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Functional Law and Economics: The Search for Value-Neutral Principles of Lawmaking

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FUNCTIONAL LAW AND ECONOMICS: THE SEARCH FOR VALUE-NEUTRAL PRINCIPLES OF LAWMAKING

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INTRODUCTION

During its relatively short history, the law and economics movement has developed three distinct schools of thought. The first two schools of thought—the positive school and the normative school—developed almost concurrently. The positive school, historically associated with the early contributions of the Chicago school, restricts itself to the descriptive study of the incentives produced by the legal system largely because its adherents believe that efficient legal rules evolve naturally. On the other hand, the normative school, historically associated with the early contributions of the Yale school, sees the law as a tool for remedying "failures" that arise in the market.

The subsequently developed functional school of law and economics draws from public choice theory and the constitutional paradigm of the Virginia school of economics, and offers a third perspective which is neither fully positive nor fully normative. Recognizing that there are structural forces that often impede the development of efficient legal rules, the functional school allows for the possibility of using insights from public choice economics to remedy faulty legal rules at a meta-level. However, unlike the normative school, the functional school also recognizes that there are failures in the political market that make it unlikely that changes will be made on a principled basis. Also, because it is difficult to identify all of the ultimate consequences of corrective legal rules, the functional school focuses on using economic theory to design legal meta-rules that lead to efficiency *ex ante*. Achieving this *ex ante* efficiency requires the

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design of legal institutions that induce individuals to internalize the effects of their private activities, as well as to reveal their true preferences in situations where collective decisions must be made.

In addition to these overarching differences about the role of law and economics in the design of legal institutions, there are other methodological differences among these schools of thought. These differences are illustrated by the debate on how to define efficiency on the individual decision-making level and in the aggregate. Specifically, the schools often take different stands on how social preferences should be evaluated and what exactly should be maximized to achieve an optimal legal system. In the sections that follow, we lay out the development of these schools of thought, detailing where they differ methodologically.

I. COMMON TOOLS, DIFFERENT METHODS

Most practitioners of law and economics believe that there is an important common ground unifying all scholars in the discipline, regardless of their ideology—a search for new insights in the law by applying economic concepts and theories.[1] Despite this common statement of purpose, various schools of law and economics can be identified, each with an elaborate research program and a distinct methodological approach.

A. Positive Versus Normative Approaches to Law and Economics

During the early period of the discipline, law and economics scholarship was labeled as Chicago-style or Yale-style.[2] These labels made reference to the respective dominant positive or normative approach utilized by each school.[3] The origins of the Chicago and Yale

1. *See* Ejan Mackaay, *History of Law and Economics*, *in* 1 ENCYCLOPEDIA OF LAW AND ECONOMICS 65 (Boudewijn Bouckaert & Gerrit De Geest eds., 2000).

2. The institution-based distinction is no longer salient as Yale has many positivist law and economics scholars on its faculty, just as Chicago has scholars who can be categorized in the normative school. For a more extensive discussion of functional law and economics and its role within the landscape of analytical methods in law and economics, see Francesco Parisi, *The Law and Economics Movement*, *in* 2 THE ENCYCLOPEDIA OF PUBLIC CHOICE 341, 341–42 (Charles K. Rowley & Friedrich Schneider eds., 2004); Francesco Parisi, *Functional Law and Economics*, *in* NORMS AND VALUES IN LAW AND ECONOMICS (Aristides N. Hatzis ed., forthcoming).

3. Parisi, *The Law and Economics Movement*, *supra* note 2, at 341 ("[D]espite [some] notable antecedents, it was not until the mid-twentieth century through the work of Henry Simon, Aaron Director, Henry Manne, George Stigler, Armen Alchian, Gordon Tullock, and others that the links between law and economics became an object of serious academic pursuit.").

schools of law and economics are attributable to the early work of a handful of scholars, including the pioneering work of Ronald Coase and Guido Calabresi in the early 1960s.

> A difference in approach is detectable between the law and economics contributions of the early 1960s and those that followed in the 1970s. While the earlier studies appraise the effects of legal rules on the normal functioning of the economic system . . . , the subsequent generation of studies utilizes economic analysis to achieve a better understanding of the legal system. Indeed, in the 1970s a number of important applications of economics to law gradually exposed the economic structure of basically every aspect of a legal system: from its origin and evolution to its substantive, procedural, and constitutional rules.[4]

> In many respects, the impact of law and economics has exceeded its planned ambitions. One effect of the incorporation of economics into the study of law was to irreversibly transform traditional legal methodology. Legal rules began to be studied as a working system. . . . Economics provided the analytical rigor necessary for the study of the vast body of legal rules present in a modern legal system. This intellectual revolution came at an appropriate time, when legal academia was actively searching for a tool that permitted critical appraisal of the law, rather than merely strengthening the dogmatic consistencies of the system.[5]

At this point, methodological differences came to surface with substantive practical differences. The Chicago school laid most of its foundations on the work carried out by Richard Posner in the 1970s. An important premise of the Chicago approach to law and economics is the idea that the common law is the result of an effort, conscious or not, to induce efficient outcomes. This premise is known as the efficiency of the common law hypothesis. According to this hypothesis (first intimated by Coase,[6] and later systematized and greatly extended by Posner), common law rules attempt to allocate resources in either a Pareto or Kaldor-Hicks efficient manner.[7]

Posner endorses a scientific approach, which uses economics to objectively study the legal system and the behavior it regulates. He believes that positive economic analysis is immune to most abuse and

4. *Id*.

