SOURCES OF LAW AND THE INSTITUTIONAL DESIGN OF LAWMAKING

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The enlightened conception of separation of powers holds that law should be made by the legislature, interpreted by the judiciary, and enforced by the executive branch of government. Public choice theory provides a solid foundation for the appraisal of this traditional formula. The findings of public choice theory, while supporting much of the traditional wisdom, pose several challenges to the theoretical foundations of these constitutional principles. In the following pages, I shall revisit these important questions considering the issue of institutional design through the lens of public choice theory.

I. Towards an Institutional Theory of Lawmaking

According to a fundamental principle of constitutional design, powers should be allocated to the branch and level of government or society that can best exercise them. This principle can be applied to the question of lawmaking in order to select sources of law that will exploit the comparative advantage of different legal and social institutions in the production of legal rules.

I consider three main criteria for evaluating the relative advantages of alternative sources of law, focusing on the political economy of production of ordinary (i.e., non-Constitutional in nature) law. These criteria are: minimization of agency problems; minimization of rulemaking costs; and the stability and transitivity of collective outcomes.

A. Minimization of Agency Problems

First, the mechanisms for law creation should be able to reflect the underlying preferences of the individuals subject to the law. For the case of political processes of law formation, this requires the choice of collective decision making procedures that will promote the alignment of the incentives of political representatives and the incentives of the represented citizens. In the presence of perfect incentive alignment, agency problems in political representation will disappear.

Likewise, in an ideal world judge-made law should approximate the rules that private parties would have chosen if engaging in an *ex ante* choice of applicable law. This claim, known as the efficiency of the common law hypothesis, constitutes an important premise of the law and economics movement. According to this hypothesis, the common law (i.e., judge-made law) is the result of an effort—conscious or not—to induce efficient outcomes. The same proponents of this hypothesis suggests that common law rules enjoy a comparative advantage over legislation in the creation of efficient legal rules because of the evolutionary selection of common law rules induced by adversarial adjudication.

The case of customary law is quite different from those of the other sources of law. Customary law avoids the interface of third party decision makers (such as legislators and judges) and is directly derived from the observation of the behavioral choices of individuals in society. In a customary law

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setting, the group of lawmakers coincides with the subjects of the law and agency problems are generally absent from such process of law formation. In the following discussion, we will consider a different group of problems that affect the process of customary law formation.

In all the above cases, the institutional design of lawmaking should induce incentive alignment in order to minimize the extent of agency problems, with a minimization of rent seeking and a resulting optimal supply of public goods.

B. Minimization of Rulemaking Costs

The second criterion for evaluating alternative sources of law is that of cost minimization of collective decision-making. According to this criterion, the mechanisms for law creation should be chosen in order to minimize the transaction costs of collective decision making and political bargaining.

This cost minimization problem involves the evaluation of two different costs:

(i) direct costs of decision making, such as the costs of reaching a majoritarian consensus in a political context, or the cost of litigation or adjudication in a judicial context;

(ii) indirect or external costs, such as the cost imposed on a minority group by the rules chosen by a majority coalition.

Different levels of transaction costs of types (i) and (ii) are inherent in the different processes of law formation.

1. Direct Costs of Lawmaking. In a legislative process, individual preferences are captured by the collective decision making process through the imperfect interface of political representation. Bargaining among political representatives is costly, due to the strategic behavior of large number bargaining (i.e., free riding, hold ups, and other collective action problems) and the absence of legal enforcement mechanisms for political bargains. In this dimension, lawmaking through politics is likely to impose the highest level of transaction costs among the alternative sources of law that we consider.

Transaction and information costs are also present in the case of judge- made law. The process of judicial creation of legal rules faces the obvious constraint given by the costly access to information regarding alternative legal rules. If we analogize the lawmaking process to a production process in the marketplace, the common law may indeed appear as quite an inefficient production process. The common law process, when shifting some of the law making functions to the judiciary, entrusts courts with the task of conceiving and refining legal rules while adjudicating specific cases.

From a production point of view, such process foregoes the economies of scale and scope that might be exploited by a specialized legislative process. On the other hand, the common law process, by relying on the adversarial efforts of the parties, utilizes information available to the parties. Parties have direct information on the costs and benefits of alternative rules and courts may be regarded as having an informational advantage over central legislative bodies, given the opportunity of judges to infer the litigants' preferences from the choices they make during the case.

Courts have a further informational advantage in observing the revealed preference of the parties with respect to applicable law. Modern legal systems generally provide a set of default rules that apply if the parties fail to choose alternative provisions to govern their relationship. When parties opt out of the default rules (through ex ante choice of differing provisions or ex ante choice of law), they reveal their preferences over alternative legal rules. If courts observe a large number of parties routinely opting out of the default rules, it becomes evident that such rules have failed their cost-

minimization task under the circumstances and do not approximate the will of the majority of the contracting parties. In these cases, courts would have a comparative informational advantage over legislators in designing and revising default legal rules.

For the case of customary law, we should distinguish two distinct costs: (a) the cost of decentralized creation of a customary legal rule; and (b) the cost of judicial finding of an existing rule of customary law.

The costs of customary law creation are relatively minimal. Most rules of customary law are derived from the observation of widespread practice followed by individuals in society. In this context, customary rules are a costless byproduct of the economic and social interactions of individuals in society. Such practices are not being carried out with the objective of giving birth to binding rules of customary law and the legal recognition of such practices as binding customs adds no cost to the activities involved.

The cost for courts to identify a rule of customary law may, however, be considerable. Customs are intangible sources of law and their content does not enjoy any objective articulation in written law. The identification of custom thus requires knowledge of past practice and investigation of the beliefs shared by those who engaged in the practice: a process that can be costly and difficult to carry out.

A point of advantage of customary sources of law is related to the fact that custom is formed through the independent action of individuals in society, without the need for their express agreement to the emerging rule. Since most rules of custom require a very high level of participation without yet necessitating a unanimous consensus, hold up problems and other transaction-associated costs are generally avoided in the formation of customary legal rules. No single individual in society can prevent the emergence and recognition of a general custom.

2. External Costs of Lawmaking. The various sources of law also have different levels of external costs. As public choice theory has shown, in the case of political decision-making, direct costs and external costs of lawmaking are negatively correlated (Buchanan and Tullock, 1962). The tradeoff between direct and external costs is easily illustrated by the consideration of the two limit cases of unanimity and dictatorship in a voting context. If deliberations require a unanimity vote, the risk of external costs disappears, since unanimity gives every voter a veto power against undesired proposals. Transaction costs are instead very high under a unanimity rule. In the opposite case of dictatorship, the risk of external costs is much higher, since a dictator can single-handedly impose costs on all other individuals. Conversely, the direct costs of lawmaking are lowest under dictatorship, given that no consensus and political bargaining is necessary under a dictatorial decision rule.

Analogous tradeoffs between direct and external costs exist for sources of law other than legislation, but the content and interpretation of such costs differ substantially in each case. Thus, for example, rules of customary law require a very high level of participation and consensus. This reduces the risk of external costs imposed on unwilling minorities, but, as a result of such high threshold of required participation, customary laws are relatively slow in their emergence and evolution.

In evaluating the various sources of law, it is necessary to give careful consideration to the different performance of alternative lawmaking processes from the vantage point of this criterion of cost minimization.

C. Stability and Transitivity of Collective Outcomes

The third problem of institutional design is to minimize the cost of instability and ensure rational and transitive collective choices. As it has been observed in the literature (e.g., Cooter, 2000; Stearns, 1994; and Parisi, 1997 and 1998), when political cooperation fails and the lawmaking mechanisms do not generate Condorcet winners, several legal institutions and doctrines come to the rescue to minimize instability and select among cyclical alternatives. In particular, Cooter (2000) explains how democratic constitutions pursue these goals of stability by separating powers among the branches of government, by guaranteeing individual rights, and creating a framework of competition for political office. Parisi (1998) considers the role of logrolling as an instrument of stability in a legislative setting. With reference to judge-made law, Stearns (1994) considers the role of standing doctrines and stare decisis as evolved institutions aimed at reducing instability in the absence of a Condorcet majority consensus. In the different setting of customary law, Parisi (1997) discusses the process of formation and evolution of customary law, unveiling the ability of customary law to generate stable rules in different game-theoretic situations.

II. Law Through Politics: The Political Economy of Legislation

Comparative differences in legal systems often reflect different ideologies and conceptions of political economy of lawmaking. In recent years, all countries of the modern world have been giving written statutes increasingly greater importance among the sources of law. The supremacy of written law over other sources of legal order is not, however, a universal characteristic of all modern legal systems.

Comparative legal scholars usually distinguish between civil law and common law systems. The distinction is based on a dichotomous conception of legal traditions. Systems of the civil law tradition give greater weight to written and statutory sources of law. Generally speaking, these systems are historically derived from a legal tradition that recognized the authority of a comprehensive body of written law (e.g., the Roman Corpus Juris) and were not relying on the casuistic evolution of case-by-case decision making in the absence of a coherent skeleton of codified law. This dichotomous distinction, while useful as a preliminary classificatory tool, should not be overestimated.

During the last several decades, legal systems of the world have converged toward a middle ground. In the civil law tradition, the dogmas of supremacy of legislation over case-law have gradually given way to a more balanced conception of sources of law, where statutes and case-law more or less happily coexist with one another. Likewise, in the common law tradition, the proliferation of legislative intervention has gradually corroded the traditional dominance of judge-made sources.

A. Lawmaking and Political Representation

During the nineteenth century, the enlightened conception of democratic governance and the renewed trust in political decision-making fostered an increased importance of statutory law. Ideals of democratic legislation gradually replaced the historic conception of statutory law as a written articulation of laws of a higher and older origin. Laws were not the mere expression of preexisting natural or fundamental rights, but rather they were the primary source, if not the sole origin, of individual rights. Rights were derived from laws, rather than laws being derived for the protection

of individual rights. Legislative bodies were making (i.e., creating) law as opposed to finding (i.e., recognizing) preexisting legal norms. With the exception of some minimal Constitutional constraints on law making, national parliaments and congresses acted as sovereign lawmakers. Such unbounded legislative powers were justified by the alleged function of legislative organs as faithful agents and political representatives of the people.

The unfolding of history has, however, revealed the true face of democratic decision-making and the limits of mechanisms of political representation in lawmaking. There are two theoretically distinct problems that affect the mechanisms of political representation. These problems have become the respective focus of several important contributions in the public choice and social choice literature. Within the public choice tradition, we learn that political representatives are agents of the individuals they represent. Such political representation is often affected by pervasive agency problems. The correction of these problems requires the choice of collective decision making procedures that promotes the alignment of the incentives of political representatives with the incentives of the represented citizens, or else an effective monitoring and accountability of political agents. If incentives are effectively aligned, agency problems of this type do not affect political representation. Much of the public choice and the constitutional design literature addresses these fundamental problems.

