European Journal of Law and Economics, 18: 259–272, 2004
© 2004 Kluwer Academic Publishers. *Manufactured in The Netherlands.*

Positive, Normative and Functional Schools in Law and Economics

FRANCESCO PARISI parisi@gmu.edu
George Mason University, School of Law, and University of Milan, School of Law

Abstract

During its relatively short history, the law and economics movement has developed three distinct schools of thought. The first two schools of thought, often referred to as the Chicago or positive school and the Yale or normative school, developed almost concurrently. The functional school of law and economics, which developed subsequently, draws from public choice theory and the constitutional perspective of the Virginia school of economics to offer a third perspective which is neither fully positive nor fully normative. Various important methodological questions have accompanied the debate between these schools concerning the appropriate role of economic analysis in the institutional design of lawmaking and the limits of methods of evaluation of social preferences and aggregate welfare in policy analysis. These debates have contributed to the growing intellectual interest in the economic analysis of law.

Keywords: law and economics, intellectual history, methodology

JEL Classification: K00, B0, B5, B25, B41

1. The origins and the evolved domain of law and economics

Various important methodological questions have accompanied the growth and evolution of law and economics. Economists and jurists alike have debated the appropriate role of economic analysis in the institutional design of lawmaking and the limits of methods of evaluation of social preferences and aggregate welfare in policy analysis. In many respects, these methodological debates have contributed to the diversification of methodologies in the economic analysis of law.

1.1. The origins of modern law and economics

Law and economics is probably the most successful example of the recent surge of applied economics into areas that were once regarded as beyond the realm of economic analysis and its study of explicit market transactions. Methodologically, law and economics applies the conceptual apparatus and empirical methods of economics to the study of law.

Extensive research has been carried out to identify the historical and antecedents to modern law and economics. The encyclopedic work edited by Jürgen Backhaus (2003) contains several biographical entries devoted to precursors and early European exponents of the law and economics movement. It is interesting to see that, although the recognition

of law and economics as an independent field of research is the result of studies carried out in the United States after the 1970s, it is in Europe that most of the precursors can be found. Notable antecedents to law and economics include the work of Adam Smith on the economic effects of legislation (1776), and Jeremy Bentham's theory of legislation and utilitarianism (1782, 1789).

In the United States, 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. The regulation of business and economic law fell within the natural interest of the first American scholars of law and economics. Early research concentrated on areas related to corporate law, tax law, and competition law. In so doing, the first generation of law and economics scholars paralleled the efforts of other economists, trying to explain the functioning of explicit economic markets and the impact of alternative legal constraints, such as taxes and regulation, on the market.

In the 1960s the pioneering work of Ronald Coase and Guido Calabresi brought to light the pervasive bearing of economics in all areas of the law. The methodological breakthrough occasioned by Coase and Calabresi allowed immediate extensions to the areas of tort, property and contract. The analytical power of their work was not confined to these fields, however, and subsequent law and economics contributions demonstrate the explanatory and analytical reach of its methodology in a number of other areas of the law.

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 (i.e., they consider the impact of legal rules on the market equilibrium), 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.

Despite some resistance to the application of economics to nonmarket behavior, the important bonds between legal and economic analysis, as well as the social significance of the object of study, were in themselves a guarantee of success and fruitfulness for law and economics.

An important ingredient in the success of law and economics research has come from the establishment of specialized journals. The first such journal, the *Journal of Law and Economics*, appeared in 1958 at the University of Chicago. Its first editor, Aaron Director, should be credited for this important initiative, successfully continued by Ronald Coase. Other journals emerged in the following years: in 1972, the *Journal of Legal Studies*, also housed at the University of Chicago, was founded under the editorship of Richard Posner; in 1979, *Research in Law and Economics*, under the editorship of Richard Zerbe, Jr.; in 1981, the *International Review of Law and Economics* was established in the United Kingdom under the editorship of Charles Rowley and Anthony Ogus (later joined by Robert Cooter and Daniel Rubinfeld); in 1982, the *Supreme Court Economic Review*, under the editorship of Peter Aranson (later joined by Harold Demsetz and Ernest Gellhorn); in 1985, the *Journal of Law, Economics and Organization*, under the editorship of Jerry Mashaw