5. *Id*.

6. *See* R. H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960).

7. 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.

misuse because it is merely used to explain or predict incentives which guide individuals and institutions under alternative legal rules.

The primary hypothesis advanced by positive economic analysis of law 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, on the content of which there is no academic or political consensus, introduce unacceptable ambiguity into the judicial process. In arguing for positive use of economics, Posner is not denying the existence of valuable normative law and economics applications. In fact, law and economics often has many objective things to say that will affect one's normative analysis of a policy.[8]

Despite the powerful analytical reach of economic analysis, Chicago scholars acknowledged from the outset that the economist's competence in the evaluation of legal issues is limited. While the economist's perspective can prove crucial for the positive analysis of the efficiency of alternative legal rules and the study of the effects of alternative rules on the distribution of wealth and income, Chicago-style economists generally recognized the limits of their role in providing normative prescriptions for social change or legal reform.[9]

Conversely, the Yale school of law and economics, often described as the "normative" school believes that there is a larger need for legal intervention in order to correct for pervasive forms of mar-

8. Posner offers crime as an example. Positive law and economics can help explain and predict how various punishments will affect the behavior of criminals. It might determine that a certain sanction is more likely to deter a certain crime. While this analysis does not by itself mean that the law should be adopted, it can be used to influence normative analysis on whether the law would be beneficial to society.

9. Recognition of the positive nature of the economic analysis of law was not sufficient to dispel the many misunderstandings and controversies in legal academia engendered by the law and economics movement's methodological revolution. As Coase indicated, the cohesiveness of economic techniques makes it possible for economics to move successfully into another field, such as law, and dominate it intellectually. *See* Coase, *supra* note 6. But methodological differences played an important part in the uneasy marriage between law and economics. The Popperian methodology of positive science was in many respects at odds with the existing paradigms of legal analysis. Rowley characterizes such differences, observing that positive economists follow the Popperian approach, whereby testable hypotheses (or models) are derived by means of logical deduction, and then tested empirically. *See* Charles K. Rowley, *Social Sciences and Law: The Relevance of Economic Theories*, 1 OXFORD J. LEGAL STUD. 391, 391–94 (1981). Anglo-American legal analysis, on the other hand, is generally inductive: lawyers use individual judgments to construct a general premise of law. Much work has been done in law and economics despite these methodological differences, with a reciprocal enrichment of the analytical tools of both disciplines. *Id.* at 394.

ket failure.[10] Distributional concerns are central to the Yale-style literature. The overall philosophy of this group is often presented as more value-tainted and more prone to policy intervention than the Chicago law and economics school.

Unlike its Chicago counterpart, this school has attracted liberal practitioners who employ the methodology of the Chicago school but push it to formulate normative propositions on what the law ought to be like.[11] 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.

B. The Functional Approach and Individual-Centered Economic Analysis

As the domain of law and economics has expanded, its perspective on methodological issues has not been stagnant.[12] In the 1990s, a new generation of literature, developed at the intersection of law, economics, and public choice theory, pushed the boundaries of economic analysis of law, studying the origins and formative mechanisms of legal rules. The resulting approach, which we describe as the "functional" approach to legal analysis, is quite skeptical of both the normative and the positive alternatives.[13] The systematic incorporation of

10. Mackaay observes that the Yale school considers market failures to be more pervasive than Chicago scholars are willing to admit. *See* Mackaay, *supra* note 1, at 89–91. Legal intervention is believed to be the appropriate way of correcting such failures, although it may not succeed in all circumstances. *Id.*

11. Posner acknowledges that normative economic analysis, *i.e.*, the use of economics to argue for what law should be, is susceptible to criticism. On the other hand, he notes that while economic analysis assesses the costs and benefits of a proposed rule, it is the non-economic weighting of the economic factors which is vulnerable to subjective ideology. *See* Richard A. Posner, *Some Uses and Abuses of Economics in Law*, 46 U. CHI. L. REV. 281, 286–87 (1979).

12. 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 their operational paradigms often lead to analogous results when applied to real cases. However, 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. *See* James M. Buchanan, *Good Economics—Bad Law*, 60 VA. L. REV. 483 (1974); Charles K. Rowley, *The Common Law in Public Choice Perspective: A Theoretical and Institutional Critique*, 12 HAMLINE L. REV. 355 (1989). 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.

13. For a brief intellectual history of the three approaches to law and economics, see Richard A. Posner & Francesco Parisi, *Scuole e Tendenze nell'Analisi Economica del Diritto*, 147 BIBLIOTECA DELLA LIBERTÀ 3 (1998).

public choice theory into the economic approach to law may serve to bridge the gap between conflicting normative perspectives in law and economics, at least by bringing the debate onto the more solid ground of collective choice theory.