The second problem emerges even in the absence of agency problems in representation. This problem is one of selection of appropriate criteria for aggregating individual preferences. If the interests of politicians align with the interests of the people whom they represent, politics can be viewed as a framework for bargaining among political agents of the various factions in society. The question is whether political bargaining can successfully yield a consensus among the various political factions, such that political outcomes can be legitimately and unambiguously identified with the "will of the people."

As the social choice literature has often pointed out, even if we contemplate a world of perfect incentive alignment between political representatives and the represented citizens (i.e., even if we assume away agency problems in political representation), there is no assurance that the mechanisms of law creation are responsive to the underlying preferences of individuals in society.

B. Political Decision-Making and the Market for Votes

One of the main insights from social choice theory is that the correlation between preference and choice is weaker for groups than for individuals (Shubik, 1982, p. 124). According to Arrow's (1951) possibility theorem, it may indeed be too much to expect methods of collective decision making to be at the same time rational and egalitarian. Arrow's theorem shows that any social decision that is adopted must violate at least one of six self-evident axioms of normative political theory, commonly described by the following terms: range, universal domain, unanimity, nondictatorship, independence of irrelevant alternatives, and rationality. Arrow's negative conclusion and its various corollaries pose a dramatic threat to the legitimacy of political decisions. The observation that the likelihood of cycling majorities decreases in situations where the number of decision-makers is much greater than the number of choices does not affect the practical relevance of Arrow's analysis applied to the political process, where the large number of decision-makers is actually concentrated into a restricted number of interest groups with "group" votes.

The heart of Arrow's theorem states that there are no non-dictatorial rules or procedures for collective decision-making that reflect the combined preferences of voters to a consistent collective

outcome (Arrow, 1951). The implications of Arrow's theorem concern the existence of cyclical majorities which are capable of repealing any resolution that has been adopted previously. Parisi (1998) suggests that, if all voters are allowed to enter into binding agreements over the policy outcome to be adopted by the majority coalition, collective preferences in a multi-dimensional policy space will be transitive as long as individual preferences are single-peaked.

This intuition runs contrary to the common thought in public and social choice theory (See, e.g., Bernholz, 1973; N.R. Miller, 1977; and Th. Schwartz, 1977). Most of the literature on the stability implications of log-rolling considers log-rolling in the context of bargaining for the formation of coalitions where side-payments are only instruments for entering the majority coalition, and no side-payments are made by those who are not part of the majority. The political reality is often different from that contemplated by these scholars. Bargaining is certainly permitted even between minority and majority voters, with exchanges taking place among all coalitions. As shown by Parisi (1998), if we allow for a broader role for bargaining and side-payments and contemplate binding and enforceable political bargains across different coalitions, the results would be quite different.

C. One Man, One Vote, and the Market for Votes

In situations in which no strong political consensus is reached on a given issue, intransitivity may result. Intransitivity implies that a different order in the decision making process may affect the outcome and that any winning coalition may be undermined by the reintroduction of an alternative it previously defeated. The structure of the voting process does not allow the cycle to be broken by looking at the intensity of voters' preferences. The outcome is arbitrarily determined by the order of motions, with no guarantee that the ultimate result will yield a higher level of social welfare than that potentially afforded by any other defeated policy alternative. The inability of the democratic process to capture the intensity of the voters' preferences is a by-product of the generally espoused principle that every individual is entitled to one–and only one–vote. The "one man, one vote" rule is further explained by the fact that individual voters do not face the opportunity cost of casting their vote. Whether their preference is strong or weak, voters will cast their vote in favor of their favored option. Even if voting were specifically designed to allow voters to indicate the intensity of voters' preferences, the voting ballot could not possibly capture such intensity. Absent a mechanism to extract the true intensity of their preferences, individual voters would tend to overstate their preference in order to maximize the impact of their votes.

Democracy gives equal weight to all votes when they are counted, regardless of how strongly the voters feel about the issue. In this way, numerically equal groups have equal political say in the process. However, if the distribution of sentiments on an issue is not symmetrical, and the minority holds strong preferences, the outcome would be inefficient. By introducing the possibility of bargaining and vote-trading in the process, the intensity of preferences will be reflected in the decision-making process. With bargaining and side-payments, the "one man, one vote" rule would provide the initial entitlement for each voter-trader. The exchange mechanism would then reveal the relative strength of individual preferences.[2] Political bargaining may provide a solution to the intensity problem, and at the same time correct for the cyclicality problem. Politicians know well that

[2] From an efficiency perspective, in fact, weight should be given to intensive preferences.

under certain conditions the outcome may depend on the sequence of decisions and therefore on agenda-setting. For example, in a situation with intransitive preferences, the agenda-setter may influence the process in favor of his preferred policy by determining the sequence of decisions and introducing his preferred policy in the last motion. This point is well known among public choice theorists and legal practitioners. Judge Easterbrook (1983) has noted that "someone with control of the agenda can manipulate the choice so that the legislature adopts proposals that only a minority support." (See also Levine and Plott (1977); Long and Rose-Ackerman (1982)).

Agenda-setting increases the internal predictability of the outcome for those who are involved in the process and have full information about it. Legislators sharing similar information on their respective prospects will have an opportunity to bargain under conditions of symmetric information, trading votes for issues on which they hold weak preferences in exchange for votes on issues which have more value for them. Economic theory teaches us that bargaining between politicians will continue until the marginal utility of gaining one vote on a certain issue equals the marginal cost of giving up one vote for another issue. We should further consider whether the outcome selected by majorities in such an environment of costless and enforceable political bargaining maximizes the combined welfare of the platforms. Parisi (1998) suggests that both stability and efficiency will be obtained through bargaining, as long as the exchanges are enforceable and relatively costless to carry out. The implications are very far-reaching and can be articulated in the following two propositions:

(i) If the conditions for the Coase theorem are present for all voters (i.e., if political agents can enter into coalition contracts with other agents and such contracts are enforceable as stipulated, unless mutually dissolved by all parties), the composition of the initial majority coalition is irrelevant for the policy outcome; and

(ii) If the Coase theorem holds, voters' preferences are strictly concave, and vote-exchange agreements are enforceable, cycling in a multi-dimensional policy space is excluded.

Thus, if political bargains are possible at no cost and political agreements are enforceable, the resulting political equilibrium will be unique and will occur at a point of social maximum. Any point other than the global maximum will be unstable, since there will always be enough surplus to allow for side payments to voters in exchange for policy concessions. Once the socially optimal point is reached, there will be no opportunity to destabilize the policy arrangement.

D. Enforcing Political Bargains

The above conclusions rest on a quite formidable assumption. Political agreements are assumed to be enforceable, just like ordinary contracts in a private law setting. This implies that any attempt to modify the bargained for policy choice would have to be accepted by all parties—contracts can be resolved only with the consent of the contracting parties.

More generally, the Coasian bargaining assumption implies that all political promises are enforceable. In this setting, minority voters can join the coalition and have a marginal effect on the policy outcome by out-bidding or "bribing" all members of the pre-existing majority. With enforceable contracts members of a majority coalition cannot cheat on each other. Collectively, they will entertain offers made by minority voters who will influence the status quo with their side payments, but they will not be able to break away from an existing coalition, since such coalition agreements can be modified only with the consent of all parties. Finally, as well-known in the collective action literature (e.g., Olson, 1965) groups with lower collective action costs can be more

effective in gathering the most effective bribe, as public choice theory has extensively shown in a variety of rent-seeking contexts (Kahn, 1990; Dixit & Olson, 1997).

As pointed out by Cooter (2000), in real politics, bargaining is afflicted by a special problem that is usually absent in private contracts. Political agents are limited to the extent which they can enter into enforceable political bargains. For example, coalitions agreements are only good until a new coalition is formed. Likewise, there is no way to bind future voting decisions in a log-rolling context, or to constrain the choices of future office-holders.

In a traditional contract setting, a contractual agreement can be undone only with the consent of all original contracting parties. Conversely, in informal political agreements, any political agent can betray the original agreement and destabilize the original coalition. There are no direct legal remedies to render such agreements enforceable.

In general, no agreement between current members of Congress regarding future voting is enforceable under the law. For example, majority deliberations cannot be perpetuated prohibiting future amendments or requiring that such amendments be carried out with a super-majority vote. Legislators sometimes have to be creative to make contracts enforceable in the real-world market for votes. In several occasions political actors attempt to signal the enforceability of their bargains (and ensure its influence against the status quo) in a future vote by publicly stating that they would not "go back and undo the things that they pledged that they would do." In other situations, the repeat interaction among politicians may induce the fulfillment of some political bargains, thus facilitating political cooperation. However, the general non-enforceability of political bargains limits the deals that can be struck among political representatives and among branches of government.

E. Limits of the Politics-Like-Markets Analogues

In real politics, legislative and political bodies seldom work like markets. Cooter (2000) points out three main challenges to the politics-like-market analogy. The first reason why political markets do not work like ordinary markets is that the value of a legislator's vote often depends upon how the other legislators vote. There are pervasive externalities and resulting free riding incentives in political action. The second reason is that real life politics has too many political actors for each one to bargain with everyone else. Unlike the atomistic marketplace of traditional economics, bilateral negotiations would be prohibitively expensive in real life politics. Third, Cooter points out the diffuse hostility to a rationalization of politics as a market for consensus. Ordinary citizens with little information about legislative bargains and would resist any institutionalization of political bargaining, objecting to their representatives participating in open log-rolling.

Indeed, a full analysis of the politics-like-market analogy cannot be accomplished in a vacuum, but rather must be exposed to the reality of democratic politics. The following corrollaries are discussed by Parisi (1998) and are illustrative in this regard: (1) issue bundling; (2) free riding and bargaining failures; and (3) agency problems and the political dilemma.

1. Issue Bundling. In the real world of politics, transaction costs are present. As a way to minimize the effect of transaction costs, policy "packages" are traded and voted upon in the usual course of dealing. Political deals are indeed characterized by a bundling of different issues. Congressional voting normally requires a binomial vote on legislation, supplying a bundle of bargained-for provisions. House and Senate rules do not prevent amendments that are unrelated to the subject matter of the bill at issue. (Dixon, 1985; Riggs, 1973) For example, when Congress sent President Clinton the 1997 appropriations bill that funds White House operations, it included

legislative riders ranging from the repeal of a law allowing states to share in federal price discounts from the pharmaceutical industry, to a provision to clarify that imports manufactured by indentured child labor are prohibited (Rogers, 1997). Although the item veto enabled President Clinton to remove particular items from such bundles, he has thus far utilized that power narrowly and selectively (Penny, 1997).

From an efficiency perspective, bundling–just like tying in a commodity market–may generate suboptimal outcomes. In order for a vote exchange process to work at its best, all dimensions of the policy space should be the potential object of bargaining and trade. Bundling reduces the dimensions of the bargaining space. At the limit, all policy dimensions may collapse down to a two-dimensional policy space, limiting the domain of the optimization process.

