

The Interface Between Law and Economics and Forensic Economics

Introduction and Brief History

Law and economics has been a recognized subdiscipline in economics since before 1958. In 1958 the *Journal of Law and Economics* began publication. Since that time, courses in law and economics have become available through many undergraduate and graduate programs in economics and through law and economics centers associated with many major law schools. As a result, law and economics is now clearly recognized as a relevant subdiscipline and research area in economics. Publication outlets for research in law and economics now include: *The Journal of Law and Economics*; *The Journal of Legal Studies*; *The Journal of Law, Economics and Organization*; *The International Review of Law and Economics*; similar journals in Great Britain; and law review journals. Research papers in law and economics are also accepted for publication by most mainline economic journals that publish papers from all areas in economics. Law and economics is listed as item K in the "Classification System for Books" of the *Journal of Economic*

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Literature. The subject matter of “law and economics” is defined in the *New Palgrave Dictionary of Economics* (1987), in an entry written by David Friedman.

Forensic economics as a research agenda is a much more recent phenomenon. Even though economists have been acting as expert witnesses in litigative contexts for many decades, the notion of forensic economics as a subdiscipline with a unique research agenda is only 11 years old. Prior to the formation of the National Association of Forensic Economics (NAFE) in 1986, forensic economists acted as independent agents with relatively little intercommunication among practitioners, other than mentoring relationships that existed at local levels.¹ A small number of papers relating to measurement questions that would be recognized today as part of forensic economics were being published in *The Journal of Risk and Insurance*, several law and economics journals, and law reviews prior to 1987. But the *Journal of Forensic Economics*, published by NAFE starting in late 1987, was the first journal with a specific agenda of publishing research in the area of forensic economics.

After 1987, NAFE began arranging sessions for reporting forensic economic research at major economics association meetings, so that by 1992 such sessions were being arranged at the Allied Social Science Meetings and the meetings of the Southern Economic Association, the Western Economic Association, the Midwest Economics Association, the Eastern Economics Association, the Southwest Social Science Association and the Missouri Valley Economic Association. NAFE also added a second journal, the *Litigation Economics Digest*, in 1995. The American Academy of Economic and Financial Experts was formed and began arranging annual sessions in Las Vegas in 1989 and initiated the *Journal of Legal Economics* in 1991. The American Rehabilitation Economics Association was formed in 1989 and will begin publishing *The Earnings Analyst*, a journal dealing with research on both vocational and forensic economics topics in early 1998. In addition to these journals and professional sessions, courses are now being taught in forensic economics at several major universities, and it appears that several more courses are in the offing (courses have now been taught at Pennsylvania State University, Bellarmine College and the University of California-Irvine). However, there is no mention of “forensic economics” in the classification system of the *Journal of*

Economic Literature, even as a subcategory of law and economics, and no listing in the *New Palgrave Dictionary of Economics*.²

Most forensic economists do not come from a background in law and economics, nor are many of the leading researchers in law and economics contributors to journals in forensic economics. Among forensic economists who became involved in litigative work prior to the 1990's, the common denominator was often an accidental request for research assistance in damage analysis that resulted in a first litigative experience. In general, practitioners did not set out to be forensic economists but became involved through a consulting request that incidentally involved litigation. If such practitioners did well in their first case experiences, they were offered additional work, which eventually lead to active consulting practices. Research required by those consulting opportunities then generated interest in the research agenda of forensic economics (Ray 1991). Economists came to forensic involvement from many different backgrounds in labor economics, public microeconomics, business economics, financial economics and only a few from law and economics. But once they became involved, the questions they needed to answer were dictated by the nature of analysis they were asked to provide and those questions became the central questions in forensic economics. Ward and Olson (1987) described the agenda for research in forensic economics in the first issue of the *Journal of Forensic Economics* in a manner that is still accurate today. Brookshire (1991) and Ward and Olson (1993) provide a more recent statement of the research agenda in forensic economics.

