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Institutionalized Corruption and the Kleptocratic State

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Abstract

This paper argues that corruption patterns are endogenous to political structures. Thus, corruption can be systemic and planned rather than decentralized and coincidental. In an economic system without law or property rights, a kleptocratic state may arise as a predatory hierarchy from a state of pure anarchy. A dictator minimizes the probability of a palace revolution by creating a system of patronage and loyalty through corrupt bureaucracy. Competitive corruption patterns are associated with anarchy and weak dictators, while strong dictators implement a system of monopolistic corruption. Efforts at public sector reform may meet resistance in countries featuring such systemic corruption.

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Contents Page

I. INTRODUCTION

Corruption and governance are increasingly popular topics for analysis. Contrary to the mainstream discussion of corruption,[2] we propose that patterns of corruption must be analyzed in their political context because **corruption is endogenous to the political process**. Drawing from the literatures on the economics of conflict and appropriation, the economics of organized crime, and the political economy of dictatorships, we **motivate the endogenous genesis of the *kleptocratic state* from a state of pure anarchy**.[3] Warlords and their collaborators emerge as successful adaptations to the game of anarchy and they seek to usurp each other in a quest for hegemonic rule.

In our view, however, the internal organization of predatory teams is inadequately explained in the literature, which affects the understanding of the optimal span of control of dictatorship. As a partial answer to the problem of internal cohesion of predatory teams, we offer the explanation that **corrupt offices are created to satisfy a leader's desire to foster loyalty through patronage**. The predatory hierarchy, established in order to extract rents from the economy, is based on a system of low civil service wages, which mandate corrupt activity and serve to reinforce the system of rent extraction to the ultimate benefit of the ruler. Thus, we suggest that corruption is endogenous to the political regime and predatory activity on the part of low level bureaucrats must be judged in its political context since **different political regimes generate different patterns of corruption**.

Our analysis builds upon the insights summarized by Bardhan (1997) in two important respects. First, Bardhan asserts that theories of the kleptocratic state cannot determine whether the corruption patterns that arise in an economy would be competitive or monopolistic. By contrast, we endogenize corruption patterns within a model of political structures, which allows us to predict under which regimes competitive or monopolistic corruption patterns are likely to be encountered. Second, our analysis can be extended to explain political corruption – which Bardhan omitted from his survey – as rent-seeking behavior of the polity in democratic rather than dictatorial regimes.

In our view, the endogenization of corruption patterns to the political structure marks an important step in the evolution of research on corruption. The early—apologetic—literature on corruption sought to make arguments in favor of corrupt behavior under the premise that it increased economic efficiency.[4] More recent research by a variety of authors

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[2]For example, see Shleifer and Vishny (1993), Bardhan (1997), or Elliott (1997).

[3]Elsewhere in the literature, this has long been claimed by Mancur Olson, for example in Olson (1993).

[4]For example, see Leff (1964) and Huntington (1968).

has documented the ill effects of corrupt activity on economic growth.[5] Nevertheless, corruption is largely viewed as a decentralized and coincidental phenomenon. Instead, we posit that corruption should be considered as systemic and deliberate: It is the natural result of efficient predatory behavior in a lawless world.

The paper is organized as follows. Chapter 2 reviews the current literatures on conflict, appropriation, and dictatorship to conclude that the internal organization of predatory teams remains insufficiently discussed. Chapter 3 describes how gangs can emerge as superior adaptations to the game of anarchy and establishes conditions that determine optimal gang size and the optimal size of the territory controlled by the gang. Chapter 4 presents our arguments that predatory hierarchies are an organizational innovation that increases the span of control of warlords and that nations evolve via the quest of warlords for hegemony. Chapter 5 links our insights with respect to predatory hierarchies to existing research on organized crime and corruption and we posit that corrupt bureaucracies are an application of our concept of predatory hierarchies. Chapter 6 concludes and provides views on the applicability of our theories to public sector reform.

II. PRODUCTION, PREDATION, AND DICTATORSHIP

This section summarizes the economic literature on conflict and appropriation in a variety of settings. With few exceptions, unquestioned acceptance of property rights in the "State of Law" has dictated the course of Economic Inquiry.[6] However, the **universal acceptance of the concept of property rights leads much of the analysis to overlook instances of legal failure**.

In the economics literature, Becker's (1968) seminal inquiry into the economics of crime and punishment offers an explicit recognition of the incentives for individuals to redistribute rather than produce. Tullock (1974 and 1980) was among the first to analyze rent-seeking activities in totalitarian societies within the economic paradigm.

More generally, Hirshleifer (1987, ch.6) distinguishes a hierarchy of theories: "Constitutional Economics," which models systems with functional property rights; "Constitutional Politics," which allows for redistribution by the polity within the confines of democratically legitimized constitutions; and, "Non-constitutional Politics," which analyzes social interactions guided solely by the laws of nature.[7] Hirshleifer (1996) describes an

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[5]For example, see Kaufmann (1997) or Mauro (1995 and 1997).

[6]Hirshleifer (1987, ch. 8) quotes Rousseau's *Discourse on the Origin of Inequality*: "The first man who, having enclosed a piece of ground, bethought himself of saying: 'This is mine,' and found people simple enough to believe him, was the real founder of civil society."

