

PROPERTY RIGHTS AND THE EVOLUTION OF THE STATE

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Abstract

Using property-rights tools, this paper develops a theory of the transition from despotic to rule-of-law regimes, relying on the notion that rulers and subjects are interested in maximizing wealth. Keeping subjects in check enhances despots' internal security, but at the cost of lower output, and of less wealth for the despots. Enhanced wealth is especially valuable for protection against outside threat. Subjects will increase output only if provided with rights to, for example, ownership, movement, and voting. Despots can guarantee them these rights by relinquishing some of their own power.

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Many democracies have been established in recent decades, only to fall soon thereafter, having been taken over by dictators. Other democracies have proved remarkably stable, and their evolution into the democracies they are today has been gradual. Some of the latter however, emerged from an earlier state of dictatorship. I argue below that dictators face a tradeoff between personal wealth and security; when choosing more wealth they become less autocratic. Assuming individual maximization rather than relying on taste or custom, I derive conditions under which freedom and voting institutions might evolve gradually out of dictatorships. I show why the process constitutes the evolution of the rule of law and not a deliberate drive towards democracy.¹

In attempting to determine the direction an initially autocratic state may take, I focus on two contracting issues.² One is the distinction between self-enforced agreements and agreements enforced by a third party. The other is the role of contractual incentives and the problems of effecting them. I build on the notion that the security of a ruler depends crucially on whether he remunerates his subordinates with a fixed reward or allows them to become residual claimants to their actions.

Suppose a country is taken over by an “absolute dictator” who values his safety and his personal wealth. Unburdened by the previous regime's guarantees,

¹ In terms of the theory, the main contribution here is the synthesis of findings using a diverse set of tools from contract theory and from the theory of property rights necessary to study this problem in political economy. Some of these tools, however, had to be modified to fit the task at hand.

² In Barzel (1999) I construct a model in which dictatorship is one of the outcomes that emerges from more “primitive” conditions. Crucial to this work is a distinction between violence-using enforcers, and other third-party enforcers.

the dictator may immediately appropriate all wealth, non-human and human. Being absolute, he has the power to confiscate any asset his subjects may own at any future time. His status is most enviable; he is the wealthiest, most powerful and most secure person in the domain. In reality, however, no dictator is truly “absolute.” Neither is a dictator able to extract all the wealth his subjects are capable of producing, nor is he entirely immune to being overthrown.

The actual dictator stands to gain wealth by exchanging with his subjects and by selling them the right to exchange with each other.³ By doing so, however, he may be compromising his own safety. The trade-off between wealth and safety arises because, on the one hand, as subjects' freedom grows, they gain more from increasing their output, and thus they are willing to pay more to secure that freedom. On the other hand, subjects may use the wealth they accumulate and the freedoms granted them to overthrow the dictator.

Many dictators seem to opt for safety, choosing not to cede to subjects rights, for example, to move around or select their occupation. Wealth, however, may be used to enhance safety against outside threats. A dictator may deem the trade-off attractive and use his wealth-gain to better secure his position when the chance is high that he may lose his job, and his head, especially as a result of a take-over from the outside. The threat of such take-overs seems to have been significant in medieval England, but not in Tokugawa Japan, or during certain periods in ancient China. In the discussion that follows, I focus primarily on the ruler who perceives that the gain in wealth and the added security it can secure to be large enough that he is willing to sacrifice some of his internal security to obtain it.⁴

³ Olson (1993), and McGuire and Olson (1996) analyze in detail some of the advantages to dictators from granting rights to their subjects. I discuss their contributions later in this section.

⁴ Findlay (1992), in a somewhat similar vein, contrasts the lack of incentive

Absolute dictatorship is mutually exclusive with the existence of a collective action mechanism and with third-party enforcement. Under an absolute dictator, subjects cannot form contracts with each other because, other than the dictator who will confiscate their gains, there is no third party to adjudicate and enforce them. All agreements, then, must be self-enforced. An actual dictator who opts for wealth gain must permit his subjects to own and accumulate wealth, and he must provide assurances, initially self-enforced, that he will not confiscate their gains. He has to initiate procedures that constrain his own behavior. As we will see, in the absence of setbacks, the institutions he will erect will evolve over time into what is often viewed as a full-fledged democracy. A crucial step in that evolution is the formation of a collective action mechanism. The ruler will cooperate in forming such a mechanism to enable subjects to actively oppose him in case he attempts to confiscate their property. Although my argument is Hobbesian in spirit, it stands Hobbes on his head in that here, the ruler gives up some of his own freedom in order to gain his subjects' trust.

The starting point of absolute rule by a single person greatly simplifies the specification of the objectives of the ruling body. Beginning at the onset, rather than in mid-stream of the evolving institutions makes it easier to determine the direction of causality in the main relationships being studied. The onset of dictatorship is also a beginning in that it may emerge after a drastic setback to the rule of law, even if the rule of law has been substantially developed; its re-establishment then entails a fresh start. Finally, beginning with dictatorship also makes it clear that the third-party enforcement associated with the rule of law must be preceded by collective action.

for growth in monolithic, closed regimes to the adventurous spirit of open competing states.

History demonstrates that the life of dictators is under constant threat from their own “supporters,” from internal revolt and from other states. A dictator may reduce the threat from within by repressive measures. Although the use of repression significantly lowers the dictator’s pecuniary income, its absolute level is likely to be high. Absent any serious outside threat, dictators seem to willingly sacrifice the extra income to enhance their security. When an outside threat emerges, however, more resources are needed to counter it. By relaxing his control, the dictator will gain resources. Moreover, the more time he has the larger the gain. If the outside threat is sudden and immediate, he cannot achieve much by reducing the level of repression. But if he has time for preparation, he may *choose* to relax his repressive measures in order to gain the wealth that can mitigate the threat.⁵

Following the Norman Conquest in 1066, relative to most countries, England was not subject to many major disruptions. A rudimentary rule of law was established there relatively early, and its institutions advanced substantially throughout the Middle Ages. I illustrate, and in a couple of spots test, the model I develop with events from England during that period. Limiting the focus to one country has the merit of holding many factors such as size, religion, climate and location constant. A model capable of accounting for the political evolution of even a single country would constitute a significant advance in our knowledge. To test the model more generally, the differences across countries must be accounted for, but that goes beyond the scope of this paper.⁶

Olson (1993), and McGuire and Olson (1996), address the same issue I do. McGuire and Olson (p. 72) say, "By providing a peaceful order and other public

⁵ It seems to me that this is what Communist China has been doing for the last two decades and what Gorbachev tried in Russia, not too successfully for himself.

⁶ Barzel and Kiser (1997) test some of the propositions of this paper mostly by comparing medieval England and France.

goods, he [the bandit who becomes an autocrat] makes his subjects more productive...[and] he obtains more resources for his own purposes than from roving banditry." Indeed, their conclusion (p.73) that a "self-interested actor with unquestioned coercive power...[will] act in ways... *consistent with the interests ... of those subject to the power* ... as if the ruling power were guided by a hidden hand" (italics in original) applies, with appropriate caveats, to my case too. Yet there is no overlap between my project and theirs; the two are complementary. The questions I ask are radically different from theirs. In McGuire and Olson's analysis, institutions are all in place. They inquire about what quantity of resources the ruler will extract from his subjects given that the deadweight loss from taxation affects him, too. They argue as well that he will encourage investment in public goods for production, from which all gain. I, on the other hand, am concerned with the evolution of institutions. I take it as given that the ruler will extract what is best to him, subject, however, to the trade-off he must make between his security and material wealth. I consider the restrictions he will impose given that others covet his position, and the mutually beneficial institutions, including voting institutions, that he will create as his regime gains stability. In addition, McGuire and Olson compare subjects' income under autocracy to that under democracy. This is not a legitimate question within my framework. In my framework voting institutions are endogenous, and are introduced to enrich the ruler and his subjects.

I open the discussion in Section One by analyzing the ruler's trade-off between his personal security and his material wealth. In Section Two I demonstrate that, in spite of the ruler's initial confiscating power, under certain conditions he can guarantee the gains needed to induce his subjects to make deals with him. I indicate in Section Three when the ruler may choose to reverse himself and become more dictatorial and why stable conditions are necessary for the emergence and the advance of the rule of law. In Section Four it is shown that the

erection of voting institutions in England, including parliament and its seemingly democratic trappings, can be viewed not as a result of a power struggle between ruler and subjects but rather as a means of cooperation which is part of the parties' wealth-maximizing process. In Section Five some refutable implications are derived, and in Section Six, the concluding section, I compare the received approach to the rule of law and democracy to the approach taken by this paper.

