3 Functional Law and Economics

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During its relatively short history, the law-and-economics movement has developed a wide spectrum of methodological approaches, distinguishable for their respective emphasis on positive, normative, or functional economic analysis. Ronald Coase's "The Problem of Social Cost" is generally considered to provide the foundations of the first identifiable school of thought – the Chicago school of positive law and economics.[1] Proponents of the Chicago school argue that market forces cause the common law to develop efficient, or wealth-maximizing, legal rules. As suggested by the Coase theorem, only transaction costs will impede first-best efficiency. An important premise of law and economics is that the common law is the result of an effort, conscious or not, to induce efficient outcomes. This premise, first intimated by Coase, and known as the hypothesis of efficiency of the common law, suggests that common-law rules enjoy a comparative advantage over legislation in fulfilling this task because of the evolutionary selection of common-law rules through adjudication and the gradual accretion of precedent.[2] Much of the early work of the positive school of law and economics aims at explaining how common-law rules provide individuals with proper incentives such that society's wealth is maximized. To the extent that positive law-and-economics scholars formulate any prescriptive corollaries, they tend to focus on the reduction of transaction costs that stand in the way of wealth maximization.

Although the positive arguments apply less well to statutory law, adherents of the Chicago school often also believe in the efficiency of political markets, and argue that market forces in the political arena will also tend to generate wealth-maximizing outcomes, subject to the transaction-cost proviso.[3] In the choice between having politicians and having courts govern individual behavior, the positive school favors the institution facing lower transaction costs. Following Coase,

[1] Ronald H. Coase, 1960, "The Problem of Social Cost," *Journal of Law and Economics*, 3, pp. 1–44.
[2] This hypothesis is developed more fully in Richard A. Posner, 2007, *Economic Analysis of Law*, 6th ed., New York: Aspen Publishing, and Paul Rubin, 1977, "Why Is the Common Law Efficient?," *Journal of Legal Studies*, 6, pp. 51–63.
[3] For the clearest expositions of this position, see Gary Becker, 1983, "A Theory of Competition among Pressure Groups for Political Influence," *Quarterly Journal of Economics*, 98, pp. 371–400, and Donald Wittman, 1995, *The Myth of Democratic Failure: Why Political Institutions Are Efficient*, Chicago: University of Chicago Press.

Richard Posner has played a key role in shaping the methodological approach of the Chicago school. Posner believes that positive economic analysis is immune to most abuse and misuse, because it is merely used to explain or predict incentives that guide individuals and institutions under alternative legal rules. The primary hypothesis is the notion that efficiency is the predominant factor shaping the rules, procedures, and institutions of the common law. Posner contends that efficiency is a defensible criterion in the context of judicial decision making because "justice" considerations, for which there are no academic or political consensus, introduce unacceptable ambiguity into the judicial process. In arguing for positive use of economics, Posner does not deny the existence of valuable normative law-and-economics applications. In fact, law and economics often have many insights into normative analysis of policy.

The second school of law and economics emerges around the Yale school. Due to its methodological emphasis, the Yale school is generally described as the normative school of law and economics. Unlike the Chicago school, the Yale school is much more skeptical of the natural development of the common law, in view of the presence of market failures, which impede the achievement of efficiency. Further, proponents of the normative school suggest that efficiency is only one of many normative goals that can and should be pursued through the law. The Yale school of law and economics believes that there is a larger need for legal intervention in order to correct for pervasive forms of market failure. Distributional concerns are often regarded as an integral part of efficiency considerations by the scholars who adhere to this school. The overall philosophy of this school is often criticized by the Chicago school for being value-tainted and excessively prone to policy intervention.

The Yale school considers market failures to be more pervasive than Chicago scholars are willing to admit.[4] Employing similar tools to the positive school, normative law and economics pushes the analysis to formulate propositions on what the law ought to be like. Legal intervention becomes a critical policy instrument for correcting market failures. Given the overriding need to pursue justice and fairness in distribution through the legal system, most Yale-style scholars would suggest that efficiency, as defined by the Chicago school, could never be the ultimate end of a legal system.[5] Chicago scholars, on the other hand, acknowledge that although normative corollaries are in principle useful and desirable, in assessing the costs and benefits of a proposed rule the weighting of noneconomic factors renders the analysis highly vulnerable to subjective ideology.

Some degree of controversy still surrounds several of the methodological, normative, and philosophical underpinnings of the economic approach to law, although most of the ideological differences tend to lose significance because they

[4] Ejan Mackaay, 2000, "History of Law and Economics," in Boudewijn Bouckaert and Gerrit de Geest, eds., *Encyclopedia of Law and Economics*, vol. 1, Cheltenham: Edward Elgar Publishing, pp. 65–117.