The functional approach is wary of the generalized efficiency hypothesis espoused by the positive school.[14] In this respect, functionalists share some of this skepticism of the normative school. There is little empirical support for a generalized trust in the efficiency of the law in all substantive areas. 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 also is 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. Thus, functionalists think it is generally dangerous to use such tools to design corrective or interventionist policies. In this respect, functionalists are aligned with the positive school in their criticism of the normative approach. According to both positivists and functionalists, normative economic analysis often risks overlooking the many unintended consequences of legal intervention.

Public choice theory in general, and constitutional political economy in particular, provides strong methodological foundations for the functional school of law and economics. The findings of public choice theory, while supporting much of the traditional wisdom, pose several challenges to neoclassical law and economics. In spite of the sophisticated mathematical techniques of economic analysis, judges and policymakers in many situations still lack the expertise and methods for evaluating the efficiency of alternative legal rules.[15] Therefore, courts

14. *See* GORDON TULLOCK, THE LOGIC OF THE LAW (1971) for an early systematic treatment of the law from the functionalist perspective. In this work, Tullock raises a good deal of skepticism regarding the efficiency of prevailing legal systems, pleading in the book's preface that "[o]ur present legal system cries out for reform." *Id*. at vi.

15. An important premise of the functional approach to law and economics is its reliance on methodological individualism. According to this paradigm of analysis, only individuals choose and act. *See*, *e.g.*, James M. Buchanan, *The Domain of Constitutional Economics*, 1 CONST. POL. ECON. 1 (1990). 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, it 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. *See* VIKTOR J. VANBERG, RULES AND CHOICE IN ECONOMICS 1 (1994). Normative individualism further postulates that only the judgment of single individuals can provide a relevant benchmark against which the merits of alternative rules can be evaluated. *Id*.

and policymakers should undertake a functional analysis. Such an analysis requires them to first inquire into the incentives underlying the legal or social structure that generated the legal rule, rather than directly attempting to weigh the costs and benefits of individual rules.[16] In this way, the functionalist approach to law and economics 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.

With this focus on the underlying legal and social structure, there is less impetus to micro-manage individual legal and policy decisions. Such micro-management 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.[17] Buchanan eloquently describes the constitutional political economy research program in his Nobel Prize address by saying "I sought to make economic sense out of the relationship between the individual and the state before proceeding to advance policy nostrums."[18]

II. INDIVIDUAL PREFERENCES, COLLECTIVE CHOICES: PARETO, BENTHAM, AND RAWLS

The need to make comparative evaluations between different rules motivates much of law and economics. Consequently, the second methodological problem in law and economics deals with the choice of criteria for carrying out such comparative analysis. In practical terms, this problem is concerned with the method of aggregation of individual preferences into social preferences, and is not unique to law and economics. It is part of a much larger methodological debate in economic philosophy and welfare economics.

As early as 1881, F.Y. Edgeworth stated the moral dilemma of social welfare analysis, observing that a moral calculus should pro-

16. On this point, see Robert D. Cooter, *Structural Adjudication and the New Law Merchant: A Model of Decentralized Law*, 14 INT'L REV. L. & ECON. 215 (1994) (introducing the similar idea of structural adjudication of norms).

17. A good summary of Buchanan's structural vision of government and society can be found in GEOFFREY BRENNAN & JAMES M. BUCHANAN, *The Reason of Rules: Constitutional Political Economy*, *in* 10 THE COLLECTED WORKS OF JAMES M. BUCHANAN 3–19 (2000).

18. James M. Buchanan, *The Constitution of Economic Policy*, 77 AM. ECON. REV. 243, 243 (1987).

ceed with a comparative evaluation of "the happiness of one person with the happiness of another . . . . Such comparison can no longer be shirked, if there is to be any systematic morality at all."[19] The problem obviously arises from the fact that economists do not have any reliable method for measuring individuals' utility, let alone making interpersonal comparisons of utility.

Economic analysis generally utilizes one of the three fundamental criteria of preference aggregation.

A. Ordinality and Pareto

The first criterion of social welfare is largely attributable to Italian economist and sociologist, Vilfredo Pareto. The Pareto criterion limits the inquiry to *ordinal* preferences of the relevant individuals. According to Pareto, an optimal allocation is one that maximizes the well-being of one individual relative to the well-being of other individuals being constant.[20] In normal situations, there are several possible solutions that would qualify for such a criterion of social optimality. For example, if the social problem is one of distributing a benefit between two parties, any hypothetical distribution would be Pareto optimal, since there is no possible alternative redistribution that would make one party better off without harming another party.