I. What Can the Ruler Gain by Granting Rights to His Subjects?

It is well recognized, especially since the collapse of the former Soviet Union, that dictatorial regimes are "inefficient." In this section I analyze the source of the inefficiency and why some regimes nevertheless allow it to linger.

Dictatorial regimes are characterized not only by the absence of civil rights, but also by the subservient status of a large fraction of the subjects. Holding subjects to such a status is not without cost to the dictator. Adam Smith viewed slavery as inefficient, stating that "work done by slaves...is in the end the dearest of any" (*The Wealth of Nations*, p. 411). The inefficiency, he observed, resulted from the fact that slaves were not residual claimants to their own efforts. He failed to ask, however, why the practice persisted through much of history. Smith's explanation for inefficiency also applies, though to a lesser degree to serfs and, indeed, though under caveats, to any individual constrained by another. I hypothesize that the owners of slaves and the masters of serfs (and of other classes of the oppressed) were willing to sacrifice income because the restrictions they imposed reduced the ability of their subordinates to rebel. Students of the dictatorial state, whether historians, political scientists, or even economists, seem unaware of this trade-off, which, in my view, is of the utmost importance. In this section I explore this trade-off and factors inducing a move along its frontier.

If policing and monitoring were costless and perfect, a wealth-maximizing dictator would extract the entire net value of his resources.⁷ Such a ruler would be truly absolute. His workers would receive only their minimal “maintenance” expenses, i.e., the amount required to maximize their product net of these expenses. Monitoring or policing would be trivial if a person’s productive ability were known precisely. Were the capability of every person known, no one would be required to do more than he could, and so no one would fail. We may view the relationship between the ruler and subjects as “agreements,” whereby each subject would simply agree either to turn in the maximum output he could produce or face a severe penalty. Under such conditions there would be no reason to disallow any person full freedom as long as he fulfilled his part of the agreement; however, he would be left with little time or energy to enjoy that freedom.

In reality, of course, policing and monitoring are not costless; the ruler cannot possibly know everything. In particular, he cannot know with accuracy what are subjects’ individual capabilities. It is prohibitively costly to acquire this information. He may resolve the problem by employing them and supervising their inputs, or by imposing an output quota (a fixed tax). Output quotas produce a radically different distribution of residual income than does input supervision.⁸ Under input supervision, especially when it is accompanied by severe restrictions, the ruler extracts an effort level from each individual, which tends to be constant

⁷ Modeling the ruler as a wealth-maximizer is not new. Recent contributions that maintain this assumption at least part of the time include North (1981) and Levi (1988). Olson (1991), too, has been studying the behavior of a maximizing dictator and the question of the conversion of a dictatorial regime to a democracy. Lane (1958) anticipates the present paper in delineating the evolution of a violent regime into a democracy by the process of wealth creation. Lane’s focus is on Venice, a long-lived, stable, rule-of-law regime.

⁸ Khalil and Lawarrée (1998) demonstrate the proposition. Their setting, however, is more restricted than the one considered here.

across time periods. The ruler is the residual claimant of the variability of an individual's output level and value. Under output quotas such roles are reversed; the ruler tends to receive a fixed output flow. Subjects will fully exploit their productive abilities since they are the residual claimants of the variability in output. The quota system, then, enhances workers' ownership rights. Since subjects operating on a quota basis retain the gains from efficient resource use, they are motivated to maximize joint output (except in that the losses they can bear are limited by their wealth). When an individual's quota is set in money rather than in kind, he has the opportunity to exploit his comparative advantage even more fully, whereas under input supervision and under a quota set in physical units his master must spend resources to discover that comparative advantage.

But how would the ruler set the individual quotas? The information regarding the maximizing quota levels is essentially the same as knowing individuals' capabilities and it is not easy to come by. Given its intended use, individuals are unlikely to reveal their abilities. Obtaining the information by direct observation is also costly. People are unequal to each other, and each person's productive ability varies across time periods. Other productive factors are also heterogeneous, and output is not uniform, either. Since inputs and outputs are observed imperfectly, the performance of individuals is not easy to discern, and it is consequently difficult to determine how potentially productive each worker is.⁹

Suppose the ruler nevertheless attempts to extract from his subjects in-kind or money payments. Since he does not possess accurate information about their abilities, the amount he will demand from each will diverge from what each could deliver. Errors, positive and negative, are costly to him. When he demands too much, he will be forced to destroy or severely punish those individuals who are unable to deliver, for, absent any penalty, no one would deliver. The abilities of

⁹ See Barzel (1977, 1982).

these individuals, at least in part, will then be wasted. Moreover, individuals who become aware that the demand on them exceeds their capacity may promptly choose to revolt. Neither is the ruler much better off when his demand falls short of individuals' ability to deliver. First, he loses the difference, and second, which is of more concern to him, the existence of such a difference gives subjects an asset they may use to topple him (provided they have, or can form, a collective action mechanism). Although the ruler is the presumed owner of his subjects, his rights, in terms of his ability to extract their entire productive abilities, are not secure, then, and he will seek ways to better protect them.¹⁰

The ruler can reduce the threat of revolt by imposing constraints on his subjects.¹¹ He can constrain their freedom of movement, the kind of assets they may own, and their freedom to trade; he may require payment in kind rather than in money, and may even stipulate how they should use their resources and then monitor their efforts.¹² Appropriately set, these constraints reduce the ability of individuals to revolt.¹³ However, they are costly to the ruler in that they reduce output. In addition, enforcing them requires monitoring, and the more thorough the enforcement, the higher the monitoring costs. Economizing on these costs leaves subjects leeway to shirk.¹⁴

¹⁰ I am following Alchian and Allen's (1977) definition of rights. They define (economic) rights (p. 114) in terms of a person's expectation of enjoying (the fruits of) assets. These are distinct from legal rights that the state chooses to delineate and enforce.

¹¹ Tullock (1987) extensively discusses the problems rulers have in averting revolt.

¹² Before their defeat by King David, the Philistines prohibited the Israelites from using tools made of iron.

¹³ The setting here is essentially one of a principal who observes the agent's effort and the quantity and quality of the agent's output with error: error that can be reduced at a cost. Risk-neutrality is implicitly assumed.

¹⁴ As technology has become more sophisticated, it might appear that it could be employed to monitor subjects at a modest sacrifice in output. The dismal

The restrictions need not be permanent. The ruler is likely to remove them as changes in economic circumstances lower the net benefits they yield, and as he accumulates information about the productivity of his various subjects and about the chance they will revolt. Changes in the opposite direction will lead him to impose more, or more severe, restrictions. One way to avoid imposing an *excessive* output quota is to offer individuals the option of switching to operating under quotas. The ruler can gain by this arrangement if the quotas he sets significantly exceed the net value of individuals' output when they are monitored by inputs

The individuals who deem the terms of exchange to be satisfactory will accept the offer. Since they self-select, there is little danger they will switch to a quota they are incapable of meeting. They will trade higher quotas for less severe restrictions because the option of having greater freedom is valued for its own sake and because, as just stated, it is likely to make them more productive. Such a relaxation also poses a greater threat to the ruler's security; the errors in calculating the new payments enable some subjects to amass resources which, provided they can act collectively, can be used to topple him.¹⁵ Thus, changes in restrictions provide the ruler with a tradeoff between his income and his security. For example, the introduction of irrigation reduces output variability, making the tradeoff more favorable; the ruler is expected to relax the restrictions then. He can allocate the higher income toward both more goods and more security.

During the middle ages feudal services, such as military service by the nobility and work obligations by serfs, were converted on a large scale to taxes or

performance of the Soviet Union and the severe constraints on individuals' production activities, however, do not support the notion that it was effective. The reason could be that the counter technological means have advanced at a similar rate.

¹⁵ Ethnic minorities that are tied together by factors such as language or customs, then, are less likely than less cohesive groups to be offered to operate under quotas because it is easier for them to act collectively.

in-kind lump sum payments: a switch from supervised work to a quota or monetary payment. The conversion seems to have led to a great increase in specializing. The army became more professional, towns grew rapidly,¹⁶ and individual peasants reduced their range of activities, which led, among others, to a flourishing trade in wool.

It is well known that a ruler can benefit by tying his own hands: circumstances exist in which he gains by granting his subjects more freedom. In the following pages circumstances will be encountered time and again where the ruler willingly relaxes constraints. Conditions under which the subjects expect the ruler not to confiscate their gains will be discussed in Section Two, below.