[7]In the absence of a functioning legal framework, Coase is replaced by Machiavelli.

economy in the absence of law and property rights. In an environment of abundance, where it is not necessary to safeguard territory or supplies, Hirshleifer labels social organization as "amorphy."

Accordingly, if resources are not abundant and investment and stock keeping can increase utility, a lawless environment (Hirshleifer's Non-constitutional Politics) provides the opportunity for an individual to satisfy consumption demands via **predation** rather than production. This is the premise of the first set of models to be reviewed here.

A. Combat and Appropriation

We begin by discussing simple models wherein two individuals allocate their time among production, predation, and defense, and time acts as a resource constraint. These models specify a production and a combat technology, and agents maximize utility derived from consumption.

First, consider the case where the two individuals have **equal endowments**. In equilibrium, the players commit equal resources to production and military activities. A crucial variable in the models is the decisiveness of combat. Hirshleifer (1996) shows that, as the decisiveness of combat increases,[8] more time is allocated to military activity and social output decreases due to the resource constraint. Skaperdas (1992) shows that in cases of very low combat decisiveness, a cooperative outcome with no combat and maximal production is feasible.

Second, if the players have **unequal endowments**, the decisiveness of combat technology determines the nature of the resulting equilibrium. Under low combat decisiveness, individuals with low resource endowments invest more in combat technology and relative income distribution shifts in favor of the poor.[9] On the other hand, high combat decisiveness under unequal endowments may lead to the poor acquiescing completely, investing only in production. Hirshleifer (1996) calls this "hierarchy," while Skaperdas labels it "an equilibrium of semi-cooperation." We treat it here as an economic description of subjugation.

Lastly, Hirshleifer (1996) examines the impact of increasing the number of players in the simple game of anarchy. Holding combat decisiveness constant, an increase in the number of players increases each player's allocation to combat rather than production, and thus decreases per capita social output. If the population becomes excessively large, it may disintegrate into amorphy if that equilibrium satisfies the individuals' viability constraint.

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[8]Small changes in relative combat technology have great consequences for the likely outcome.

[9]Hirshleifer (1991b) labels this the "Paradox of Power."

Otherwise, a Hobbesian "Each against All" would ensue until the population has shrunk to a sustainable level.

B. Dictatorship and Kleptocracy

The "kleptocratic state" exists to maximize the welfare of its ruler.[10] In Grossman's (1991) *General Equilibrium Model of Insurrections*, peasants allocate their time between production, soldiering for the elite, or insurrection activities, while the ruler taxes farmers, and hires soldiers against insurrection at a wage rate that is a decision variable. Hence, the ruler's taxation and soldiering decisions have to find equilibrium with the peasant's decisions on how to allocate time between the competing activities. This model focuses on the relative merits of peasants' insurrection technology versus the ruler's defense through soldiering. If the combat technology is favorable to the ruler, he may, in the extreme, lower the tax rate and hire a sufficient number of soldiers to eliminate completely insurrection activity. If the combat technology shifts against the ruler, the discount rate he applies to future consumption increases, leading him to increase the tax rate, albeit at the loss of total taxation revenues and decreased social welfare because greater effort is allocated to combat.

There are important parallels between Grossman's model and the anarchy models introduced above, particularly Hirshleifer's concepts of the "Paradox of Power" and "Hierarchy." Grossman's model is somewhat richer, in that combat outcome is not a "winner-take-all-contest," but the dictator has the discretion to set the tax rate, which allows him to affect peasants' military activity. Nevertheless, Grossman's results mirror those of the two-player anarchy game with unequal endowments: a weak dictator finds himself more often threatened by insurrection, output is reduced, but the peasants' share in total output is relatively increased. Due to a combination of military strength and low tax rates, a strong dictator finds no opposition, output is increased, and the resulting equilibrium can be interpreted as a "humane" form of subjugation due to the lower tax rate.[11]

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[10]Herschel Grossman (1995a) quotes Edwin Mills: "Until two or three hundred years ago, it was characteristic almost anywhere - and to this day, it is characteristic in the majority of countries and in countries containing the majority of the world's population - that the primary government activity was and is extraction of surpluses from the predominantly agricultural population and use of such surplus, to benefit tiny groups of people in and near the government." Later, he quotes Robert Claiborne: "The distinction between robber and cop, between extortion and taxation, has been blurred at many times in history."

[11]Usher (1989) combines several of the arguments above into a theory of dynastic cycles. In his model, peasants can be either farmers or bandits who steal from farmers. The ruler taxes farmers and tries to hunt down and kill bandits in order to protect his tax base. This dictatorial equilibrium is superior to an anarchic world until population growth motivates the ruler to turn to banditry, since he can no longer expend sufficient resources on policing bandits. This causes a reversal to anarchy when the tax base can no longer satisfy the

(continued...)

This section has contrasted models of two-player anarchy games with dictatorial equilibria to examine their similarities. Grossman's model could be considered as a refinement of a two-player game between one dictator and one peasant. Models of dictatorship have remained silent on the issue of how the dictator avoids a "palace revolution" in an environment of anarchy since government is considered a monolithic institution concerned with survival and taxation. We assert that existing theories of dictatorship do not model social aggregation in an adequate manner.

