

# 0400

## METHODOLOGY: GENERAL

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### Abstract

Most disputes on the methodology of law and economics have been initiated by critical scholars from disciplines outside the field itself, such as practitioners of law and literature and critical legal studies. This chapter reviews the literature on the methodology of law and economics.

It discusses, among others, the following issues: the object of law and economics, the measuring rod (money versus utility), positive and normative law and economics, and the scientific value of law and economics

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### 1. Law and Economics: Method and Object

Law and economics does not differ from other fields of study in the respect that over time different schools of thought have come into existence. Such schools include Chicago Law and Economics, Public Choice Theory, Institutional Law and Economics and Neoinstitutional Law and Economics (Mercuro and Medema, 1997). It has been argued, however, that most legal economists follow a pragmatic, eclectic, approach and that with a few exceptions, it is hard to fit them in a particular school of which they faithfully follow the rules. The economic approach to law is based on a limited number of assumptions that themselves may be amended if an alternative set of assumptions would fit the particular object of study better (De Geest, 1994). Therefore, a review of the methodology of law and economics must concentrate on the ideas that are shared by the vast majority of the people working in this field, although attention will be paid to the cases in which alternative viewpoints have been defended by major scholars. Remarkably, most disputes on the methodology of law and economics have been initiated by critical scholars from disciplines outside the field itself, such as practitioners of law and literature and critical legal studies.

Disputes on the proper definition of object and method of law and economics are not completely absent, but there seems to be a consensus among most of its practitioners. The fundament of this consensus is Gary Becker's (1976) argument that economics should be defined according to its method, rather than to its object of study. According to Becker, this method is the rational choice approach. Students of law and economics sometimes summarize this approach in just four words - 'people maximize, markets clear' (Baird, 1997) - but besides maximizing behavior and market equilibrium, the economic rational choice approach also comprises the assumption of stable preferences.

The rational choice approach can be and is applied to almost any object of study where choices are made, including for example criminal activities, sexual behavior and animal behavior. The notion of market clearance or market equilibrium refers to the fact that because demand rises if prices go down, supply rises if prices go up, and vice versa, the market will tend towards a situation where supply equals demand at a particular equilibrium price.

Equilibria will not only result on explicit markets such like the stock exchange, but also on implicit markets such as the market for criminal activities or the marriage market, which in law and economics are more than just metaphors. If the price of criminal activities goes up, due to for example a stricter criminal law, demand will go down, and similarly the demand for marriages will go down if the price rises (Becker, 1991).

Law and economics can be defined as the economic analysis of law, and therefore as the application of the rational choice approach to law. In accordance with the textbook definitions, the term law here refers to statutes, judge-made law, treaties and customary law. However, not only the law itself is studied, but also the way it came into existence and, in particular, its effects.

Law and economics is closely related to neo-institutional economics, but as Ronald Coase (1994) has shown, it is possible to distinguish both. Coase argues that while law and economics demonstrates how economics is important for the study of the law, neo-institutional economics focuses on the importance of institutions - mainly the firm, the market, and of course the law - that are important for the understanding of the economic system. Coase predicts that over time the fields will diverge from each other and increasingly will become the domain of specialists. Initially, a lot of insight in the law is gained by the understanding that people make choices and, therefore, economists are able to contribute to the understanding of the law. Once lawyers get familiar with the basic concepts of economics, however, their superior understanding of the object of study will enable them to surpass economists working in the same field. Lawyers will be able to refine

the method and thereby improve on the study of the particular object. Over time this will be required in order to advance law and economics.

The people who are assumed to maximize are individual people. This is to say that the individual action is the basic unit of analysis, so that the action of collective actors like firms or states should be analyzed in individual terms. This principle, known as methodological individualism, is just an analytical tool and in itself does not have ethical implications in the sense that the interests of individuals *ought* to be maximized.

Moreover, methodological individualism does not require that individuals are nontuistic in the sense that they only take their own wellbeing into account when they make decisions. It is true that in most economic analysis of law the assumption of rationality implies nontuism, but this is clearly an example of an assumption that may be amended without violating the essence of an economic analysis. In the context of family law, for example, it is usually assumed that parents are altruistic towards their children (Becker, 1991). Neither does methodological individualism imply that individuals are assumed to make their decisions in isolation from others. The idea that individuals choose in the context of social interactions is made explicit when game theory is used as a method of economic analysis, as nowadays is often the case (Kerkmeester, 1995).

It has been argued that human rationality is bounded in the sense that it is limited by a lack of information or of abilities to process information. An alleged consequence is that people do not maximize but are satisfied with reaching a certain aspiration level of utility. However, in mainstream law and economics issues of information may be taken into account by acknowledging that acquiring and processing information is costly and that, therefore, a rational individual deliberately will limit the collection of information (Posner, 1993a).

Recent developments in law and economics extend its realm beyond the context of markets by analyzing the consequences of social norms. The existence of social norms can be the basis for an explanation of human behavior, alternative to the rational choice approach. In some cases the best predictions may be yielded by the assumption that individuals choose certain acts because it is the norm to do so, rather than that they would base their actions on an outcome-oriented evaluation of costs and benefits (Elster, 1989). Within law and economics, social norms have particularly attracted attention since Ellickson (1991) showed that, different from what the Coase theorem predicts, individuals do not bargain towards an efficient solution on the basis of clearly defined rights that function as starting point for negotiations. Rather they simply follow social norms that often, although not always, help to obtain efficient outcomes.

Many attempts have been made to show that social norms themselves may be the results of rational choices (Becker, 1996; Cooter, 1998).

## 2. The Measuring Rod: Money Versus Utility

If people maximize, *what* do they maximize? Two 'measuring rods' are widely used in law and economics.