Subjects value the right to own assets more highly if it is accompanied by the right to trade. A ruler who grants subjects additional trading rights can assign them, then, still-higher output quotas. The value of the right to trade one's output depends on its suitability for direct consumption. When the output consists of the commodities the individual would have chosen to consume anyhow, the right to trade is worth little. The value of the right to trade increases as the divergence widens between individuals' output and their desired consumption. As trading opportunities become more attractive, the gains brought about by specializing increase, and, therefore, the incentive to relax restrictions is intensified. It is expected, for example, that the opening and expansion of trade between villages and cities was followed by the acceleration of the conversion of serfs' duties to money payment obligations. Trade facilitates the accumulation of wealth and the access to weapons, both of which make insurrections more likely. Rulers who are more internally secure, being subject, for instance, to fewer attempted uprisings,

¹⁶ Subjects in chartered towns were exempted from the military obligations that free subjects had to perform. This presumably reduced the chance that towns, some of which became rich quickly, would possess the military skills that would facilitate rebellion against the king.

are less threatened by such freedoms. A ruler whose internal rule is insecure to begin with, then, is expected to restrict trade and is not expected to grant many rights to his subjects.

A useful, and natural definition of (the level of) freedom emerges from this discussion: The fewer and the less severe are the restrictions imposed on an individual, the freer he is.¹⁷ Although it is difficult to measure “freedom” and to compare the increase in freedom by the removal of different restrictions, the removal of one without adding any other clearly enhances freedom. Now the ruler is expected to extract fees for granting freedoms. Nevertheless, subjects’ freedom is expected to be positively related to their income. The errors the ruler makes in setting the individuals’ payment level are likely to get larger as the removal of the restrictions becomes more complete. Therefore, as a ruler allows his subjects more freedom, some will be able to amass more wealth.

The ruler who grants subjects the right to own assets or to trade must guarantee that the rights will be honored. If people doubt they will be able to retain their rewards, they will not switch to quotas as often, and the quotas themselves cannot be set as high. Without a guarantee, then, the gains the ruler stands to make by converting to the quota system are greatly reduced. A ruler who guarantees the rights that he grants, then, is simply becoming wealthier. Whereas the ruler is “absolute,” being “above the law,” and could renege on his guarantees, he chooses to build a reputation and commit himself to abide by the law. He gains by relinquishing some of his power, granting his subjects self-enforced

¹⁷ Workers employed for wages (the “servants” in Coase’s “master and servant” terminology) are less free than they would be if they were self-employed. Free individuals who agree to become employees and submit to others’ instructions must be compensated for the freedom that they relinquish.

constitutional guarantees of their freedoms and of the security of their wealth against confiscation.¹⁸

What is meant by an agreement between an absolute ruler and his subjects? Because of the cost of supervision, the ruler's ability to compel subjects to do what they are capable of is limited. He must get their consent, explicit or implicit, if they are to do some of the things which are too costly to extract forcefully. Subjects will voluntarily deal with the ruler only if they expect to gain from such dealings. Since there is no third party to enforce agreements with the ruler, those who deal with him, then, must perceive that the agreements are self-enforced and that he will not gain by confiscating their gains. In the following section I will demonstrate that circumstances do exist such that the ruler will not gain from confiscating subjects' gains.

II. The Ruler vs. the Rule of Law

It is well known that the power to confiscate is not an unmixed blessing; no one would do business with a partner who would seize the gain generated by dealing with him. Although the ruler stands to gain by voluntarily abstaining from using his power, a mere stroke of his pen will not do. Consider a loan made to the ruler. Its present value net of loan repayment may be positive, but, once it has been granted, the ruler will benefit even more by failing to repay it altogether.

¹⁸ Montesquieu, in *Esprit des Lois*, says "we owe...to the avarice of rulers the establishment of a contrivance which somehow lifts commerce right out of their grip," (Book XXI). Several decades later, James Stuart, in his *Inquiry Into the Principles of Political Economy*, observes that "Trade and industry...owed their establishment to the ambition of princes...principally with a view to enrich themselves...and that people, having the fund of the prince's wealth in their own hands, have it also in their power, when it becomes strongly their inclination, to shake off his authority." Hirschman (1977) discusses these ideas, and cites the above statements in his monograph.

Without credible, self-imposed sanctions, nobody will grant the loan to the ruler. The ruler will refrain from using his power only if he will suffer net losses in case he reneges on his promise to repay the loan.¹⁹

In the case of the already-granted loan which is not self-enforced, it is clear that if the ruler is concerned with credit only (and not with his reputation in other areas), he will gain from confiscation. It is also clear from the literature that under repeated interaction reneging is not always profitable. Less clear are more specific conditions under which the ruler will avoid confiscation. I will now demonstrate that such opportunities were available by presenting three examples pertaining to the problem at hand. I present more than one such opportunity because the power of each to prevent confiscation is limited; each provides protection against confiscation only for a subset of the potential cases. Each, then, may contribute to reduce the scope of profitable confiscation.

First, the ruler may deem the cost of the information he needs to determine what there is to confiscate as prohibitive. In the context of setting quotas, confiscation may take the form of raising the quotas of the abler workers after promising that the original quotas were “permanent.” Given the difficulty of observing performance, the cost to the ruler of obtaining data indicating if, and by how much, he can raise the quota of an individual above its initial level may exceed the extra value he may receive. When subjects perceive such costs to be high, they will be more willing to accept the quota arrangement.

Second, certain types of confiscation entail a change in contract form that reduces the confiscator's income from the transaction itself. The reduction may be

¹⁹ Hicks (1969) concluded that the ruler would always gain by repudiating his debts. In Barzel (1992), I show that taking into consideration factors such as the ability to sidestep church-imposed usury restrictions, which Hicks overlooked, the ruler can gain from honoring his obligations. Over a long period during the Middle Ages in England, the kings honored their obligations.

large enough to negate the gain from confiscation. Consider a promising new enterprise which a subject has a comparative advantage in managing. To maximize the income from the enterprise, the manager must become a (partial) residual claimant to the enterprise's income. Correspondingly, the ruler will organize the business so that the income he extracts takes a (relatively) fixed form. Confiscation here consists of appropriating the positive residuals from the enterprise. By appropriating residuals, however, the ruler becomes more of a residual claimant to the enterprise's income, and, by the same token, the manager becomes less of a residual claimant. But this will cause the enterprise to be managed less profitably, thus increasing the probability that the venture will fail, and resulting in a lower post-confiscation income flow. The ruler, obviously, will be expected to refrain from confiscation when it is perceived to lower his wealth.

Finally, the confiscation of the assets of one person tarnishes the ruler's reputation and signals to others that their assets are also at risk. To reduce that risk, these other individuals will refrain from engaging in activities that could benefit the ruler. Such a loss of potential benefits may exceed the gains from confiscation. In the context of quotas, the ruler can gain by making a standing offer for the option to switch to a fixed quota and allowing subjects to accept whenever they wish. If they observe that he tends not to keep his promise, they will be reluctant to convert the option. Moreover, the less subjects fear confiscation, the more they will invest in assets and skills that are specialized to their post-switching activities. Confiscation at any particular time may backfire because it will deprive the ruler of some of the additional future gains that could have been forthcoming from subjects' switching.

The force that yields the self-enforcement in the third case is the ruler's gain from maintaining his reputation for non-confiscation. This is a general factor that may be superimposed on the other cases as well, thereby enhancing their self-

enforcement. In these cases, as in others, the greater is the expectation of continuity in a relationship between ruler and subjects, the greater is the ruler's incentive to keep his promises. Correspondingly, the longer he and his descendants are expected to rule, the more trustworthy he becomes. A young ruler can make credible commitments into the future, and, if he has an heir, the commitment may extend beyond his expected lifetime.²⁰ Such a ruler, then, is wealthier than an heirless or an older ruler; the latter's discount rate is higher. The susceptibility of an heirless ruler to the last period problem may account for both rulers' and subjects' efforts to ensure succession.²¹ In addition, if future gains are expected to eventually dry up, confiscation becomes more attractive, as it does also if the ruler's discount rate increases. In such cases the ruler is expected to provide more assurances against confiscation. He may, for instance, allow subjects to settle closer to the border, which makes escape easier, and he may allow them to own arms or to fortify their homes and communities to increase his cost of confiscation.

The ability to make credible commitments also enables the ruler to create an enforcement mechanism that is independent of him.²² A ruler will more effectively persuade his subjects to deal with him if the judiciary (and the police) obey the law rather than always favoring him. He will gain, then, from making the reward structure of judges (and the police) dependent on following the law and he will cede to them some independent power.^{23, 24}

²⁰ I am assuming parental love. Tullock (1987), however, draws attention to the threat that a designated successor poses to the existing dictator. He also points out that love did not always dominate father-son relationships.