[5] Put another way, whereas both schools largely adopt forms of utilitarian social welfare functions in their implicit optimization problems, Yale school adherents are more likely to adopt nonuniform weights on the individual utility arguments because of their normative positions on the importance of distributional concerns.

lead to analogous results when applied to real cases. Some scholars perceive that the current state of law and economics is comparable to the state of economics prior to the advent of public choice theory, insofar as an understanding of "political failures" was missing from the study of market failures.[6] Public choice may indeed inject a skeptical, and at times disruptive, perspective into the more elegant and simple framework of neoclassical economics, but this added element may well be necessary to understand a complex reality.

As the domain of law and economics has expanded, a new generation of literature, developed at the intersection of law, economics, and public choice theory, has pushed the boundaries of the economic analysis of law, studying the origins and formative mechanisms of legal rules. The resulting approach, the *functional* approach to legal analysis, is quite skeptical of both the normative and the positive alternatives.[7] The functional approach is wary of the generalized efficiency hypothesis espoused by the positive school. In this respect, the functionalists share some of the skepticism of the normative school. There is little empirical support for a generalized trust in the efficiency of the law in any individual area of the law, much less a universal efficiency. The functional school of law and economics is even more vocally skeptical of a general efficiency hypothesis when applied to sources of the law other than common law (e.g., legislation or administrative regulations). The functional approach is also critical of the normative extensions and *ad hoc* corrective policies that are often advocated by the normative schools. Because economic models are merely a simplified depiction of reality, functionalists think it is generally dangerous to use such tools to design corrective or interventionist policies. 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.[8]

Individuals subscribing to the functional school of law and economics are less sanguine about both the efficiency tendencies of the common law and the ability of legal and political elites to micromanage decisions to achieve nonefficiency goals. Although functional law-and-economics scholars recognize the potential for market failures to inhibit the common law from naturally achieving wealth maximization, they also draw from the field of public choice economics to highlight the dangers of giving political or judicial policymakers substantial discretion.

[6] See James M. Buchanan, 1974, "Good Economics – Bad Law," *Virginia Law Review*, 60, pp. 483–492, and Charles K. Rowley, 1981, "Social Sciences and the Law: The Relevance of Economic Theories," *Oxford Journal Legal Studies*, 1, pp. 391–405.

[7] For the earliest comprehensive formulation of this position, see Gordon Tullock, 1971, *The Logic of the Law*, New York: Basic Books.

[8] For a more extensive intellectual history, see Francesco Parisi, 2005, "Methodological Debates in Law and Economics: The Changing Contours of a Discipline," in Francesco Parisi and Charles K. Rowley, eds., *The Origins of Law and Economics: Essays by the Founding Fathers*, Cheltenham: Edward Elgar, pp. 33–52. For a recent articulation of this position in the face of one of the modern branches of the normative school, the behavioral law-and-economics movement, see Jonathan Klick and Gregory Mitchell, 2006, "Government Regulation of Irrationality: Moral and Cognitive Hazards," *Minnesota Law Review*, 90, pp. 1620–1663.

I. CONSTITUTIONAL DESIGN AND METARULES

Public choice theory and constitutional political economy provide the methodological foundations for the functional school of law and economics. The findings of public choice theory, though supporting much of the traditional wisdom, pose several challenges to neoclassical law and economics. In spite of the advances of economic analysis, judges and policymakers in many situations still lack the expertise and methods for evaluating the efficiency of alternative legal rules. The functional approach to law and economics is informed by an explicit recognition that whatever social reality we seek to explain at the aggregate level ought to be understood as the result of the choices and actions of individual human beings who pursue their goals with an independently formed understanding of the reality that surrounds them,[9] and will be conditioned on the incentive structure in which they operate.[10] Courts and policymakers should therefore first inquire into the incentives and the social structure underlying a legal problem, rather than directly attempting to weigh the costs and benefits of individual rules.[11]

In this way, the functionalist approach to law and economics can extend the domain of the traditional law-and-economics inquiry to include both the study of the influence of market and nonmarket 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. With this focus on the underlying legal and social structure, micromanaging individual legal and policy decisions becomes less attractive. Such micromanagement is likely to suffer from the rent-seeking activities of interested parties. Much of the intellectual foundation for this structural focus can be found in the seminal writings of James Buchanan.[12] Buchanan eloquently describes the constitutional political economy research program in his Nobel Prize address: "I sought to make economic sense out of the relationship between the individual and the state before proceeding to advance policy nostrums."[13]

Drawing on the method of constitutional political economy, the functional law-and-economics school focuses on the creation of incentive-compatible metarules

[9] Viktor J. Vanberg, 1994, *Rules and Choice in Economics*, London: Routledge.

[10] For empirical illustrations of this general point, see Eric Helland and Alexander Tabarrok, 2002, "The Effect of Electoral Institutions on Tort Awards," *American Law and Economics Review*, 4, pp. 341–370; Eric Helland and Jonathan Klick, 2007, "The Effect of Judicial Expedience on Attorney Fees in Class Actions," *Journal of Legal Studies*, 36, pp. 171–188; and Nuno Garoupa, Eric Helland, and Jonathan Klick, 2008, "The Effect of Attorney Compensation on the Timing on Settlements" (unpublished manuscript, regarding how judges make decisions in specific institutional settings, leading to a fairly clear divergence from efficiency or even the kinds of goals generally espoused by those in the normative school).