III. PREDATORY TEAMS

In the economics literature, one of the less understood aspects of social organization is the natural emergence of predatory teams and social contracts.[12] The rudimentary structure provided by mafias has been analyzed in the sense that they not only produce output of "criminal goods," but they also define and police the behavior of their members. For example, Skaperdas and Syropoulos (1995) describe the rudimentary constitutional role of predatory teams and liken them to "primitive states."

One explanation for the emergence of gangs is that they represent an efficiency adaptation to the game of anarchy itself. Usher (1989) speculates that economies of scale in combat technology imply that the group as a whole is stronger than the sum of its individuals, and the individual possessing the most powerful combat technology may assume the position of leader. However, the ambitions of team members to become leaders themselves may upset this fragile equilibrium. Hirshleifer (1996) maintains that powerful groups have (by some yet-to-be-understood mechanism) solved the problem of anarchy within their structure, but anarchy continues between rival groups.[13]

Due to the absence in the literature of models of the internal cohesion of predatory teams in lawless systems, the forces determining the optimal size of predatory teams are not

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consumption demand of the ruler. Under anarchy, the population shrinks to sustainable levels, and a new dynasty may develop. The dynasty can achieve a steady state, however, if the population remains sufficiently small and all members of society are better off under despotism rather than anarchy. The shrinking of the population after the dynasty disintegrates into anarchy mirrors Hirshleifer's (1996) result of anarchy being unable to sustain more than a particular number of individuals in the economy. Due to the superior efficiency of the despotic rather than the anarchic regime, the break-up of the dynasty is followed by population reduction.

[12]See Skogh and Stuart (1982) for an early attempt to explain the endogenous genesis of social contracts under anarchy in an economic framework.

[13]Skaperdas and Syropoulos (1995) argue that team cohesion can be maintained in an infinitely repeated game where reputation overrides the Prisoner's Dilemma outcome of the one-period Nash equilibrium.

well explained.[14] Our contribution to that literature begins by considering the case where there are economies of scale in combat technology. A gang consisting of a few people is stronger than the same number of individuals and the gang will be more likely to achieve an equilibrium of subjugation with neighboring individuals. But how are the gains from predation shared among gang members? Three questions arise: the determination of gang leadership; the optimal size of the gang; and, the optimal span of territorial control.

A. Gang Leadership and the Palace Revolution

One possible answer to the question of gang leadership[15] is that the individual with the best combat technology will be the leader. This is an inadequate explanation, however, since leadership is the skill demonstrated in **organizing** combat activity. While the first element is a "supply-side" argument in that the leader establishes his role by force, the second element is a "demand-side" consideration since gang members want the most skilled person in charge. This demand element is an important consideration when analyzing the potential for a palace revolution.

One way to envision group formation is that the winner of a combat situation doesn't subjugate the loser, but offers integration to fight under his command in the future. The **leader** is the person organizing gang warfare. For simplicity, we assume that in combat situations decisions are made by order of the leader, since consensus weakens the timeliness of the gang's combat skills and autonomous decision-making is inconsistent with the assumed economies of scale in combat technology. In determining leadership, we can treat individual combat technology and individual leadership skills in combat situations as exogenous, while the sharing rule of combat proceeds is endogenous.

The leader can be expected to obtain the largest relative share of predation gains due to his individual combat skills and the willingness of gang members to accept a smaller share of the gains in exchange for the presumed skills of the combat leader. In an environment of

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[14]Polo (1995) addresses the internal organization of gangs as an agency problem between gang leadership and soldiers. The model explains the hegemonic rule of a gang in a geographically concise area, with different gangs controlling different areas. Yet, it lacks an important step in the analysis, as there is an assumed ex ante asymmetry between principal and agent: the agent can never usurp the principal. Thus, the model presupposes an existing gang, and analyzes its relationship to "the marginal agent." Findlay (1996) also examines "the limits of empire" in a relevant context, but fails to explain the source of diminishing returns to territory.

[15]As Radner (1992) shows, the economics of leadership and management is still insufficiently understood. Thus, we do not claim to capture the full richness of the determinants of leadership, but maintain that the analysis of leadership under anarchy adds an important dimension to the discussion.

anarchy, however, each gang member has the incentive to *ex ante* contract out the largest share to the leader, and *ex post* renegotiate and expropriate the leader. This is the problem of palace revolution.[16]

Accordingly, it is necessary but not sufficient for the leader to have high individual combat skills, since gang members could prefer a weaker leader with better management skills. In any case, the leader would be expected to obtain the largest share from predatory activity for himself, while ensuring that gang members are sufficiently well rewarded to be induced to be part of a gang. In light of the incentive of every gang member to *ex post* renegotiate, the question for the leader is how to avoid a palace revolution by a potential challenger. The probability of a palace revolution is a function of the surplus share extracted by the leader.