²¹ See Klein and Leffler (1981). Kreps, *et al* (1982) present a more general discussion of repeated prisoner dilemma games.

²² The medieval (and other) English kings could not be sued. There were, however, other, indirect ways within the legal system to settle disputes between subjects and the king.

²³ In England, the ruler may have attempted to create (or to maintain) an independent judiciary in the medieval jury system. The jurors, appointed by the

The most decisive step in the creation of independent enforcement is the formation of a collective action mechanism with sufficient power to oppose the ruler. Obviously, only a secure ruler who is confident that his subjects do not wish to topple him will create, or allow the creation of, such a mechanism. In England, the council of the barons and, subsequently, parliament seem to have been such mechanisms. I will discuss these institutions in the two following sections. A collective action mechanism can be exploited for third-party enforcement. It also accommodates the expansion of the set of enforceable agreements between ruler and subjects and among subjects. Third-party enforcement makes long-term relationships easier to maintain, and enables the parties to commit resources that specialize in their projects. Long-term contracts make it easier for the parties to protect their specialized resources, and reduce the parties' incentives to spend resources to determine whether rents that may be captured are available.²⁵ A dictator, then, may use a bootstrap operation to gradually convert his regime to the rule of law.

Both historians and economists often characterize absolute rulers as "predators." Here I assume that rulers always maximize their wealth; whenever they perceive a net gain from confiscation, they will confiscate. Nevertheless, it seems that viewing them as predators serves no good purpose. If, as I believe to be the case, the term "predator" is used to mean that the ruler will confiscate whenever the opportunity arises, this implies that he is overlooking available

king, were dignitaries in their communities. One of their functions was to delineate the ruler's rights. See Pollock and Maitland, pp. 140-141.

²⁴ Montesquieu (1748) was probably the first to advocate the "separation of powers," considering it to be a necessary condition for liberty. The focus here is on the ruler's gain from the policy of separation.

²⁵ Johnsen (1995) shows the commitment value of long-term contracts. Rey and Salanie (1990) analyze long-term contracts and show their superiority under asymmetric information. See also Fudenberg, Holmstrom and Milgrom (1990).

temporal trade-offs and this behavior is inconsistent with maximizing.²⁶ Suppose it were clear at contracting time that later the ruler (or, for that matter, the subjects) would be able to engage in predatory action and to capture more wealth. In that case the contractors could increase the value of their transaction by making the appropriate provisions within their contract to avoid the resource use that capture entails. Each party perceives, then, that the provisions of the contract (and the underlying conditions) assure that, after the contract is signed, the cost to the other of capturing more of its wealth will exceed the gain from such a capture.²⁷ Abstracting from the perception by one party that the other has made a mistake (or “trembled,” in Selten’s terms), as maximizers, the parties intend to honor their contracts and abstain from predatory action. As is discussed in the next section, reneging, predatory action or confiscation will occur, but only because of unanticipated changes in circumstances.

The grant of monopoly rights over trading opportunities is sometimes considered as evidence of the ruler’s predatory bent. This type of action, however,

²⁶ Olson (1993) recognizes this point.

North and Weingast (1989) use a framework quite similar to the one presented here to analyze seventeenth-century England. Among other things, they state that the Stuarts engaged in more predatory behavior than their predecessors did. But why were the Stuarts *more* predatory than Queen Elizabeth I, their predecessor? Unless conditions changed between the two regimes, the confiscation level should have been the same. North and Weingast fail to recognize the possible change in conditions that underlies the change in behavior. The consequences of such a change are likely to prove relevant to their study.

²⁷ A substantial literature that formally models the predatory state has emerged during the last two decades. This literature, to the extent I am familiar with it, is fatally flawed. In their models, the authors seem to invariably, though implicitly, adopt the major Walrasian assumption of costless product information and the costless delineation of rights that it entails. The Coase theorem applies to such a world. Resource allocation, then, must be efficient. Where predatory behavior exists, however, resources are used to transfer wealth. This outcome, then, is inconsistent with the premises of these models.

is neither necessarily predatory, nor necessarily inefficient. Recall that at the onset of the absolute rule, the ruler owns everything, which includes the rights to new trade projects. Selling the rights to particular new trading opportunities, then, does not constitute confiscation or predatory behavior. Moreover, trading opportunities, particularly in foreign trade, must be discovered, developed, and protected against piracy. The investment in discovery and protection can be recovered only if the investors obtain exclusive rights, i.e., a monopoly, over the trade opportunities. Payment to the ruler for the exclusive right to trade and for its protection may be made in advance in a lump sum; alternatively, payments may be made in the form of tariffs. The ruler who specializes in and wishes to retain the monopoly on the use of force may agree to provide military protection. The potential for tariff revenues encourages the ruler to actually provide protection. The more essential is protection, the greater is the likelihood that the ruler will impose tariffs rather than collecting payment in advance, even though tariffs have a greater effect on resource allocation.

III. Exogenous Change, The Rule of Law and Stability

The two main themes I discuss in this section are (1) The (time-path of the) evolution of an initially dictatorial regime toward the rule of law, under the assumption of no major disruptions; and (2) The reasons for and the effects of major disruptions.

A dictator who has just taken a state over cannot benefit from the potential gains generated by third-party enforcement because there can be no third party. If the dictator wishes to form agreements with subjects, subjects must perceive the agreements as self-enforced. Subjects have to assess whether or not the dictator will lose from not keeping his side of the agreement. A brand new dictator,

however, has no track record, and subjects have little specific information by which to predict his behavior.

As time passes, subjects accumulate information on the dictator's patterns of behavior (and he on theirs) which enables them to estimate more accurately what his gains and costs are and how reliable he is. Given the potential gains from agreements, the dictator can deliberately take steps that reduce his gains from confiscation. He may, for instance, make investments that will depreciate if he loses the cooperation of his subjects. He may allow subjects to bear arms to make confiscation more risky to him or to settle in areas where confiscation is difficult. Finally, and most importantly from the viewpoint of the evolution of the rule of law, he may facilitate the formation of a mechanism by which subjects may act collectively.

With the formation of such a mechanism, subjects acquire the means to resist the ruler, and thus the ruler becomes less absolute. In medieval England, parliament with its two houses very clearly had this power: it deposed a king. The council of the nobility—an ad hoc group convened by the king that would eventually become parliament—seems to have already held such power at a much earlier date. In an early draft of the Magna Carta there is a clause empowering the nobility to confiscate royal properties.²⁸

The existence of a collective action mechanism allowed for a major change in the interaction between subjects and ruler: It made it easier for subjects to impose sanctions on the ruler. It also allowed a shift in the form of agreement

²⁸ In that early version, the Magna Carta explicitly allowed subjects--the barons--to confiscate the king's property in the event that the king violated contract obligations. The clause allowing for such confiscation, however, is not included in the final version of the document. If subjects did indeed have the power to confiscate, they did not use it; they must have concluded they were better off not exercising that power.

among subjects. Initially, agreements had to be enforced without the help of the state. With the collective action mechanism they could form agreements that were (more fully) enforced by the state and thus becoming “contracts.”

In spite of their ability to gain, mostly by charging fees for the rights they granted, dictators often ceased their cooperation with subjects. Major disruptions seem to be the cause for stopping the cooperative efforts. History makes it amply clear that dictatorship is at least as common as the rule of law, and that even when the rule of law makes headway, its reversal is no less common than its continued success. Still, my upcoming discussion of setbacks is much briefer than the discussion of the advance of the rule of law. The asymmetry does not reflect the relative importance of the two forces but rather the fact that advance of the rule of law is cumulative and gradual, while major setbacks to it tend to be abrupt. I argue that the ability to form agreements and subsequently to form contracts and to enforce them is a condition for the success of the rule of law. Exogenous shocks induce the abrogation of agreements, outright confiscation and the return to dictatorial rule.

At the outset of each agreement between subjects and ruler, the parties consider the safeguards against confiscation to be adequate. However, they are never certain of their assessment, and, in any case, the safeguards may weaken as conditions change. During each period, the safeguards are “tested.” If they pass the test, the cumulative evidence of their effectiveness increases. If their performance is not entirely satisfactory, they have proven less effective than originally thought, and the parties’ ability to form agreements suffers; safeguards deemed initially adequate have become inadequate. In the future, the parties will have to spend more resources on delineating and enforcing agreements.