Based on this history, there are three objectives in this current paper. First, differences and overlapping areas in the research agendas of law and economics and of forensic economics are outlined. Second, the infancy of forensic economics as a research agenda is stressed and the possibilities for greater recognition of forensic economics by the economics profession as a whole in the future is considered. Third, affirmation is offered that forensic economics has a valid research agenda of its own and is not a trivial subset of applications within law and economics. General definitions of the two areas are given first, then the interface between the areas in terms of those definitions are discussed, and finally the prospects for increasing recognition for forensic economics is addressed.

What is Law and Economics?

In the *New Palgrave Dictionary of Economics* (1987), David Friedman defines the research agenda of law and economics (Vol. 3: 144):

The economic analysis of law involves three distinct but related enterprises. The first is the use of economics to predict the effect of legal rules. The second is the use of economics to determine what legal rules are economically efficient, in order to recommend what the legal rules ought to be. The third is the use of economics to predict what the legal rules will be. Of these, the first is primarily an application of price theory, the second of welfare economics, and the third of public choice.

Likewise, in their introduction to *Law and Economics* (1988 edition), Robert Cooter and Thomas Ulen suggest that law and economics:

deals with the economic explanations of the law and predictions of the consequences of legal rules...the rules created by law establish implicit prices for different kinds of behavior, and the consequences of those rules can be analyzed as the response to those implicit prices...economic concepts such as maximization, equilibrium, and efficiency are fundamental categories for explaining society, especially the behavior of rational people responding to the rules of law. Thus, the scope for the economic analysis of law is as broad as the scope of rational behavior by legal officials and by people subject to the law.

In general, law and economics can be defined as the analysis of the impact of law on the behavior of individuals, and thus on the allocation of resources. In a practical sense, however, a significant part of what would fall within that conceptual definition is treated separately from what is covered in courses in law and economics. In the JEL classification system, the subcategories under law and economics are as follows:

General

Basic Areas of Law

Regulation and Business Law

Other Substantive Areas of Law

Legal Procedure, the Legal System, and Illegal Behavior.

“Regulation and Business Law” is an area covered at great length in courses on Industrial Organization and “Business and Government” in economics curricula. It is typically not covered in law and

economics courses and is not even significantly mentioned in Cooter and Ulen. "Regulation and Business Law" is very much of a research area of its own, with course and textbook coverage that is separate from law and economics. In Cooter and Ulen, and in most general treatments of Law and Economics, four basic areas of law are considered: the economics of property rights, the economics of crime, the economics of contracts, and the economics of torts. A fifth and closely related area, the economics of organization, is also implicitly included. Business regulation and business law are not considered.

Ronald Coase, whose "Coase Theorem" underlies much of what constitutes the field of law and economics,³ is the scholar most researchers in law and economics would identify as the person who did most to establish law and economics as a unique research agenda. Coase's work transcends law and economics, but it was his guidance as editor of the *Journal of Law and Economics* for many years that shaped the research agenda in law and economics in its formative years.

What is Forensic Economics?

Forensic Economics can be defined as the analysis of the participation of economists in the litigation process. That implies two topics. First, it is the economics of economists acting as agents for both attorneys and for the courts in litigation. Second, as described by Ward and Olson (1987): "The primary focus of the research of the forensic economist is the measurement of market loss (damages) arising from market failures, contract disputes or torts. Taking the law as given, the forensic economist applies economic theory to problems of valuation presented in litigation." Thus, forensic economics is both the economics of economists as economic experts in litigation and the economics of measurement and projection of damages under circumstances constrained severely by both data and law. A third element relates to econometric tests of causality in both employment discrimination and antitrust cases, but this element involves only a minority of forensic economists and will not be considered here.