In an ideal world with no transaction costs, in order to maximize the beneficial functioning of the political market, no bundling should exist. In the real world with positive transaction costs, a positive amount of bundling is to be expected and is part of the global optimization process. Elhauge (1991, p. 31) has noted that where there is issue bundling, "diffuse interests can be systematically under-represented even if voters face no collective action problem." But the market will adjust to reach the optimal tradeoffs between the savings on transaction costs and the inefficiencies of tying.

2. Free Riding and Bargaining Failures. An important assumption of the Coase theorem is the absence of transaction costs. A costless transaction requires the absence of strategic behavior in the bargaining process. This condition is highly problematic in the context of multi-party voting. The opportunity for individual strategic behavior is elevated where two polar groups seek compromise. In the real-world market for votes, the term "triangulation" has been to describe the result of efforts to legislate in the middle ground between ideological extremes, where vote-trading trans-action costs are high (Broder (1997), attributing the "triangulation" concept to former Clinton-advisor Dick Morris).

All cyclicality problems require the presence of at least three voters. Bargaining among three voters in a two dimensional space is highly sensitive to free riding and other forms of strategic preference revelation. If we think of this triangular situation in a spatial voting setting, we can realize that any movement in the policy space will generate benefits or losses for at least two parties. In the great majority of cases, all three parties will be affected by a potential policy change. Under such conditions, any bargaining carried out by one voter has the potential of creating side benefits for another voter. Any policy change "purchased" by one voter is potentially a free good (or a free bad) for another voter. In a three-party bargaining, voters are thus faced with a collective action problem. The problem is exacerbated by an increase in the number of voters. In a multi-voter setting, strategic behavior may indeed plague the bargaining process.

The collective action problem described above is not different from any other free riding problem in a Coasian setting. Olson (1997) has discussed the collective action problem in the context of a Coasian bargaining, questioning the practical validity of the Coasian proposition in a multi-party context. If the object of one individual's bargaining generates a benefit to other individuals who are not involved in the bargain, what is obtained through the bargaining of one individual creates a positive externality to other individuals. Thus the incentives to undertake the bargaining may be seriously undermined. Every individual wishes to be the free rider, having somebody else pay the price of the common good. Thus, similar to any public good situation, there will be a sub-optimal level of bargaining for the common interest.

3. Agency Problems and the Political Dilemma. The analysis of the hypothetical market for votes considered in this article takes the will of the voters as a given. Further analysis should consider the effect of agency problems in the bargaining mechanism. In the real world of politics, most collective decisions are carried out by political representatives, who undertake collective decisions as agents of the represented individuals. Political representation is often undermined by serious agency problems. Public choice theory provides ample analysis of the factors of such incentive misalignment, including (a) rational abstention; (b) rational ignorance; and (c) regulatory capture and resulting special interest legislation. Such discrepancies are most visible when an agency problem in political representation occurs at the margin of a crucial vote.

If bargaining is carried out in the absence of agency problems, the bargaining result maximizes the voters' utility, as illustrated above. But where the bargaining is carried out by interested representatives, the opportunity is present for departures from the optimality outcome described above.

In general terms, if market mechanisms are allowed to operate in political contexts, the collective decision-making mechanism is lubricated. In the absence of representation failures, the collective outcome will approximate the allocative outcome of a competitive market. If bargaining is carried out by agents whose underlying incentives differ from those of their principals, the market mechanism may generate greater discrepancies between the ideal and the real political outcomes, including the fact that agents may be induced to abandon their principals' core values.

F. The Cost of Legislation

The absence of legal enforcement mechanisms in political contracts increases transaction costs and often represents an unsurmountable obstacle to political cooperation. According to Cooter (2000), the institutional design of lawmaking should promote institutional arrangements that minimize the transaction costs of political bargaining.

With respect to legislation as a source of law, the previous sections have shown that the politics-like-markets analogues risk overlooking the difficulties of correcting political failures through political bargaining. The existence of effective exchange mechanisms within politics accentuates the features of the underlying political system. In a world of good politics, it allows for better outcomes. In a world of political failures, it may exacerbate the existing problems.

In a world where political bargaining exists, however, the existence of enforcement mechanisms within politics will promote stability and reduce costly intransitivity of collective outcomes.

As discussed above, stability cannot be used as a proxy for efficiency. It is indeed well-known in the social and public choice literature that a "Condorcet winner" can at times be inefficient, but at least it can always be trusted to satisfy the preferences of the majority of voting individuals. Absent mechanisms to induce voters to reveal the true intensity of their preferences, democratic legislative systems cannot improve on Condorcet winners and should maintain rules that allow such alternatives to prevail when they exist.

If Condorcet winners do not exist, the method and sequence of voting (e.g., agenda setting) determine the political outcome. In these cases, as Cooter (2000) aptly puts it, "democratic politics becomes a contest, not to satisfy the preferences of a unique majority, but to determine which majority's preferences will be satisfied." In these situations, institutions should be designed in order to minimize the welfare costs of voting intransitivity and instability. The existence of enforceable contractual mechanisms for political exchange may be a valuable instrument of stability.

These results confirm Buchanan and Tullock's (1962, p. 153) important observation that "with all side payments prohibited, there is no assurance that collective action will be taken in the most productive way." Likewise, they provide a conjectural solution to Tullock's (1981) puzzle as to why there is so much stability in the political process.

III. Common Law and the Economics of Judicial Lawmaking

Judge-made law and doctrines of stare decisis have varying degrees of importance in the various legal systems of the world. As well known, there is a substantial historical difference between the role played by precedents in the common law and civil law traditions. In early legal systems, written legislation was utilized with great parsimony and great weight was given to customary sources of law. Occasionally, sources of customary law were unable to provide solutions to emerging legal issues and to satisfy the changing needs of society. In these cases, precedents were recognized and followed as a matter of outright necessity.

With the gradual expansion of statutory law, the recognition of precedents as sources of law was no longer a practical necessity. In this setting, contemporary legal systems have developed a variety of doctrines to determine the effective role of judicial decisions in the presence of legislation and to guarantee an effective separation between these two branches of government. Principles of separation of powers provide the constitutional foundations for balancing the institutional roles played by courts and legislators.

A. Separation of Powers and the Independent Judiciary

One key feature of most constitutional systems of the Western legal tradition is the principle of separation of powers, with particular importance placed on an independent judiciary to ensure the fair adjudication of law. The principle of separation of powers implies that, unlike the legislative and executive branches, most judges are (or should be) systematically shielded from political or economic influence.

As a matter of institutional design, the independence of judges can be achieved by either turning the judiciary into a bureaucracy-type institution, where judges are selected and promoted according to pre-established standards of performance on the bench, or through political appointment with life-tenure, with the consequent elimination of any ties with the appointing political body (Cooter, 2000). The first approach is generally followed by most civil law jurisdictions, while the second approach finds its typical incarnation in the federal judiciary of the United States.

Landes and Posner (1975c) examine the effect of the independent judiciary on lobbying, the de jure system of interest group purchase of legislative policy. Economic analysis of the role of the courts shows how an independent judiciary can make viable a governmental process that emphasizes interest group participation in policy formation. By enforcing laws validly passed, even in a previous legislative session, the judiciary ensures integrity in the constitutional process by imposing prohibitive costs on public interest purchase of judicial decisions.

Landes and Posner work from the perspective of interest group analysis, pointing out that interest groups will not purchase policy programs if they cannot assume that desired policy will last. In the absence of an enforceable contract, some other power must provide that guarantee. In the first instance, the high transaction costs associated with cumbersome process of enacting legislation supply stability.

Accordingly, if courts, which must enforce legislation, were agents of the Congress in session, the legislature could cheaply arrange a de facto repeal by asking its courts to rewrite legislation by taking advantage of interpretive leeway. If, on the other hand, the judiciary is independent and interprets legislation in accordance with the enacting Congress' intent, it then supports, rather than interferes with, purchase of legislation by interest groups. However, the independent judiciary may also impose costs by declaring the law unconstitutional or interpreting it in a way that reduces gains to the group that paid for the law.

Some questions have been raised in the literature regarding the actual level of independence of the judiciary. After all, in the U.S. legal system Congress does have powers, such as appropriations of funds, creation of new judgeships, and rewriting jurisdiction by which they might compel judicial acquiescence. However, self-interested judges can increase their independence by rendering predictable decisions in accord with the original meaning of the statute. According to Landes and Posner (1975c), this increases the value of the judiciary to the current legislature because its members know that the courts will enforce the contracts they make. According to the authors, the structure of the judiciary – life tenure, rules against ex parte contact, and impeachment for accepting bribes – also prevents interest groups from influencing judges directly.

Landes and Posner (1975c) further explore the positive implications of the economic theory of the judiciary. First, they consider the case of "dependent" judiciaries, such as those established in specialized agencies, making a consistent finding that such entities are established when the chance of judicial nullification of political and legislative bargains is high. Mild judicial review allows the agencies to keep the terms of a particular legislative deal, but since that review is not wholly effective, administrative adjudication becomes far less consistent over time, as would be expected from a dependent judiciary that is not protected from shifts political emphasis. The authors further consider the effect of an economic system of legislation coupled with an independent judiciary has on the form of interest group legislation. Building upon public choice models of rent-seeking, the authors suggest that interest groups purchase legislation that does not require substantial annual appropriations. Legislative rents that require yearly Congressional funding are quickly dissipated as it would be necessary to lobby each new Congress to support the program, the costs of which eat into the net present value of the legislation for its intended beneficiaries. Since the judiciary cannot help to enforce new annual appropriations, interest groups tend not to purchase such legislation.

The law and economics literature also considers the role of the independent judiciary in enforcing the Constitution. According to Landes and Posner (1975c), judicial independence has two purposes in this context. First, it establishes ground rules for a system of interest group politics enforced by the independent judiciary. Second, the Constitution confers specific protective legislation on powerful interests groups willing to purchase such a provision in their favor. For example, broad interpretation of the First Amendment is a form of protective legislation purchased by publishers as an interest group. The Constitution's purpose, supported by the independent judiciary, is to protect groups powerful enough to obtain a constitutional provision or a special interest legislation in their favor.

The conclusions reached by this literature stress that the independent judiciary is an essential element in the observed struggle among interest groups, which is a major component of political practice. Although the judiciary is a critical player in this process, it itself is not "political" but rather is above politics, because it fulfills its role by enforcing the legislative deals of earlier legislatures, not because it has special wisdom, integrity, morality, or commitment to principle.

B. The Hypothesis that the Common Law is Efficient

To the extent to which judicial bodies are independent from political forces and shielded from interest group pressure, the process of judicial lawmaking can be considered immune from the collective decision making failures considered in the previous section.