The first is utility, a term referring to the preferences of individuals: the more a particular item is preferred, the higher is by definition the utility that it yields to the individual. Everything can be measured in terms of utility, including for example leisure, love, altruistic feelings, the adherence to norms, and so on. It is even conceivable that someone derives utility from losing his money. What individuals prefer and to which extent they do so, is a matter of personal taste in which economics does not interfere: *de gestibus non est disputandum* (Becker, 1996).

The most important arguments for the use of utility rather than money are derived from the axiom of diminishing marginal utility, that says that the utility gained from successive units of a commodity diminishes. The same can be argued with regard to money, in the sense that an additional euro will yield less utility than the last one. If the axiom holds, this has consequences for the attitude of individuals toward risk. If twice the amount of money does not yield twice the amount of utility, an individual will prefer the certainty of a particular amount of money above a gamble with a 50 percent chance of getting the double amount and a 50 percent chance of receiving nothing. However, the axiom does not always hold and, moreover, in some contexts individuals may not be risk-avoiders but be neutral towards risk, or even risk-seekers in the sense that they prefer a gamble with a certain expected value over the certainty of this value.

An important drawback of utility is that it is hard to make interpersonal comparisons if such a subjective measuring rod for utility is used. This is why the use of the Pareto criterion is defended. The definition that a change will result in a Pareto improvement if at least one person will be better off and no person will be worse off than before avoids the need for making interpersonal comparisons. A solution is Pareto optimal if no further Pareto improvements can be made. The Pareto criterion is to be distinguished from the Kaldor-Hicks criterion that states that a change results in a wealth improvement if the winners gain more than enough to compensate the losers, whereby however such a compensation need not take place in fact.

While as a logical statement the assumption that an individual is engaged in the maximization of utility is true by definition and therefore a truism, the same assumption clearly is unrealistic as an empirical statement.

Ronald Coase (1994) compares the use of the term utility in economic models with the use of the term aether in classical physics. It is not observable, but only called in because it is required to make the traditional model work.

The fact that all behaviors can be explained in terms of utility is an advantage, but at the same time another drawback of its use. The only way to determine someone's utility function is to observe his behavior. If, however, the utility function thus derived will be used to predict the behavior of the same individual, circularities are bound to occur. No matter how unusual one's behavior, it always can be 'explained' by assuming that it maximizes utility. This helps to understand the importance of rational choice theory's assumption that preferences are stable during the period under consideration.

The most obvious alternative for the use of utility is money, as is preferred by both Coase and Posner, and this use has clearly some advantages. In the first place the assumption that, other things being constant, people prefer more money over less and always like to have more, is among the most realistic assumptions that can be made. Because, however, some individuals may form an exception to this rule, the circularity inherent in the statement that individuals maximize utility is avoided. Interpersonal comparisons are easier to make with money than with utility. Although a dollar may not mean the same to person A as to person B, at least it is the same dollar. This possibility is particularly important in normative law and economics. In order to avoid the restrictions of the Pareto criterion that as was noted above, only allows for a change if nobody is worse off as a result, Richard Posner (1992) defends the use of the principle of wealth maximization. The measure is the willingness to pay: if goods and other resources are in the hands of the persons who were willing and able to pay the highest amount for this, wealth is maximized. Willingness to pay is not a pure expression of the preferences that an individual has towards a particular item. It may be the case that although A has more intense preferences with regard to an item than B has, still B may be willing to pay more for it, for the simple reason that he has more money available. There is a speculative element in it since the offering prices one needs to know to determine willingness to pay are not always observable.

#### *Alternatives*

There has not been much attention for the use of alternatives to money or utility in law and economics. This neglect contrasts with the extensive discussions in economics and in ethical discourses. A source of alternatives for money is fed by some authors' argument against welfarism, that is the idea that the social ordering of different situations should depend on the utility that individuals derive in those different states of the world (Roemer, 1996). An important problem is that individuals may have 'perverse'

preferences, for example deriving utility from torturing someone else, or expensive tastes. For positive purposes this is not a point, but it causes difficulties as soon as utility maximization is regarded as something that should be promoted (Posner, 1979).

The alternatives presented not only counter welfarism, but also provide better opportunities for interpersonal comparisons. Examples are John Rawls' well-known concept of primary goods and Amartya Sen's functionings. Functionings refer to what goods can do for people, which is not only yielding individual utility, but also escaping death, being nurtured, getting self-respect, participating in community life, and so on. The point is not that those functionings could be measured in terms of utility, because of course they can, but that they themselves can be measured more objectively than is possible with utility. However, for most economic analyses of law, it is doubtful whether the advantages just mentioned outweigh the costs of a more complicated approach.

#### *Criticisms*

The economic assumptions regarding utility or wealth maximization have been the main objects of attacks by critics of law and economics. The criticisms have focused on the positive as well as the normative use of the assumptions.

The mainstream ideas about maximizing behavior are based on the assumption that desires and opportunities are independently given (Kerkmeester, 1992). It may, however, be the case that desires are influenced by opportunities. Dworkin (1980) points at the possibility that because of the familiar 'grass is greener' phenomenon, social wealth may be increased by a transfer from A to B, but because of the resulting change in preferences then again may be increased by transferring the item back from B to A. Even more common is the situation in which on the contrary someone will ask more for something he owns than he would pay to acquire it. This has become known as the endowment effect and as such it has received its place in the economic analysis of law (Sunstein 1997a).

Particularly vexing for economists is the sour grapes effect, named after the fable of the fox who, when he discovered that he could not reach certain grapes, did not want them because they were sour anyway (Elster, 1979). The effect is important for a judgement of the assumption of wealth maximization but it conflicts with the equally important assumption that preferences are stable.