If the leader has high combat skills, the probability of success for an individual gang member trying to overthrow the leader is small. Therefore, the challenger must find an ally who is convinced that his future share from predatory activity under new leadership is larger than his present share and is prepared to face the risks inherent in combat. Because of uncertainty, *ceteris paribus*, gang members will prefer the status quo in leadership. Given the *ex ante* preference for the status quo, however, the approach to another gang member with a plan to topple the incumbent is risky. The potential ally knows that the initiator of the overthrow may seek an alternative collaborator in his place if he declines to participate. Thus, if the potential ally in the overthrow declines to participate, his rational response will be to actively try to avert the overthrow. Since the initiator of the revolt understands these considerations, the likelihood of revolt initiation is reduced.

B. Optimal Team Size

Consider the case of a gang of three members including the leader. The initiator of a revolt has only one potential ally. If the ally declines to participate, he knows that the initiator only has the choice to acquiesce, or try to topple the leader by himself. If the former is more likely, the potential ally has no reason to inform the leader in order not to reduce the group size to two and lose economies of scale in combat technology due to downsizing of the group. If the latter is more likely, the group will downsize anyway, and the ally will choose his side depending on who he expects will win the contest, which is likely to be the incumbent.

Now consider a gang of four including the leader. A potential ally has to consider that in case he declines, the fourth person will be an ally in the revolt. There is thus an increased chance that a successful revolt will take place without him. This, in turn, will increase the likelihood that he will side with the leader immediately to avert revolt, since *ceteris paribus* the initial preference favors the *status quo*. **Given the individual combat skills and combat management skills of the leader, and given the leader's optimal sharing rule of proceeds**

[16]The game is understood as a repeated game where players have incomplete information about other players' combat and management skills.

from predatory activity, the addition of a fourth gang member increases the incentives for self-monitoring. This, in turn, reduces the likelihood of a successful palace revolution. Accordingly, when gang size is small, the leader has an incentive to expand gang size in order to increase both economies of scale in combat technology, and to reduce the probability of a successful overthrow.

As the gang becomes ever larger, however, there are more individuals to aspire for the position of leadership. Even a strong leader can be toppled by a dissenting group of only a few people. And, in a very large group, even a potential ally to prevent a coup might join the revolt in order to preempt yet another group from staging the coup first. Thus, in a group that is large enough to host several rival teams aspiring to produce the new leader, the self-monitoring forces are diminished, and the probability of a revolt increases.

From this we conclude that **optimal group size is thus a policy variable of the leader to balance an increase in the gang's strength against an increased likelihood of a palace revolution due to reduced self-monitoring activities at the margin. With this, we have a theory of social aggregation at the micro-level arising from a condition of pure anarchy**. We explain the endogenous genesis of a group with one layer of hierarchy: gang members and their leader.

C. Optimal Size of Terrain Controlled

In its immediate environment, the gang will attempt to achieve an equilibrium of subjugation with individual peasants, but these peasants have an incentive to create a gang of their own in order to escape the equilibrium of subjugation. The optimal size of territory controlled is a function of the optimal size of an individual gang. By definition, optimal gang size dictates how many individual peasants can be controlled in an equilibrium of subjugation while taking account of the risk of some peasants banding together in a peasant revolution. Absent competing gangs elsewhere, and given optimal gang size, the optimal size of territory is determined by the gang balancing additional income from larger territory against the probability of a peasant revolution at the margin.

IV. From Gang Warfare Towards Hegemony

Competing gangs are likely to vie for control over the peasantry. As Hirshleifer noted, with the problem of anarchy within gangs solved, anarchy between gangs will persist. While the results from the two-player anarchy equilibrium apply, we now add the feature that gangs try to protect "their" peasants from assaults by rival gangs.

Assume that two neighboring gangs enter into a combat situation and one gang wins. One option is that the victors force losing gang members into peasantry and subjugation. The winning gang also "takes over" the peasants previously controlled by the gang that lost in combat. Since optimal gang size is endogenous, however, and because optimal gang size determines the optimal size of the territory controlled, such subjugation of a rival gang increases the probability of a peasant revolution. That is, the territory under control now

exceeds the optimum. Therefore, **if gangs have established the optimal size of their territory, subjugation after inter-gang warfare is not efficient**.

A. Predatory Hierarchies

A key contribution of this paper is to argue that **there are organizational solutions to expand the span of control of predatory teams beyond the endogenously determined size of the nucleus gang**. Borrowing from Findlay (1996), we assert that integration of the rival gang is a meaningful alternative to complete subjugation. Our solution to the problem of integration, however, is different: the creation of multi-layered hierarchies in predatory teams. The gang that emerges as winner from gang warfare integrates the losing gang in an equilibrium of **subordination** rather than subjugation. This is accomplished by: reducing the size of the losing gang below its optimum to render it weaker than the winning gang; allowing the losing gang to continue extracting rents from parts of its previous area of control so that losing gang members remain better off than peasants; and, demanding that a fraction of the proceeds are passed up to the winning gang.[17]

Once such a two-layered hierarchy is recognized as an organizational solution to the problem of the optimal span of control of a predatory leader, the central gang can manage several such subordinated units in order to exploit forces of self-monitoring analogous to those that were at work in the nucleus gang. At least to some extent, the subordinated gangs monitor each other so that the probability of an uprising is limited.

This devolution of power to the "second in line" may be an appropriate description of the Aristocracy under the King in England after the Magna Carta. **The King needs to relinquish a sufficient share of his income to make self-policing of the Aristocracy succeed to the point that no one Lord can usurp the King.** The surplus of extortion proceeds for the Aristocracy over and above the wage rate of peasants determines self-monitoring activity within the Aristocracy.