[11] On this point, see Robert Cooter, 1994, "Structural Adjudication and the New Law Merchant: A Model of Decentralized Law," *International Review of Law and Economics*, 14, pp. 215–231 (introducing the similar idea of structural adjudication of norms).

[12] A good summary of Buchanan's structural vision of government and society can be found in Geoffrey Brennan and James M. Buchanan, 1985, *The Reason of Rules: Constitutional Political Economy*, New York: Cambridge University Press.

[13] James M. Buchanan, 1987, "The Constitution of Economic Policy," *American Economic Review*, 77, p. 243.

to which rational individuals would consent at the constitutional stage of decision making while they are uncertain as to how those rules will directly affect their own self-interest. This constitutional perspective was first used in economics by James Buchanan and Gordon Tullock[14] and bears a good deal of resemblance to the "veil of ignorance" mechanism introduced by John Rawls[15] around the same time.[16] The *ex ante* perspective avoids the temptation to engage in micro-level social engineering because it depends on committing to rules that will be optimal in expectation, while recognizing that those rules will likely generate undesirable outcomes from time to time.

The constitutional design element of functional law and economics deviates from the Chicago school to the extent that efficient institutions are not assumed simply to evolve over time. Instead, functionalists take as their primary function the design of institutions in which individual incentives are harnessed to reach the social goals agreed upon at the constitutional stage. Recognizing that market failures limit the natural evolution of efficient legal rules, functionalists attempt to design institutions that internalize the external costs and benefits created by individual behavior in order to achieve the social goals chosen at the constitutional stage. However, also recognizing the existence of government failure, functionalists are not willing to allow political and legal elites or majorities to align individual actions with social goals on an issue-by-issue basis. Eschewing any romantic visions of government or the courts, functionalists assume that public figures are self-interested and will pursue their own interest, often to the detriment of the social interests that would be acceptable to all at the constitutional stage.

To mediate between distrusting the natural evolution of law and being suspicious of government or legal interference in social interactions, functionalists examine both formal and informal institutions to determine the underlying processes that give rise to the institutions and whether the institutions would be acceptable to a rational individual at the constitutional stage. The benchmark against which the value of any institution is to be judged is an individual's *ex ante* decision to submit to the institution or the proposed change to the institution. This benchmark implies a modified unanimity rule in which adoption or modification of a social institution requires effective unanimity among those affected by the institution. Although true unanimity is the ideal, functionalists recognize that, at the constitutional stage, individuals would voluntarily agree to a sub-unanimity rule due to the transaction costs generated by requiring unanimous agreement.[17] In practice, the inquiry advocated by functional law-and-economics scholars requires an investigation into the origins of the social institution, the incentives created by the social institution,

[14] James M. Buchanan and Gordon Tullock, 1962, *The Calculus of Consent: Logical Foundations of Constitutional Democracy*, Ann Arbor: University of Michigan Press.

[15] John Rawls, 1971, *A Theory of Justice*, Cambridge, MA: Belknap Press.

[16] Whereas both sources seem to have been influenced by John Harsanyi (1953, "Cardinal Utility in Welfare Economics and in the Theory of Risk-Taking," *Journal of Political Economics*, 61, pp. 434–435), Rawls departs from Harsanyi (and Buchanan and Tullock) by implicitly imposing a condition of severe risk aversion, which generates his maximin criterion for just social rules.

[17] See Jonathan Klick and Francesco Parisi, 2003, "The Disunity of Unanimity," *Constitutional Political Economy*, 14, pp. 83–94.

and an articulation of the conditions that have changed, making the original consent to the institution no longer tenable from the *ex ante* perspective. This kind of principled inquiry reduces the scope for legal and political entrepreneurs to implement extractive rules that exploit diffuse interests in favor of concentrated ones.[18]

II. FUNCTIONAL PRINCIPLES OF LAWMAKING: SOME EXAMPLES

Functionalists examine decentralized, voluntary exchanges as a mechanism for welfare maximization. The school challenges the positivist belief that rules must come from an institutionalized authority such as a legislative or judicial body to constitute proper law. In the absence of market failures, voluntary social arrangements offer a rebuttable presumption of efficiency, even in those areas where notions of market failure and high transaction costs have justified formal legislation. In the following we will illustrate the methodology of functional law and economics by reference to two examples: choice of law and the principle of reciprocity.