If conditions subsequent to the time of an agreement were to follow their predicted path, no change in the terms or in the distribution of the gains from

existing agreements would be expected. While the agreements are in effect, however, unforeseen events are bound to occur, and these may alter the reliability of the commitments to perform. The same applies to contracts. One of the effects of unforeseen events is the eruption of disputes. Contracts do not provide for every conceivable change, and the parties are likely to disagree about how some of the changes affect their contractual relationships.²⁹ Their rights within existing contracts become less clear, and they will spend resources, partly through court action, to better protect some rights and to capture others. Moreover, commitments may cease to be self-enforced and even within contractual relations parties may be able to capture wealth, by, for instance, deliberately seeking loopholes in contracts that were not problematic before the change in conditions. A second effect is that the exogenous change may deprive the parties of the means to meet contractual obligations and cause them to breach their contracts.

Changes occur continually, and transactors expect to be affected by them even if they cannot predict their exact nature. Reputation is of central importance here. As time passes both the subjects and the ruler will learn from experience how to interpret each other's behavior, which enables them to form agreements and write contracts that they are less likely to breach even when conditions change. Moreover, they are expected to benefit in a number of ways from the accumulation of satisfactory experiences. The ruler guarantees that he will not confiscate the gains from cooperation from any particular agreement; this guarantee is likely to spill over across agreements. In addition, individuals who are party to both old and new agreements with the ruler will seek safeguards against confiscation in general. The ruler will agree to provide safeguards because doing so will allow him to gain a larger share of whatever income the projects may generate. Such efforts contribute to the enforcement mechanism, and, with it, to the rule of law.

²⁹ Hart (1988, 1995) provides a general discussion of incomplete contracts.

Changes, however, especially when extraordinary, are likely to destroy information and to hamper the rule of law. This is because transactors encounter new major forces that affect their relationships, and with which their agreements are not geared to cope. Disputes and confiscation are then expected to intensify, while the reputation of the parties will become tarnished. An increase in exogenous change, then, will affect the rule of law adversely. A drastic change may negate all that was achieved before and wipe out all the past progress of the rule of law, requiring a fresh start. One would expect, for instance, a severe war to significantly weaken the rule of law. As Pollock and Maitland state, “a disputed succession to the throne, a quarrel between the king and the officers of his exchequer, could impair, or for a while destroy, all such concentration [of legal action] as there was,” (vol. 1, p. 110). Beside war, the invention of weapons as well as natural disasters such as droughts, earthquakes, floods, and disease may all produce drastic change. An earthquake, for instance, will render unprofitable certain projects that were viewed before as profitable. Transactors, then, may renege on contracts that they intended to honor before. Other transactors may lose the means (or outside financing) to honor their contracts.³⁰

A secure regime that has enjoyed stability is likely to become more economically advanced and governed by the rule of law. Rulers facing an imminent outside threat, however, will not gain much from granting rights to their subjects. The more serious and imminent the threat, the shorter is the expected longevity of the ruler, and the greater the ruler’s gain from breaking his promises. It is expected, for instance, that when the external balance of power is upset, as when a country’s former weak neighbor gains strength, the country’s own rule of law will weaken. As the probability of takeover increases, transacting between

³⁰ The potential “snowball” effects of such contract violations may explain states’ offer of disaster assistance.

ruler and subjects becomes more difficult. The rulers of such countries are expected to become more absolute, as may be manifested by restrictions such as curfews and those associated with martial law. The rulers may also decide that honoring their commitments ceased to be profitable and engage in predatory action instead. As rulers become more absolute and more arbitrary, their economies are expected to stagnate and even to regress.

A necessary condition for a state to adopt rule of law institutions is that it be easy to defend from the outside. England met this condition, being effectively protected by the sea. Its relatively large military potential further reduced the outside threat. Still, for the emergence of such institutions, especially initially, the ruler should not be totally secure from such a threat. The events of 1066 demonstrated that England indeed was not immune to invasion. Its relatively secure position, however, permitted its continuing progress after 1066.

IV. Voting Rights and Constitutional Constraints as Contractual Stipulations between Ruler and Subjects

In 1066, William the Conqueror, heading an army he brought from Normandy, took England by force, became the direct proprietor of much of its land, and rewarded most of the rest to his supporters—the barons and the church. William had a great deal of power. Although it is not clear how despotic he was, it is clear that, during the middle ages, the power of the monarchy relative to other groups was declining steadily. By the end of the thirteenth century many rule-of-law institutions were already in place in England, the main one being parliament. In this section the model is discussed and applied to voting institutions in the context of the English experience in the Middle Ages.

Historians assert almost invariably that in the Middle Ages voting rights were granted as concessions that powerful subjects forced on rulers. In my view,

the desire to reap the gains that cooperation may afford was the force behind the granting of such rights. I argue that powerful, and, what is more important, secure rulers willingly granted voting rights to subjects with whom they wished to cooperate. The evidence clearly supports the latter hypothesis.

I have discussed the problems a new ruler faces when attempting to extract wealth from his subjects, and I have indicated that under stable conditions he may find it profitable to grant them rights to secure their active cooperation in joint ventures. The value of the cooperation increases as subjects' wealth increases. The following discussion identifies circumstances under which the ruler stands to gain by granting a particular right—the right to vote. It suggests who will get the vote, and it offers an explanation as to why this right and the restrictions associated with it enhance the rule of law. In Section VI, the concluding section, I argue that in the analysis of political institutions, the rule of law is a more useful concept than is democracy.

As time passes and conditions change, the ruler is likely to come across promising new projects. These may include facilitating new export and import opportunities, improving the legal system, building roads and undertaking military ventures. It may seem that a powerful ruler could simply commandeer the necessary resources to finance such projects, by, for example, imposing new taxes. However, at any given time the ruler's relationships with his subjects are set. In England, these relationships consisted, among others, of the taxes and labor obligations that were imposed early on and that remained fixed and viewed as “customary”, and of explicit agreements, or charters, with the nobility, the Church, cities, merchant guilds and Jews. Each agreement defined the rights of the parties and each reflected the best the ruler could attain in the particular case. Such implicit or explicit agreements presumably also accommodated general changes in circumstances, including the expectation that new projects would emerge. Absent

a drastic change in conditions, the ruler, then, could not have profited by predatory behavior. According to the model, and given his time horizon, he was already extracting from his subjects as much as he could.³¹ He must, then, have secured the resources for the new projects cooperatively.

As a general proposition, the form of the reward to the cooperating resource owners can span the range from a fixed amount per unit of resources to a claim on the residual from the projects to which they contribute. The ruler will offer a residual share when supervision is difficult and when inducing cooperation and eliciting information are important. Subjects, for example, may have their own information about whether and how a war can be won. In that case, the promise of a share, i.e., a residual claim in the loot, will induce them to reveal the information and to perform better in the war. Some projects require the cooperation of many residual claimants. To afford each claimant a share in the decision-making, decisions must be made by voting. In the case of public goods, the decision must be binding for all voters so that no one would benefit from the effort without contributing to it.³²

Turning to defensive projects, considers the level of defense effort when, say, the English feared invasion by the French. Were the invasion to succeed, one of its effects would be the loss of properties. By and large, each owner will bear the loss of his own property. If these owners vote for a defensive tax, they bear the

³¹ The confiscation from Jews in the 13th century (Barzel, 1992) does not seem to contradict the proposition in the text. A drastic change in conditions did occur—the emergence of alternative sources for loans—greatly lowering the value of maintaining the relationship with the Jewish lenders. This particular act of confiscation seemingly was sufficiently idiosyncratic not to jeopardize other relationships.

³² Although they are residual claimants in the aggregate, since voting is subject to free riding, individual voters are such claimants only weakly. Still, each voter *expects* to be the swing voter once in a while, and he is then the residual claimant at some small probability.

tax, and they benefit from the lower probability of a loss. If they choose a higher tax, they bear that too and benefit from the enhanced defense. Thus, they are (at least partially) residual claimants to their own actions.

When the ruler seeks active cooperation from subjects, he may stipulate that major business decisions should be made by a majority, or, when appropriate, a super-majority, of the votes of the participating resource owners. He will enhance the effectiveness of voting by prescribing procedures that protect voters from confiscation by him and by each other, since participants will then value the ventures more highly and will be willing to pay him a larger amount to participate in them. A ruler who pursues investment opportunities within these institutions chooses to abide by the institutions' procedures and by majority vote. He shares decision-making power with his partners in order to profit from the cooperation. By initiating and agreeing to the entire voting procedure the ruler merely provides guarantees to his partners. The ventures under consideration may be “business” ventures or “governmental” ventures. The guarantees in the governmental ventures have the trappings of democratic institutions. These guarantees differ from the guarantees given to partners in “purely” business ventures in one fundamental feature; they must be self-enforced, whereas third-party enforcement may be used in business ventures.