In this setting, law and economics scholars formulated a conjecture, known as the efficiency of the common law hypothesis – according to which the common law (i.e., judge-made law) is the result of an effort, conscious or not, to induce efficient outcomes. This hypothesis was first intimated by Coase (1960) and was later systematized and greatly extended by Posner in numerous books and articles. Common law rules attempt to allocate resources in either a Pareto or Kaldor-Hicks efficient manner. Further, common law rules are said to enjoy a comparative advantage over legislation in fulfilling this task because of the evolutionary selection of common law rules through adjudication. Several important contributions provide the foundations for this claim. The scholars who have advanced theories in support of the hypothesis are, however, often in disagreement as to its conceptual basis.

Rubin (1977) provides an important contribution to the emerging efficiency of the common law hypothesis. He maintains that the efficiency of the common law is best explained by an evolutionary model in which parties will more likely litigate inefficient rules than efficient ones. The pressure for the common law to evolve to efficiency, he argues, rests on the desire of parties to create precedent because they have an interest in future similar cases. Rubin thus considers three basic situations: where both parties are interested in creating precedent, where only one party is interested in creating precedent, and where neither party has such an interest.

Where both parties have an interest in future similar cases, and the current legal rule is inefficient, the party held liable will have an incentive to force litigation. Parties will continue to use the courts until the rule is changed. If the current rule is efficient, however, there is no incentive to change it, so it will remain in force. Where only one party has an interest in future similar cases, the incentive to litigate will depend on the allocation of liability. If liability falls on a repeat player, litigation will likely occur, whereas the other party would have no incentive to litigate. As a result, precedents will evolve in the interested party's favor, whether or not the rule is efficient. In the event that neither party is interested in precedents, the legal rule — whether efficient or not — will remain in force, and parties will settle out of court because they lack the incentive to change the current rule. Rubin thus concludes that the common law becomes efficient through an evolutionary process based on the utility maximizing decisions of litigants, rather than on judges' desires to maximize efficiency.

Rubin's analysis was extended by Priest (1977), who articulated the idea that the common law tends to develop efficient rules independently of judicial bias in decision-making. Indeed, he asserts, efficient rules will develop even despite judicial hostility toward efficient outcomes. Priest parts with Rubin, however, on the source of the tendency toward efficiency, rejecting Rubin's conclusion that this tendency occurs only where both parties to a dispute have an interest in future similar cases and therefore have an incentive to litigate. Instead, he asserts that litigation is driven by the costs of inefficient rules, rather than the desire for precedent.

According to Priest's analysis, inefficient rules impose greater costs on the parties subject to them than do efficient rules, thereby making the stakes in a dispute greater. Where the stakes are greater, litigation is more likely than settlement. Consequently, out of the complete set of legal rules, disputes arising under inefficient rules will tend to be litigated and relitigated more often than disputes arising under efficient rules. This means that the rules not contested will tend to be efficient ones. Because they are less likely to be reviewed, including by judges hostile to efficient outcomes, these rules tend

to remain in force. Further, as inefficient rules are reviewed, the process of review provides the chance that they will be discarded in favor of efficient rules which, in turn, are less likely to be reviewed. Thus, the selection of efficient legal rules will continue through the adjudication process.

C. Litigation as a Rule Selection Mechanism

An important component of the theories advanced by Rubin (1977) and Priest (1977) is the criteria for the selection of disputes for litigation. In fact, only a small fraction of disputes go to trial, and even fewer are appealed. Priest and Klein (1984) develop a model of the litigation process that explores the relationship between the set of disputes litigated and the set of disputes settled. According to their one-period model of dispute resolution, the proportion of plaintiff victories in any set of cases will be influenced by the shape of the distribution of disputes, the absolute magnitude of the judgment, litigation and settlement costs, and the relative stakes of the parties. Priest and Klein show that the set of disputes selected for litigation, rather than settlement, will therefore constitute neither a random nor a representative sample of the set of all disputes. They then derive a selection hypothesis: where both parties have equal stakes in the litigation, the individual maximizing decisions of the parties will create a strong bias toward a success rate for plaintiffs at trial (or appellants on appeal) of 50 percent, regardless of the substantive standard of law.

When the assumption that both parties have equal stakes in the dispute is relaxed (e.g., where one of the parties is a repeat player and has a stake in future similar cases), the rate of success in litigation begins to deviate from the hypothesized baseline, and the model predicts that the repeat player will prevail more frequently. Priest and Klein present a great deal of data, both derived from their own empirical investigations and from the major empirical studies of the legal system since the 1930s. While they caution, because of measurement problems, against the conclusion that these data confirm the selection hypothesis, the data are nonetheless encouraging.

Legal disputes are resolved at various stages of a sequential decision-making process in which parties have limited information and act in their own self-interest. An efficient resolution occurs when legal entitlements are assigned to the parties who value them the most, legal liabilities are allocated to the parties who can bear them at the lowest cost, and transaction costs are minimized. Following these premises, Cooter and Rubinfeld (1989) review economic models of legal dispute resolution, attempting to synthesize a model that provides a point of reference necessary to both an understanding of the courts, and deliberation over proposed changes in legal rules. In the first stage of a legal dispute, the underlying event, efficiency requires balancing the cost of harm against the cost of harm avoidance. Because Coasian bargaining is typically not possible, the social costs of harm are externalized. Therefore, an initial allocation of entitlements is essential to creating incentives for efficient levels of activity and precaution. During the second stage, the harmed party decides whether or not to assert a legal claim. This requires the balancing of immediate costs, such as hiring an attorney, and the expected benefits from asserting a claim. In the third stage, after a legal claim is asserted, but before trial, courts encourage parties to bargain together to reach a settlement. If the parties cannot privately settle their dispute, the court performs this function in the final stage, trial. Using their hybrid economic model of suit, settlement, and trial, Cooter and Rubinfeld come to examine the incentives parties face as they proceed through the litigation process, and make predictions based on the decisions available to the parties, with a discussion of some of the concerns that arise from the pursuit of efficiency which pervades normative economic analysis.

D. Judicial Incentives and the Common Law

To understand judicial behavior, the first step is to analyze the incentives faced by judges in their judicial role. In the federal system, law and economics has had difficulty explaining judicial behavior in economic terms, in part because the federal judiciary is structured so as to shield judges from direct political or economic constraints. Posner (1994) articulates a positive economic theory of the behavior of federal appellate judges, using a model in which judicial utility is primarily a function of income, leisure, and judicial voting. He argues that appellate judges are ordinary, rational people whose behavior is somewhat analogous to that of managers of nonprofit enterprises, voters, and theatrical spectators.

In Posner's view appellate judges are like nonprofit managers in that it is difficult to determine the quality or value of the desired output (neutral "justice") from the full range of their services (rulemaking, private dispute resolution, and interposition between the government and its citizens). A rational public is reluctant to buy such services from a profit-making enterprise because a competitive market is not feasible, and they are reluctant to delegate such services to elected officials whose use of political criteria would not be easily monitored. The judiciary is called on to apply neutral justice with much discretionary power but without monetary or political compensation incentives.

The judiciary's nonprofit structure enables competent people to be attracted to judging at lower wages by not forcing judges to work as hard as comparable lawyers might in private practice. However, because most judges continue their judicial activity beyond the usual retirement age of their private sector counterparts, Posner postulates that judges must derive utility in judging beyond just money and leisure. Posner believes that an appellate judge's utility function additionally contains preferences for a good reputation, popularity, prestige, and avoiding reversal. He explicitly excludes from the judicial utility function a desire to promote the public interest because he says such preference cannot be assumed across the board for all individuals. While it might explain the decisions of a few judges, it is not a good standard overall.

Posner analogizes judicial decision making to political voting. There is pure utility in voting, as evidenced by participation in popular elections in which individuals incur a net cost in order to participate in the political process. This analogy suggests that voting on cases is one of the most important sources of judicial utility due to the deference judges' opinions receive by lawyers and the public. Judges further derive a consumption value in deciding for whom or what to vote. Judges balance this consumption against the opportunity cost of decision-making. Leisure-seeking by judges with weak preferences may result in "going along" voting: insistence that a particular decision is coerced by the law, joining opinions containing much dictum with which they disagree, or using procedural rules to avoid difficult or politically sensitive issues. Posner further suggests that this leisure-seeking explains why judges adhere to *stare decisis*, but not rigidly, given the partially offsetting utility of discretionary power.

Posner's approach supports the theory that the conditions of judicial employment enable and induce judges to vote their values (among which Posner believes efficiency to be particularly influential), and his hypothesis generates a number of testable economic predictions about judicial behavior which have engaged an entire generation of legal and economic scholars.

E. Rules, Standards and the Economics of Legal Rulemaking

Often a judge must choose between a rule that is precise and one that provides better results in most cases but has higher adjudication costs. Posner's foundational work on the economics of legal rulemaking is often associated with the general theory of adjudication advanced in Ehrlich and Posner (1974a). The choice of the degree of precision in the formulation of legal commands is largely based on the desire to minimize social costs. Specific legal rules and general legal standards lie at opposite ends of the precision spectrum. Ehrlich and Posner articulate the criteria for determining the optimal degree of specificity, given cost minimization as a dominant consideration. The authors begin with a static cost-benefit analysis of the optimum level of detail in legal rules.

Ehrlich and Posner discuss the benefits that precision brings to the legal system, including increased predictability and the consequential reduction in litigation expenditures, increased speed of dispute resolution, and reduced information costs associated with adjudication. The authors suggest that greater precision benefits the legal system. Such benefit results from increasing the marginal productivity of prosecuting the guilty relative to the innocent and reducing the marginal productivity of a guilty defendant's litigation expenditures relative to the innocent. Greater precision allocates scarce judicial resources more efficiently. It makes outcomes more predictable and thus encourages settlement. It decreases the number of legal issues and thus makes dispute resolution more speedy. It reduces information costs in dispute resolution by summarizing what has been learned in prior adjudications, and it facilitates monitoring of judicial agency costs by making incompetent or corrupt outcomes more detectable.

With these benefits, precision also brings costs: the costs of rule formulation (often substantial, given the high transaction costs of statutory decisions) and allocative inefficiency arising from both the over-inclusive and under-inclusive effects of rules. Greater specificity generates inefficiencies from imperfect fits between the coverage of a rule and the conduct it seeks to regulate. Greater precision imposes costs in obtaining and evaluating information and formulating rules (which increases with the number of decision-makers involved). Greater specificity increases the information barriers for laymen, who are more likely to understand general standards than specific rules which employ technical language. Additionally, it increases expenditures on legal counsel because most rules are not nearly as intuitive as standards. Lastly, specificity increases the rate of obsolescence of the rules under changing economic and social conditions.

IV. Customary Law and the Economics of Decentralized Lawmaking

The hypothesis that legal rules evolve toward efficiency by a process similar to natural selection was originally formulated with reference to judge-made common law rules. While wealth-maximizing hypotheses of the common law have served as a baseline for the analysis of other sources of law, different theoretical frameworks are used to explain the economic structure of non-judge-made rules.