A. The Metaphor of the Market for Legal Rules

The Coase theorem suggests that when the contractual surplus exceeds transaction costs, parties will enter into welfare-enhancing contractual arrangements. Similarly, parties will select the most efficient legal regime whenever the benefits drawn from choosing a foreign body of law exceed the attendant transaction costs. Liberal rules for the enforcement of choice-of-law provisions are therefore instrumental in reducing the transaction costs of the bargain. The normative corollary calls for a clear and unambiguous enforcement of such agreements.[19]

Despite this efficiency rationale, whether and to what extent parties should be free to choose the law that regulates their actions and relationships is an age-old quandary.[20] According to its advocates, choice of law provides the basis for interjurisdictional competition. Any restriction on the contractual freedom of choice of law, like any constraint on market competition, should be utilized only when

[18] For a systematic and exhaustive discussion of this point, see James M. Buchanan and Roger D. Congleton, 1998, *Politics by Principle, Not Interest: Toward Nondiscriminatory Democracy*, Cambridge: Cambridge University Press.

[19] For an empirical examination of the potential efficiency loss generated when legal institutions create an impediment to this contractual choice of legal regime, see Jonathan Klick, Bruce Kobayashi, and Larry Ribstein, 2008, "The Effect of Contract Regulation: The Case of Franchising" (unpublished manuscript).

[20] Historically, the parties' autonomy in choosing the applicable law originated from international commercial law. For example, medieval Europe featured autonomous systems of law (e.g., mercantile law and maritime law) whose applicability turned on the express or implied choice of the parties. Sixteenth- and seventeenth-century legal scholars in England and continental Europe referred to the parties' intentions as the primary criterion for the resolution of conflicting contract clauses. The same characterized the French approach at the time of the 1804 codification and nineteenth-century German scholarship, though there is some disagreement on the matter (for a historical analysis, see Ole Lando, 1976, "Contracts," in R. David et al., *International Encyclopedia of Comparative Law*, Tübingen: JCB Mohr, pp. 17–23). Later, both in Europe and in the United States, legislative and jurisprudential solutions limited the parties' autonomy in their choice of governing law.

there is systematic institutional or market failure. Scholars have considered the desirability of a constitutional constraint on the state's ability to impose unilateral restrictions on choice of law.[21]

The modern rules for enforcing choice-of-law agreements limit the freedom of parties in various ways. Even the most liberal choice-of-law regimes (e.g., France) condition the enforcement of choice-of-law agreements on preserving the integrity of essential interests of the domestic legal system. Other systems allow it only if the agreement does not circumvent mandatory provisions of the domestic legal system (e.g., Austria). Yet other jurisdictions tend to regulate choice of law with a complex mixture of standard- and rule-based criteria (e.g., the United States) that are often complemented by an intricate combination of exceptions that are rarely linked by a common rationale.[22]

There are various practical reasons for parties to choose a law different from their forum law, not all of which are immediately consistent with the efficiency hypothesis. Several functionalist arguments have been put forward to identify the proper limits of freedom of contract vis-à-vis state and third-party interests.[23] As previously discussed by Parisi and Ribstein,[24] these arguments include those that are (1) externality-based, (2) information-based, and (3) market-based.

1. Individual autonomy and externality-based limitations. One of the most frequently addressed issues in the choice-of-law debate relates to the tension between the private interests of contracting parties and the interests held by the state and third parties. For example, the unconstrained freedom of private parties may circumvent state policy and infringe upon the interests of parties not in privity with the contract. The Coasian presumption of the social desirability of transactions

[21] A similar analysis should be extended to the role of public international law in constraining states' assertions of superior interest in limiting free choice of law. See, for example, Arthur von Mehren and Donald T. Trautman, 1981, "Constitutional Control of Choice of Law: Some Reflections on the Hague," *Hofstra Law Review*, 10, pp. 35–57, and Frederic L. Kirgis, Jr., 1976, "The Roles of Due Process and Full Faith and Credit in Choice of Law," *Cornell Law Review*, 62, pp. 94–150.

[22] The U.S. Restatement (First) of Conflict of Laws of 1934 did not contain any provision for contractual choice of law. Courts tended to enforce choice-of-law clauses where the parties' express choice resolved an otherwise present conflict-of-law problem. See Larry Ribstein, 1993, "Choosing Law by Contract," *Journal of Corporation Law*, 18, pp. 245–300. The Restatement (Second) of Conflicts established the enforceability of express choice of law as a primary factor for conflict of law analysis in contracts. A standard-based criterion was introduced in the United States by the Uniform Commercial Code, which adds a "reasonable relation" requirement for the enforcement of contractual choice of law. For a discussion of the modern choice of law, see Francesco Parisi and Erin O'Hara, 1998, "Conflict of Laws," in Peter Newman, ed., *New Palgrave Dictionary of Economics and the Law*, New York: Palgrave Macmillan, pp. 491–492.

[23] In transnational contracts, parties select a neutral law different from their individual domestic legal systems, according to how future disputes will be resolved per the neutral law. In other instances, the parties select a foreign body of law because of its relationship to the purpose of their contract, to avoid the simultaneous application of different legal systems to the same relationship, to homogenize the governing law when a party enters a contract with several different parties of different nationalities, to reduce bargaining costs, to opt out of some undesirable provisions of the otherwise applicable legal system, or to take advantage of greater familiarity with the chosen law than with the otherwise applicable forum law.