This difference necessarily entails another. In large-scale ventures, especially those on the national level and those engaged in military matters, the organization necessarily provides a framework for collective action among subjects. This collective action mechanism can enforce decisions for its members and it has the power to oppose the ruler. The emergence of such an organization, then, constitutes a major break in the character of the regime; from one that is autocratic to one based on the rule of law.

The pursuit of wealth by the ruler leads, then, to a cooperative arrangement with subjects in which, subject to certain procedures, decisions are made by voting. I define such an arrangement a “voting regime.”³³ The definition is operational; conditions for vote allocation and for changes in related procedures are predictable. For instance, the greater is the correspondence between the net benefits from a project and the wealth of the participant, the more likely is the allocation of votes to be based on wealth (Barzel and Sass, 1990). Voting regimes are not expected to be “inclusive;” the right to vote is unlikely to be extended universally.³⁴ This is so because individuals who do not contribute to a project, and those who contribute to it by selling their services at fixed prices, do not gain at the margin from decisions that maximize joint wealth. Efficiency is lowered if such individuals are given a voice in the decision making. In shareholder corporations, for instance, votes are allocated to residual claimants but not to fixed claimants (neither to non-claimants). The ruler is expected to pursue efficient voting institutions because, when he does so, the amount he can charge for the right to form them is largest.

A whole array of institutions is expected to emerge to meet the requirements of different projects. In local projects, for example, individuals with local knowledge make for attractive partners since they can more cheaply control enterprises in their area. Thus, in England, the king as well as the barons agreed to grant some autonomy to cities located in their domains. The other side of the coin is that the specialized knowledge that individuals possessed enabled them to “cheat” the ruler and retain a large fraction of the rents the projects produced. It is

³³ Olson (1991) defines “democracy” in a similar fashion. However, he hypothesizes that democracies emerge when several evenly matched groups cooperate in the *overthrow* of a dictator.

³⁴ A major distinction between what I call a “voting regime” and what is conventionally called a “democracy” is that the latter is routinely viewed as inclusive.

not surprising that many of the individuals and entities that were granted special rights became wealthy.³⁵

Since cities tend to be specialized, efficiency was enhanced when the cities themselves became the main residual claimants of the income they generated; paying out relatively fixed dues. Efficiency was enhanced further when they became governed by voting institutions. The king granted, or, more accurately, sold charters to many cities giving them autonomy, which included the right to elect officials. The king also granted charters to various trading companies. The owners of these companies made decisions by vote while obviously these organizations were no “democracies.”

One can expect the ruler to erect several layers of voting organizations, ranging from purely “business” ventures (forming overseas trading companies) to purely “governmental” ventures (building highways, developing river basins, conducting military operations). Whenever the ruler erects a multi-participant organization, he is expected to set it up such that decisions will be made by the vote of the residual claimants of the organizations.

Of those projects that tend to affect the whole country, the foremost is warfare, whether offensive or defensive. A successful offensive war, besides yielding loot, also reduces the chance that a foreign power will capture some of the country’s wealth, thereby enhancing most property rights in the winning country. A loss at war, even if it occurs on foreign soil, has the opposite effect. War tends to affect the security of life and of property in general. Moreover, one tends to be protected if one’s neighbors are. The defense against a foreign aggressor, for example, is likely to benefit whole regions. To a substantial degree, then, the war effort produces a public good. Therefore, compulsory participation is called for; otherwise, non-contributors would take a free ride at the expense of the

³⁵ I thank the referee for this point.

contributors. Given the nature of the defensive effort, efficiency is enhanced when all those who stand to benefit from it are both made to contribute to it and given the option to take part in managing it. The ruler is expected to compel the cooperation of the potential beneficiaries from the war.

Returning to medieval England, in the early stages of the evolution of the rule of law the king formed agreements with his major tenants—the barons. To secure their contributions to various projects, he was willing to share power with them by forming voting institutions and subjecting himself to the associated constraints.³⁶ The main national organization, primarily concerned with military affairs, was a council that evolved into Parliament during the second part of the thirteenth century. Initially, after the Magna Carta was created in 1215, only a small number of relatively independent, wealthy individuals besides the nobility had voting rights, but, with time, as serfdom declined and as the country grew more prosperous, individuals who became free and amassed property were also enfranchised.

To secure cooperation, the king had to commit to allow for the development of a collective action mechanism for his subjects. The council and, subsequently, parliament seem to have become such a mechanism. This mechanism had the power to depose kings, and early in the fourteenth century parliament indeed deposed a king—Edward II in 1327. Only kings who were secure in their positions, then, were expected to erect and to enhance national voting organizations.³⁷ It is of interest to note that the king made attendance in parliament

³⁶ Olson (1993, p. 574) holds the view that in autocracies “the main obstacle to long-run progress...is that individual rights...can never be secure.” Rights (in the sense of the ability to enjoy the services of the assets) may be secured by self-enforced agreement, and, as argued here, the ruler may choose to cede power to subjects and to abide by the rule of law.

³⁷ Barzel and Kiser (1997) explore empirically two of the forces that affected the emergence and the power of national voting institutions in medieval England

mandatory. The attendance requirement made it easier to enforce the parliamentary decisions; it also enhanced the collective action power.

Some of the voters in parliament represented themselves; the rest represented other free men, and these constituents usually empowered their representatives to vote on their behalf. Among the rights the kings conceded was the power to decide whether to impose new (property) taxes. During that era, the king usually was the one who initiated project proposals in parliament. The voters had the right to decide whether to take part in them. In conformity with the hypothesis here, if the voters found the projects attractive, they financed them by voting for a tax. The taxes they agreed to they imposed directly on themselves, and not, as a rule, on third parties. Such parties as foreign merchants or Jews were not represented in parliament; rather, they had direct prior agreements with the king. The relations between the serfs and the chief tenant of an estate were also already set. These groups were seldom subject to parliamentary taxes. The parliamentary voters who made tax contributions expected to receive shares in the benefits each project was to generate in exchange for their tax contributions. Presumably, they were promised a share in the loot from participating in a foreign war. As property owners, they surely gained from the reduced chance of foreign conquest and the attendant loss of property it would bring.

The term “tax” may appear unambiguous and well understood, but in fact this is not the case. As used in the literature the term has several distinct meanings. One meaning is that (some) taxes are the rents paid by the former owners of confiscated properties to the confiscator. Another meaning is that taxes constitute

and France. One is the effect of increased heterogeneity of the voters. This factor did not vary much in England, however. The other is the security of the ruler. The evidence is consistent with the hypothesis that the more secure the ruler was, the more he allowed these voting institutions to develop and the more power he gave them.

transfer payments—their claimed destination in contemporary taxation theory. As viewed here, the taxes *newly* imposed by the medieval English parliament are fundamentally different from both of those described above. Rather, they are viewed as investment shares in projects the ruler usually initiated and in which subjects *wanted* to be partners. Indeed, as the power of parliament *grew*, it *voted* for *more* taxes.³⁸

The relationship between ruler and subjects was not always harmonious. Because contracts are incomplete, any relationship is prone to dispute even though both parties expect to gain from it. Indeed, medieval England was subject to some severe disputes, and the one in 1216 that led to the writing of the Magna Carta was a full-fledged civil war. Historians seem to focus on disputes between ruler and subjects to the exclusion of their potential gains from cooperation. They contend that the main function of parliament was to oppose the ruler's predatory demands. If the contention were true, a lower level of taxation should have accompanied the increased power of parliament. The fact that an increasingly more powerful parliament imposed on itself higher and higher taxes is a clear refutation of the contention.

Not all projects that appealed to the king were deemed attractive to his would-be partners; parliament voted some of them down. In this sense, taxes were voluntary. They were compulsory only in that once the deciding majority agreed to be taxed, everyone had to pay. Such taxes are similar to the assessments condominium owners impose upon themselves. They are efficient in two ways: First, to these presumably-informed voters, the tax-cost of the particular projects seems less than their expected benefit; and, second, they constitute the purchase of ownership shares, inducing owners' effort in the projects. They were also efficient

³⁸ See Barzel (1997) and Barzel and Kiser (1997). In medieval France, too, as the power of the voting body (the estates general) grew, it voted for more taxes.

in that transfer among taxpayers was minimal. During the Middle Ages, parliament made great effort to reach major decisions by consensus, not just by simple majority.