The Pareto criterion has been criticized for two main reasons: (a) it is status quo dependent, in that different results are achieved depending on the choice of the initial allocation; and (b) it only allows *ordinal* evaluation of preferences, since it does not contain any mechanism to induce parties or decision makers to reveal or evaluate *cardinal* preferences (*i.e.*, the intensity of preferences). As a result of these shortcomings, scholars have questioned the usefulness of the Pareto criterion in its applications to law and economics.[21]

B. Utilitarian Measures: Bentham and Kaldor-Hicks

In the nineteenth and early twentieth century, economists and philosophers developed welfare paradigms according to what degree

19. FRANCIS YSIDRO EDGEWORTH, MATHEMATICAL PSYCHICS 7–8 (Augustus M. Kelley Publishers 1967) (1881).

20. As a corollary, a change to a Pareto superior alternative makes someone better off without making anyone worse off.

21. *See* Guido Calabresi, *The Pointlessness of Pareto: Carrying Coase Further*, 100 YALE L.J. 1211 (1991).

all affected individuals had to be taken into account in any comparative evaluation of different states of the world. This methodological trend, related to utilitarian philosophy, is best represented by philosophers and jurists such as Bentham and later economists such as Kaldor and Hicks, who in different ways formulated criteria of social welfare that accounted for the *cardinal* preferences of individuals.[22]

In *An Introduction to the Principles of Morals and Legislation*,[23] Bentham presents his theory of value and motivation. He suggests that mankind is governed by two masters: 'pain' and 'pleasure.' The two provide the fundamental motivation for human action. Bentham notes that not all individuals derive pleasure from the same objects or activities, and not all human sensibilities are the same.[24] Bentham's moral imperative, which has greatly influenced the methodological debate in law and economics, is that policymakers have an obligation to select rules that give "the greatest happiness to the greatest number."[25] As pointed out by Kelly,[26] this formulation is quite problematic, since it identifies two maximands (*i.e.*, degree of pleasure and number of individuals) without specifying the tradeoff between one and the other. Bentham's utilitarian approach is thus, at best, merely inspirational for policy purposes.

Later economists, including Kaldor, Hicks, and Scitovszky, formulated more rigorous welfare paradigms, which avoided the theoretical ambiguities of Bentham's proposition.[27] However, these formulations presented a different set of difficulties in their implementation. The core idea of their approach is that state A is to be preferred to state B if those who gain from the move to A gain

22. *See* 3 JEREMY BENTHAM, *A Manual of Political Economy*, *in* THE WORKS OF JEREMY BENTHAM 31 (John Bowring ed., Russell & Russell 1962) (1839); J. R. Hicks, *The Foundations of Welfare Economics*, 49 ECON. J. 696 (1939); Nicholas Kaldor, *Welfare Propositions of Economics and Inter-Personal Comparisons of Utility*, 49 ECON. J. 549 (1939).

23. JEREMY BENTHAM, A FRAGMENT ON GOVERNMENT AND AN INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION (Wilfrid Harrison ed., Oxford 1948) (1823) [hereinafter BENTHAM, PRINCIPLES OF MORALS AND LEGISLATION].

24. For an interesting discussion on Bentham and his influence on the law and economics movement, see Richard A. Posner, *Bentham's Influence on the Law and Economics Movement*, 51 CURRENT LEGAL PROBS. 425 (1998).

25. *See* BENTHAM, PRINCIPLES OF MORALS AND LEGISLATION, *supra* note 23, at 128 n.1; *see also* 1 JEREMY BENTHAM, *A Fragment on Government*, *in* THE WORKS OF JEREMY BENTHAM 221, 227 (John Bowring ed., Russell & Russell 1962) (1776) ("*It is the greatest happiness of the greatest number that is the measure of right and wrong*. . . ." (emphasis in original)).

26. *See* Paul Kelly, *Bentham, Jeremy (1748–1832)*, *in* 1 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 156, 158 (Peter Newman ed., 1998).

27. *See* Kaldor, *supra* note 22; Hicks, *supra* note 22; Tibor Scitovszky, *A Note on Welfare Propositions in Economics*, 9 REV. ECON. STUD. 77 (1941).

enough to compensate those who lose. The test is generally known as the Kaldor-Hicks test of potential compensation. It is one of "potential" compensation because the compensation of the losers is only hypothetical and does not actually need to take place.[28] In practical terms, the Kaldor-Hicks criterion requires a comparison of the gains of one group and the losses of the other group. As long as the gainers gain more than the losers lose, the move is deemed efficient. Mathematically, both the Bentham and the Kaldor-Hicks versions of efficiency are carried out by comparing the aggregate payoffs of the various alternatives and selecting the option that maximizes such summation.

C. Multiplicative Social Preferences: Nash and Rawls

Other paradigms of social welfare depart from the straight utilitarian approach, suggesting that social welfare maximization requires something more than the maximization of total payoffs for the various members of society. Societies are formed by a network of individual relations and there are some important interpersonal effects that are part of individual utility functions. Additionally, human nature is characterized by diminishing marginal utility, which gives relevance to the distribution of benefits across members of the group.

Imagine two hypothetical regimes: (a) in which all members of society eat a meal a day; and (b) in which only a random one-half of the population gets to eat a double meal while the other unlucky half remains starving. From a Kaldor-Hicks perspective, the two alternatives are not distinguishable from the point of view of efficiency because the total amount of food available remains unchanged. In a Kaldor-Hicks test, those who get a double meal have just enough to compensate the others and thus society should remain indifferent between the two allocational systems. Obviously, this indifference proposition would leave most observers unsatisfied. In the absence of actual compensation, the criterion fails to consider the diminishing marginal benefit of a second meal and the increasing marginal pain of starvation. Likewise, the randomized distribution of meals fails to consider the interpersonal effects of unfair allocations. Fortunate individuals suffer a utility loss by knowing that other individuals are starving while they enjoy a double meal. Because of the diminishing

28. One should note that, if actual compensation were carried out, any test satisfying the Kaldor-Hicks criterion of efficiency would also satisfy the Pareto criterion.

marginal utility of wealth and interpersonal utility effects, from an *ex ante* point of view, no individual would choose allocation system (b), even though the expected return from (b) is equal to the return from (a).