This logic can be extended to multi-layered hierarchies. The necessary conditions for a multi-layered hierarchy to be sustainable are that: each layer must be strictly better off than the next-lower level; the central institution at each layer must be stronger than each individual group at the next-lower level; each layer manages an optimal number of

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[17]Such equilibrium is then stabilized by the provision of hostages as described by Williamson (1983). In the absence of legal enforcement, the provision of hostages is the only possible way to ensure that "contractual" obligations are met. One way to implement such an equilibrium would be to have the losing gang pay its dues *ex ante* to make it economically inevitable that the losing gang still enforces an equilibrium of subjugation with the peasants it controls, rather than hiring them as new gang members to regain strength.

subordinate groups so that the probability of a revolt is minimized due to self-monitoring; and even the lowest level group within the hierarchy is strictly better off than the peasantry.[18]

In a probabilistic sense, the individuals at each layer of the hierarchy expect to be worse off in combat with a rival structure, thereby strengthening the internal cohesion of the hierarchy. That is, the hierarchy itself is stronger than the sum of the individual gang parts. **This rent-extraction hierarchy is therefore an organizational innovation expanding the limits of empire.** Once we understand the limits of empire, we assert that **nations may have developed as the hegemonic results of gang warfare** and represent the optimal span of control of warlords.[19]

The question that remains to be addressed is whether nations so-defined can achieve some stability in the anarchic equilibrium with their neighbors. For this we have to make another assumption: the geographic landscape features spaces that either favor offensive or defensive military technology. An area encircled by a stretch of land favoring defensive military technology will then define the limits of empire. A hegemonic hierarchy arises within the controlled territory as a result of gang warfare, while its borders produce the anarchic equilibrium of cooperation between neighbors due to poor combat technology as defined by Skaperdas (1992). This is synonymous with "peaceful coexistence."

B. Toward an Evolution of Political Structures

An important question remains unanswered, however: How would a dictator in peaceful coexistence with his neighbors maximize income by sponsoring economic growth?[20] A fundamental problem in the equilibrium of pure subjugation is that the peasantry lacks incentives to invest in entrepreneurial talent, since the dictator cannot commit not to renegotiate the tax rate ex post. This is a key feature in the model by Grossman and Noh (1994). The ruler is not able to commit to a tax rate below a certain threshold, which leads peasants to restrict production to a level compatible with the minimum credible tax rate. This

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[18]The provision of hostages, as discussed below, can help to ensure that the rents extracted from the peasantry are passed upstream.

[19]Baumol (1995), speculates that a fruitful approach to research would be to: "**Interpret most governments in human history as gangster associations**," and he maintains that: "Governments concerned with the welfare of the governed and constrained by rule of law from arbitrary and violent measures are the rare exception in human history, perhaps most realistically interpreted as a curious aberration of a very recent period in rather limited portions of our planet."

[20]Some analysis of this issue can be found in Usher (1989), who assumes that peasants can be either farmers or bandits (who steal from farmers), while rulers tax farmers and hunt bandits. Thus, even a predatory dictator would install a system of law and order to increase his tax base.

minimum credible tax rate, in turn, is a function of the stability of the dictatorship. Secure dictators can commit to a lower tax rate and thus become more benevolent. **The model allows for a poverty trap in the case of stronger insurrection technology, but a move toward a State of Law in the case of weaker insurrection technology and stronger dictators.**[21] Thus, it opens the way for the evolution to more modern societies.

Finally, Grossman (1995) motivates the endogenous development of the welfare state in an environment of redistributive activities. If wage income in an economy is small versus property income, the property class has an incentive to redistribute wealth to wage earners in a "Robin Hood" equilibrium in order to preempt predatory redistributive efforts of the wage earners. This model does not explicitly mention dictators, but can be interpreted in that vein. It mirrors the dictator's incentive to reduce taxes if his seat is relatively secure.

V. Rent-Seeking in the Kleptocratic State: Monopolization and Corruption

This section seeks to draw parallels between corrupt bureaucracies and the predatory hierarchies discussed above. In our view, corrupt bureaucracies are an extension of the logic of predatory hierarchies, which in turn are an efficient organizational adaptation for mafias and dictators alike. In particular, we describe how corrupt bureaucracies are an efficient form of rent-extraction for the dictator, especially when compared to other forms of tax administration. Low civil service wages underpin loyalty to the dictator and reduce the probability of a palace revolution.

A. Monopolies and Cartels in the Business Process

First, we consider the problem of revenue mobilization faced by a dictator seeking to maximize the proceeds from rent-seeking activity. The relevant literature typically considers rent extraction via a tax *rate*. To gain further insights, we assume transaction costs to be linked to the method of taxation. Consider an equilibrium in which a secure dictator is concerned with increasing the tax base while keeping taxes sufficiently low to curtail revolutionary activity. Economic theory tells us that to maximize the tax base the dictator should seek to maximize output, which is accomplished in a competitive and entrepreneurial environment with secured property rights. To the extent that tax collection entails fixed costs, however, it may be inefficient to tax a large number of firms and consumers. More importantly, if taxing consumer surplus is burdened by prohibitive transaction costs, and since the loss of consumer surplus is largely external to the dictator's maximization problem,

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[21]With regard to the equilibrium of a "Poverty Trap," Colombatto and Macey (1998) argue that the dictator may seek to retard growth in order to prevent an evolution of income distribution that would be unfavorable to his interests.

in the limit the rational dictator's interests are interchangeable with those of a monopolist.[22] Accordingly, the monopolization of industries through close associates of the dictator (crony capitalism) is one example of an efficient form of a predatory hierarchy.

