed by law is imposed. But in fact every official will have an incentive--non-monetary considerations and a penalty for bribery aside--to accept a bribe in an amount less than the penalty prescribed by law in exchange for not imposing the penalty. Thus the administrative structure is controlling not as formally conceived but as actually implemented in light of the incentive for bribery and any counteracting factors such as a penalty for accepting the bribe. Consequently, the complications we have put aside for the immediate parties to the bribe transaction also are relevant in determining the actions of the other officials whose behavior defines the parameters in which the bribe transaction occurs.

### Collusion

It would appear that whatever the administrative structure, both viewed in its formal aspects or as it actually operates to control the behavior of the parties to a bribe transaction, that substantial opportunities are likely to exist for groups of officials to improve the outcome for the group as a whole by suppressing competition among members of the group. This would seem to be so, moreover, whatever is postulated as the objective

of the group.

The possibility of collusion provides one explanation for why the bribe prices which are observed appear to be higher than would be expected if competition among officials were not constrained, even taking into account the pockets of market power which would be created by the administrative structure in the absence of collusion. The alternative explanation for the existence of bribe prices substantially above cost, (in the limited sense of the benefit of a reduced number of violation as a member of the public foregone by the official when he lowers the price for committing a violation), is that there are additional costs associated with the bribe transaction consisting of the penalty for bribery and the aversion of public officials and private individuals to being parties to a bribe transaction. Something will be said later about sorting out these two explanations. Here consideration is given to the role of collusion in driving up prevailing bribe prices.

If it is assumed that the group of officials are profit maximizers the explanation for collusion is straightforward. (I continue to assume a zero penalty for bribery.) In the absence of collusion each official will offer exoneration at the negligible price equal to his private cost of not enforcing the law. There will be many purchasers at this price and violations will consequently occur in large numbers. As in the case of all monopolies, if the price were raised there would be fewer violations but the higher price which could be obtained for each of the smaller number of violations which did occur would offset

the loss in revenue from extracting a bribe for fewer violations. The familiar profit maximizing calculation of the monopolist would yield a price-quantity outcome which appropriately took both of these effects into account. The result, of course, would be a higher price and a lesser number of violations than would occur if competition were not constrained. It is also clear that the more substitutes which can be included within the control of a single profit maximizing entity the higher will be the general level of prices and the greater the monopoly profits which can be earned.

A closely analogous rationale would lead to higher prices and fewer violations if it is posited that the group wishes to maximize the production of public goods or to achieve a set of redistributational goals. From the viewpoint of producing public goods the individual official ignores the effect of a price reduction in increasing the amount of "bad" conduct constituting the offense which occurs. It is the reduction in the amount of this socially harmful conduct which is the "public good" produced by law enforcement. If redistribution is posited as the goal once again it is the effect of a price reduction on the level of activity which constitutes the violation which is ignored by the individual official. Under this theory the presumed purpose of the law is to reduce the level of this activity in order to confer benefits on those who are allowed to engage in it. But if, for example, some restriction on entry is created to benefit a favored group these benefits will be reduced if a disfavored group can secure entry at a lower price and thus increase the

amount of competition for the favored group. Thus whether the production of public goods or redistribution is posited as the goal a cooperative solution which takes into account the consequences of the price at which exoneration can be purchased on the accomplishment of the group's goals is preferable for the group as a whole to a competitive outcome in which these consequences are ignored.

### Monitoring and Sanctioning

The discussion so far appears to demonstrate that unconstrained competition among enforcement officials will yield lower prices for committing violations and more violations than is in the interest of the group as a whole, no matter how the objectives of the group are defined. The prices for violations and the number of violations which would be expected if competition were not constrained also appear to be different than the prices for violations and quantity of violations which actually occur. Both of these conclusions indicate that the outcome is largely determined by the monitoring and sanctioning of individual bribe transactions which is conducted. The questions then become what objectives are sought to be served by the monitoring and sanctioning functions and how are these objectives accomplished.