Some of the parliamentary tax contributions were in kind. When these partners deemed a fighting project attractive, they contributed armies instead of, or along with, pecuniary taxes. Moreover, they participated in the conduct of warfare. The direct involvement in the war enabled the participants first to protect their inputs in it and their share in the loot, and second to prevent the king from using the assembled forces to assume dictatorial powers.³⁹

Individuals will attempt to accommodate new activities within their organizations, and, when suitable, will also bring in new voting partners. In this way, as new investment opportunities emerge, economies in organization costs may be realized by adding new partners to existing organizations and by giving them voting and other constitutional rights, instead of custom-making organizations for each new project. When external effects are present, the ruler may mandate the participation by new partners whom existing partners want to take on. If such arrangements are to succeed, costly wealth-transfers must be avoided. In anticipation of such opportunities, the original constitutions are expected to accommodate expansion while providing safeguards against transfers.

The English parliament consisted of two “houses”: the house of lords and the house of commons. Initially, the bulk of the power rested with the house of lords but as the middle ages progressed, its power declined and that of the house of

³⁹ At that time England did not have a standing army. Rather, armies were assembled as the need arose. Those assembled for protection were paid directly. Those assembled for fighting on foreign soil, which, it seems, were more threatening to subjects, relied primarily on the expected loot. It does not seem that the latter type of armies could easily have been turned against subjects. For a more general discussion of the motivation of armed forces see Allen (1998).

commons increased. What accounts for the power shift? By the hypothesis here, we expect power in parliament to reflect the economic interests affected by its decisions. Lords' wealth expanded during that era along with the general growth in wealth, but it did not expand as fast as that of other freemen. The king originally invited commoners to participate in parliament. The franchise applied to those freemen who met a tax base requirement (uniform in the shires, but variable in towns). The number of commoners and their wealth constantly expanded. The interests of the newly enfranchised voters tended to match, per unit of taxable assets held, those of the established voters, whereas those whose interests no longer matched those of the other voters because they were impoverished were disenfranchised. The changes in the composition of voters and in their power in parliament conform to the hypothesis here.

V. Implications

The approach I offer here is operational and a number of implications are scattered throughout earlier sections.⁴⁰ In this section I will lay out—with only the barest explanation, however—a number of additional implications, and, when I can, I will suggest ways of performing the test. These implications underscore the role of factors such as how despotic a ruler is, how severe is an external shock, how free and how rich subjects are, what rights they have, how specialized they are expected to become and how much trade is expected to be carried on internally and externally.

These implications are as follows:

⁴⁰ Kiser and Barzel (1991) show that the history of England from the Norman conquest to the hundred-year war conforms, in broad terms, to the hypothesis here.

1. a. *Autarky*: The more absolute the rule is the more autarkic individuals in the country and the country as a whole are expected to be. The reason is that absolute rulers are *insecure*, and restricting trade reduces the opportunities for insurrection. Given the notion advanced in this paper that a ruler who introduces a voting regime is less absolute, the implication may be tested by comparing the degree of autarky, or, conversely, the level of trade, of states before and after voting institutions are introduced.⁴¹
- b. *Specializing*: With less trade individuals will specialize less⁴².
2. *Freedom and wealth*: The two tend to reinforce each other. Freedom permits people to fully exploit their productive potential, and the opportunities to amass wealth call for safeguards against confiscation. Therefore, the more freedom individuals have, the richer they are expected to become, and the richer they are, the more freedom they are expected to have. Pursuing further the comparison of the previous implication may test the proposition. States that develop voting regimes are expected to become freer *and* richer than they were before.
3. *Freedom and variability in wealth*: The greater is individuals' freedom, the greater their expected *variability* in wealth. Slaves' and serfs' incomes are expected to be quite uniform (and of course low). More generally, a dictator imposes constraints so as to reduce the variability in subjects' income or wealth while extracting the bulk of the output they produce. As constraints on individuals are relaxed, these individuals increasingly bear the residual

⁴¹ Switzerland (and Venice prior to its conquest by Napoleon) had voting institutions from their inception. The test suggested in the text is not applicable to them, then.

⁴² This implication, of course, is common to the standard economic model.

from their activity, and thus the wealth-variability across individuals is expected to grow.

4. *Shocks, trade and specializing*: Shocks, whether due to nature, to external enemies or to internal upheaval, are expected to reduce the rule of law, make the rule more despotic, and (related to the first implication) reduce trade and specializing. Thus, for instance, subsequent to a major war, restrictions on a country's foreign trade are expected to increase above their pre-war level and the volume of trade to fall below its pre-war level.
5. *Output value and security constraints*: When the price of the output that slaves or serfs produce increases, their masters' loss from the restrictions on their production activities becomes higher. The severity of the restrictions is expected to be reduced then. However, serfs may use their greater freedom and higher income to try to depose the ruler. Therefore, the ruler is expected to tighten those constraints, which enhance security. This may explain why, as mentioned in footnote 17, when cities were granted charters, the residents were required to pay a tax in place of the military service that had been previously demanded. The charters the king granted to cities gave their residents the opportunity to enrich themselves. By replacing direct military obligation with monetary payment, these individuals were deprived of their potential military power, and thus their increased wealth was less threatening to the king.
6. *Property ownership and voting*: Voting is a means of enhancing the productivity of organizations. As a rule, the net gain organizations generate is highly correlated with the amount of property held by the individuals in the organization. Property ownership, then, is expected to be a necessary condition for obtaining the right to vote.

7. *Taxation and representation*: For voting institutions to produce efficient outcomes, (marginal) voting rights have to be proportional to the net marginal benefits the voted-on projects produce. Secure regimes, then, are expected to tie projects' benefits to projects' tax assessment, and to tie both to the allocation of voting rights.⁴³

VI. Concluding Remarks on the Rule of Law and Democracy

In this paper I have discussed forces behind the rule of law and the institution of voting. Obviously, there exists an extensive literature on these topics. One difference between my approach and that in the literature is that I attempt to be operational, whereas much of the literature approaches these issues normatively. I now elaborate on this difference.

As the rule of law has evolved, it has yielded personal freedoms and institutions considered democratic. Some view the rule of law itself as an ideal on the same level as freedom and democracy. Proponents of such a view, of whom Hayek is the most notable, extol the virtues of the rule of law over discretion by the ruler. Hayek (1960, Ch. 11) is able to cite a number of astute statesmen who have made the rule of law a cornerstone of the governing political doctrine. Yet, as Hayek recognizes, there is little in the existing mechanisms of the state to induce the actual pursuit of the ideal. Legislative bodies are not bound by these principles, and there is no other institutionalized force to advance the state of freedom or of democracy.⁴⁴ Neither the pursuit of freedom and democracy as ends in themselves

⁴³ In medieval England, where the regime was relatively secure, the data assembled by Barzel and Kiser (1997) support the hypothesis that taxation and representation went together (as they did in medieval France during the period the regime was secure).

⁴⁴ In the American case, the Constitution may seem to protect and enhance such principles. However, the associated mechanism cannot be very direct or

nor the idealized rule of law seems to have operational power. The theory of the evolution of the state proposed here is able to produce working definitions for some of these concepts and, what is more important, to explain the changes in their status.

As discussed in Section One, personal freedom can be defined in terms of the restrictions imposed on the individual and his control over the residual of his productive effort. The state of freedom thus defined depends on such factors as a person's wealth, his capacity to revolt against the ruler, and the ease of supervising his effort and output. Similar considerations apply to the rule of law in Section Three and to voting regimes in Section Four. The erection of a collective action mechanism and the third-party contract enforcement that it facilitates result in the expansion of contracting opportunities. Progress along these lines is progress of the rule of law. Offered here is an objective, positivistic attempt to explain and predict the existence and extent of the rule of law.