In the literature on organized crime, Gambetta and Reuter (1995) have extended this analysis beyond extracting rents from monopolies to argue that mafias have incentives to create cartels rather than monopolies. While the pecuniary proceeds can be identical, the mafia has a more favorable power balance versus smaller cartel members (as opposed to a large monopolist). Since individual cartel members benefit from mafia enforcement of the cartel, they can be regarded as "partners in crime." Hence, cartel members can be regarded as part of the mafia itself. Accordingly, **gang leaders can be viewed as maximizing revenue by delegating the task of extortion to lower levels in the mafia hierarchy, and then collecting a share of the revenue from the decentralized units,**[23] while maintaining a monopolistic hold over business processes. Thus, arguments from the organized crime literature support our reasoning, both as regards the method of taxation through vested monopolies as well as with respect to the stability of predatory teams.

B. Institutionalized Corruption

We have argued that the decentralization of extortionary activity involving partial devolution of power, as well as efficient extortion via cartelization or monopolization of productive activity, belong to the set of efficient strategies of mafias and dictators alike. We can now make the link to corrupt activities.

Corrupt bureaucracy as a system of patronage and loyalty

Corrupt activities should be considered as rent-seeking activities associated with the predatory hierarchies discussed above. Thus, we consider corruption to be a systemic device for the ruler to extract rents from the populace while at the same time securing loyalty, which protects him from revolt. This is in contrast to the mainstream literature on corruption,[24]

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[22]Bigsten and Moene (1996) document a tendency towards rent extraction from monopolies for the case of Kenya. Regarding organized crime, Fiorentini and Peltzman (1995) state: "In competitive markets...the high number of agents involved and the logic of competition do not allow for the collection of large rents from regulation net of its cost." Thus, similar to dictatorial regimes, the mafia prefers to extract rents from monopolies.

[23]Franzini (1995) asked: "What is to prevent us from regarding the mafia as an organizational structure that protects mafia firms on the basis of the advantages it offers with respect to individual protection?"

[24]For example, see Shleifer and Vishny (1993), Bardhan (1997), or Elliott (1997).

which defines corruption as an agency problem where lower level bureaucrats pervert sensible rules.[25]

Corrupt bureaucracy can be viewed as an extension of the principle of efficient rent extraction via monopolies: The bureaucracy can be considered as a monopoly on the granting of licenses that permit private sector activity, rather than direct monopolization of the business process. First, rents may be extract more efficiently through the sale of a limited number of licenses, rather than vesting a monopoly over a particular sphere of economic activity. Second, endowing only a few bureaucrats with the power to grant licenses enables the diversion of the licensing proceeds away from the budget towards private gain. Since the dictator depends on lower levels of the bureaucracy for rent collection and is himself vulnerable to overthrow by insiders, the role of corruption is to implement an effective extraction and reward mechanism.

The corrupt bureaucracy can be seen as an extension of the logic defining the relationship between King and Aristocracy. Under the Roman dictum of *Divide et Impera*, the corrupt bureaucracy represents the organizational form facilitating an increase in the optimal span of control of Warlord or King, and thus an increase in the limits of empire. **Corrupt bureaucracy *is* the predatory hierarchy defined in chapter four,** in that it provides the optimal mechanism for rent-extraction by a predatory ruler.

Also, corruption serves as a hostage mechanism to minimize the probability of defection or insurrection by lower level insiders of the corrupt bureaucracy: they are effectively constrained—due to their own participation—from turning to the public to denounce the system. On the other hand, the dictator can, when necessary, find a reason why an uncooperative bureaucrat is found guilty of corruption. Corruption is both the carrot and the stick that strengthen loyalty.

A mechanism with which to implement a predatory hierarchy of corruption is to provide the public sector bureaucrat with wages below subsistence.[26] By accepting the contract, the bureaucrat has provided himself to his superiors as a hostage in the sense of

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[25]Support for our theory is provided by a quotation found in Bardhan's (1997) survey article: "As Ronald Wraith and Edgar Simpkins say of English history: 'For two hundred and fifty years before 1688, Englishmen had been killing each other to obtain power...The settlements of 1660 and 1688 inaugurated the Age of Reason, and substituted a system of patronage, bribery and corruption for the previous method of bloodletting.'" Centralized power was strengthened by patronage and tendencies towards anarchy were contained.

[26]Ul Haque and Sahay (1996) recognize the linkage between official wages and corruption: at some point, public sector revenues fall with falling public sector wages due to increased corruption.