and Oliver Williamson (later joined by Roberta Romano); in 1994, the *European Journal of Law and Economics* was launched under the editorial direction of Jürgen Backhaus and Frank Stephen; in 1999, the *American Law and Economics Review,* under the editorship of Orley Ashenfelter and Richard Posner; and, most recently, in 2004 the *Journal of Empirical Legal Studies* under the editorship of Theodore Eisenberg, Jeffrey J. Rachlinski, Stewart J. Schwab, and Martin T. Wells; and the *Review of Law and Economics* established in 2005 under the editorship of Robert Cooter, Ben Depoorter, Lewis Kornhauser, Gerrit De Geest, Nuno Garoupa, and Francesco Parisi. These specialized journals provided—and continue to provide—an extremely valuable forum for the study of the economic structure of law.

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—a clear change from the Langdellian tradition, which had relied almost exclusively on the self-contained framework of case analysis and classification, viewing law as little more than a filing 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.

The marriage of law and economics has also affected the economic profession, contributing to the expansion of the original domain of microeconomic analysis—the study of individual and organizational choices in the market—to the study and understanding of other institutions and non-market phenomena.

1.2. The evolved domain of law and economics

Despite the powerful analytical reach of economics, it was clear from the outset that the economist's competence in the evaluation of legal issues was limited. While the economist's perspective could 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, economists generally recognized the limits of their role in providing normative prescriptions for social change or legal reform.

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 (1978) indicated, the cohesiveness of economic techniques makes it possible for economics to move successfully into another field, such as law, and dominate it intellectually. 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 (1981) characterizes such differences, observing that positive economics follow the Popperian approach, whereby testable hypotheses (or models) are derived by means of logical deduction and are then tested empirically. 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.

Law and economics relies on the standard economic assumption that individuals are rational maximizers, and studies the role of law as a means for changing the relative prices attached to alternative individual actions. Under this approach, a change in the rule of law will affect human behavior by altering the relative price structure—and thus the constraint—of the optimization problem. Wealth maximization, serving as a paradigm for the analysis of law, can thus be promoted or constrained by legal rules.

The early years of law and economics were characterized by the uneasiness of some traditional legal scholars in the acceptance of the notion of wealth maximization as an ancillary paradigm of justice. Although most of the differences gradually 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—two objections continue to affect the lines of the debate. The first relates to the need for specifying an initial set of individual entitlements or rights, as a necessary prerequisite for operationalizing wealth maximization. The second springs from the theoretical difficulty of defining the proper role of efficiency as an ingredient of justice, vis-à-vis other social goals.

In his well-known defense of wealth maximization as a guide for judicial action, Posner (1985a) distinguishes wealth or expected utility from market prices. While market prices may not always fully reflect idiosyncratic valuations, they avoid an undertaking of interpersonal utility comparisons, with the opportunity for ex post rationalization of positions taken on emotional grounds. Posner's view is sympathetic to the premises of a property right approach to legal relationships, and he stresses the importance of an initial distribution of property rights prior to any calculation of wealth maximization. His paradigm of wealth maximization serves as a common denominator for both utilitarian and individualist perspectives. By combining elements of both, Posner provides a theory of wealth maximization that comes closer to a consensus political philosophy than does any other overarching political principle.

In contrast, Calabresi (1980) claims that an increase in wealth cannot constitute social improvement unless it furthers some other goal, such as utility or equality. Denying that one can trade off efficiency against justice, he argues instead that efficiency and distribution are ingredients of justice, which is a goal of a different order than either of these ingredients. Calabresi thus defends law and economics as a worthy examination of certain ingredients of justice, rather than a direct examination of justice itself.

The intellectual resistance that has characterized the birth of law and economics can only be temporary. Both legal practitioners and policymakers are becoming aware of the important role of economic analysis in their discipline, and we have already mentioned notable contributions to mainstream economic theory from lawyers in the law and economics movement. Likewise, as Coase (1978) noted, economists have come to realize that the other social sciences are so intertwined with the economic system as to be part of the system itself. For this reason, law and economics can no longer be appraised as a branch of applied microeconomics; rather, it must be seen as contributing to a better understanding of the economic system itself. The study of the effects of other social sciences on the economic system will, Coase predicts, become a permanent part of the field of economics.