As part of this undertaking, law and economics scholars have examined whether and how far the theory that law is an instrument for maximizing social wealth or efficiency can be extended to other decentralized processes of law formation, such as customary law and social norms.

A. Adjudicating Social Norms

According to the theory of spontaneous law, customary law has a comparative advantage over other institutional sources. The intellectual basis of this claim is related to the proposition that any social arrangement that is voluntarily entered upon by rationally self-interested parties is beneficial to society as a whole.

The inductive process which underlies spontaneous law builds upon the role of individuals giving direct effect to their revealed preferences, without the interface of third-party decision-makers. To the extent that social practices have emerged under competitive conditions (i.e., so long as there is an implicit cost for indulging in inefficient equilibria) without Pareto relevant externalities, we may be able to draw plausible conclusions regarding the desirability of emerging customs. It is in this latter sense that custom may reclaim full dignity as a source of law. The evolutionary and game-theoretic appraisals of the lawmaking process have indeed shed new light on the normative foundations of spontaneous law, but they require an appropriate analysis of the incentive structure in the originating social environment. (Cooter, 1992).

Evolutionary theories of cooperation have indeed explained the ability of rationally self-interested individuals to cooperate for the sake of mutual gain. Evolutionarily stable cooperative strategies serve efficiency goals and may emerge as social norms recognized by the community to be obligatory. Once emerged, customary rules generate the expectations of the other members of society and those expectations in turn demand judicial enforcement. In some instances, peer pressure and spontaneous processes of norm internalization will support their enforcement.

The legal system may further this process by recognizing and enforcing welfare-maximizing social norms. In this regard, Cooter (1994) argues that legal recognition and enforcement should consequently be denied in the case of non-cooperative practices, under a test that amounts to a structural analysis of the social incentives that generated the norm. He further argues that in the process of common law adjudication, a distinction must necessarily be made between cooperative norms and non-cooperative practices. Courts are not specialized in the adjudication of most norms. They must therefore resort to a structural approach, first inquiring into the incentives underlying the social structure that generated the norms, rather than attempting to weigh their costs and benefits directly.

B. The Process of Customary Law Formation

A fundamental insight of the economic analysis of law is the notion that legal sanctions are "prices" set for given categories of legally relevant behavior. This idea develops around the positive conception of law as a command backed by an enforceable sanction. Law and economics uses the well-developed tools of price theory to predict the effect of changes in sanctions on individual behavior. One essential question, however, remains unanswered: how can the legal system set efficient prices if there is no market process that generates them? In other words, how can legal rules reflect the level of social undesirability of the conduct being sanctioned?

Although the legal system sometimes borrows a price from the actual market (e.g., when the sanction is linked to the compensatory function of the rule of law), there is a wide range of situations in which legislative and judicial bodies set prices in the absence of a proper market mechanism. In a law and economics perspective, customary law can be viewed as a process for generating legal rules that is analogous to a price mechanism in a partial equilibrium framework.

Both the emergence of custom from repeated contractual practice and the role of custom as a non-contractual solution to game inefficiencies have been the object of study in both the economic and philosophical literature. Law and economics has revisited this familiar theme, considering the spontaneous emergence of customary law, and more recently, emphasizing the issue of legal and institutional change in an evolutionary setting (See, e.g., Cooter, 1994; Parisi, 1995 and 1998; E. Posner, 1996; Bernstein, 1996). Further, Parisi (2000) has considered the public choice dimension of the process of customary law formation, considering the potential for norm manipulation and the desirability of an increased recognition and incorporation of customary norms by the legal system.

C. Customary Law in the Age of Legislation

In the "social contract" framework, customary rules can be regarded as an implied and often non-verbalized exercise of direct legislation by the members of society. Those legal systems that grant direct legal force to customary rules regard custom as a primary, although not exclusive, source of law. In such legal traditions, courts enforce customary rules as if they had been enacted by the proper legislative authority. Custom thus amounts to a spontaneous norm which is recognized by the legal system and granted enforcement as a proper legal rule.

Modern legal systems generally recognize customary rules that have emerged either within the confines of positive legislation (*consuetudo secundum legem*) or in areas that are not disciplined by positive law (*consuetudo praeter legem*). Where custom is in direct conflict with legislation (*custom contra legem*) the latter normally prevails. In some instances, however, a custom supersedes prior legislation (*abrogative custom*), and some arguments have been made in support of emerging practices that conflict with obsolete provisions of public international law (*desuetudo*, or abrogative practice) (Kontou, 1994).

Judicial recognition of customary practice amounts to a declaratory (rather than constitutive) function that treats custom as a legal fact. The legal system "finds" the law by recognizing such practices, but does not "create" the law. The most notable illustration is the system of international law, where, absent a central legislative authority, custom stands next to treaties as a primary source of law. (See, e.g. Article 38 (1) of the *Statute of the International Court of Justice*; and Restatement 102 of the *Foreign Relations Law of the United States*).

Whenever they are granted legitimate status in a legal system, customary rules are usually given the same effect as other primary sources of law. Although often subordinated to formal legislation, customary rules derive their force from the concurrence of a uniform practice and a subjective belief that adherence to them is obligatory (*opinio iuris*), without necessarily being formally incorporated into any written body of law. For this reason, they are usually classified as "immaterial" sources of law (H.L.A. Hart, 1961, p. 246-7; Brownlie, 1990). This notion implies that the custom remains the actual source of law even after its judicial recognition. In this setting, the judicial decisions that recognize a custom offer only persuasive evidence of its existence and do not themselves become sources of law. In turn, this prevents the principle of *stare decisis* from crystallizing customary law.

D. The Anatomy of Customary Law

The theory of customary law defines custom as a practice that emerges outside of legal constraints, and which individuals and organizations spontaneously follow in the course of their interactions out of a sense of legal obligation. Gradually, individual actors embrace norms that they view as requisite to their collective well-being. An enforceable custom emerges from two formative elements: (i) a quantitative element consisting of a general or emerging practice; and (ii) a qualitative element reflected in the belief that the norm generates a desired social outcome.

1. The Quantitative Element. The quantitative requirements for the formation of customary law concern both the length of time and the universality of the emerging practice. Regarding the time element, there is generally no universally established minimum duration for the emergence of customary rules. Customary rules have evolved from both immemorial practice and a single act. Still, French jurisprudence has traditionally required the passage of forty years for the emergence of an international custom, while German doctrine generally requires thirty years. (See Tunkin (1961); and Mateesco (1947)). Naturally, the longer the time required to form a valid practice, the less likely it is for custom to effectively anticipate the intervention of formal legislation, and to adapt to changing circumstances over time.

Regarding the condition of universality, international legal theory is ambivalent. Charney (1986) suggests that the system of international relations is analogous to a world of individuals in the state

of nature, dismissing the idea that unanimous consent by all participants is required before binding customary law is formed. Rather than universality, recent restatements of international law refer to "consistency" and "generality." (See D'Amato, 1971). Where it is impossible to identify a general practice because of fluctuations in behavior, the consistency requirement is not met. (See *Asylum case* (1950), at 276-7; and *Wimbledon case* (1923), Ser. A, no. 1). Similarly, more recent cases in international law restate the universality requirement in terms of "increasing and widespread acceptance." (See, e.g., *Fisheries Jurisdiction case* (1974), at 23-6; *North Sea Continental Shelf cases* (1969), at 42), allowing special consideration for emerging general norms (or local clusters of spontaneous default rules) that are expected to become evolutionarily stable over time.

With regard to rules at the national or local level, the varying pace with which social norms are transformed suggests that no general time or consistency requirement can be established as an across-the-board condition for the validity of a custom. Some variance in individual observation of the practice should be expected because of the stochastic origin of social norms. A flexible time requirement is particularly necessary in situations of rapid flux, where exogenous changes are likely to affect the incentive structure of the underlying relationship.

2. The Qualitative Element. The second formative element of a customary rule is generally identified by the phrase *opinio iuris ac necessitatis*, which describes a widespread belief in the desirability of the norm and the general conviction that the practice represents an essential norm of social conduct. This element is often defined in terms of necessary and obligatory convention. (Kelsen, 1939 and 1945; D'Amato, 1971; and Walden, 1977). The traditional formulation of *opinio iuris* is problematic because of its circularity. It is quite difficult to conceptualize that law can be born from a practice which is already believed to be required by law.

The practical significance of this requirement is that it narrows the range of enforceable customs. Only those practices recognized as socially desirable or necessary will eventually ripen into enforceable customary law. Once there is a general consensus that members of a group ought to conform to a given rule of conduct, a legal custom can be said to have emerged when some level of spontaneous compliance with the rule is obtained. As a result, observable equilibria that are regarded by society as either undesirable (e.g., a prisoner's dilemma uncooperative outcome) or unnecessary (e.g., a common practice of greeting neighbors cordially) will lack the subjective and qualitative element of legal obligation and, therefore, will not generate enforceable legal rules.

The concept of *opinio iuris* introduces a distinction between mere behavioral regularities and internalized obligations. This distinction may be related to the parties' awareness of the expected aggregate payoffs from the game, a distinction that is crucially important in the normative setting. Two categories of social rules are generally distinguished: (a) those that reflect mere behavioral patterns that are not essential to the legal order; and (b) those that reflect an internalized belief that the practice

is necessary or socially desirable. A mere behavioral regularity, lacking the qualitative element of *opinio iuris*, does not generate a customary rule. In legal jargon, such behavior is a mere usage; in economic terms it simply represents an equilibrium convention. On the other hand, norms considered necessary for social well-being are treated as proper legal customs and can enter the legal system as primary sources of law.

E. The Domain of Customary Law

The literature on social norms proceeds by considering the appropriate domain of customary law and studying the situations that are more easily governed by spontaneous law.

The earliest economic models of spontaneous norm formation consider the role of morality and internalized obligations as a means for inducing cooperation in conflict games (see, e.g., Gauthier, 1986; and Ullmann-Margalit, 1977). Internalization of the norm is a source of spontaneous compliance. For example, individuals internalize obligations when they disapprove and sanction other individuals' deviations from the rule, or when they directly lose utility when the norm is violated. In this setting, Cooter (1994) suggests that a legal custom will successfully evolve when the *ex ante* individual incentives are aligned with the collective public interest. Cooter (1994, p. 224) calls this proposition the "alignment theorem."

The perfect alignment of individual interests rarely occurs in real life situations, however, so proxies for structural harmony (such as role reversibility and reciprocity) have been considered by the more recent literature.

1. Reciprocity and Incentive Alignment. Individuals choose among alternative rules of behavior by employing the same optimization logic they use for all economic choices. True preferences are unlikely to be revealed when individual interests are not aligned. Traditionally, strategic preference revelation is viewed as a hindrance to the spontaneous emergence of cooperation. Such a problem is likely to be minimized in situations of role reversibility or stochastic symmetry (Parisi, 1995). Role reversibility and stochastic symmetry induce each member to agree to a set of rules that benefits the entire group, thus maximizing her expected share of the wealth.