In pursuing these questions one basic conclusion is easily reached. The formal, acknowledged system for sanctioning bribery fits only the public goods or wealth distribution model and these only in one extreme form. As indicated above, the objection to bribery from the point of view we have been considering is that

too low a price for a violation results and thus too many violations. This objection applies to all three of the possible objectives of law enforcement. But the price can be increased in two ways. Either the cost of accepting a bribe can be made so high that no bribery occurs and all penalties are exacted formally as fines or the cost of accepting a bribe can be increased or the competition of others to offer substitute exoneration decreased so that the bribe price approaches but remains below the level of the fine which would be formally imposed if the bribe transaction were not consummated. It might, for example, as is considered below, be desirable to turn to the second solution if the bribe transaction were more efficient than a formal legal proceeding in some respects.

It is clear, however, that if the objective is to maximize the profits of enforcement officials the result which leads to no bribery or to a bribe price above the profit maximizing level must be avoided. Unless some mechanism through which the amount formally collected as fines can be distributed to enforcement officials is postulated then the interest of a group of profit seeking officials would be served by driving the bribe price as close as possible to the maximizing level but in no event above it. This is so because "too high," a price will produce a more than offsetting reduction in the number of violations or lead to a payment of the fine in lieu of the bribe.

Under the profit seeking approach the sanction imposed on an official who took a bribe would be carefully calibrated to be the difference between the amount accepted and the maximizing price.

If all officials were subject to such a sanction each in his self interest would charge the maximizing price. Under this regime the amount imposed as a sanction would increase as the amount accepted as a bribe decreased. Thus officials who accepted "too low" a bribe would be induced to act in the interest of the group as a whole.

By contrast the laws prohibiting bribery do not increase the penalty as the amount accepted as a bribe decreases or in any other way incorporate the notion of an official accepting "too low" a bribe as the gravamen of the offense. Instead they are avowedly designed to eliminate all bribery. This is not, in principle, inconsistent with the public goods or redistributational rationale. In effect the bribe price has been raised, as our analysis suggests would be in the interest of a group favoring one of these objectives, but to a level so high that no transactions are consummated and the fine is formally paid in a legal proceeding. If one is indifferent as to who receives the amount exacted as a penalty then a system with no bribery and one with a prevailing bribe price which is close to the fine which would be collected if the bribe transaction were not consummated would be substantially equivalent. The choice of the two systems would turn on questions of efficiency of the two methods which are considered below. The fact that the apparent purpose of the bribery laws is to eliminate all bribery but that the level of enforcement is so low in many jurisdictions that bribery flourishes suggests there may be substantial conflict in making this choice.



The point, however, for present purposes, is that the existing bribery laws are consistent only with the public goods or redistributive rationale to the extent they seek to eliminate all bribe transactions (or raise the bribe price above the profit maximizing level). There may, however, be informal, unacknowledged, monitoring and sanctioning mechanisms which do attempt to implement the profit maximizing rationale or utilize some amount of bribery as one means of accomplishing the purposes of the law in producing public goods or redistributing wealth. Most significantly, it would seem that organization of the enforcement effort to maximize the profits which can be derived from it offers the prospect of such substantial gain that supervisory officials would have a strong incentive to undertake the necessary monitoring and sanctioning. While in the first instance the bribe income is realized by officials who have direct contact with violators it would seem that higher officials could capture these returns by in effect selling the positions in which bribe income can be earned. It is, of course, not clear how bribe income is actually distributed. It is widely believed that the nominal salaries received by officials are reduced to take account of the bribe income which can be earned. It is not clear, however, whether their real earnings exceed what they can make in alternative occupations. And as indicated above, a price may also have to be paid for the job which yields bribe income. Moreover, the official who has the right to appoint to a job which produces bribe income, may himself have had to pay something for the job he holds. All of this suggests an upward

movement of bribe income to officials of more and more extensive power. If one adds the fact that more profits can be earned by controlling as wide a range of substitutes as possible the notion of some extremely inclusive monopoly mechanism controlled at very high levels of government emerges as a likely outcome. But if carried to this extreme point this conception obliterates one distinction which was essential in the earlier analysis. If we posit as cartel managers of a profit maximizing cartel a small group of powerful officials it appears likely that they would also have access to public funds as well. They would thus be indifferent between bribe income and revenue generated by legally collected fines.