Some authors have argued that the unidimensionality of measuring in terms of utility or money fails to take the complexity of human motivation into account. Martha Nussbaum (1997) argues that in law and economics too much attention is paid to variables that are measurable, at the expense of

other factors that may play no lesser role in determining human action. According to Robin West (1988) legal economists fail to reckon with the warmth and empathy that characterizes human relations. The use of Kaldor-Hicks efficiency in law and economics, however, implies the assumption that it is possible to obtain sufficient insight in the preferences of others to determine what one needs to get in order to be compensated for a loss (De Geest 1994). Therefore, it is doubtful whether West's criticism holds against mainstream law and economics.

All the previous remarks are based on the idea that the assumptions regarding utility or wealth maximization do not provide for a realistic description of the complexities of human behavior in the real world. One response from law and economics could be that its assumptions can be - and often are - made to be more in accordance with reality. In particular, Gary Becker's (1996) recent work on tastes shows willingness to incorporate the possibility of changes in preferences into the economic model. A different response, however, could be that unrealism of assumptions is not necessarily a bad thing. The latter point will be returned to in Section 4.

Most reactions have been provoked by Richard Posner's principle of wealth maximization. The most influential of these reactions is Ronald Dworkin's (1980) comment.

In the first place Dworkin notes that willingness to pay for an item is not only determined by preferences for the item, but also by ability to pay. Therefore, a scarce item may end up in the hands of a rich man who barely needs it, rather than with a poor soul who desperately needs it, but simply cannot afford to pay the same amount. This situation is in accordance with the principle of wealth maximization, while total utility is not maximized.

In the second place, wealth maximization may lead to outcomes that can be regarded as unfair. This is the case in the example mentioned above, but outcomes can also be unfair in cases in which total utility is maximized but unequally divided.

In the third place, Dworkin argues that the principle of wealth maximization interferes with individual autonomy as would be guaranteed by individual rights. He mentions a case in which A attaches a higher value to an item than owner B does. A benevolent dictator then would maximize wealth by taking the item from B and giving it to A.

The allegation that law and economics does not recognize rights that is implicit in the last remark is clearly unjustified, and Dworkin himself mitigated his criticism in this respect. As the importance of the notion of property rights within law and economics shows, rights do play an important role. Dworkin's remarks certainly have their merits, but it should be noted that a normative law and economics does not stand or fall with Posner's

wealth maximization. Posner (1980) himself insisted that the principle of wealth maximization is in accordance with individual autonomy.

### **3. Positive and Normative Law and Economics**

Due to the discussion above it has become obvious that it is important to try to distinguish between positive and normative law and economics. This issue is particularly important for an evaluation of the position of law and economics as a scientific discipline. In other words: it should be clear whether law and economics regards statements about how the law and its effects are, or about how they ought to be.

A possible point of view is that both are possible (Friedman, 1987). A positive analysis explains the law, predicts its effects and thereby indicates which legal rule as a matter of fact will be efficient. These results of a positive analysis can then be used for normative purposes, such as the prescription of the efficient rule.

The approach leading to normative statements has been aptly characterized by James Buchanan's (1990) words 'the ought is derived from the presumed is'. A legal economist starts with assumptions about human behavior. Correct predictions of human behavior and the way it is influenced by the law are required for decisions on how the law should be. Therefore, the discussion about the realism of assumptions that will follow in the next paragraph will be relevant for both positive and normative law and economics.

However, not everyone is satisfied with the idea of a co-existence of positive and normative law and economics. Some argue that only a positive economic analysis of law is possible (De Geest 1994). The efficiency of a legal rule is regarded to be a factual issue, and that it thus can be determined objectively. To argue that therefore this rule is desirable is to add a value judgement that is not a part of an economic analysis.

A point of view that is even more radical is that economics is a strictly positive science, while law is a strictly normative undertaking, and that therefore law and economics cannot go together (Couwenberg et al. 1980).

The opinions just cited lose ground, however, as soon as it is acknowledged that a science is not necessarily positive and that this is particularly true for the economic science. Coase gives the example of an economist predicting that a certain measure, namely collectivization of agriculture, will lead to mass starvation. In Coase's opinion it is absurd to state that the economist is not able to make a statement about whether this particular measure is desirable or not. The idea that the making of value judgements is better left to others is rejected by Coase (1994), since he

believes that economists and others share many values and economists thus are able to make acceptable value judgements on their own.

Coase's opinion is supported by the fact that nowadays many economists are no longer reluctant to acknowledge that they are engaged in a normative undertaking. In particular, the relation between economics and ethical issues as the just distribution of welfare has been the subject of study (Roemer, 1996). It could well be argued that if economics could be normative anywhere it is in the context of the economic analysis of law.

Several authors (for example Raes 1990) even argue that an economic analysis always is normative, at least implicitly. Their argument is that if legal economists focus so much on efficiency, this shows that they believe laws *should be* efficient or that at least efficiency is an important and desirable characteristic. An even more critical approach to the allegedly normative contents of law and economics is put forward from critical legal studies and law and literature. Both are currents in American legal theory that have been particularly aimed at unmasking law and economics as a biased - inherently conservative, right-wing - movement (Kelman, 1987; Duxbury, 1995; Mercurio and Medema, 1997).

#### 4. The Scientific Value of Law and Economics

##### *Inductive versus Deductive Approaches*

In the previous paragraph it was argued that the relation between theory and the empirical world is not only important in positive law and economics, but also if a normative point of view is taken. According to the famous words of Oliver Wendell Holmes, which are often quoted in law and economics: 'experience not logic is the life of the law'.

Two extreme viewpoints are possible as to the relation mentioned above. The most common is the application of the deductive method, of which the rational choice approach is an example. Deduction implies that the focus is from theory to reality, that is starting with making assumptions, deriving hypotheses from them, and testing these hypotheses by confronting them with the results of empirical observations.