Scholars that try to evaluate the welfare implications of distributional inequalities generally do so by invoking Rawls'[29] theories of justice or by using Nash's[30] framework of welfare. The intuition underlying these criteria of welfare is relatively straightforward; the well-being of a society is judged according to the well-being of its weakest members. The use of an algebraic product to aggregate individual preferences captures that intuition. Like the strength of a chain is determined by the strength of its weakest link, so the chain of products in an algebraic multiplication is heavily affected by the smallest multipliers. Indeed, at the limit, if there is a zero in the chain of products, the entire grand total will collapse to zero. This means that the entire social welfare of a group approaches zero as the utility of one of its members goes to zero.

In the law and economics tradition, these models of social welfare have not enjoyed great popularity. This is not due to an ideological preconception but rather is a result of a combination of several practical reasons. These reasons include the general tendency to undertake a two-step optimization in the design of policies, and the dif-

29. *See* JOHN RAWLS, A THEORY OF JUSTICE (1971). 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 suggests that optimal social norms are those that would emerge through the interaction of individual actors in a social setting with impersonal preferences. *See* John C. Harsanyi, *Cardinal Welfare, Individualistic Ethics, and Interpersonal Comparisons of Utility*, 63 J. POL. ECON. 309 (1955).

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 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 Amartya K. Sen, *Rational Fools: A Critique of the Behavioral Foundations of Economic Theory*, 6 PHIL. & PUB. AFF. 317 (1977); EDNA ULLMANN-MARGALIT, THE EMERGENCE OF NORMS (1977); DAVID GAUTHIER, MORALS BY AGREEMENT (1986).

30. John F. Nash, Jr., *The Bargaining Problem,* 18 ECONOMETRICA 155 (1950). According to the Nash criterion, social welfare is given by the product of the utility of the members of society. *See id*. at 159; *see also* DENNIS C. MUELLER, PUBLIC CHOICE II 379–82 (rev. ed. 1989) (attributing the multiplicative form of the social welfare function to Nash).

ficulties of identifying an objective criterion for assessing interpersonal utility and diminishing marginal utility effects. From a methodological point of view, distributional concerns are generally kept separate from the pursuit of efficiency in policymaking. Such separation has been rationalized on the basis that the legal system is too costly an instrument for distribution, given the advantage of the tax system for wholesale reallocation of wealth.[31]

Some of the tension among these three social welfare standards is dissipated by the functional school's focus on *ex ante* welfare. That is, ideally, legal meta-rules should be designed to maximize expected welfare, not realized welfare. From the *ex ante* perspective, there is no tension between the Pareto and the Kaldor-Hicks standard.[32] Further, while the *ex ante* perspective does not require the generalized risk aversion posited in the Rawlsian "veil of ignorance" decision rule, it does allow for the protection of the "worst off" member of society along dimensions where a representative individual would rationally choose such protections *ex ante*. This notion is implicit in Buchanan and Tullock's derivation of optimal constitutional rules, which serves as part of the foundation of functional law and economics.[33]

III. WHAT IS THE MAXIMAND?

There is a third methodological problem: What should the legal system try to maximize? In this debate, even strict adherents to the instrumentalist view of the law may question whether the objective of the law should be the maximization of aggregate wealth or the maximization of aggregate utility.

If the scholars involved in this debate could look at the issue as neutral spectators, consensus could be reached on the idea that the ultimate policy goal is the maximization of human happiness and well-being. Consequently, the human dimension cannot be by-passed in policy evaluation. Regardless of such an observation, economic analysis of law rarely uses utility-based methods of evaluation. The reason for this is mostly pragmatic. Unlike wealth (or quantities of physical resources), utility cannot be objectively measured. Furthermore, interpersonal comparisons of utility are impossible, rendering

31. *See* Louis Kaplow & Steven Shavell, *Why the Legal System Is Less Efficient than the Income Tax in Redistributing Income*, 23 J. LEGAL STUD. 667 (1994).

32. For an exposition of this point, see Jonathan Klick & Francesco Parisi, *The Disunity of Unanimity*, 14 CONST. POL. ECON. 83, 85 (2003).

33. JAMES M. BUCHANAN & GORDON TULLOCK, THE CALCULUS OF CONSENT (1962).

any balancing across groups or individuals largely arbitrary. These limitations make utility maximization unviable for practical policy purposes.

Given the above limitations, practitioners of economic analysis of law have departed from the nineteenth century utilitarian ideal of utility maximization.[34] Instead, they have increasingly used a paradigm of wealth maximization. Posner is the most notable exponent of the wealth maximization paradigm. Under wealth maximization principles, a transaction is desirable if it increases the sum of wealth for the relevant parties (where wealth is meant to include all tangible and intangible goods and services).