These conditions in fact occurred during the formative period of the medieval law merchant (*lex mercatoria*), when traveling merchants acted in the dual capacity of buyer and seller. If they articulated a rule of law which was favorable to them as sellers, it could have the opposite effect when they acted as buyers, and vice-versa. This role reversibility changed an otherwise conflicting set of incentives (buyer versus seller) into one that converged toward symmetrical and mutually desirable rules.

The law merchant therefore illustrates a successful system of spontaneous and decentralized law (see Benson, 1989 and 1990; and Greif, 1989). Fuller (1969, p. 24) observes that frequent role changes foster the emergence of mutually recognized and accepted duties "in a society of economic traders. By definition the members of such a society enter direct and voluntary relationships of exchange. . . . Finally, economic traders frequently exchange roles, now selling, now buying. The duties that arise out of their exchanges are therefore reversible, not only in theory but in practice."

Certainly, the emergence of consensus for a given rule does not exclude the possibility of subsequent opportunistic deviation by some individuals when roles are later reversed. This is a typical enforcement problem, however, and the possibility of strategic defection does not undermine the rule's qualitative features. The general acceptance of (or acquiescence to) a custom depends primarily on its anticipated effect on the group. Those strategies that maximize the expected payoff for each participant if reciprocally undertaken evolve into norms. This conception of spontaneous law is examined by Stearns (1994, pp. 1243-44), who observes that if the participants were unable to devise rules governing future interactions, and unforeseen circumstances placed them in a forced market relationship requiring post-contractual negotiations, courts and legislatures might have a comparative advantage over the participants in devising market facilitating rules. Unlike market participants, courts and legislatures choose from among alternative solutions as if the underlying events had not yet occurred, without attempting to maximize strategically the advantage caused by unforeseen circumstances (See also Shubik, 1987).

Where rules are breached following role reversal, norms play a collateral yet crucial role in sanctioning case-by-case opportunism. A merchant who invokes a particular rule when buying yet refuses to abide by the same rule when selling would be regarded as violating a basic norm of business conduct, and would suffer reputational costs within the business community. Conditions of role reversibility, coupled with norms that generate disincentives to adopt opportunistic double standards, are therefore likely to generate optimal rules via spontaneous processes. The group's ability to impose a sanction obviously depends on an individual's accountability for his past behavior. Benson (1992, pp. 5-7) explores the role of reputation in situations of repeated market interaction, observing that reputation serves as a source of collective knowledge regarding past actions.

2. Reciprocity Rules in Customary Legal Systems. When unilateral defection promises higher payoffs and there is no contract enforcement mechanism, players are tempted to depart from optimal strategies, often generating outcomes that are Pareto inferior for all (e.g., the well-known prisoner's dilemma game). Prisoner's dilemma-type games are plagued by the dominance of opportunistic behavior because of the potential accessibility of off-diagonal, non-cooperative outcomes. Schotter

(1981), Lewis (1969) and Leibenstein (1982) analyze the role of conventions in correcting prisoner's dilemma situations.

Among the devices capable of correcting prisoner's dilemma-type games, the players can bind their strategic choices to those of their opponents, drastically changing the equilibrium of the game. Ensuring automatic reciprocity by binding a player's strategy to that of his opponent eliminates access to off-diagonal outcomes and renders the reward for unilateral defection unobtainable. Just as no rational player will employ defection strategies in the hope of obtaining higher payoffs from unilateral cheating, neither will a rational player be induced to select defection strategies as a merely defensive tactic. Automatic reciprocity mechanisms thus guarantee the destabilization of mutual defection strategies and the shift toward optimizing cooperation. (For a similar argument relying on tit-for-tat strategies, see, generally, Axelrod, 1981).

Interestingly, where custom is recognized as a primary source of law, mechanisms of automatic reciprocity are generally regarded as meta-rules of the system. One may consider the following two illustrations, lawless environments and law of nations, drawn respectively from ancient law and modern international law, which reveal substantial structural similarities.

Lawless environments are characterized by structural reciprocity. In such environments, rules of reciprocity emerge as fundamental customary norms. In the absence of an established legal system or commonly recognized rule of law, reciprocity implies that parties can do unto others what has been done to them, subject to the limits of their reciprocal strengths. Ancient customs of retaliation, based on conceptions of symmetry and punitive balance, provide an intriguing illustration of the principle of reciprocity at work. (See, e.g., Exodus 21:23; and Code of Hammurabi Paragraphs 108 and 127).

Similarly, in the so-called law of nations (the system that governs the relationships between states), the voluntary recognition of rules by sovereign states implies that absent a commonly accepted standard of conduct, lawless freedom applies. Positions that are unilaterally taken by one state generate a standard which may be used against the articulating state in future occasions.

Thus, in both ancient law and modern international law, the principle of reciprocity serves as a crucial pillar for the process of law formation. Often, situations of post-contractual behavior capable of modifying states' obligations arise in the law and practice of international relations. The international law formation process provides states with numerous occasions for opportunistic behavior, including hold-out strategies and free riding. Left unconstrained, states' unilateral defection strategies would dominate in equilibrium. To cope with this reality, basic norms of reciprocity are generally recognized as rules of the game.

As a further illustration, one can consider Art. 21(1)b of the 1969 Vienna Convention, which articulates an established custom of reciprocity, creating a mirror-image mechanism in the case of unilateral reservations. Art. 21(1)b states, "[a] reservation established with regard to another party . . . modifies those provisions to the same extent for that other party in its relations with the reserving

state." The effects of this automatic reciprocity mechanism are similar to a tit-for-tat strategy without the need for active retaliation by states. Whenever a treaty is modified unilaterally in favor of one state, the result will be as if all the other states had introduced an identical reservation against the reserving state. As shown by Parisi (1995), by imposing a symmetry constraint on the parties' choices, this rule offers a possible solution to prisoner's dilemma problems.

It should be noted that, while the principle of reciprocity solves conflict situations characterized by a prisoner's dilemma structure (in both symmetric and asymmetric cases), alone it is incapable of correcting other strategic problems. For example, when a conflict occurs along the diagonal possibilities of the game (such that the obtainable equilibria are already characterized by symmetric strategies), a reciprocity constraint will not eliminate the divergence of interests between the players and will not affect the results of the game (e.g., in a "Battle of the Sexes" game, reciprocity is ineffective). The same holds for pure conflict (i.e, zero-sum) situations.

3. Other Environmental Conditions that Foster Efficient Customs. Evolutionary models further examine the role of long-term relationships in the equilibrium of the game. In long-term human interactions, reciprocity and close-knittedness provide individuals with incentives to choose globally optimizing strategies. Introducing interdependent utility functions into the model, the horizons of individual maximization are extended to include payoffs from future interactions with a direct computation of the well-being of close members within the group. Such a theoretical framework obviously allows for a far more optimistic prediction of spontaneous order. This insight is consistent with the predictions of evolutionary models of social interaction, where low discount rates for future payoffs and the close-knittedness of the group are found to be positively correlated with the emergence of optimal social norms. Models based on interdependent utility and close-knittedness generate results that are qualitatively similar to those discussed for the case of role reversibility.

If the models are further modified to allow the intensity of sentiments of social approbation or disapprobation to vary with the relative frequencies of the two strategies in the population, the degree of spontaneous norm enforcement is likely to increase with a decrease in the proportion of defectors in society. Likewise, norms that are followed by a large majority of the population are more likely to be internalized by marginal individuals in the absence of coercion. Generally, if the measure of spontaneous enforcement and internalization of the norm depends on the proportion of the population that complies with the norm's precepts, the dynamic adjustment will become even more conspicuous. Along with the adjustments taking place in the initial time period, an additional "internalization effect" will occasion a dynamic adjustment of the equilibrium. An initial change in the players' level of norm internalization reproduces the conditions of instability occasioned by the initial emergence of the norm. In this setting, norms become self-reinforcing in that they are likely to occasion an increase in

both spontaneous compliance and expected payoffs to the norm-abiding players, with a threshold level of compliance marking the "tilt point" for the survival of the norm.

The various models formulated in the literature suggest that iterated interactions with role reversibility, reciprocity constraints, and structural integration facilitate the emergence and recognition of customary law. The dynamic of the norm formation may unveil the existence of a "tilt point" beyond which emerging beliefs become stable and self-sustaining. In light of reciprocal constraints undertaken by other members of the community, individuals who frequently exchange roles in their social interactions have incentives to constrain their behavior to conform to socially optimal norms of conduct. Buchanan (1975) insightfully anticipated this result, suggesting that even stronger logic explains the emergence of cooperation in situations of induced reciprocity. In both cases, the non-idealistic and self-interested behavior of human actors will generate optimal norms.

F. Articulation Theories of Customary Law

Notable scholars have considered the conditions under which principles of justice can emerge spontaneously through the voluntary interaction and exchange of individual members of a group. As in a contractarian setting, the reality of customary law formation relies on a voluntary process through which members of a community develop rules that govern their social interaction by voluntarily adhering to emerging behavioral standards. In this setting, Harsanyi (1955) suggests that optimal social norms are those that would emerge through the interaction of individual actors in a social setting with impersonal preferences. The impersonality requirement for individual preferences is satisfied if the decision makers have an equal chance of finding themselves in any one of the initial social positions and they rationally choose a set of rules to maximize their expected welfare. Rawls (1971) employs Harsanyi's model of stochastic ignorance in his theory of justice. However, the Rawlsian "veil of ignorance" introduces an element of risk aversion in the choice between alternative states of the world, thus altering the outcome achievable under Harsanyi's original model, with a bias toward equal distribution (i.e., with results that approximate the Nash criterion of social welfare). Further analysis of the spontaneous formation of norms and principles of morality can be found in Sen (1979); Ullmann-Margalit (1977); and Gauthier (1986).

Legal theorists and practitioners have addressed a similar issue when considering the requirements of *opinio iuris*. In attempting to solve one of the problems associated with the notion of *opinio iuris*, namely the troublesome problem of circularity, legal scholars (notably, D'Amato, 1971) have considered the crucial factors of belief and action in the formation of customary rules. The traditional approach emphasizes the awkward notion that individuals must believe that a practice is already law before it can become law. This approach basically requires the existence of a mistake for the emergence of a custom, the belief that an undertaken practice was required by law, when instead,

it was not. Obviously, this approach has its flaws. Placing such reliance on systematic mistakes, the theory fails to explain how customary rules can emerge and evolve over time in cases where individuals have full knowledge of the state of the law.

In this context, legal theorists have proposed to look past the notions of *opinio iuris* and usage concentrating on the qualitative element of "articulation." Articulation theories capture two important features of customary law: (a) customary law is voluntary in nature; and (b) customary law is dynamic. According to these theories, in the process of ascertaining the qualitative element of *opinio iuris*, relevance must be given to the statements and expressions of belief (i.e., articulations) of the various players. Individuals and states articulate desirable norms as a way to signal that they intend to follow and be bound by such rules. In this way, articulation theories remove the guessing process from the identification of *opinio iuris*.