[24] Francesco Parisi and Larry Ribstein, 1998, "Choice of Law," in Peter Newman, ed., *New Palgrave Dictionary of Economics and the Law*, New York: Palgrave Macmillan, pp. 238–240.

is relaxed in the presence of Pareto-relevant externalities, which are often found when the analysis incorporates third-party expectations.[25] In other instances, the externality turns on state interests. This may refer simply to the interests of the residents or citizens of the forum state, or to a claim of infringement of a direct state interest. Most often, such claims are made in conjunction with the forum state's coordination policies.[26] Alternatively, the state may assert a need to maintain coherent and uniform case law within forum courts.[27] A third issue raised in the choice-of-law debate involves administrative and judicial costs. When choice of law is not accompanied by a choice-of-forum clause, courts are forced to apply a system of rules with which they may be grossly unfamiliar, having no record of past decisions on the point. This may lead to substantial information costs and unpredictability in the decision-making process.[28]

According to the functionalist paradigm, the externality-based arguments to justify legal limits on freedom of choice are often ill informed. Restrictions on choice of law aimed at containing the judicial or administrative costs are generally inappropriate. Rather than limiting the autonomy of the parties, forum courts should restrict parties' choice of law, inducing them to take full account of the increased costs due to their decision to use foreign laws. An individualized evaluation of the private surplus and external costs would impose a formidable burden on the courts, resulting in prejudice to reliability and predictability. A rule-based approach, though possessing greater transparency, would unnecessarily limit the freedom of the parties, curtailing possible Pareto-superior arrangements. A sound economic analysis should focus more attentively on the endogenous and price-based institutional correctives of the externalities, perhaps leading to differential tax rates applied to transactions or parties deviating from forum law to internalize these external costs.

2. Information-based rationales for restrictions on choice of law. Another set of functional arguments for limiting the parties' autonomy rests on asymmetric information.[29] Several legal systems distinguish between bargained-for contracts

[25] From an economic perspective, most of the arguments based on third-party protection are logically vitiated. For instance, if externalities were to be conceived as a result of the parties' choice of law, a social welfare analysis should consider the trade-off between the benefit to the contracting parties and the potential external cost imposed on the third parties. The resulting case-by-case analysis would impose a formidable judicial burden on courts and generate much uncertainty. Furthermore, a contract that affects third parties does not create relevant externalities if the third parties have a low-transaction-cost opportunity to protect themselves via relevant contractual terms (Parisi and Ribstein, "Choice of Law," p. 238). This too is a simple application of the Coase theorem.

[26] Modern legal systems often distinguish between the choice of law governing the validity of the agreement and the choice of law governing its content. States will more rigorously scrutinize choice of law affecting the validity of contracts to preserve their interest in this area.

[27] Ole Lando, "Contracts," pp. 33–34.

[28] In order to correct this problem, some legal systems create an exception to the *ius novit curia* rule, according to which foreign law is treated as a fact and subjected to the burden of pleading and proof of the parties.

[29] For example, in the case of contractual choice of law, limits are imposed in order to protect uninformed parties who may agree to a choice-of-law clause without being aware of the substantive content of the invoked rules. Similarly, the Restatement (Second) of Conflict of Laws § 568 contemplates rules designed to protect a person from the oppressive use of superior bargaining power.

and standard-form agreements. The protection of uninformed parties is more rigorous in the case of standard-form agreements, given the asymmetric incentives to acquire information regarding the governing law and the less visible elements of the agreement. A contractual choice of law allegedly gives the drafter an advantage in selecting a more favorable set of terms without expressly bargaining with the other contracting party.

Recent functionalist scholarship has suggested that most of the information-based rationales for limiting choice of law do not survive close scrutiny. Quite frequently, parties are ill informed on the applicable forum law but are not exempted from its application. This result should not change in the choice-of-law context, because parties have no better knowledge of the forum law than the law they expressly choose in their contract. If anything, the express choice of the parties should signal their informed preference for the chosen law. Any limitation of the parties' freedom on the basis of an imputed lack of information is therefore likely to be purely paternalistic, but there is generally no reason to assume that the state is in a better position to know what is in the parties' best interests.

3. The market for rules. Yet another functional approach is to conclude that the optimal restriction on choice of law is none at all. Choice-of-law provisions tend to increase efficiency by allowing parties to contract away inefficient forum laws that could not be modified through express contractual terms. Individuals and firms can select away from inefficient mandatory rules by choosing an alternative legal system without bearing the cost of relocation or acquiring a particular status in the chosen jurisdiction. The scholarship hypothesizes that liberal choice-of-law regimes give states an incentive to compete by providing efficient legal rules.[30] Choice of law, in other words, behaves similarly to the product marketplace.[31] Furthermore, the competitive supply of laws constrains rent-seeking legislation. Redistributive policies will not be possible under an unrestricted choice-of-law regime, given the adverse selection that would be generated.