The alternative is an inductive approach, that is to say focusing from reality to theory. One starts with making empirical observations, making generalizations in order to develop a theory. In his criticisms on the use of assumptions in law and economics, which use is inherent to the deductive approach, Ronald Coase defends the inductive alternative that he has been practicing himself. Coase accuses the followers of the deductive approach of practicing 'blackboard economics', that is having the conviction that a model that is drawn on the blackboard obviously has meaning for the real

world. An example is given by the provision of lighthouses, which according to economic models are classical examples of public goods for which the government should provide. Coase (1988) showed that empirical, inductive, research led to the conclusion that in fact in England for centuries there been a profitable private provision of lighthouses.

The predominance of deductive approaches in law and economics has also resulted in criticisms from law and literature (Gaakeer and Kerkmeester, 1997). By focusing on generalizations rather than on individual cases, law and economics allegedly overlooks aspects that make every case unique (White, 1987).

Given the dominance of the deductive approach in law and economics, the debate on the position of assumptions in law and economics deserves closer scrutiny. The usual point of view is that for several reasons the realism of assumptions is irrelevant. In the first place an economic theory of law that captures its full complexity would not be a theory, but a description (Posner, 1992).

The most principled as well as influential counterargument is based on Milton Friedman's (1953) ideas about the role of assumptions in positive economics that have become part of the dominant methodology in law and economics. Friedman argues that the realism of a model should not be tested on the level of the assumptions underlying it, but on the level of the hypotheses derived from the model. Therefore, what counts is whether a model predicts well, in other words whether the predictions derived from the model (the hypotheses) are in accordance with empirical observations.

A frequent comment on the rationality assumption, namely that real people are not rational in the sense that they make deliberate calculations, calculating with lightning speed can be countered by pointing at Friedman's argument. It is not relevant whether people really calculate, but whether their behavior can be predicted correctly on the basis of a model that is made *as if* those calculations are made and decisions are based upon them.

An extreme viewpoint of Friedman that has become known as the 'F-twist', is that assumptions even *should be* unrealistic, because that is what makes them general enough to yield fruitful predictions.

Friedman's methodological paper has evoked a large amount of comments. An argument against the use of Friedman's methodology is the assertion that - at least in a number of contexts - unrealistic assumptions fail to yield correct predictions about the empirical world, and thus the F-twist certainly does not hold. The most important defender of this view is Cass Sunstein, who pleads for a 'behavioral law and economics'.

Based on empirical research that found anomalies in rational choice theory, Sunstein (1997b) develops a catalogue of complications that law and economics should take into account, in particular if it comes to estimation of

probabilities, changes of preferences, and addiction. This is not to say that behavior is unpredictable. On the contrary, deviations from the predictions of rational choice theory often happen in a systematic way and inductive research of these deviations can help to build economic models that yield better predictions.

Another point to be mentioned is that in Friedman's view correct predictions are useful because they help confirm to a theory. However, the logical-positivist idea that the confirmation of theories is relevant has come under attack from the philosophy of science known as critical realism, with Karl Popper as its founder. Popper argued that confirmations never are able to prove that a theory is correct. One should therefore strive for the falsification of his theory, looking for empirical observations that are *not* in accordance with the predictions of the model. If a model is falsified in a confrontation with reality, the assumptions of the model can be adjusted and attempts at falsification can start anew. Ideally, deduction and induction will follow each other in an 'empirical cycle'.

The methodological prescriptions of critical rationalism have found wide support (Teijl and Holzhauer, 1997). Critics of this viewpoint, however, have argued that although the falsification principle is adhered to in theory, it is not followed in practice. Usually, scholars look for confirmations of their theory and in case a discrepancy between reality and the predictions of the theory is found, this is blamed on anomalies that require further study (Coase, 1994).

#### *Alternatives to Critical Rationalism*

Observing the failure of critical rationalism to describe the practice of law and economics as a scientific discipline, alternative models have been sought. Thomas Kuhn presented an alternative in his *The Structure of Scientific Revolutions* (Coase, 1994). Kuhn noted that indeed isolated discrepancies do not lead to the abandonment of a generally accepted paradigm. Whether a new paradigm will replace the old will not only be determined on the basis of empirical results. Of no less importance is the ability of the adherents of the new paradigm to gain key posts at universities and at the boards of important journals. Legal economists choose between competing theories and empirical research plays a role in showing the attractiveness or unattractiveness of a theory.

The fact that Kuhn stresses an institutional perspective implies that the success of law and economics to a large extent depends on the ability of lawyer-economists to obtain positions at law schools and to get their articles accepted in prestigious legal journals. A complicating point hereby is, however, that the amount of success will depend on the attractiveness of law and economics as a *normative* theory. Of old, the legal academia has been

less interested in positive studies than in normative arguments that state how a case should be decided or how a law should be written.

Another alternative that attracted attention in law and economics is Lakatos's *Methodology of Scientific Research Programmes* (De Geest 1994; Teijl and Holzhauser 1997). According to Lakatos, theories have a hard core that is maintained, even if some elements have been falsified. A layer of additional hypotheses, *ceteris paribus* clauses and empirical observations protects this hard core. In practice, several research programs compete with each other. A research program is regarded as progressive if it yields new and correct predictions. A theory is only regarded to be falsified when it is replaced by a new and better theory.

De Geest (1994) has developed a theory that does not stress the importance of the truth of a theory but its plausibility, defined as the probability that its statements about the reality are true. For the plausibility of a theory not only empirical confirmations are relevant, but also the accordance of its statements with self-observation and life experience of the specialists that give a judgement of the theory. The latter is important for law and economics because empirical confirmations in the form of observable data are still limited in number. The same line of reasoning is followed by Coase (1994) in his effort to reconcile the main works of Adam Smith, namely *The Theory of Moral Sentiments* and *The Wealth of Nations*. If the complicated theory of motivation as developed in *The Theory of Moral Sentiments* is used as the starting point of an economic analysis the conclusions from *The Wealth of Nations* still hold, but are made more plausible. In this respect the problem with the use of unrealistic assumptions as defended by Friedman is that they do not contribute to the plausibility of a theory.