This analysis, inconclusive as it is, suggests that the process through which monitoring and sanctioning activities are formulated and implemented are key determinants of the bribe prices which prevail, the number of bribe transactions which are consummated and the number of violations which occur. We, however, know very little about the factors which shape these patterns. Three basic outcomes can, however, be described. In one situation bribery is common, bribe prices are low and violations occur frequently. This outcome suggests that the process of monitoring and sanctioning individual officials has been ineffective no matter what is assumed to be the objective of law enforcement. Indeed the total amount of profits derived from bribe income is well below a level attainable through cooperation. In the second type of outcome substantial monitoring and sanctioning occurs. As a result bribe prices are

higher, fewer incidents occur and violations of the law are less frequent than in the first case postulated. This outcome could mean that a partially effective profit maximizing cartel has been established or that bribery is being used, in part at least, as a substitute for a formally imposed fine to achieve the objectives of producing public goods or redistributing wealth. In the third case the cost of bribery has been raised so high that virtually none occurs and the amount of violations is low because the legal sanction is formally imposed in almost every instance. This outcome could not be the result of a profit maximizing cartel but would have to be the result of effective monitoring in support of the public goods or redistributational goal.

#### Self Monitoring - The Importance of Culture

Cooperative solutions often emerge in the absence of explicit sanctions. People vote, refrain from littering when unobserved, cheer at football-games, tell the truth, mow the lawn and engage in much other socially productive activity even in the face of substantial opportunities to be a free rider. It is entirely conceivable that people have similar attitudes toward bribery, which is after all a form of "cheating" on the legal system which is designed to accomplish some common objectives of the group as a whole.

The existence of such attitudes can be easily incorporated into the analysis of the bribe transaction. The private individual and the public official may each incur a psychic cost from participating in a bribe transaction. This should operate

exactly as would an excise tax imposed on the purchaser and the seller.

If one begins with the assumption that all parties bear these costs the effect on the outcome is straightforward. The private individual will offer less and the public official demand more each to obtain compensation for the psychic costs associated with the bribe transaction. This should lead to a reduction in the number of bribe transactions which are concluded. It is not clear, however, what the effect will be on the observed level of bribe prices. Since the number of transactions is reduced, if demand curves for exoneration are, as has been postulated, negatively sloped, this will tend to make prices higher. But on the other hand the demand curve has shifted inward as compared to a world in which no psychic costs are incurred by individuals paying bribes. Thus any given quantity of bribes will command a lower price. The net effect on price will depend on both consequences, the reduction in the quantity of exoneration purchased tending to raise price and the lower price which can be obtained for the new quantity as compared to the price it would command if the demand curve were not influenced by an aversion to bribery. Of course in a world in which psychic costs are borne by sellers and buyers nominal prices do not in any event accurately reflect the values which are being exchanged.

Under this simplified version of the analysis differences among jurisdictions in the magnitude of psychic costs borne by participants would indeed make a substantial difference. It would seem, however, that these differences would be mitigated to

a significant degree. Private individuals and public officials who had no aversion to bribery could earn large profits by entering a bribery market dominated by people who did. The public official could accept a lower price since he did not have to be compensated for his psychic costs. And the private individual could offer a higher price since he similarly required no compensation. It would seem in time that the market would be occupied by people who did not bear psychic costs from engaging in bribe transactions.

There may, however, be limitations on this extreme outcome. The supply of people in a particular culture who bear no psychic costs may be sufficiently inelastic that these costs continue to matter at the margin in determining the asking or offering price for a bribe. Substantial profits may, of course, still be earned by inframarginal people who have no aversion to bribery. Moreover, to the extent that the laws in question are very general in application, like the tax laws, then individuals cannot easily avoid situations in which they may be charged with a violation. In this case the relevant population which defines the demand for bribery may be the general population not the "specialists" in bribery who would engage in occupations like prostitution, gambling or dealing in drugs.

The suggestion that differences in psychic costs may account for observed differences in the quantity of bribery which occurs raises a fundamental methodological question. The usual economic approach takes "taste" as given. But the "taste" we are discussing is not unrelated to issues of economic efficiency.

Essentially a "taste" not to cheat on a cooperative solution is a self imposed sanction which is a substitute for an explicit sanction imposed by the state or some private monitoring agency. The existence of this substitute may increase the efficiency with which the group functions--given the costliness of the alternative means of explicit sanctioning. This raises two interesting questions. First, in a static sense what is the contribution which "tastes" of this kind can make. If they are great, differences in economic well being may depend on their being more of them in one country than another. Secondly, in a dynamic sense what are the processes through which tastes which make such a contribution come to dominate in one culture but not in another. All I can say at the present time is that the question of bribery seems to provide a challenging opportunity to pursue these issues.