The analogy of law as a product[32] provides the basis for a general theory of competitive supply of laws. Freedom of choice of law is an essential prerequisite for any process of effective competition. The application of the theory of market failures to the efficiency hypothesis discloses some issues of potential relevance.[33] Any limitation on the enforcement of contractual choice of law should only be used when the less disruptive cost-based alternatives appear to fail.

Choice-of-law advocates claim that competitive supply may improve the selection and quality of laws. In general, there is no clear public choice model that

[30] Larry Ribstein, "Choosing Law," pp. 249–250.
[31] Roberta Romano, 1985, "Law as a Product: Some Pieces of the Incorporation Puzzle," *Journal of Law, Economics and Organization*, 1, pp. 225–283.
[32] Ibid.
[33] Some demand-side constraints may be readily discarded for their paternalistic nature and for failing to consider the transaction-specific knowledge that parties use to determine their choice of governing law, which will be largely unavailable to the jurisdiction's lawmakers and will generally doom the "one size fits all" nature of most paternalistic interventions. The analysis should also consider the reach of endogenous market and institutional devices in the correction of possible spillover effects of the parties' choice of law.

supports the hypothesis that legislators maximize the popularity of their legislation outside their jurisdiction. Lawmakers do not have a residual claim on the supplied legislation, such as the ability to charge a hypothetical price for the adoption of the supplied law by foreign parties. Likewise, there is no revenue effect of the parties' choice of law (e.g., increased tax revenues from companies incorporated in the territory). Good law is a public good because legislators do not capture the entire benefit created by the law that they supply. As such, law may remain chronically undersupplied. Choice of law allows parties to pick the best available law, mitigating the effects of the undersupply of good law, but it does not remedy that undersupply problem. If lawmakers cannot benefit from making better law, then the fact that parties can select better laws from different jurisdictions does not entirely remedy that incentive problem.

B. Reciprocity as a Metarule in the Design of Law

Another example of functional legal analysis is given by the principle of reciprocity. This rests on the observation that individuals choose among 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. Strategic preference revelation has traditionally been 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,[34] which induce each member to agree to rules that benefit the entire group, thus maximizing the individual's expected share of the wealth.[35]

There is always the possibility of subsequent opportunistic deviation when roles are later reversed.[36] 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 but refuses to abide by the same

[34] See Francesco Parisi, 1995, "Toward a Theory of Spontaneous Law," *Constitutional Political Economy*, 6, pp. 211–231, and Vincy Fon and Francesco Parisi, 2008, "Role-Reversibility, Stochastic Ignorance, and Social Cooperation," *Journal of Socio-Economics*, 37, pp. 1061–1075.

[35] These conditions occurred during the formative period of the medieval law merchant when traveling merchants acted in the dual capacity of buyer and seller. The law merchant illustrates a successful system of spontaneous and decentralized law (see Bruce L. Benson, 1989, "The Spontaneous Evolution of Commercial Law," *Southern Economic Journal*, 55, pp. 644–661; Bruce L. Benson, 1990, *The Enterprise of Law without the State*, San Francisco: Pacific Research Institute; and Avner Greif, 1989, "Reputation and Coalitions in Medieval Trade: Evidence on the Maghribi Traders," *Journal of Economic History*, 49, pp. 857–882). In *The Morality of Law* (1969, New Haven: Yale University Press), Lon L. Fuller observes that frequent role changes foster the emergence of mutually recognized and accepted duties "in a society of economic traders" (p. 24).

[36] The general acceptance of (or acquiescence in) 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; see Max L. Stearns, 1994, "The Misguided Renaissance of Social Choice," *Yale Law Journal*, 103, pp. 1243–1244. Stearns observes that courts and legislatures might have a comparative advantage in devising market-facilitating rules if participants were unable to devise rules governing future interactions, and if unforeseen circumstances placed them in a forced market relationship requiring postcontractual negotiations. Unlike market participants, courts and legislatures choose from among alternatives *ex ante* without attempting to strategically maximize the advantage caused by unforeseen circumstances. (See also Martin Shubik, 1987, *Game Theory in the Social Sciences: Concepts and Solutions*, Cambridge, MA: MIT Press.)

when selling would be regarded as violating a basic norm of business conduct. Consequently, he would suffer reputational costs within the business community. Therefore, conditions of role reversibility, coupled with norms that generate disincentives to adopt opportunistic double standards, are likely to generate optimal rules via spontaneous processes.[37]

1. Reciprocity and the prisoners' dilemma. 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. This type of opportunistic behavior is well known as the prisoners' dilemma game.[38]

Reciprocity may prevent the suboptimal outcome. The players, for example, can bind their strategic choices to those of their opponents, changing the equilibrium of the game by eliminating the reward for unilateral defection.[39] Mechanisms for automatic reciprocity tend to populate environments where custom is recognized as a primary source of law, such as international treaty negotiations.[40] 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.[41] Positions taken by one state generate a standard that may be used against that state on future occasions.[42] Reciprocity therefore deters noncooperative, Pareto-suboptimal equilibria among nations.[43]

[37] The group's ability to impose a sanction depends on an individual's accountability for her past behavior. Bruce L. Benson (1992, "Customary Law as a Social Contract: International Commercial Law," *Constitutional Political Economy*, 3, pp. 1–27) explores the role of reputation in situations of repeated market interaction, observing that reputation serves as a source of collective knowledge regarding past actions.