Coase also examines the reasons for the movement of economists into the other social sciences, and attempts to predict the future of this phenomenon. Groups of scholars are bound together by common techniques of analysis, a common theory or approach to the subject, and/or a common subject matter. In the short run, Coase maintains, one group's techniques of analysis may give it such advantages that it is able to move successfully into another field and maybe even dominate it. In the long run, however, the subject matter tends to be the dominant cohesive force. While the analytical techniques employed by economists—such as linear programming, quantitative methods, and cost-benefit analysis—may recently have aided the entry of economists into the other social sciences, Coase predicts that such a movement can only be temporary. After all, the wisdom possessed by economists, once its value is recognized, will be acquired by some of the practitioners in these other fields (as is happening in the field of law).

As the domain of law and economics continues to expand, its perspective on methodological issues has not been stagnant. While this introductory essay emphasizes the wide range of substantive applications, some degree of controversy still surrounds several of the methodological, normative, and philosophical underpinnings of the economic approach to law. Most of the ideological differences tend to lose significance because their operational paradigms often lead to analogous results when applied to real cases. Some scholars, however, perceive that the current state of law and economics as 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 (Buchanan, 1974; Rowley, 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 better understand a complex reality. In a way, the systematic incorporation of public choice theory into the economic approach to law has contributed to bridging the conflicting normative perspectives in law and economics, at least by bringing the debate onto the more solid ground of collective choice theory.

Economics is a powerful tool for the analysis of law. If humans are rational maximizers of their utility, wealth or well-being then they respond rationally to changes in exogenous constraints, such as laws. This rationality assumption provides the basic foundation for much law and economics literature. Building upon the standard economic assumption that individuals are rational maximizers, the sophisticated tools of price theory become a useful aid in the study and choice of legal rules (Cooter, 1984). While there is much consensus on the value of economic theory in the study of legal rules, important methodological differences arise with respect to the choice of the appropriate instruments of legal analysis and the choice of method for evaluation of social preferences. I will briefly discuss these methodological issues in turn.

2. Schools and intellectual perspectives in law and economics

Most practitioners of law and economics believe that there is an important common ground that unifies all scholars in the discipline, regardless of their ideological creed: a search for new insights in the law by applying economic concepts and theories (MacKaay, 2000). 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.

2.1. The Chicago and Yale schools: 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. These labels made reference to the respective positive or normative approach utilized by each school. The origins of the Chicago and Yale 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.

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 (1960), and later systematized and greatly extended by Ehrlich and Posner (1974), Rubin (1977) and Priest (1977), common law rules attempt to allocate resources in either a Pareto or Kaldor-Hicks efficient manner. Further, according to the positive school, 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.

The primary hypothesis advanced by positive economic analysis of law is thus 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 (1974) 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.[1]

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 was limited. While the economist's perspective could 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.

To the contrary, 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 market failure.[2] 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 (MacKaay, 2000). 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.

2.2. *The Virginia school: The functional approach and the return to normative individualism*

In recent years, a new generation of literature–developed at the interface of law, economics and public choice theory–pushes the methodological boundaries of economic analysis of law. The resulting approach is in many respects functional in its ultimate mission, cutting across the positive and normative distinction and unveiling the promises and pitfalls of both the normative and the positive alternatives. This approach to legal analysis has the potential of shedding light on the traditional conception of lawmaking, suggesting that the comparative evaluation of alternative sources of law requires an appropriate analysis of the incentive structure in the originating environment. This line of research is attentive to the identification of political failures in the formation of law, stressing the importance of market-like mechanisms in the creation and selection of legal rules.