Consistent with the predicament of the economic models, articulation theories suggest that greater weight should be given to beliefs that have been expressed prior to the emergence of a conflict. Here, it is interesting to point out a strong similarity between the legal and the economic models. Articulations that are made prior to the unveiling of conflicting contingencies can be analogized to rules chosen under a Harsanyian veil of uncertainty.

States and individuals will have an incentive to articulate and endorse norms that maximize their expected welfare. Given some degree of uncertainty as to the future course of events, the emerging rules will be such as to maximize the expected welfare of the community at large. Conversely, rules that are articulated after an outburst of conflict may be strategically biased. Once the future is disclosed to them, parties will tend to articulate rules that maximize their actual welfare, rather than the expected welfare to be derived from an uncertain future. Thus, ex ante norms should be given greater weight in the adjudication process.

This predicament seems to be contradicted, however, by the empirical and anecdotal evidence on commercial customary law. Bernstein (1996) examines customary rules that have developed in various modern commercial trades. Her findings seem to indicate that in the adjudication of business disputes, commercial tribunals tend to enforce customary rules that are quite different from the business norms spontaneously followed by the parties in the course of their relationship. Rather, customary rules develop around practices developed during the conflictual phase of a relationship. In this setting, Bernstein distinguishes between relationship norms and end-of-the-game norms. When adjudicating a case, courts are faced with parties who have reached the end point in their relationship. The end-of-the-game norms of the conflictual phase thus tend to be enforced, while the cooperative norms developed in the course of their relationship remain outside the domain of adjudication.

F. The Limits of Customary Law

Customary rules are generally accepted by the community, with a larger share of rules followed spontaneously by the community and a consequent reduction in law enforcement costs. In the decentralized dynamic of spontaneous law, individual decision-makers directly perceive the costs and benefits of alternative rules, and reveal their preferences by supporting or opposing their formation. The formative process of customary law proceeds through a purely inductive accounting of subjective preferences. Through his own action, each individual contributes to the creation of law. The emerging rule thus embodies the aggregate effects of independent choices by various individuals that participate in its formation. This inductive process allows individuals to reveal their preferences through their own action, without the interface of third-party decision-makers.

The analogy between customary rules and spontaneous market equilibria, however, calls for an assessment of the potential insufficiencies of the spontaneous processes of law formation. The literature in this area is relatively thin and much work still needs to be done to develop a coherent understanding of the limits of spontaneous sources of law.

1. Path Dependence and the Idiosyncracies of Customary Law. Norms and conventions vary from place to place. Any theory about the efficiency of spontaneous law should explain the diversity of norms and conventions across time and space. In my view, there are two primary ways to provide such an explanation.

The first is to look for idiosyncratic environmental or institutional factors which might attribute to the diversity of observed rules. If the underlying social, economic, or historical realities are found to be different from one another, different norms or conventions should be expected. Rules, norms and conventions develop in response to exogenous shocks through a natural process of selection and evolution. This "survival of the fittest" explanation would suggest that whatever exists in equilibrium is efficient, given the current state of affairs. This belief, borrowed from Darwinian evolutionism, is pervasive in the law and economics literature, and, when applied to spontaneous law, risks becoming a tautological profession of faith. Ironically, we should note that the originators of such a claim, socio-biologists, have now widely refuted its validity.

The second way to reconcile the efficiency claim to the observed diversity of spontaneous rules is to consider the role of path dependence in the evolution of norms and conventions. Evolution toward efficiency takes place with some random component. Random historical and natural events (the random element of chaos theory) determine the choice of the initial path. This may be the case particularly where initial choices are made under imperfect information. Evolution then continues toward efficiency along different paths, with results that are influenced and constrained by the initial random conditions.

If we agree that path dependence has something to do with the emergence and evolution of customary law, we should follow this logic to its conclusion, revisiting the very foundations of the

efficiency claim. The main question is whether path dependence could ever lead to inefficient results. According to current research (Roe, 1996), path dependence may lead to inefficient equilibria. Once a community has developed its norms and conventions, the costs of changing them may outweigh the benefits. Less efficient rules may persist if the transition to more efficient alternatives is costly. Thus, if one allows for some randomness and path dependence, norms and conventions, although driven by an evolution-toward-efficiency dynamic, may stabilize around points of local, rather than global, maximization. Our history, in this sense, constrains our present choices. We may wish we had developed more efficient customs and institutions, but it would be foolish now to attempt to change them. The claim of efficiency of spontaneous law thus becomes a relative one vis-a-vis the other sources of law. The point then becomes that of weighing the relative advantages of spontaneous lawmaking against the attributes of engineered legislation, taking full account of the pervasive public choice and information problems underlying such alternatives.

2. Rational Abstention and Norm Manipulation. A public choice analysis of customary law should further consider the vulnerability of norms and customs to the pressure of special interest groups. This line of analysis—relatively undeveloped in the current literature—should search for parallels between the legislative process and the dynamic of norm formation. In that setting, the opportunity for collective beliefs and customs to be manipulated by special interest groups should be analyzed. Any claim that customary sources are superior to proper legislation will have to rest on a solid understanding of the relative sensitivity of each source to possible political failures.

The application of a well known theorem of public choice to the study of customary law generates very interesting results. Unlike legislation in a representative democracy, customary law rests on the widespread consensus of all individuals affected by the rule. If principal-agent problems are likely to arise in a political world characterized by rational ignorance and rational abstention of voters, no such problems appear to affect customary sources. Individuals are bound by a customary rule only to the extent that they concurred—actively or through voluntary acquiescence—in the formation of the emerging practice.

Imperfect information, however, may induce voluntary acqui-escence—or even active concurrence—to an undesirable practice. Economic models of cascade or bandwagon behavior have shown how inferior paths can be followed by individuals who rely on previous choices undertaken by other subjects, and value such observed choices as signals of revealed preference. Economic models have shown that, when information is incomplete, excessive weight can be attached to the signal generated by others. Others' choices may be followed even when the agent's own perception conflicts with the content of the observed signal. In this way, a biased or mistaken first-mover can generate a cascade of wrong decisions by all his followers, with a result that may prove relatively persistent under a wide array of conditions.

Cascade arguments may also unveil the relative fragility of spontaneous sources of law in light of the possible manipulation of collective beliefs through biased leadership. If information is imperfect, the input of politically biased first-movers may generate undesirable norms. These norms may persist because of the weight attached to the choices of our predecessors. Thus, once generated, wrong beliefs may become stable and widespread in any community of imperfect decision makers.

3. Collective Action Problems in Customary Legal Regimes. Another potential weakness of customary law is revealed by the application of a collective action framework to the study of the formation and enforcement of customary rules. We can start the analysis by observing that legal rules and law enforcement are public goods. In the case of customary rules, collective action problems may thus arise at two distinct stages: first, in the formative process of customary rules; and second, in the enforcement of the emerged customs.

The process of a custom formation relies on the spontaneous and widespread acceptance of a given rule by the members of a group. Individuals often face a private cost when complying with the precepts of the rule, and they generally derive a benefit because of the compliance of others with existing rules. Thus, the formation of customary law can be affected by a public good problem. When discussing the conditions under which customary rules can effectively develop, I illustrated the analysis with a game-theoretic framework. The public good problem considered here is in many respects similar to the strategic tension that we have examined in the context of customary law formation. If individuals face a private cost and generate a public benefit through norm creation, there will be a suboptimal amount of norms created through spontaneous processes. Any individual would like others to observe a higher level of norm compliance than he or she observed. The resulting level of norm compliance would thus be suboptimal. Collective action problems in the formation of customary rules have traditionally been corrected by norms which sanctioned opportunistic double standards, and by metarules imposing reciprocity constraints on the parties.

More serious collective action problems emerge in the enforcement of spontaneous norms. If the enforcement of norms is left to the private initiative of individual members of the group, a large number of cases will be characterized by a suboptimal level of enforcement. Punishing violators of a norm creates a public good because of the special and general deterrent effect of the penalty. Yet imposition of the penalty is left to private initia-tive, punishers would be willing to enforce norms only to the point which the private marginal cost of enforcement equals its private marginal benefit. This equilibrium obviously diverges from the social optimum, where enforcement would be carried out until the marginal cost equals the social, rather than private, marginal benefit.

This consideration explains why the customs of ancient societies recognized and sanctioned only a limited category of wrongs. Generally speaking, only those wrongs that had a well-identified victim were likely to be addressed through a system of private law enforcement. For the system of private

law enforcement to function properly, it was necessary for the victim or his clan to have a strong interest in carrying out the punishment. This also explains why other categories of wrong with a broader class of victims tend to emerge during more advanced stages of legal development, when law enforcement is delegated to a central authority.

In sum, collective action problems may be pervasive in the enforcement of customary rules, with a consequential risk that enforcement will be suboptimal. This conclusion suggests that the decentralized process of law formation may be successfully coupled with a centralized mechanism of law enforcement. In this way, the advantages that customary sources have in gathering diffuse information will be available, free from the collective action problems that typically affect decentralized processes of law enforcement.

V. Conclusion: Public Choice and Functional Law and Economics

Law and economics scholarship has traditionally been labeled as normative or positive. In both of these versions, law and economics focuses on the role of law as an instrument of behavioral control, and treats the political process and institutions as exogenous.

A new generation of literature–developed at the interface of law, economics and public choice theory–pushes the boundaries of economic analysis of law, studying the origins and formative mechanisms of legal rules. The resulting approach, which can be labeled "functional" approach (Posner-Parisi, 1998) is quite skeptical of both the normative and the positive alternatives.

The functional approach is weary of the generalized efficiency hypotheses espoused by the positive school. In this respect, the functionalists are aligned with the normative school. Nothing supports a generalized trust in the efficiency of the law in all areas of the law. Even more vocally, the functional school of law and economics is skeptical of a general efficiency hypothesis when applied to sources of the law other than common law.

The functional approach is also critical of the normative extensions and ad hoc corrective policies, which are often advocated by the normative schools. Economic models are a simplified depiction of reality and, according to the functionalists, it is often dangerous to utilize such tools to design corrective or interventionist policies on the basis of such imperfect assumptions. In this respect, the functionalists are aligned with the positive school in their criticism of the normative approach. According to both the positivists and the functionalists, normative economic analysis often risks overlooking the many unintended consequences of legal intervention.

Public choice theory provides strong methodological foundations for the functional school of law and economics. Public choice theory provides indeed the tools for the appraisal of the traditional assumptions of law and economics. The findings of public choice theory, while supporting much of

the traditional wisdom, pose several challenges to the theoretical foundations of the neoclassical law and economics approach.