Ronald Coase (1994) further argues that even if predictions on the basis of unrealistic assumptions are correct, a theory based upon them may fail in providing insight in the working of the economic (or legal) system. An important factor in judging the importance of realism of assumptions is the goal one is aiming for. If it is only prediction and control, the use of unrealistic assumptions is fine, as long as they indeed predict well. If, however, the goal is explanation, an approach based on unrealistic assumptions is not really helpful in providing insight in what really moves a person and in how legal rules really have effects. There is an additional need for a 'mechanism' that shows how something could have happened. Not only the predictions, but also the beauty, elegance and internal consistency of an economic model determine its value for the analysis of law. Therefore, the life of law and economics is not just experience; it is logic as well.

**Bibliography on Methodology: General (0400)**

- Adams, Michael (1984), 'Ist die Ökonomie eine imperialistische Wissenschaft? - Über Nutz und Frommen der Ökonomischen Analyse des Rechts (Is Economics an Imperialist Science? On the Usefulness and Forms of Economic Analysis of Law)', *7 JURA*, 337-349.
- Adelstein, Richard P. (1981a), 'The Plea Bargain in England and America: A Comparative Institutional View', in Burrows, Paul and Veljanovski, Cento G. (eds), *The Economic Approach to Law*, London, Butterworths, 226-252.
- Adelstein, Richard P. (1981b), 'Institutional Function and Evolution in the Criminal Process', *76 Northwestern University Law Review*, 1-99.
- Adelstein, Richard P. and Peretz, Steven I. (1985), 'The Competition of Technologies in Markets for Ideas: Copyright and Fair Use in Evolutionary Perspective', *5 International Review of Law and Economics*, 209-238.
- Alpa, Guido (1996), 'Lo Snobismo degli Economisti e il Rifiuto del Dialogo con i Giuristi (a proposito dell'Introduzione alla Versione Italiana di 'Impresa, Mercato e Diritto' di R.H. Coase) (The Economists' Snobbery and the Refusal of Dialogue with Lawyers)', *Economia e Diritto del Terziario*, 745-749.
- Backhaus, Jürgen G. (1996), *Good Economics, Bad Economics, and European Economics*, Meteor Research Memorandum, Maastricht, No. RM/96/007.
- Baird, Douglas G. (1997), 'The Future of Law and Economics: Looking Forward', *64 University of Chicago Law Review*, 1129-1165.
- Becker, Gary S. (1976), *The Economic Approach to Human Behavior*, Chicago: University of Chicago Press.
- Becker, Gary S. (1991), *A Treatise on the Family*, Enlarged edition, Cambridge, MA, Harvard University Press.
- Becker, Gary S. (1996), *Accounting for Tastes*, Cambridge, MA, Harvard University Press.
- Brenner, Reuven (1980), 'Economics: An Imperialistic Science?', *9 Journal of Legal Studies*, 184 ff.
- Brietzke, Paul H. and Whitton, Linda S. (1996), 'An Old(er) Master Stands on the Shoulders of Ageism to Stake Another Claim for Law and Economics (Book Review of Richard A. Posner, Aging and Old Age)', *31 Valparaiso University Law Review*, 89-109.
- Bruce, Christopher J. (1989), 'A Positive Analysis of Methodology in the Law and Economics Literature', *Hamline Law Review*, 197-228.
- Buchanan, James M. (1990), 'The Domain of Constitutional Economics', *1 Constitutional Political Economy*, 1-18.
- Campbell, David (1994), 'Ayres versus Coase: An Attempt to Recover the Issue of Equality in Law and Economics', *21 British Journal of Law and Society*, 434-463.
- Campbell, David (1996), 'On What is Valuable in Law and Economics', *8 Otago Law Review*, 489-514.
- Campbell, David (1997), 'The Relational Constitution of Contract and the Limits of Economics: Kenneth Arrow on the Social Background of Markets', in Deakin, Simon and Michie, Jonathan (eds), *Contracts, Co-operation and Competition: Studies in Economics, Management and Law*, Oxford, Oxford University Press, 529-596.