The functional approach to law and economics is still in its initial phase of development and far from a point of theoretical maturity, but this approach is unquestionably successful in raising some crucial questions regarding the difficult link between individual preferences and social outcomes, with an emphasis on institutional mechanism design and individual choice. The resulting approach is quite skeptical of both the normative and the positive alternatives.[3] Public choice theory provides strong methodological foundations for the functional school of law and economics: the systematic incorporation of the findings of public choice theory into the economic analysis of law may serve to bridge the 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 hypotheses espoused by the positive school. In this respect, the functionalists share some of this skepticism of the normative school. Nothing supports a generalized trust in the efficiency of the law in all areas of the law. Even more vocally, the functional school of law and economics is skeptical of a general efficiency hypothesis when applied to sources of the law other than common law (e.g., legislation or administrative regulations).

The functional approach is also critical of the normative extensions and ad hoc corrective policies, which are often advocated by the normative schools. Economic models are a simplified depiction of reality. Thus, functionalists think it is often dangerous to utilize 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.

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., Buchanan (1990) and the various contributions of the Virginia school of political economy). 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 (Vanberg, 1994:1). Normative individualism further postulates that only the judgment of the single individuals can provide a relevant benchmark against which the merits of alternative rules can be evaluated.

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. Courts and policymakers should thus 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.[4] 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.

3. Pareto, Bentham and Rawls: The Dilemma of preference aggregation

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

Already in the late nineteenth century, Edgeworth (1881:7–8) stated the moral dilemma of social welfare analysis, observing that a moral calculus should proceed 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.” The problem obviously arises from the fact that economists do not have any reliable method for measuring individuals’ utility, let alone make inter-personal comparisons of utility.

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

3.1. Ordinal preferences and the Pareto criterion

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.[5] 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 that 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 (e.g., Calabresi, 1991), have questioned the usefulness of the Pareto criterion in its applications to law and economics.

3.2. Utilitarian tests: Bentham and Kaldor-Hicks

In the nineteenth and early twentieth century, economists and philosophers developed welfare paradigms according to which the degree of 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 (1839) and later economists such as Kaldor (1939), Hicks (1939), and Scitovsky (1941), who in different ways formulated criteria of social welfare that accounted for the *cardinal* preferences of individuals.

In *Principles of Moral and Legislation*, Bentham (1789) 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.[6] 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.” As pointed out by Kelly (1998:158) 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 (1939), Hicks (1939), and Scitovsky (1941), formulated more rigorous welfare paradigms which avoided the theoretical ambiguities of Bentham’s proposition. 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 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.[7] 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.

3.3. Non-linear 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 inter-personal 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 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' (1971)[8] theories of justice or by utilizing Nash's (1950)[9] 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 a 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 so much for an ideological preconception but rather for 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 difficulties 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 (e.g., Kaplow-Shavell, 1994).

4. Wealth, utility and revealed preferences: The choice of maximand

There is an important methodological question that has openly engaged the attention of prominent law and economics scholars: 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, aggregate utility, or merely provide the conditions for free individual choice.

If the scholars involved in these debates 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. But regardless of such an observation, economic analysis of law rarely uses utility-based methods of evaluation. The reason for this is, once again, mostly pragmatic. Unlike wealth (or quantities of physical resources), utility cannot be objectively measured. Furthermore, inter-personal comparisons of utility are impossible, rendering any balancing across groups or individuals largely arbitrary. These limitations make utility maximization unviable for practical policy purposes.

Given the above limitations, following Posner, several practitioners of economic analysis of law have departed from the nineteenth century utilitarian ideal of utility maximization[10] Rather, they have increasingly used a paradigm of wealth maximization. Several scholars in law and economics remain uneasy in accepting the notion of wealth maximization as an ancillary paradigm of justice. Although several of the differences prove to be largely verbal 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 right advocates who perceive the social cost of adopting such 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 (Buchanan, 1974; Rowley, 1989).

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 tradition (see, e.g., Calabresi, 1980) have claimed that an increase in wealth cannot constitute social improvement unless it furthers some other social goal, such as utility or equality. 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.