The early years of law and economics were characterized by some uneasiness in accepting the notion of wealth maximization as an ancillary paradigm of justice. Most of the differences proved to be largely verbal, and many others were dispelled by the gradual acceptance of a distinction between paradigms of utility maximization and wealth maximization. However, two objections continue to affect the lines of the debate.

The first objection relates to the need for specifying an initial set of individual entitlements or rights as a necessary prerequisite for operationalizing wealth maximization. In this context, one can think of the various criticisms of wealth maximization by property rights advocates who perceive the social cost of adopting such a criterion of adjudication as very high, given wealth maximization's instrumentalist view of individual rights and entitlements. These critics argue that rights have value that must be accounted for outside of how useful they might be to the accumulation of wealth. Along similar lines, these critics suggest that the wealth maximization criterion of economic analysis is comparable to the methodological approach of economics prior to the advent of public choice theory, insofar as an understanding of "political failures" was missing from the study of collective decision making.[35]

The second objection springs from the theoretical difficulty of defining the proper role of efficiency as an ingredient of justice, vis-à-vis other social goals. Legal scholars within the law and economics

34. Bentham challenged the use of objective factors, such as wealth or physical resources, as a proxy for human happiness. *See*, *e.g.*, BENTHAM, *supra* note 22. Despite the difficulties in quantification of values such as utility or happiness, the pursuit of pleasure and happiness and the avoidance of pain are the motivating forces of human behavior. Wealth, food, and shelter are mere instruments to achieve such human goals.

35. *See* Buchanan, *supra* note 12; Rowley, *supra* note 12.

tradition have claimed that an increase in wealth cannot constitute social improvement unless it furthers some other social goal, such as utility or equality.[36] Denying that one can trade off efficiency against justice, these scholars argue instead that efficiency and distribution are equally essential elements of justice, which is seen as a goal of a different order than either of its constitutive elements.

Posner stands as the most notable defender of the criterion of wealth maximization addressing these important questions and justifying wealth maximization as a worthy standard for evaluating legal rules. Posner explicitly advocates wealth maximization as a criterion that should guide judicial rule making.[37] Making the case for wealth maximization, he defines it and compares it with the alternative theories of utilitarianism and libertarianism. As mentioned earlier, wealth maximization occurs when a transaction increases the total amount of goods and services, weighted by offer prices and demands prices.[38] Because of the market's ability to capture subjective values and preferences, wealth maximization is a comprehensive measure of social welfare.[39]

A. Wealth Maximization as a Social Value

Much of the criticism of law and economics lies in the mistaken belief that wealth maximization is a form of utilitarianism. Prior to his important article on utilitarianism and legal theory,[40] Posner himself had been wrongly characterized as acknowledging utilitarianism as the inspiration of law and economics. Posner distinguishes utilitarianism from the methodological premises of law and economics, arguing

36. *See* Guido Calabresi, *About Law and Economics: A Letter to Ronald Dworkin*, 8 HOFSTRA L. REV. 553 (1980).

37. *See* Richard A. Posner, *The Justice of Economics*, 1 ECONOMIA DELLE SCELTE PUBBLICHE 15 (1987).

38. For intangible goods for which there are no explicit markets, Posner suggests that shadow prices serve equally well as tools of objective evaluation.

39. In a methodological comparison of the various criteria of social choice, Posner considers the value of wealth maximization as a criterion for guiding judicial rule making and adjudication. *See* Posner, *supra* note 37. Even if no moral or ethical argument can be established in its favor, Posner concludes wealth maximization or efficiency is still a valuable tool for normative analysis. *Id*. Posner further points out that economics can, with a morally-neutral approach, provide an evaluation of the costs of any proposed action. He contends economics can provide direction to any decision, particularly one in which efficiency is a prevailing value. *See* Richard A. Posner, *Law and Economics* Is *Moral*, 24 VAL. U. L. REV. 163 (1990); Richard A. Posner, *Utilitarianism, Economics, and Legal Theory*, 8 J. LEGAL STUD. 103 (1979).

40. *See* Posner, *Utilitarianism, Economics, and Legal Theory*, *supra* note 39.

in favor of wealth maximization as a superior normative theory of law.

According to Posner, utilitarianism holds that the worth of a law should be judged by its effect in promoting the surplus of pleasure over pain ("happiness") across society. Normative economics holds that a law should be judged by its effectiveness in promoting social welfare, a term which when broadly defined almost means the same as utilitarian happiness. In this context, Posner suggests that economists' use of "utility" as a synonym for "welfare" adds to the confusion.