In the above pages we have revisited the important questions concerning the institutional design of lawmaking through the lens of public choice theory. Alternative sources of law are evaluated considering their respective advantages in the production of legal rules. The functionalist approach to legal analysis sheds new light on the process of law formation suggesting that the comparative evaluation of alternative sources of law requires an appropriate analysis of the incentive structure in the originating environment.

In spite of the sophisticated mathematical techniques of economic analysis, scholars, judges and policymakers in many situations still lack the expertise and methods for evaluating the efficiency of alternative legal rules. Courts and policymakers can thus resort to a functional approach, first inquiring into the incentives underlying the legal or social structure that generated the legal rule, rather than attempting to weigh the costs and benefits of individual rules directly. In this way, the functionalist approach to law and economics, building upon the solid grounds of public choice theory, can extend the domain of traditional law and economics inquiry to include both the study of the influence of market and non-market institutions (other than politics) on legal regimes, and the study of the comparative advantages of alternative sources of centralized or decentralized lawmaking in supplying efficient rules.

Undoubtedly, the field is still far from a point of maturity. The relationship between competing sources of social and legal order remains for the great part still to be evaluated in light of the important criteria that should govern the institutional design of lawmaking.

Statutes and Laws

Code of Hammurabi, Para. 108, 127.

Exodus 21:23.

Restatement of the Law - Foreign Relations Law of the United States, Sec. 102.

Statute of the International Court of Justice, Art. 38(1).

Vienna Convention, Art. 21(1)b.

Cases

Asylum case, 1950 ICJ Reports 266.

Fisheries Jurisdiction case, 1974 I.C.J. 3 (July 25).

North Sea Continental Shelf case, 1969 I.C.J. 3 (Feb. 29).

The S.S. Wimbledon case, 1923 P.C.I.J. (ser. A) No. 1 (Aug. 17).

Bibliography

Arrow, Kenneth J. (1951), *Social Choice and Individual Values* (New Haven: Yale University Press).

Axelrod, R.M. (1981) "The Emergence of Cooperation Among Egoists." *American Political Science Review* 75: 306-318.

Benson, B.L. (1989) "The Spontaneous Evolution of Commercial Law." *Southern Economic Journal* 55: 644-661.

Benson, B.L. (1990) *The Enterprise of Law: Justice Without the State.* San Francisco: Pacific Research Institute.

Benson, B.L. (1992) "Customary Law as a Social Contract: International Commercial Law." *Constitutional Political Economy* 3: 1.

Bernholz, Peter (1973) *Logrolling, Arrow-Paradox and Cyclical Majorities,* 15 Public Choice 87-95.

Bernstein, L., (1996) "Merchant Law In a Merchant Court: Rethinking the Code's Search for Immanent Business Norms." *University of Pennsylvania Law Review* 144: 1765.

Broder, David S. "Catatonic Politics," *Wash. Post*, Nov. 11, 1997, at A19.

Brownlie, I. (1990) *Principles of Public International Law*. Oxford: Clarendon Press.

Buchanan, J.M. (1975) *The Limits of Liberty: Between Anarchy and Leviathan*. Chicago: University of Chicago Press.

Buchanan, J.M., and Tullock, G. (1962) *The Calculus of Consent. Logical Foundations of Constitutional Democracy*. Ann Arbor, Mich.: University of Michigan Press.

Charney, J.I. (1986) "The Persistent Objector Rule and the Development of Customary International Law." *British Yearbook of International Law* 56: 1.

Coase, Ronald H. (1960) *The Problem of Social Cost*, 3 Journal of Law and Economics 1-44.

Cooter, R.D. (1992) "Against Legal Centrism." *California Law Review* 81: 425.

Cooter, R. D. (1994) "Structural Adjudication and the New Law Merchant: A Model of Decentralized Law," 14 *International Review of Law and Economics* 215-231 (1994).

Cooter, R. D. (2000) *The Strategic Constitution.* Princeton, NJ: Princeton University Press.

D'Amato, A. (1971) *The Concept of Custom in International Law*. Ithaca, New York: Cornell University Press.

Dixit, Avinash & Olson, Mancur Jr. (1997), "Does Voluntary Participation Undermine the Coase Theorem?" (Aug. 6, 1997) (unpublished manuscript on file with the *George Mason Law Review*).

Dixon, Alan J. (1985) *Line-Item Veto Controversy*, 64 Cong. Dig. 259, 282.

Easterbrook, Frank H. (1983) *Statutes' Domains*, 50 U. Chi. L. Rev. 533 (1983).

Ehrlich, Isaac & Posner, Richard A. (1974) "An Economic Analysis of Legal Rulemaking," 3 *Journal of Legal Studies* 257-286.

Elhauge, Einer R. (1991) *Does Interest Group Theory Justify More Intrusive Judicial Review?*, 101 Yale L.J. 31.

Fuller, L.L. (1969) *The Morality of Law*. Revised Edition. New Haven, Conn.: Yale University Press.

Gauthier, D. (1986) *Morals by Agreement*. Oxford: Clarendon Press.

Greif, A. (1989) "Reputation and Coalitions in Medieval Trade: Evidence on the Maghribi Traders." *Journal of Economic History* 49: 857.

Harsanyi, J.C. (1955) "Cardinal Welfare Individualistic Ethics, and Interpersonal Comparisons of Utility." *Journal of Political Economy* 63: 315.

Hart, H.L.A. (1961) *The Concept of Law*. Oxford: Clarendon Press.

Hirshleifer, J. (1982) "Evolutionary Models in Economics and the Law: Cooperation Versus Conflict Strategies." *Research in Law and Economics* 4: 1.

Kahn, Peter L. (1990) *The Politics of Unregulation: Public Choice and Limits on Government*, 75 Cornell L. Rev. 280, 312 n. 101.

Kelsen, H. (1939) "Théorie du Droit International Coutumier." *Revue Internationale de la Théorie du Droit* (New Series) 1: 263.

Kontou, N. (1994) *The Termination and Revision of Treaties in the Light of New Customary International Law*. Oxford: Clarendon Press.

Landes, William M. & Posner, Richard A. (1975), *The Independent Judiciary in an Interest-Group Perspective*, 18 Journal of Law and Economics 875-901.

Leibenstein, H. (1982) "The Prisoners' Dilemma in the Invisible Hand: An Analysis of Intrafirm Productivity." *American Economic Review Papers and Proceedings* 72: 92.

Levine & Plott (1977) *Agenda Influence and its Implications*, 63 Va. L. Rev. 561.

Lewis, D. (1969) *Convention: A Philosophical Study*. Cambridge, Mass.: Harvard University Press.

Long & Rose-Ackerman (1982) *Winning the Contest by Agenda Manipulation*, 2 J. Pol'y Analysis & Mgmt. 123.

Mateesco, N.M. (1947) *La Coutume dans les Cycles Juridiques Internationaux*. Paris.

Miller, N.R. (1977) *Logrolling, Vote Trading and the Paradox of Voting: A Game Theoretical Overview*, 30 Public Choice 51.

Olson, Mancur (1965) *The Logic of Collective Action*. Cambridge, MA: Harvard University Press.

Olson, Mancur (1997) *The Coase Theorem is False?*, paper presented at the 1997 American Law and Economics Association annual conference held in Toronto, Canada.

Parisi, F. (1995a) "Private Property and Social Costs," 2 *European Journal of Law and Economics*, 149-173.

Parisi, F. (1995b) "Toward a Theory of Spontaneous Law." *Constitutional Political Economy* 6: 211-231.

Parisi, F. (1997a) "*The Cost of the Game: A Topology of Social Interactions.*" *European Journal of Law and Economics* (forthcoming)

Parisi, F. (1997b) "The Economics of Customary Law: Lessons From Evolutionary Socio-Biology," in Bouckaert, B. And De Geest, G. (eds.) *The Production of Law: Essays in Law and Economics.* Antwerpen: Maklu Publisher.

Penny, Timothy J. (1997) *Pork is Safe from This President's Line-Item Vetoes*, Wall St. J., Nov. 13, 1997, at A22.

Posner, Eric (1996a) "Law, Economics, and Inefficient Norms," *University of Pennsylvania Law Review* 144: 1697.

Posner, Eric (1996b) "Norms, Formalities, and the Statute of Frauds: A Comment.*"University of Pennsylvania Law Review* 144: 1971.

Posner, Richard (1994), "What Do Judges and Justices Maximize? (The Same Thing Everybody Else Does)," 3 *Supreme Court Economic Review* 1.

Posner, Richard & Parisi, Francesco (1998) "Scuole e Tendenze nella Analisi Economica del Diritto," 147 *Biblioteca della Liberta'* 3-19

Priest, George L. & Klein, Benjamin (1984) "The Selection of Disputes for Litigation," 13 *Journal of Legal Studies* 1-55.

Priest, George (1977) "The Common Law Process and the Selection of Efficient Rules," 6 *Journal of Legal Studies* 65-82.

Rapoport, A. (1987) "Prisoner's Dilemma." In: *The New Palgrave: A Dictionary of Economics*. New York: Norton.

Rawls, John (1971) *A Theory of Justice*. Cambridge, Mass.: Harvard University Press.

Riggs, Richard A. (1973) Riggs, *Separation of Powers: Congressional Riders and the Veto Power*, 6 U. Mich. J.L. Ref. 735, 743-45.

Roe, Mark (1996) "Chaos and Evolution in Law and Economics." *Harvard Law Review* 109: 641-668.

Rogers, David (1997) "Clinton Warns He's Prepared to Veto Spending Bills If Changes Aren't Made," *Wall St. J.*, Oct. 2.

Rubin, Paul H. (1977) "Why is the Common Law Efficient?," 6 *Journal of Legal Studies* 51-63.

Schotter, A. (1981) *Economic Theory of Social Institutions*. Cambridge, Mass.: Harvard University Press.

Schwartz, Th. (1977), *Collective Choice, Separation of Issues and Vote Trading*, 72 American Political Science Review.

Sen, A.K. (1979) "Rational Fools: A Critique of the Behavioral Foundations of Economic Theory." In: Hahn, F., and Hollis, M. (eds.) *Philosophy and Economic Theory*. Oxford: Clarendon Press.

Shubik, M. (1987) *Game Theory in the Social Sciences: Concepts and Solutions*. 4th ed. Boston: M.I.T. Press.

Stearns, Maxwell L. (1994) "The Misguided Renaissance of Social Choice." *Yale Law Journal* 103: 1219.

Tullock, Gordon (1981) *Why so Much Stability*, 37:2 Public Choice 189-202.

Tunkin, G.I. (1961) "Remarks on the Juridical Nature of Customary Norms in International Law." *California Law Review* 49: 419.

Ullmann-Margalit, E. (1977) *The Emergence of Norms*. Oxford: Clarendon Press.

Walden, R.M. (1977) "The Subjective Element in the Formation of Customary International Law." *Israel Law Review* 12: 344.