#### The Bribe as Incentive

We have so far assumed that enforcers are perfectly informed about violations. It is, however, costly for officials to discover that violations have occurred. Moreover, as in the case of an official deciding whether to accept a bribe, the benefit to the official of incurring costs and discovering a violation is trivial. Here his efforts do not determine the magnitude of the sanction but rather the probability that it will be imposed. However an increase in that probability, like an increase in the magnitude of the sanction, increases its expected value and thus causes a decrease in the number of offenses which occur. But

here too the official realizes only a trivial share of this social benefit.

It is therefore necessary to create incentives for officials to incur costs in discovering violations and thus increase the probability of punishment. The bribe is one of the means which can be employed to this end.

Bribery income provides a positive incentive against shirking. Income can be earned by catching people who will pay something not to be prosecuted. These people must fear something from being prosecuted. If other features of the system, "efficiently" create this apprehension a number of related beneficial effects follow. First, guilty people should have more to fear than innocent people. In other words, if the probability that punishment will be imposed is higher for the guilty, so is the expected value of the punishment. The maximum which will be paid as a bribe is higher and consequently the average return from catching people of this type thus greater. As a result, to the extent that the legal system accurately distinguishes the guilty from the innocent the bribe system creates an incentive to catch the guilty. As a related matter, the bribe system will create an incentive to apprehend offenders who have committed more serious offenses. Again the top of the bargaining range will be higher and the average return greater the more serious the offense and the more severe the penalty which can be imposed.

Thus the bribery system can serve as an incentive to increase the level of enforcement activity and allocate resources to apprehend guilty persons who have committed serious offenses.

This seems to be a desirable set of effects. There are, however, two qualifications which must be introduced. First, to the extent that the offender cannot pay the monetary equivalent of the penalty which would be imposed the bargaining limit is lowered accordingly. Thus, a bribery system should tend to produce under-enforcement with respect to crimes like murder or rape, where the offender cannot pay the monetary equivalent of a severe sanction like life imprisonment or the death penalty. Similarly, it should produce a bias in favor of enforcement against wealthy offenders. The empirical implication of this analysis is that if bribery is employed in a system on grounds of creating efficient enforcement incentives, it would be expected that it would tend to be employed with respect to offenses like prostitution, gambling, violations of trade restrictions or tax evasion, where neither the severity of the sanction nor the wealth of the offender preclude a bribe payment equal to the expected value of the punishment. By contrast, bribery should be employed less frequently with respect to offenses like rape or murder.

The second difficulty with bribery as an incentive for law enforcement is that so long as the determination of guilt or innocence by the courts is not error free (and exonerated defendants are not reimbursed for legal expenses) some incentive to apprehend the innocent does exist as well as an incentive to create a false body of evidence increasing the probability of conviction. The importance of these effects depends critically on the ability of the legal system to determine guilt accurately.



Of course, intentionally presenting false evidence can be separately punished as well. And in principle so could leveling a false accusation. Thus, the efficiency of a bribe system from an incentive point-of-view depends on the error rate in the legal system, the difference in the costs of apprehending guilty or innocent persons, and the sanctions imposed on enforcers for arresting the innocent and fabricating evidence. Conceivably then the problem of allocating enforcement resources to prosecuting the innocent could be dealt with adequately within a system which accepted bribery as one of its essential elements.

A bribe system offers one additional possibility for achieving an efficient allocation of resources to enforcement. One of the difficulties of any system in which the enforcement incentive is related to the penalty imposed is how to adjust these variables independently. Thus if it is decided that it has become more costly to detect a particular offense, the optimum adjustment might be to increase the penalty and reduce the number of offenders who are apprehended. But if the increase in penalty also increases the incentive for enforcement, as it does in a system characterized by private enforcement, there will be more rather than less enforcement with respect to the particular offense. The attempted adjustment is thus frustrated. In a system of public enforcement characterized by bribery, as contrasted with a system of private enforcement, this effect can be counteracted by limiting the number of enforcement officials authorized to apprehend offenders for committing the particular violation. Thus, in one sense, a bribe system combines desirable

features of public and private enforcement. That is enforcement activity, as in private enforcement, can be made to vary with monetary incentives that reflect the seriousness of the harm caused by the offense. At the same time, the relationship between penalty and enforcement activity can be controlled by limiting the number of authorized enforcers.