Utilitarianism is distinct from wealth maximization because it seeks to maximize aggregate "happiness" while wealth maximization seeks to maximize aggregate economic utility, called "wealth." While happiness is a philosophical concept that cannot be easily measured, wealth is more practical and measurable. More fundamentally, happiness is an insufficient social goal because happiness is passive and focuses on consumption. Wealth maximization, on the other hand, is dependent on productive effort. While being aware of the limits of a concept of wealth as a good in itself, Posner believes that wealth maximization results in a work ethic that is in fact necessary for utilitarian happiness to be brought about, and thus is an important mechanism for the advancement of society. While not precluding an instrumentalist maximization of wealth, Posner's theory does not rely on utilitarianism as a necessary methodological assumption.[41]

There is a possible intuitive justification of wealth maximization. This intuitive foundation was first emphasized by Posner, who argued that wealth maximization can be regarded as a superior ethical principle because it is more consistent with ethical intuitions, provides for a more sound theory of justice, and yields more definite results than the alternative economic views on justice.[42] By promoting the efficient

41. In order to evaluate the ethical argument for efficiency rather than utilitarianism, Posner acts on the presumption that any ethical theory is valid unless rejected, and he evaluates both utilitarianism and wealth maximization on two principal grounds for rejecting an ethical theory: its logical inadequacy, or its incongruence with widely shared ethical intuitions. Posner regards utilitarianism as somewhat illogical and inconsistent with generally accepted notions of individual rights. Its logical and moral shortcoming rests in its boundless insistence that we maximize the total amount of happiness in the universe, even beyond human utility, which can only be attained by making many people unhappy. In this way, Posner attacks traditional utilitarianism for its indefiniteness. *See id.*

42. *See id.*

use of resources, wealth maximization encourages traditional capacities, such as intelligence, and traditional virtues, such as honesty.[43]

An important part of the debate on the paradigm of wealth maximization relates to its ethical and normative justification. This foundational work in law and economics has been described as a form of normative analysis that "turns the mirror of analysis inward" attempting to answer the fundamental question of "why the law or public policy should promote efficiency."[44] Advocates of wealth maximization generally offer two basic arguments in support of such a normative goal: a teleological justification and a consent justification.[45] These justifications have come under the scrutiny of well-known legal and economic theorists.

According to Coleman, wealth maximization is a form of Kaldor-Hicks maximization in disguise.[46] The practical advantages of wealth-maximization over utility-maximization relate to the fact that it is easier to ascertain actual changes in wealth as opposed to utility. In spite of such practical superiority, Posner's normative criterion remains subject to several of the shortcomings of the Kaldor-Hicks criterion, including its difficult moral defensibility. Posner's defense of wealth maximization has been further criticized for building upon notions of implied, rather than actual, consent. Coleman recognizes the usefulness of tests of hypothetical consent a-là-Rawls, but questions the uniqueness of wealth maximization as a dominant criterion of justice from the perspective of *ex ante* social choice. The indeterminacy of such a hypothetical social choice poses a challenge to the consent-based moral justification of wealth maximization.

43. Posner suggests that wealth-maximization also supports the creation of a system of exclusive rights that extends to all valued things that are scarce, with the initial right vesting in those who are likely to value them the most and a free market for those rights once assigned (resembling Adam Smith's system of "natural liberty"). *See id*. Such a system relies on traditional capacities and virtues to reduce the cost of transacting those rights. Further, wealth maximization requires legal rules to promote hypothetical bargains where transaction costs are prohibitive. It also requires legal remedies to deter and redress the invasion of rights. Thus, a market economy regulated according to wealth-maximizing principles fosters empathy and benevolence without destroying individuality.

44. Jules Coleman, *The Normative Basis of Economic Analysis: A Critical Review of Richard Posner's* The Economics of Justice, 34 STAN. L. REV. 1105, 1105 (1982).

45. Libertarianism challenges the wholesale endorsement of wealth-maximization because of the libertarian interest in personal autonomy over social welfare and its opposition to coercive exchanges, be them explicit or under disguise. Posner notes that when compensation is considered *ex ante*, much coercive exchange is essentially voluntary, thus satisfying libertarian concerns. *See* Posner, *Utilitarianism, Economics, and Legal Theory*, *supra* note 39, at 130–31.

46. *See generally* Coleman, *supra* note 44.

B. Economic Theories of Justice

In spite of the articulate defense of the criterion of efficiency in legal and policy decisions, most law and economic scholars do not argue that efficiency concerns should replace morality. However, whenever moral or ethical theories of justice fail to generate unambiguous results that could guide policy choices and, more generally, in the absence of thumping moral or ethical concerns efficiency provides the most appropriate criterion for allocating limited resources among competing claims.

Legal scholars such as Robin Malloy, however, have often argued that efficiency-based and utilitarian theories of justice promote disrespect for individual liberty,[47] are "indeterminative and elitist,"[48] and "can hardly be viewed as anything other than amoral if not immoral."[49] Posner, in his reply to Malloy, once again takes issue with these criticisms.[50] He suggests that these critiques miss the mark, in that they treat the methodology of law and economics as a political theory.[51] Indeed, while arguing that wealth maximization is the best normative and positive theory of common law rights and remedies, Posner never suggests that wealth maximization should be the only social value or principle of justice.[52]

Even the most extreme advocates of wealth maximization do not contend that such a criterion should override moral concerns. The preference for wealth maximization over other criteria of welfare derives from the general suspicion against paternalistic governmental intervention (which would be unavoidably triggered if morality was recognized as the sole criterion of legal interpretation and judicial

47. Robin Paul Malloy, *Invisible Hand or Sleight of Hand? Adam Smith, Richard Posner and the Philosophy of Law and Economics*, 36 U. KAN. L. REV. 209, 254 (1988).

48. *Id*. at 248.

49. *Id*. at 253.