[38] See Andrew Schotter, 1981, *Economic Theory of Social Institutions*, Cambridge, MA: Harvard University Press; David Lewis, 1969, *Convention: A Philosophical Study*, Cambridge, MA: Harvard University Press; and Harvey Leibenstein, 1982, "The Prisoner's Dilemma in the Invisible Hand: An Analysis of Intrafirm Productivity," *American Economic Review*, 72, pp. 92–97. All analyze the role of conventions in correcting prisoners' dilemma situations.

[39] See Vincy Fon and Francesco Parisi, 2003, "Reciprocity-Induced Cooperation," *Journal of Institutional and Theoretical Economics*, pp. 76–92, and Vincy Fon and Francesco Parisi, 2007, "Matching Rules," *Managerial and Decision Economics*, 28, pp. 1–14. For a similar argument relying on tit-for-tat strategies, see Robert Axelrod, 1984, *The Evolution of Cooperation*, New York: Basic Books.

[40] Francesco Parisi and Nita Ghei, 2003, "The Role of Reciprocity in International Law," *Cornell International Law Journal*, 36, pp. 93–123.

[41] The international law formation process provides states with numerous occasions for opportunistic behavior, including holdout strategies and free riding. These strategies occur less frequently than expected, because states then follow basic norms of reciprocity.

[42] Consider Art. 21(1)b of the 1969 Vienna Convention, which creates a mirror-image mechanism for 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." As shown by Parisi ("Spontaneous Law," pp. 211–231), by imposing a symmetry constraint on the parties' choices, this rule offers a possible solution to prisoners' dilemma problems.

[43] Reciprocity does not solve all strategic problems. For example, when a conflict occurs along the diagonal possibilities of the game so 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. This occurs in the battle-of-the-sexes game and in pure conflict (i.e., zero-sum) situations.

2. Other forms of stochastic reciprocity. Evolutionary models further examine the role of long-term relationships in fostering desirable outcomes. The impact of long-term human relationships in encouraging cooperation is twofold. First, relationships strengthen human bonds and render others' well-being relevant to one's own decision making. Individual welfare maximization turns on both payoffs from future interactions and the well-being of close members within the group.[44]

Repeated social interactions in a close-knit group also allow the development of an institutional memory of parties' past behavior. Consequently, there is a possible role for reputation and the social sentiments of approbation and disapprobation. If models of cooperation allow the intensity of those sentiments 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 reduction 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.[45] The various models formulated in the functionalist 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. Individuals who frequently exchange roles in their social interactions have incentives to constrain their behavior to conform to socially optimal norms of conduct.[46]

3. Reciprocity and generality constraints in legislation. A third role for reciprocity is its use as a constraint on centralized lawmaking. Constitutional rules of equality under the law and nondiscrimination can be viewed as a reciprocity constraint on legislation. Public choice theory reveals the fundamental importance of such a constraint on limiting special interest legislation. According to such principles, rules imposing sanctions or exemptions should apply to all individuals within their logical scope. The legitimacy of any apparent over- or underinclusion should be subject to the strictest constitutional scrutiny. The role of such a generality constraint is twofold. First, it prevents arbitrary use of special interest legislation as

[44] Such a theoretical framework allows for a 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 close-knittedness are found to be positively correlated with the emergence of optimal social norms. However, see Jonathan Klick and Francesco Parisi, 2008, "Social Networks, Self-Denial, and Median Preferences: Conformity as an Evolutionary Strategy," *Journal of Socio-Economics*, 137, pp. 1319–1327, for a model suggesting that this process might actually change preferences of individuals, generating some problems for a standard welfare analysis. Models based on interdependent utility and close-knittedness generate results that are qualitatively similar to those discussed in the case of role reversibility.

[45] Along with the adjustments taking place in the initial time period, an additional "internalization effect" will occasion a dynamic adjustment. An initial change in the players' level of norm internalization reproduces the conditions of instability occasioned by the initial emergence of the norm, allowing it to become self-reinforcing.