There are, however, two major difficulties with the suggestion that bribery is incorporated into an enforcement system as a means of providing incentives for efficient law enforcement, beyond its inefficiencies as an incentive system noted above. First, for the bribe to be effective it must serve as both penalty and incentive. There is no reason to believe that the same "price" is appropriate for both purposes. Nor is there any obvious reason why the result of a bribe transaction will produce an "optimum" outcome from either point of view. It will thus be necessary to combine the bribe transaction with some monitoring device which adjusts both the penalty and the incentive at the appropriate level. The efficacy of the bribe system would thus turn upon the effectiveness of this monitoring system as compared to alternatives which would be employed in the absence of bribery. This comparison is very difficult both as a conceptual and an empirical matter.

The second basic qualification to the suggestion that bribery is utilized as an efficient means of creating incentives is that if this is its purpose there is no point in making the practice unlawful. Indeed, the law as written would sanction bribery so severely that it would virtually always be

unprofitable. This is totally inconsistent with the use of a bribe as incentive.

The only partial answer I can offer to this suggestion is that while the bribery laws do provide severe penalties they are so little enforced in some jurisdictions that the expected value of punishment approaches zero. This suggests some conscious tolerance of bribery. It is not, of course, the same as acknowledging bribery as the legitimate means through which enforcers earn their income. All one can say is that among the many forces at work in defining the parameters of the bribe transaction may be some recognition of its value as a means of providing incentives for enforcement officials. This value is enhanced by the fact that there are no "perfect" incentive systems which simultaneously generate any desired level of punishment and frequency of imposition. Consequently bribery must be evaluated as one of several imperfect alternatives.

#### Bribery and Public Choice

From a public choice perspective bribery has two relevant effects. First, if the actual "price" for committing a violation is reduced then the number of violations will increase and the gains to those who benefit from restricting the activity which constitutes a violation reduced. From this vantage point the beneficiaries who purchase "restrictive" legislation will be opposed to bribery whether they are members of the general public consuming public goods as in the case of a law prohibiting violent crimes or "special interests," gaining advantages from entry barring legislation. Moreover when they "purchase"

legislation they must discount the flow of benefits by the possible diminution resulting from bribery.

The second effect of bribery is that individual public officials capture revenue which would otherwise go into the treasury. This would appear to constitute a transfer from taxpayers to public officials. But since the officials are paid salaries it is not obvious how much of the bribe income is a substitute for a higher salary which would be earned in its absence. And since jobs involving opportunities to earn bribe income are valuable, if indeed more than a normal return is realized, than these can be sold by the persons controlling the appointment process. All of this determines the distributional consequences of bribery. Whatever these consequences are they will affect the incentives of taxpayers and public officials as purchasers of legislation which creates opportunities to earn bribe income.

It thus appears that private sector beneficiaries and public sector enforcers will share an interest in having the same type of legislation passed. Indeed the fact that high penalties are required to deter "entry" into the prohibited activity suggests that those who are able to engage in activity which competes with that which is prohibited are earning large profits. But these very high penalties, of course, are the essential first step for earning large amount of bribe income.

While private beneficiaries and public officials thus share an interest in securing restrictive legislation they are also competing for the profitable opportunities which the legislation

creates. An ideal price for the private beneficiaries would be so high that no violations occur. For the public officials, assuming they were interested only in profit, the price would be at the profit maximizing level where a substantial number of violations would occur. Thus there is considerable conflict between private beneficiaries and public officials in what would constitute "optimum" enforcement.

This conflict must be taken into account in a positive theory of public choice. It suggests that each of the beneficiary groups must discount its gains by the possibility that they will be dissipated by the rivalry of the other. Moreover, the struggle for legislation must embrace not only its substantive terms but the means of enforcement which will be employed as well. Aside from the more conventional questions of the cost of enforcement it is necessary to view the enforcement process as one of continuing rivalry to capture the potential gains created by the law. In addition this rivalry may also reduce the total gains which can be obtained as when competition among enforcers drives the price well below the profit maximizing level to the detriment of the public officials and private beneficiaries alike.