50. *See* Richard A. Posner, *The Ethics of Wealth Maximization: Reply to Malloy*, 36 U. KAN. L. REV. 261 (1988).

51. *Id*. at 263.

52. *See id.* at 265 ("Wealth as I define it is an important social value, and in some settings, such as that of common law adjudication . . . I believe it should be the paramount value. But I have never suggested that it is the only social value . . . ."). In a similar context, Posner describes himself as a "pragmatic economic libertarian." Posner, *Law and Economics* Is *Moral*, *supra* note 39, at 165. He is libertarian in that he is suspicious of public intervention and favors small government. *Id*. He uses economic theory to define what he sees as the appropriate role of the government to intervene and correct serious market failures. *Id*. at 166. He is pragmatic in the sense that he does not derive these free-market views from dogmatic or philosophical underpinnings. *Id*. Rather, he uses wealth maximization to operationalize his economic libertarianism. *Id*. at 167.

action) and the risks involved in shifting the burden on the judiciary in asking judges to decide controversies on the basis of distributive considerations.

Wealth maximization sometimes runs contrary to moral guides such as natural rights. The natural rights perspective views society as a compact, in which people surrender just enough of their own natural liberties as is necessary to protect everyone else's equal natural liberties. Posner believes that because the notion of natural rights can be expanded so readily, it is too unstable a foundation to build upon. He also believes that it is fundamentally anti-democratic because it holds that the more rights people have, the smaller the permissible scope of public policy deliberation.

Many of the arguments made by natural rights proponents rely on examples for which there is moral consensus. Posner points out that the power of natural rights' moral discourse runs out when one faces controversial moral issues. Thus, paradoxically, whenever an analytical perspective is most needed to frame policy questions, natural rights emerge as non-dispositive and thus hardly valuable instruments of adjudication.

C. Preference Revelation as Decision Criterion

Functional law and economics bypasses the wealth/utility divide by focusing on choice or revealed preference as the criterion of decision. That is, by designing mechanisms through which parties are induced to reveal their subjective preferences, the functional law and economics approach obviates the need for third parties, such as judges or legislators, to decide between wealth and utility as the appropriate maximand. The institutions favored by the functional approach minimize the impediments to the full revelation of the subjective preferences of the parties to a transaction by focusing on incentive compatibility mechanisms. This mechanism design approach tends to align individual and social optimality.

The mechanism design perspective of economics attempts to channel the intrinsic behavioral tendencies of individuals to reach a desired social outcome. That is, rather than attempting to alter individual behavior, functional law and economics suggests that institutions should provide incentives, such that individuals will naturally act in a desired way without any external monitoring or coercion. This necessarily requires that individuals have the ability and incentive to reveal their own subjective values and preferences, and that all costs

and benefits generated by an individual's actions accrue to that individual. This implies that individuals will only achieve socially optimal outcomes when they act for their own gain, and incentives are not attenuated by principal agent problems whereby an individual is directed to fulfill some social goal directly.

Examples of research in this area include the functional law and economics explanations for the cooperation that underlies much of human interaction. Cooperative behavior is an empirical regularity that proves puzzling from both the positive and normative perspectives. Cooperation does not easily fit within either of the original law and economics perspectives. Unbridled competition is what drives the supposedly efficient outcomes predicted by the positive school, while the normative school prescribes external limits or alterations on the natural competition that arises among individuals. However, Fon and Parisi show how social norms evolve to solve various prisoner's dilemma games by internalizing reciprocity constraints on individual action, improving the welfare of participants relative to the purely competitive outcome.[53] Laboratory evidence of the internalization of these reciprocity norms is provided by McCabe, Rigdon, and Smith.[54] This individual-centered focus also solves another seemingly intractable problem encountered in a corporate approach to law. Utility maximization necessarily requires that subjective values be attributed to human action. However, it is not possible for an outside observer to evaluate these subjective values and draw the appropriate legal or policy conclusions to maximize social welfare. To avoid this information problem, the functional law and economics approach relies on institutions that provide individuals with the opportunity to express their own values truthfully. These revealed preferences are then granted complete validity in normative terms, with law and policy makers taking them as a given.

CONCLUSION

Functional law and economics avoids paternalism and methodological imperialism by formulating value-neutral principles of collective choice. It builds upon the methodological premises of normative individualism, giving greatest freedom to individual choice, and fos-

53. *See* Vincy Fon & Francesco Parisi, *Reciprocity-Induced Cooperation*, 159 J. INSTITUTIONAL & THEORETICAL ECON. 76 (2003).

54. *See* Kevin A. McCabe, Mary L. Rigdon, & Vernon L. Smith, *Positive Reciprocity and Intentions in Trust Games*, 52 J. ECON. BEHAV. & ORG. 267 (2003).

tering socially desirable human action by establishing structural principles that induce individuals to take into account private information and subjective values and truthfully reflect such information and values in their behavioral choices. Functional law and economics represents a mode of analysis that bridges (and, in some sense, improves upon) both the positive and normative schools of thought in law and economics. Through its *ex ante* perspective, the functional school focuses on mechanism design issues to explain the origins of law, capturing both the efficiency and non-efficiency perspectives of the other two schools.