- Coase, Ronald H. (1988), *The Firm, the Market, and the Law*, Chicago, University of Chicago Press.
- Coase, Ronald H. (1994), *Essays on Economics and Economists*, Chicago, University of Chicago Press.
- Cooter, Robert (1998), 'Expressive Law and Economics', **27** *Journal of Legal Studies*, 585-608.
- Cosentino, Fabrizio (1988), 'Autonomia Privata e Paternalismo del Legislatore nella Prospettiva dell'Analisi Economica del Diritto (Individual Autonomy and the Paternalism of the Legislator: An EAL Perspective)', *Rivista Critica del Diritto Privato*, 473-511.
- Cotter, Thomas F. (1996), 'Legal Pragmatism and the Law and Economics Movement', **84** *Georgetown Law Journal*, 2071-2141.
- Couwenberg, S.W., Nagelkerke, J.J. and Slagter, Wiek J. (1980), *Recht en Economie* (Law and Economics), Rotterdam.
- De Geest, Gerrit (1994), *Economische Analyse van het Contracten- en Quasi-Contractenrecht: een Onderzoek naar de Wetenschappelijke Waarde van de Rechtseconomie* (Economic Analysis of Contract Law and Quasi Contract Law: A Study on the Scientific Value of Law and Economics), Antwerpen, Maklu, 568 p.
- De Geest, Gerrit (1996), 'The Debate on the Scientific Status on Law and Economics', **40** *European Economic Review*, 999-1006.
- Duxbury, Neil (1995), *Patterns of American Jurisprudence*, Oxford, Clarendon.
- Dworkin, Ronald M. (1980), 'Is Wealth a Value?', **9** *Journal of Legal Studies*, 191-226.
- Ellickson, R.C. (1991), *Order Without Law: How Neighbors Settle Disputes*, Cambridge, MA, Harvard University Press.
- Elster, Jon (1979), *Sour Grapes*, Cambridge, Cambridge University Press.
- Elster, Jon (1989), *The Cement of Society. A Study of Social Order*, Cambridge, Cambridge University Press.
- Elster, Jon (1997), 'More Than Enough. Review of G.S. Becker, Accounting for Tastes', **64** *University of Chicago Law Review*, 749-764.
- Epstein, Richard A. (1997), 'Law and Economics: Its Glorious Past and Cloudy Future', **64** *University of Chicago Law Review*, 1167-1174.
- Feichtinger, Gustav (1995), 'Crime and Punishment: A Dynamic Approach', **195** *Forschungsbericht/Research Memorandum*.
- Feichtinger, G., Forst, Ch.V. and Piccardi, C. (1993), 'A Nonlinear Dynamic Model for the Dynastic Cycle', **165** *Forschungsbericht/Research Memorandum*.
- Ferrarese, Maria Rosaria (1992), *Diritto e Mercato: il Caso degli Stati Uniti* (Law and Market: the Case of the United States), Torino, Giappichelli.
- Fezer, Karl-Heinz (1986), 'Aspekte einer Rechtskritik an der Economic Analysis of Law und am Property Rights Approach (Critical Aspects of the Economic Analysis of Law and the Property Rights Approach from a Lawyer's Viewpoint)', **41** *Juristenzeitung*, 817-824.
- Fezer, Karl-Heinz (1988), 'Nochmals, Kritik an der Ökonomischen Analyse des Rechts (More Critics on Law and Economics)', **43** *Juristenzeitung*, 223 ff.
- Frech, H. Edward III (1995), 'European versus American Economics, Artificial Intelligence and Scientific Content', **48** *Kyklos*, 219-226.
- Friedman, David D. (1987), 'Law and Economics', in X (ed.), *The New Palgrave: Invisible Hand*, London, Macmillan, 173-182.

- Friedman, Milton (1953), 'The Methodology of Positive Economics', in X (ed.), *Essays in Positive Economics*, Chicago, University of Chicago Press.
- Gaakeer, Jeanne and Kerkmeester, Heico (1997), *De Toenadering tussen Law and Economics en Law and Literature. Liaisons Dangereuses of De Werking van Adam Smiths Onzichtbare Hand?* (The Rapprochement between Law and Economics and Law and Literature. Liaisons Dangereuses or Adam Smith's Invisible Hand), Deventer, Gouda Quint.
- Gay, David E.R. (1981), 'Book Review of Moral Revolution and Economic Science: The Demise of Laissez-Faire in Ninteenth Century British Political Economy, Ellen Frankel Paul', **48** *Southern Economic Journal*, 530-531.
- Gay, David E.R. (1982), 'Book Review of The Role of Government in a Free Society, Phil Gramm', **50** *Southern Economic Journal*, 916-917.
- Gemtos, Petros A. (1974), 'E Provmatike ton Axiologikon Kriseon stis Koinonikes Epistemes (The Problem of Normative Judgments in the Social Sciences)', **4** *Philosophica*, 120-136.
- Gemtos, Petros A. (1988), 'Methodologika Programmata sten Oikonomike kai te Nomike Episteme kai to Problema tes Diepistemonikes tous Synergias (Methodological Programs in Economics and Legal Science and the Problem of their Interdisciplinary Collaboration)', **36** *Nomiko Vema*, 1192-1202, reprinted in *Cyprus Law Review*, 39, 4627-4643 (1990)
- Gemtos, Petros A. (1990), 'Law and Economics: Methodological Problems in their Interdisciplinary Cooperation', in Nicolacopoulos, Pantelis D. (ed.), *Greek Studies in the Philosophy and History of Science* (Boston Studies in the Philosophy of Science, vol. 121), Dordrecht, Kluwer, 239-250.
- Gemtos, Petros A. (1995), *Oikonomika kai Dikaio: Oikonomika gia Nomikous, tomos: Methodologika kai Oikonomika Themelia* (Law and Economics: Economics for Lawyers, vol. I: Methodological and Economic Foundations), Athens-Komotini, Ant. N. Sakkoulas Publications.
- Gagnani, A., Feichtinger, G. and Rinaldi, S. (1994), 'Dynamics of Drug Consumption: A Theoretical Model', **94-77** Working Paper.
- Gagnani, A., Rinaldi, S. and Feichtinger, G. (1995), 'Slow-Fast Limit Cycles in Controlled Drug Markets', **185** *Forschungsbericht/Research Memorandum*.
- Gridel, J.-P. (1994), *Introduction au droit et au droit français. Notions fondamentales. Méthodologie. Synthèses*. (Introduction to the Law and the French Law. Fundamentals notions. Methodology. Synthesis), Dalloz.
- Grillo, Michele (1996), 'Lo Snobismo degli Economisti e il Rifiuto del Dialogo con i Giuristi. Una Risposta a Guido Alpa (The Economists' Snobbery and the Refusal of Dialogue with Lawyers. A Reply to Guido Alpa)', *Economia e Diritto del Terziario*, 751-754.
- Hatzis, Aristides N. (1997), *Eisagoge sten Oikonomike Analyse tou Dikaiou* (Introduction to the Economic Analysis of Law), Aristotle University of Thessaloniki School of Law and Economics, Department of History, Philosophy and Sociology of Law.
- Hol, A.M. (1991), 'Rechten En Doeleinden. Enkele Morele Aspecten Van Juridische Aansprakelijkheid (Rights and Goals. Some Moral Aspects of Legal Liability)', in X (ed.), *Dilemma's van Aansprakelijkheid*, Zwolle, Tjeenk Willink, 127-142.