Williamson (1983).[27] **The bureaucrat must exploit the corruption potential inherent in public office in order to make good on low official wages.**[28] Superiors can enforce that most of the rents are passed upstream by threatening to dilute the relevant signature authority over the licensing monopoly. This is a particularly effective method of enforcing subservience in that it lacks transparency or accountability.

In the point of view portrayed here, **corruption is endogenous to a political system since the regime itself is predatory**. Licensing monopolies maximize the dictator's income while allowing a decentralized organization of economic activity where appropriate. Low public sector wages serve as a commitment mechanism to ensure that rents are passed upstream, while the probability of a palace revolution is contained. This is in contrast to other arguments about the causes of corruption, which portray the phenomenon as exogenous to the government that fostered such a system.

Corruption in different political systems

Once corruption is treated as endogenous to the political system of predatory dictatorship, we must address the issue of how corruption changes in changing political conditions.[29] This requires further clarification of the term "corruption." After all, the bandit stealing the farmer's crop would hardly be labeled a corrupt individual. Yet, he performs the same predatory act as the corrupt bureaucrat holding hostage applicants to his services. The only difference is that the applicant to the government service may presume a legality to the regulation in question.

We posit that corruption is a term that was developed to symbolize deviation from "morally right" or "legitimate" behavior, and that government regulation and legislation—for sometimes ill-defined reasons—has come to be considered "legitimate." Our analysis now turns to adaptations of internal organization to rent seeking in different political contexts. Since predatory hierarchies are only stable in a probabilistic sense, Machiavellian politics is still feasible, and the time path of actual regimes oscillates between strong dictatorships, dictators subject to a likely overthrow, and possibly anarchy. In addition, benevolent monarchs and democracies constitute feasible paths of political development. Corruption patterns are determined by the mode of rent-extraction associated with the respective political systems.

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[27]The arguments in favor of portraying low wages as a hostage mechanism are supported by anecdotal evidence from the developing world that some civil service positions in some countries are sold for the cash equivalent of several years worth of wages.

[28]De Soto (1989) asserts that corruption-inducing regulation exists solely for the purpose of generating corruption revenues.

[29]Similarly, Johnston (1997) has provided a classification scheme of analyzing corruption in different political regimes.

Under anarchy, predation typically takes place in a decentralized setting. Hence, there are few issues of corruption in its classical meaning. As the number of warlords in the economy decreases, and warlord organizations evolve to resemble the institutions of organized crime, rent-seeking activities would still be labeled extortionary rather than corrupt. We argued above that despotic systems are less damaging to general economic welfare than anarchic ones—hence it is unsurprising that seemingly more corrupt systems may have better growth performance than seemingly less corrupt but more openly extortionary systems.

Predatory hierarchies associated with weak and contested dictatorship can be expected to be poorly organized precisely because the dictatorship is weak and contested. The weakness stems from a lack of allies due to an insufficiently developed system of patronage. And the system lacks coordination in extortion by low-level bureaucrats due to an insufficiently developed internal organization of predation. There are possible contenders to the ruler's authority, which have varying degrees of autonomy over their own territory, some of whom are able to impose extortionary taxes outside the ruler's control. Shleifer and Vishny (1993) describe this mechanism of weakly coordinated predatory activity as a system of decentralized corruption, which is the most damaging to economic activity since bribe payers are ultimately faced with higher extortion rates. In turn, this reduces economic activity and leads to lower total corruption proceeds. We assert that this pattern is motivated by the political equilibrium of weak and contested dictatorship.

On the other hand, strong predatory rulers have successfully developed a patronage system for their defense, and therefore corruption is correspondingly well developed. The political economy of predatory dictatorships implies that economic performance is better than in anarchic or contested systems. This is a system that Shleifer and Vishny (1993) and Bardhan (1997) would classify as monopolistic corruption: users of government services are charged only once at specified rates. The system is sufficiently developed to credibly commit *ex ante* to bribery rates in the sense of Grossman and Noh's (1994) tax rates. Shleifer and Vishny (1993) show that monopolistic corruption is less detrimental to economic performance than decentralized corruption. Versus the benchmark of contested dictatorship, bribery rates go down, but total bribery proceeds go up.

The alternative view of corruption that prevails in the literature, namely that corruption represents an agency problem of sensible government rules being abused by corrupt bureaucrats—as defined by Shleifer and Vishny (1993)—becomes relevant as the process of political development progresses further down the path toward democracy. At some point, the predatory dictator receives more legitimacy (job security) from benevolence, rather than loyalty through patronage. Over time, an extortionary bureaucracy may outlive its usefulness and become a hindrance to the changing objectives of the increasingly benevolent ruler. With changing government objectives, previously desirable behavior within an extortionary hierarchy becomes "corrupt." In other words, corruption is a term that wrongly legitimizes all government action, and confusion as to efficiency consequences springs from there.

A weak democracy typically features meaningful constitutional protection of the citizenry against government sponsored rent-seeking for private gain, but nonetheless has weak political institutions. In this case, political rent-seeking may take on the form of what Bardhan (1997) labels "political corruption": the use of corruption proceeds to maximize re-election chances, rather than the pursuit of rents solely for private consumption.