The functional school of law and economics provides a third alternative by identifying individual choice and revealed preferences as the fundamental criterion for evaluation. The design of metarules that are aimed at fostering free individual choice by eliminating strategic and transactional impediments to the revelation of true preferences becomes an explicit objective of the functional school. As discussed above, the evaluation of alternative sources of law requires an appropriate analysis of the incentive structure in the originating environment

and is aimed at introducing market-like mechanisms in the creation and selection of legal rules, with an emphasis on institutional mechanism design and individual choice. The recent literature on reciprocity (Smith, McCabe and Rassenti, 1998; Fon and Parisi, 2003), social norms and customary law (Cooter, 2000; Parisi, 1998), choice of law (Romano, 1999; Parisi and Ribstein, 1998; Ribstein and O'Hara, 2000), federalism (Ribstein and Kobayashi, 2001) and freedom of contract (Trebilcock, 1994; Buckley, 1999) are examples of the growth and value of functional approaches in law and economics.

Future generations of law and economics scholars should be cognizant of the important methodological debates that have engaged their precursors, taking full advantage of the insights developed by the different methodological traditions when appraising legal rules and institutions.

Notes

1. Posner (1974) 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.
2. MacKaay (2000) observes that the Yale school considers market failures to be more pervasive than Chicago scholars are willing to admit. Legal intervention is believed to be the appropriate way of correcting such failures, although it may not succeed in all circumstances.
3. For a brief intellectual history of the three approaches to law and economics, see Posner and Parisi (1998).
4. On this point, see Cooter (1994) introducing the similar idea of structural adjudication of norms.
5. As a corollary, a change to a Pareto superior alternative makes someone better off without making anyone worse off.
6. See Posner (1998) for an interesting discussion on Bentham and his influence on the law and economics movement.
7. One should note that, if actual compensation was carried out, any test satisfying the Kaldor-Hicks criterion of efficiency would also satisfy the Pareto criterion.
8. 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 behavioural standards. In this setting, Harsanyi (1955) suggests that optimal social norms are those that would emerge through the interaction of individual actors in a social setting with impersonal preferences. The impersonality requirement for individual preferences is satisfied if the decision makers have an equal chance of finding themselves in any one of the initial social positions and they rationally choose a set of rules to maximize their expected welfare. Rawls (1971) employs Harsanyi's model of stochastic ignorance in his theory of justice. However, the Rawlsian "veil of ignorance" introduces an element of risk aversion in the choice between alternative states of the world, thus altering the outcome achievable under Harsanyi's original model, with a bias toward equal distribution (i.e., with results that approximate the Nash criterion of social welfare). Further analysis of the spontaneous formation of norms and principles of morality can be found in Sen (1979), Ullmann-Margalit (1977), and Gauthier (1986).
9. According to the Nash criterion, social welfare is given by the product of the utility of the members of society (Nash, 1950). See Mueller (1989:379–382), attributing the multiplicative form of the social welfare function to Nash.
10. 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). Already Bentham (1839) challenged the

use of objective factors, such as wealth or physical resources, as a proxy for human happiness. Despite the difficulties in quantification of values such as utility or happiness, the pursuit of pleasure and happiness and the avoidance of and pain are the motivating forces of human behavior. Wealth, food and shelter are mere instruments to achieve such human goals.

References

Backhaus, J. (ed.) (2003). *The Elgar Companion to Law and Economics*, Cheltenham, UK: Edward Elgar Publishing.

Bentham, J. (1782). *Of Laws in General*.

Bentham, J. (1789). *An Introduction to the Principles of Morals and Legislation*.

Bentham, J. (1839). *A Manual of Political Economy*, New York: G.P. Putnam.

Buchanan, J. (1974). "Good Economics-Bad Law." *Virginia Law Review*. 60, 483–492.

Buchanan, J.M. (1990). "The Domain of Constitutional Economics." *Constitutional Political Economy*. 1(1), 1–18.

Buckley, F.H. (1999). *The Fall and Rise of Freedom of Contract*, Durham: Duke University Press.

Calabresi, G. (1980). "About Law and Economics: A Letter to Ronald Dworkin." *Hofstra Law Review*. 8, 553–562.

Calabresi, G. (1991). "The Pointlessness of Pareto: Carrying Coase Further." *Yale L.J.* 100, 1211.

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

Coase, R.H. (1978). "Economics and Contiguous Disciplines." *Journal of Legal Studies*. 7, 201–211.