- Huerta De Soto, Jesús (1982), 'Método y Crisis en la Ciencia Económica (Method and Crisis in Economics)', **74** *Hacienda Pública Española*, 33-48.
- Johnsen, D. Bruce (1986), 'Wealth is Value', **15** *Journal of Legal Studies*, 263-288.
- Katz, Avery (1996a), 'Taking Private Ordering Seriously', **144** *University of Pennsylvania Law Review*.
- Katz, Avery (1996b), 'Positivism and the Separation of Law and Economics', **94** *Michigan Law Review*.
- Kelman, Mark G. (1987), *A Guide to Critical Legal Studies*, Cambridge, MA, Harvard University Press.
- Kerkmeester, Heico (1992), 'De Veronderstellingen in de Rechtseconomie: Wanneer Zij Bruikbaar Zijn en Wanneer Niet', **21** *Nederlands Tijdschrift voor Rechtsfilosofie en Rechtsrtheorie*, 126-143.
- Kerkmeester, Heico (1995), 'Game Theory as a Method in Law and Economics', in Bouckaert, Boudewijn and De Geest, Gerrit (eds), *Essays in Law and Economics II: Contract Law, Regulation, and Reflections on Law and Economics*, Antwerpen, Maklu, 267-285.
- Kerkmeester, Heico (1996), 'Bespreking van R.P. Malloy en J. Evensky (red.), Adam Smith and the Philosophy of Law and Economics en van R.H. Coase, Essays on Economics and Economists (Book Reviews)', **22** *Recht en Kritiek*, 290-296.
- Kerkmeester, Heico (1997), 'De Retoriek van de Rechtseconomie (The Rhetorics of Law and Economics)', in Feteris, E.T. et al. (eds), *Op Goede Gronden*, Nijmegen, Ars Aequi Libri, 207-213.
- Kitch, Edmund W. (1983), 'Intellectual Foundations of Law and Economics', **33(2)** *Journal of Legal Education*, 183-209.
- Kitch, Edmund W. (1992), 'The Framing Hypothesis', in Newman, Peter, Milgate, Murray and Eatwell, John (eds), *The New Palgrave Dictionary of Money and Finance*, London, MacMillan.
- Kornhauser, Lewis A. (1984), 'The Great Image of Authority', **36** *Stanford Law Review*, 349 ff.
- Kornhauser, Lewis A. (1986), 'Economic Analysis of Law', **16** *Materiali per una Storia della Cultura Giuridica*, 233 ff.
- Kornhauser, Lewis A. (1988), 'Economie (Analyse - du droit)', in Arnaud, André-Jean (ed.), *Dictionnaire Encyclopedique de Theorie et de Sociologie du Droit*, Librairie General de Droit et de Jurisprudence.
- Kornhauser, Lewis A. (1989), 'The New Economic Analysis of Law: Legal Rules as Incentives', in Mercurio, Nicholas (ed.), *Law and Economics*, Boston, Kluwer Academic Publishers.
- Kornhauser, Lewis A. (1992), 'Analise Economica do Direito', **43(2)** *Sub Judica: Justica e Sociedade*.
- Kronman, Anthony T. (1980), 'Wealth Maximization as a Normative Principle', **9** *Journal of Legal Studies*, 227-242.
- Lande, Robert H. (1989), 'Commentary: Implications of Professor Scherer's Research for the Future of Antitrust', **29** *Washburn Law Journal*, 256 ff.
- Leff, Arthur A. (1974), 'Economic Analysis of Law: Some Realism About Nominalism', **60** *Virginia Law Review*, 78 ff.
- Malloy, Robin Paul and Evensky, Jerry (eds) (1995), *Adam Smith and the Philosophy of Law and Economics*, Dordrecht, Kluwer Academic Publishers.

- Mercuro, Nicholas and Medema, Steven G. (1997), *Economics and the Law. From Posner to Post-Modernism*, Princeton, Princeton University Press.
- Mercuro, Nicholas and Ryan, Timothy P. (1984), *Law, Economics, and Public Policy*, Greenwood, JAI Press.
- Migué, Jean-Luc (1977), 'Méthodologie Économique et Économie Non Marchande (Economic Methodology and Non-Trading Economics)', *Revue d'Économique Politique*, 506 ff.
- Monateri, Pier Giuseppe (1995), 'Risultati e Regole. (Un'Analisi Giuridica dell'Analisi Economica del Diritto) (Rules and Outcomes. A Legal Analysis of the Economic Analysis of Law)', *Rivista Critica del Diritto Privato*, 605-619.
- Nussbaum, Martha C. (1997), 'Flawed Foundations. The Philosophical Critique of (a Particular Type of) Economics', *64 University of Chicago Law Review*, 1197-1214.
- Parisi, Francesco (1998), *The Economic Structure of the Law (The Collected Papers of Richard A. Posner: Volume I)*, Cheltenham and Lyme, Edward Elgar, 354 p.
- Parisi, Francesco and Posner Richard A. (1997a), 'Law and Economics: An Introduction', in Posner, Richard A. and Parisi, Francesco (ed.), *Law and Economics*, Cheltenham and Lyme, Edward Elgar, Ashgate, 3-57.
- Parisi, Francesco and Posner Richard A. (1997b), 'Scuole e Tendenze nella Analisi Economica del Diritto', *15 Rivista Critica del Diritto Privato*.
- Parisi, Francesco and Posner Richard A. (1997c), *International Library of Critical Writings in Economics, Volume I: Theoretical and Methodological Foundations*, Cheltenham and Lyme, Edward Elgar.
- Pastor, Santos (1984), 'Una Introducción al Análisis Económico del Derecho (An Introduction to Law and Economics)', *89 Hacienda Pública Española*.
- Pastor, Santos (1989), 'Derechos de Propiedad y Análisis Económico: ¿Nuevas Luces a Viejas Sombras? (Economics of Property Rights: Shading Lights?)', *38 Economistas*, 28-35.
- Polinsky, A. Mitchell (1974), 'Economic Analysis as a Potentially Defective Product: A Buyer's Guide to Posner's Economic Analysis of Law', *87 Harvard Law Review*, 1655-1681.
- Posner, Richard A. (1979), 'Utilitarianism, Economics, and Legal Theory', *8 Journal of Legal Studies*, 103-140.
- Posner, Richard A. (1980), 'The Value of Wealth: A Comment on Dworkin and Kronman', *9 Journal of Legal Studies*, 243-252.
- Posner, Richard A. (1992), *Economic Analysis of Law*, 4th edn, Boston, Little Brown.
- Posner, Richard A. (1993a), 'The New Institutional Economics Meets Law and Economics', *149 Journal of Institutional and Theoretical Economics*, 73-87.
- Posner, Richard A. (1993b), 'Ronald Coase and Methodology', *Journal of Economic Perspectives*, 195-210.
- Raes, Koen (1990), 'Het Recht van de Schaarste (The Law of Scarcity)', *16 Recht en Kritiek*, 380-394.
- Reumer, Andrés (1996), *Análisis Económico del Derecho (Economic Analysis of Law)*, Mexico, Fondo de Cultura Económica, Sociedad Mexicana de geografía y Estadística, e Instituto Tecnológico Autónomo de México.
- Rinaldi, S., Feichtinger, G. and Wirl, F. (1994), 'Corruption Dynamics in Democratic Systems', *168 Forschungsbericht/Research Memorandum*.