The culminating point of political development may be found in modern day democracies, which have actively combated the old structures of patronage in exchange for democratically legitimized systems of Law. Predatory behavior of the polity expresses itself through maximizing reelection chances by securing funding from interest groups in society. As compared to the benchmark of political corruption, interest group rent-seeking represents a constitutionally legitimized form of predatory political activity. The previous discussion is summarized in Table 1:

Table 1. Rent-Seeking Patterns and Political Regimes

Political Regime	**Rent-Seeking Pattern**
Anarchy	'Each Against All'
Warlordism / Weak Dictatorship	Competitive Corruption
Strong Dictatorship	Monopolistic Corruption
Benevolent Monarchy	'True' Corruption
Weak Democracy	Political Corruption
Functioning Democracy	Interest-Group Rent-seeking

This table complements Table 2 in Johnston (1997, p.71) in that the Johnston allocation of corruption patterns to various regimes is consistent with our theoretical analysis. In addition, we wish to postulate the existence of an evolutionary time line with regard to the regimes identified in Table 1. While we have argued the case for the development from anarchy towards stable dictatorship, Grossman and Noh (1994) have suggested a path towards a benevolent monarchy. Grossman (1995) develops arguments towards the evolution of the welfare state, but the genesis of democracies is still an unsolved mystery within this paradigm. Our main contribution is to relate various corruption patterns to different politically motivated rent-seeking regimes.[30]

[30]One unanswered question in this literature is why contested dictatorships impose higher taxes, while the threat of a contested election leads politicians in democracies to improve the level of public services to their constituents. Our answer would be that the modern state has evolved to the point where rent-seeking for private gain under dictatorship is supplanted by the rent-seeking of legitimized interest groups through the democratic process.

Corruption: A misnomer

The confusion surrounding the term corruption stems from modern societies that have come to take political legitimacy for granted and liberally transposes the term to societies based on wholly different objectives and structures. The above analysis has argued that once corruption is viewed as a predatory activity that symbolizes a precondition to stable dictatorship, the very term of corruption is misleading, since it has to be examined in the context of a particular political system. Accordingly, published corruption statistics based on subjective perceptions of individuals (e.g., businessmen from developed nations) probably confuse corruption with other, similar, predatory activity, and therefore, empirical studies will continue to suffer from shortcomings surrounding ambiguities of the concept of corruption.[31]

The more apologetic literature on corruption assumes governmental legitimacy as a matter of course. Accordingly, much of that literature describes the ill effects of corruption versus the benchmark of mature economies. But the very means of facilitating economic growth in benevolent dictatorships or stable democracies may not be useful in preventing predatory dictatorship from falling back to anarchy.

VI. Discussion and Conclusion

The key contribution of this paper to the literature is to sketch a process of social aggregation at the micro-level in an environment of pure anarchy. Warlords (mafias) and dictators emerge endogenously as efficiency adaptations to the game of anarchy. Efficient rent-seeking patterns seek to balance positive income effects against negative outcomes as defined by dictator or warlord. We have argued that predatory hierarchies satisfy such characteristics.

Judged against the background of the literature on economic organization,[32] **predatory hierarchies offer an additional perspective into the genesis of organizations.**

We have argued that dictators favor taxation via monopolies due to the administrative cost of taxing consumer surplus. The creation of monopolistic firms (crony capitalism) is a rational strategy whereby the dictator can maximize expected income. Alternatively, corrupt bureaucracies endowed with licensing privileges constitute an organizationally efficient form of rent extraction.

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[31]Mauro (1995, 1997), who established an empirical link between nations' corruption and growth performance, acknowledged a potential endogeneity bias due to survey respondents commingling traditional corruption activities with other extortionary activities and a country's growth record.

[32]E.g. Coase (1937) and Williamson (1985).

Thus, we have linked the literature on kleptocratic regimes to the literature on corruption, and we have argued that many activities typically defined as "corruption" are in effect predatory in nature. This paper has described "corruption" as an organizational solution to the expansionary intent of warlords and dictators alike. When analyzed in the light of rent-seeking dictatorship, "corruption" is systemic rather than coincidental.

The effects of corruption are evident.[33] The fundamental question, however, is whether the problem is corruption or politics. That is, what would be the impact on the political structure in a particular country if anti-corruption efforts were to be pursued independently of their environment? Can corruption be rooted out without a change toward a legitimate political process? If the arguments in this paper are correct, elimination of corruption in some instances could lead to anarchy rather than efficiency since it destablizes predatory dictatorship and hastens the path towards internal revolt.

Civil service reform or demonopolization of industry are particularly interesting issues because we posit that, in some countries, the true objective of the bureaucracy is the extraction of rents and the channeling of a share of those rents to the top of the hierarchy. If this supposition is correct, failures of efforts at reform might, in some instances, be explained through the logic of predatory kleptocracy. When reforms are consistent with a ruler's evolution toward benevolence, they serve to reinforce a virtuous process. For example, comprehensive reform of civil administration comes to fruition when a ruler gains more stability from benevolence rather than patronage. On the other hand, when reforms would threaten the survival of the regime, they may be systematically rejected, or-in the worst case - lead the country onto a path back towards anarchy.

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[33]For example, see Krueger (1974), Keefer and Knack (1997), Kaufmann (1997), Tanzi and Davoodi (1997), or Tanzi (1998).

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