Cooter, R. (1984). "Prices and Sanctions." *Columbia Law Review*. 84, 1523–1560.

Cooter, R.D. (1994). "Structural Adjudication and the New Law Merchant: A Model of Decentralized Law." *Int. Rev. of Law & Econ.* 14, 215.

Cooter, R.D. (2000). "Three Effects of Social Norms on Law: Expression, Deterrance, and Internalization." *Oregon Law Review*. 79(1), 1.

Edgeworth, F.Y. (1881). *Mathematical Psychics*, London: C. Kegan Paul.

Ehrlich, I. & Posner, R.A. "An Economic Analysis of Legal Rule Making." *Journal of Legal Studies*. 3, 257–186.

Fon, V. & Parisi, F. "The Limits of Reciprocity for Social Cooperation." George Mason Law & Economics Research Paper No. 03-08.

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

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

Hicks, J.R. (1939). "The Foundations of Welfare Economics." *Economic Journal*. 49, 696–712.

Kaldor, N. (1939). "Welfare Propositions of Economics and Inter-personal Comparisons of Utility." *Economic Journal*. 49, 549–552.

Kaplow, L. & Shavell, S. (1994). "Why the Legal System Is Less Efficient than the Income Tax in Redistributing Income." *Journal of Legal Studies*. 23, 667–681.

Kelly, P. & Bentham, J. (1998). *New Palgrave Dictionary of Economics and the Law*, vol. 1.

MacKaay, E. (2000). "History of Law and Economics." *Encyclopedia of Law and Economics*, vol. 1, Cheltenham, UK: Edward Elgar Publishing.

Mueller, D. (1989). *Public Choice II*, Cambridge, UK: Cambridge University Press.

Nash, J., (1950). "The Bargaining Problem." *Econometrica*. 18, 155.

Parisi, F. (1998). "Customary Law." *The New Palgrave Dictionary of Economics and the Law*, vol. 1.

Parisi, F. & Ribstein, L. (1998). "Choice of Law." *The New Palgrave Dictionary of Economics and the Law*, vol. 1.

Posner, R.A. (1985). "Wealth Maximization Revisited." *Notre Dame Journal of Law, Ethics, and Public Policy*. 2, 85–105.

Posner, R.A. (1988). "The Ethics of Wealth Maximization: Reply to Malloy." *Kansas Law Review*. 36, 261.

Posner, R.A. (1998). "Bentham's Influence on the Law and Economics Movement." *Current Legal Problems*. 51, 425.

Posner, R.A. & Parisi, F. (1998). "Scuole e Tendenze nella Analisi Economica del Diritto." *Biblioteca della Liberta'*. 147, 3–20.

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

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

Ribstein, L. & Kobayashi, B. (2001). "A Recipe for Cookies: State Regulation of Consumer Marketing Information." George Mason Law & Economics Research Paper No. 01-04.

Ribstein, L. & O'Hara, E.A. (2000). "From Politics to Efficiency in Choice of Law." *University of Chicago Law Review*. 67, 1151.

Romano, R. (1999). "Corporate Law as the Paradigm for Contractual Choice of Law." In F. Buckley (ed.), *The Fall and Rise of Freedom of Contract*, Durham, NC: Duke University Press.

Rowley, C.K. (1981). "Social Sciences and the Law: The Relevance of Economic Theories." *Oxford Journal of Legal Studies*. 1, 391–405.

Rowley, C.K. (1989). "The Common Law in Public Choice Perspective: A Theoretical and Institutional Critique." *Hamline Law Review*. 12, 355–383.

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

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

Scitovsky, T. (1941). "A Note on Welfare Propositions in Economics." *Review of Economic Studies*. 9(1), 77–88.

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

Smith, A. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*.

Smith, V., McCabe, K. & Rassenti, S. (1998). "Reciprocity, Trust and Payoff Privacy in Extensive Form Bargaining." *Games and Economic Behavior*. 24, 10–24.

Trebilcock, M.J. (1994). *The Limits of Freedom of Contract*, Cambridge, MA: Harvard University Press.

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

Vanberg, V.J. (1994). *Rules and Choice in Economics*, London: Routledge.