- Roemer, Andrès (1992), *Importancia del Análisis Económico del Derecho*, Mexico, SUMMA de la Sociedad Mexicana de Geografía en México y Estadística.
- Roemer, John E. (1996), *Theories of Distributive Justice*, Cambridge, MA, Harvard University Press.
- Romani, Franco (1990), 'Diritto ed Economia: la Prospettiva di un Economista (Law and Economics: the Perspective of an Economist)', *Sociologia del Diritto*, 245-254.
- Rowley, Charles K. (1981), 'Social Sciences and the Law: The Relevance of Economic Theories', *1 Oxford Journal of Legal Studies*, 391-405.
- Slagter, Wiek J. (1995), 'Grensoverschrijdingen en Grensgeschillen tussen de Economische en Rechtswetenschap (Border-crossings and Border-differences Between Economic and Legal Science)', in Slagter, Wiek J. et al. (eds), *Ondernemen Tussen Macht en Ordening: Opstellen op het Grensvlak van Economie en Recht*, Amsterdam, Thesis Publishers, 1-14.
- Sousa Franco, Atónio (1992), 'Análise Económica do Direito: Exercício Intelectual ou Fonte de Ensino?', *2 Sub Judice*, 63-70.
- Stake, Jeffrey E. (1991), 'Status and Incentive Aspects of Judicial Decisions', *79 Georgetown Law Journal*, 1447-1497.
- Stout, Lynn A. (1997), 'Irrational Expectations', (forthcoming) *Journal of Legal Theory*.
- Sunstein, Cass R. (1997a), *Free Markets and Social Justice*, Oxford, Oxford University Press.
- Sunstein, Cass R. (1997b), 'Behavioral Analysis of Law', *64 University of Chicago Law Review*, 1175-1195.
- Teijl, Rob and Holzhauser, Rudi W. (1997), *Wisselende Perspectieven in de Rechtseconomie (Changing Perspectives in Law and Economics)*, Deventer, Gouda Quint.
- Trebilcock, Michael J. (1983), 'The Prospects of 'Law and Economics': A Canadian Perspective', *33 Journal of Legal Education*, 288-290.
- Turnbull, Shann (1977), *Impact of Mining Royalties on Aboriginal Communities in the Northern Territory*, First Report, Parliamentary Paper, Canberra, Australian Government Publishing Service, No. 135/1978.
- Turnbull, Shann (1978), *Economic Development of Aboriginal Communities in the Northern Territory Second Report, Self-sufficiency (with Land Rights)*, Parliamentary Paper, Canberra, Australian Government Publishing Service, No. 438/1978.
- Turnbull, Shann (1980), *Economic Development of Aboriginal Communities in the Northern Territory: A Study in two parts*, Department of Aboriginal Affairs, Canberra, Australian Government Publishing Service.
- Turnbull, Shann (1992), 'Economics and the Laws of Nature', in Marston, Alan (ed.), *The Other Economy: Economics Nature Can Live With*, LBD Publishers, Auckland, 81-138.
- Turnbull, Shann (1994), 'Stakeholder Democracy: Redesigning the Governance of Firms and Bureaucracies', *23(3) Journal of Socio-Economics*, 321-360.
- Turnbull, Shann (1997), 'Stakeholder Governance: A Cybernetic and Property Rights Analysis', *5(1) Corporate Governance: An International Review*, 11-23.
- Weise, Peter (1991), 'Effizienz und Menschenwürde - Ein Gegensatz? Anmerkungen zu einer Kontroverse zwischen Ott/Schäfer und Fezer (Efficiency and Human Dignity - a Contradiction? Remarks on a Controversy between Ott/Schäfer and Fezer)', in Ott, C. and Schäfer, H.-B. (eds),

---

*Ökonomische Probleme des Zivilrechts, Beiträge zur ökonomischen Analyse des Rechts*, Heidelberg/New York, Springer, 18-34.

West, Robin (1988), 'Economic Man and Literary Woman: One Contrast', **39** *Mercer Law Review*, 867-878.

White, James Boyd (1987), 'The Language and Culture of Economics', **54** *Tennessee Law Review*, 161-202.

Williamson, Oliver E. (1991), 'Intellectual Foundations: The Need for a Broader View', **33** *Journal of Legal Education*, 210-216.