Both people of action and academics assert that England has come a long way toward the realization of the ideals of democratic institutions and personal freedom, but insist that it needs to advance these institutions even further. The state of democratic institutions in England, however, does not seem to have been the result of similar insistence in the past. At no point in the process described here did any group purposely set out to create a "democracy." Rather, a succession of steps enhanced the rule of law wherein the king agreed to obey the law, relinquishing some of his initial despotic power in exchange for an increase in his wealth. The theory advanced here suggests that, in England, freedom and democracy, or, more properly, voting institutions have evolved as the incidental

swift. The emancipation of slaves occurred almost a century after the adoption of the Constitution, and women got the vote several decades later. Moreover, in neither case does the Constitution seem to have been the force behind these changes.

byproducts of wealth maximization by the king and by subjects. Moreover, because the forces that govern that evolution are still with us, the realization of these ideals is likely to continue to be their byproduct. This continues to be the case even though the power of the monarch today is but a shadow of the power of the early monarchs. In the spirit of this paper is Pirenne's (1937) perception of the emergence of freedom in medieval Europe. He states, “Without liberty, that is to say, without the power to come and go, to do business, to sell goods, a power not enjoyed by serfdom, trade would be impossible. Thus they [the trading bourgeoisie] claimed it, simply for the advantage which it conferred, and nothing was further from the mind of the bourgeoisie than any idea of freedom as a natural right; in their eyes it was merely a useful one,” (p. 51).⁴⁵

The contrast between the operational approach to one of these concepts—democracy, or a voting regime, as I prefer to call it—and the standard approach is exemplified by considering the following statement by Dahl (1982). He states, “The democratization of authoritarian monarchies led to polyarchy [i.e., the current state of democracy]; must we not complete the process by democratizing polyarchies?” The first part of the statement describes an actual development. This paper models political-economic forces that can produce such an outcome; it offers reasons why voting institutions emerge, and who is likely to get the right to vote. The second part of Dahl's statement is a pious wish. Elsewhere in his book Dahl characterizes the “ideal democracy.” He does not point, however, to any mechanism that may bring about such an ideal. Moreover, the ideal itself is quite arbitrary. For instance, Dahl takes it for granted that “one person one vote” is ideal, rather than attempting to justify it. He provides no rationale as to why the

⁴⁵ It is worth noting that relatively secure states, with voting and other institutions in keeping with the rule of law, have tended also to have highly developed trade. Examples are cities of classical Greece, the Phoenician cities, and Italian and Northern European medieval cities.

ideal is not, say, “one family one-vote,” or “one-dollar paid in taxes one vote.” Indeed, it is not clear why a “person” who is a non-transient, non-imprisoned adult citizen is singled out. The stipulation of “citizenship” itself seems an ad hoc adoption of the practice as it has actually evolved. I approach the issue from a different angle. Rather than positing an ideal of democracy, I point to the forces that determine the criteria for allocating votes. The same forces may explain current practice and may predict what form it will take in the future. Thus, for instance, the model here implies that states would seldom grant voting rights to foreigners, as foreigners’ attitudes towards defense expenditures is likely to diverge from that of citizens. Dahl, however, offers no explanation as to the allocation of votes in general and, in this case, why the ideal of “democracy” denies voting rights to subjects of other states.⁴⁶

This paper employs an approach that hints at why emerging nations, in their sweeping attempts to adopt democratic institutions, often meet with turbulence and failure. In the case of England, the process of establishing the rule of law has been “organic,” encompassing a succession of activities and changes agreed upon by the parties. Moreover, whenever the contracting parties saw fit, they invited others to join forces with them. As the process continued to evolve, it seems that change itself was handled with less friction, and that mechanisms were developed to secure individuals’ rights and to prevent revolutions. The hypothesis here implies that a concerted effort was made to avoid giving rights to some at the expense of others, and that the potential for disputes was deliberately reduced. In the case of the

⁴⁶ In classical Greece, voting rights and participation in defense were tightly tied together. Metics (non-naturalized residents, some remaining so for generations) and slaves were not required to perform military services and were not granted votes. By the approach adopted here, votes were not going to be allocated to these groups. Political scientists, however, tend to simply fault Athens for retaining such an “undemocratic” practice.

wholesale adoption of democratic institutions in emerging nations, it seems inevitable that any voting or other procedural rules will permit some groups to exploit others. Property rights in such cases are insecure, and people spend resources to capture such poorly defined rights. It is not surprising that quite often the democratic institutions themselves are short-lived.

REFERENCES

- Allen, Douglas W., "Compatible Incentives and the Purchase of Military Commissions," *Journal of Legal Studies*, January 1998.
- Alchian, Armen A. and William R. Allen, *Exchange and Production*, Second Edition, Wadsworth, Belmont, 1977.
- Barzel, Yoram, "An Economic Analysis of Slavery," *J. of Law and Economics*, April 1977.
- Barzel, Yoram, "Measurement Cost and the Organization of Markets," *J. of Law and Economics*, April 1982.
- Barzel, Yoram, "Confiscation by the Ruler: The Rise and Fall of Jewish Lending in the Middle Ages," *J. of Law and Economics*, April 1992.
- Barzel, Yoram, "Parliament as a Wealth-Maximizing Institution: The Right to the Residual and the Right to Vote," *Int. Rev. of Law and Economics*, " December 1997.
- Barzel, Yoram, "A Theory of the State: Economic Rights, Legal Rights and the Scope of the State," mimeo, 1999.
- Barzel, Yoram and Edgar Kiser, "The Development and Decline of Medieval Voting Institutions: A Comparison of England and France," *Economic Inquiry*, April 1997.
- Barzel, Yoram and Edgar Kiser, "Taxation and Voting Rights in Medieval England and France," mimeo 1999.
- Barzel, Yoram and Tim Sass, "The Allocation of Resources by Voting," *Quarterly Journal of Economics*, August 1990.
- Dahl, Robert A., *Dilemmas of Pluralist Democracy*, Yale University Press, New Haven, 1982.
- Findlay, Ronald, "The Roots of Divergence: Western Economic History in Comparative Perspective," *Am. Econ. Rev.*, May 1992, 158-61.

- Fudenberg, Drew, Bengt Holmstrom and Paul Milgrom, "Short-Term Contracts and Long-Term Agency Relationships," *Journal of Econ. Theory*, Vol. 51, No. 1, June 1990.
- Hart, Oliver, "Incomplete Contracts and the Theory of the Firm," *J. of Law, Economics and Organization*, 4(1), 1988, pp. 467-476.
- Hart, Oliver, *Firms, Contracts and Financial Structures*, Clarendon Press, Oxford, 1995.
- Hayek, Friedrich A., *The Constitution of Liberty*, Chicago University Press, 1960.
- Hicks, John R., *A Theory of Economic History*, Oxford, 1969.
- Hirschman, Albert O., *The Passions and the Interests: Political Arguments for Capitalism Before Its Triumph*, Princeton University Press, Princeton, 1977.
- Johnsen, D. Bruce, "The Quasi-Rent Structure of Corporate Enterprise: A Transaction Cost Theory," *Emory Law Journal* 44(4), 1995, pp. 1277-1356.
- Khalil, Fahad and Jacques Lawarrée, "On Commitment and Collusion in Auditing," mimeo 1998.
- Kiser, Edgar and Yoram Barzel, "The Origins of Democracy in England," *Rationality and Society* 3(4), 1991, pp. 396-422.
- Klein, Benjamin and Keith B. Leffler, "The Role of Market Forces in Assuring Contractual Performance," *JPE*, August 1981, 615-641.
- Kreps, David, Paul Milgrom, John Roberts and Robert Wilson, "Rational Cooperation in the Finitely-Repeated Prisoner's Dilemma," *J. of Econ. Theory*, V. 27, 1982, pp. 253-279.
- Lane, Frederic C., "Economic Consequences of Organized Violence," *J. of Economic History*, Vol. 18, 1958, pp. 401-17.
- Levi, Margaret, *Of Rule and Revenue*, University of California Press, 1988.
- McGuire, Martin C., and Mancur Olson Jr., "The Economics of Autocracy and Majority Rule," *Journal of Economic Literature*, Vol. 34, No 1, March 1996.

Montesquieu, *Esprit des Lois*, 1748, Geneva.

North, Douglass C., *Structure and Change in Economic History*, W.W. Norton, 1981.

North, Douglass C. and Barry R. Weingast, "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England," *The Journal of Economic History*, December 1989, 803-832.

Olson, Mancur, "Autocracy, Democracy, and History," in *Strategy and Choice*, Richard J. Zeckhauser, ed., MIT Press, Cambridge, 1991.

Olson, Mancur, "Dictatorship, Democracy, and Development," *Am. Political Science Review*, Vol. 87, No. 3, September 1993.

Pirenne, Henri, *Economic and Social History of Medieval Europe*, New York, Harcourt, 1937.

Pollock, Sir Frederick and Frederick William Maitland, *The History of English Law Before the Time of Edward I*, Volume 1, Second Edition, Cambridge, 1898.

Rey, Patrick and Bernard Salanie, "Long-Term, Short-Term and Renegotiation: On the Value of Commitment in Contracting," *Econometrica*, May 1990.

Smith, Adam, *The Wealth of Nations*, Cannan's Edition [1904], Chicago, 1976.

Tullock, Gordon, *Autocracy*, Kluwer, Dordrecht, 1987.