[46] James Buchanan (1975, *The Limits of Liberty: Between Anarchy and Leviathan*, Chicago: University of Chicago Press) insightfully anticipated this result. He suggested that even stronger logic explained the emergence of cooperation in situations of induced reciprocity. In both cases, the nonidealistic and self-interested behavior of human actors would generate optimal norms.

a redistributive tool. Second, by linking the effects and benefits of legislation to a large class of potential beneficiaries, it creates a collective-action problem in rent-seeking and lobbying efforts. As a result, generality constraints have a profound economic effect, because the dissipation of economic rent is considerably reduced in such a system.[47]

Because the civil code's tendency toward generality has endured over the long run, it is useful to examine whether the economic effect of this environment has contributed to its resilience. In this regard, game theory offers a particularly appropriate vehicle for analysis. If a legal regime can enforce rules that create an effective reciprocity constraint, optimal outcomes of wealth creation can occur.[48] The contrary is also true. If a legal regime fails to implement such rules, suboptimal outcomes will prevail. The question then becomes how to sustain the rules that promote reciprocity.[49]

SUGGESTIONS FOR FUTURE RESEARCH

To highlight the promise of the functional law-and-economics perspective, we suggest two distinct areas where its insights may be particularly valuable. The first is in the field of behavioral law and economics, which posits that individuals exhibit systematic departures from the rational choice model of human behavior. These biases and heuristics, it is argued, leave room for policymakers to intervene in market decisions to counteract individual irrationality in the hope of improving welfare. Although the functional school would not necessarily rule out the possibility of systematic mistake-making on the part of individuals, it would generally view these interventions with suspicion.

First, these interventions will not generally be guided by completely rational and self-sacrificing automatons, but rather by self-interested politicians and bureaucrats, who, in addition to exhibiting behavioral biases themselves, will also be influenced by the rent seeking that is endemic to the public policymaking process. Second, scholars from the functional school stress that individual decision-making needs to viewed in its institutional context. Whereas individuals may exhibit large departures from the rational choice model in the contrived atmosphere of a lab, there may be strong institutional and social forces that limit the practical significance of these departures. For example, individuals especially prone to behavioral biases may self-select into domains where the costs of these biases

[47] The generality constraint in legislation has created high thresholds of political and social consensus to implement changes to a code. Consider, for example, the fact that the French Civil Code of 1804 remains essentially unchanged to the present time.

[48] The end result of this popular antagonism toward special interests is that the legislative role tends to be restricted to general legislation that is welfare-enhancing. The powerful constraint on *ad hoc* decision making resulting from deductive jurisprudence and general legislation produces a legal environment centered around universally applicable legal principles.

[49] Popular resistance to the code's alteration restrains special interest legislation. This can be formalized in such requirements as supermajority or executive approval for constitutional changes or executive approval. Additionally, the code should contain provisions encouraging its expansive and analogical interpretation, while adopting restrictive interpretations of rules serving a special interest. This will discourage rent seeking through the courts or the legislature.

are small.[50] Also, the structure of the market itself may provide a natural limit on the costs of these biases.[51]

A second extension involves replacing the positive and normative schools' approaches to analyzing the merits of legal rules by looking at them in isolation. That is, whereas the positive school tends to fit models to existing legal rules with the goal of describing how those rules are, in fact, efficient, and the normative school focuses on why market failures undermine those results, the functional school suggests that one needs to focus on the sources of a rule and how it is embedded in a specific institutional context. If the process generating the legal rule satisfies certain conditions that are widely accepted by those affected by the ultimate legal rule, then the rule itself is presumed to be acceptable. This structural adjudication approach, highlighted by Cooter, suggests a reorientation of theoretical law and economics in which scholars focus on the sources of law, adopting a decidedly institutionalist perspective.[52]

Functional law and economics revisits the institutional design of lawmaking through a structural analysis that evaluates alternative sources of law by their abilities to produce beneficial legal rules. Functional law and economics rejects both the efficiency claims of the positive school and the normative school's willingness to allow judicial and political elites to micromanage social interactions. Informed by public choice theory, functionalists are hesitant to trade market failures for government failures. Instead, they focus their attention on constitutional design issues and favor metarules that give prominence to individual choice and consent *ex ante*. This approach exploits the comparative advantage of different legal and social institutions in the production of legal rules by considering agency problems, rule-making costs, and preference-revelation mechanisms that induce individuals to select socially efficient arrangements. The functionalist literature offers insights into how iterated interactions, role reversibility, and reciprocity constraints can shape customary law and legislation. It also provides a framework for analyzing the externality, information, and market-based rationales for defining the limits of choice of law.[53]

[50] See, for example, John A. List, 2004, "Neoclassical Theory versus Prospect Theory: Evidence from the Marketplace," *Econometrica*, 72, pp. 615–625.

[51] See, Alan Schwartz, 2008, "How Much Irrationality Does the Market Permit?" *Journal of Legal Studies*, 37, pp. 131–159.

[52] Cooter, "Structural Adjudication."

[53] For further insights, the authors suggest Robert Cooter, 2002, *The Strategic Constitution*, Princeton, NJ: Princeton University Press; Jonathan Klick and Francesco Parisi, 2005, "Wealth, Utility, and the Human Dimension," *NYU Journal of Law and Liberty*, 1, pp. 590–608; and Francesco Parisi and Jonathan Klick, 2004, "Functional Law and Economics: The Search for Value-Neutral Principles of Lawmaking," *Chicago-Kent Law Review*, 79, pp. 431–450.