As a research agenda, separate from the advocacy context of consulting work and testifying in court, forensic economists are concerned with 1) conceptual issues of measurement, including the validity of inference within ranges of specification when observations are too limited to allow statistical analysis, 2) ethical issues involved in the twin roles of advocacy and computational neutrality by

practitioners, 3) the rhetoric and limits of economic science, 4) allocational impacts of various judicial doctrines relating to the character of allowable testimonial economic expertise, and 5) the development of solid procedures for interdisciplinary research leading to better estimation of damages.⁴ The vast majority of articles in forensic economics journals and papers at forensic economics sessions are focused on these broadly based research agenda items.

There is a very important difference between forensic practice and the research agenda of forensic economics. Forensic practice has to do with manner of presentation of testimony while research in forensic economics addresses a research agenda devoid of advocacy in a forensic context. Forensic economic journals and program coordinators for academic sessions on forensic economics self consciously try to avoid accepting papers by authors seeking to gloss their own credentials as practitioners rather than to provide scientific advances within the research agenda of the field. Personal injury, wrongful death, divorce, business valuation, employment discrimination and some analysis of commercial litigation constitute the primary institutional areas of concern in forensic economics. In terms of published research and papers presented, antitrust law and the role economists play in antitrust litigation, while technically included within any reasonable definition of forensic economics, is really a subfield unto itself within the area of industrial organization rather than either forensic economics or law and economics. The combined areas of damage analysis for personal injuries and wrongful deaths constitute a majority of research done in the area of forensic economics.

If forensic economists were asked to identify a person who played a role similar to the role played by Ronald Coase in law and economics, those persons would have to be Gary Becker and possibly Theodore Schultz (Ward and Olson 1993). Becker's works *Human Capital* (1964; 1993) and *Treatise on the Family* (1981) contain the theoretical basis for most of lost earnings and lost services analysis as well as the structure of a modern utility function that is used as a starting point for forensic economic research on other types of damages. Yet, Becker himself has never been involved as a forensic economist or with uses of his work in forensic economics. In this respect, there may be an important difference between Becker's role in damage analysis and Coase's direct involvement with research in law and economics.

The Interface Between Law and Economics and Forensic Economics

There is significant overlap in content between forensic economics and law and economics, but there are significant nonoverlapping areas as well. Returning to the four basic areas of law and economics outlined by Cooter and Ulen (1988), there is no significant involvement of forensic economists in the economics of property rights or crime. Forensic economists do, however, have significant involvement with the economics of contracts and torts, primarily in terms of the measurement of losses stemming from violations rather than allocational effects of the awards. This still means that two of the four major areas in law and economics overlap into forensic economics. David Friedman's (1987) *New Palgrave* definition of "law and economics" identifies three distinct but related enterprises in law and economics: "The first is to predict the effect of legal rules." That, clearly, is part of the agenda of forensic economics. "The second is to determine what legal rules are economically efficient, in order to recommend what the legal rules ought to be." The issue of the efficiency of legal rules has been addressed in the literature of forensic economics relating to the desirability of testimony on "hedonic damages," much of which is summarized in Ward and Ireland (1996), and is one of the research objectives identified by Brookshire (1991). However, this is clearly a secondary objective in terms of research coverage in forensic economics. "The third is the use of economics to predict what the legal rules will be." Prediction of this sort is not part of the agenda of forensic economics.

From the opposite side of the coin, the coverage of law and economics of the five major objective areas in forensic economics discussed earlier is as follows: 1) "Conceptual issues of measurement, including the validity of inference within ranges of specification when observations are too limited to allow statistical analysis." Measurement issues are not a major focus of law and economics. 2) "Ethical issues involved in the twin roles of advocacy and computational neutrality by practitioners." Ethical questions relating to the testimonial process are also not a focus of law and economics. 3) "The rhetoric and limits of economic science." This is a minor theme in law and economics, but is not a major focus. 4) "Allocational impacts of various judicial doctrines relating to the character of allowable testimonial expertise." This area falls within the law and economics agenda, but it is not a major focus of law and

economics research. 5) "Concern with interdisciplinary development of measurement standards for damage analysis." This is not an area of concern for law and economics.

Using these criteria, the overlaps between the areas of law and economics and forensic economics are considerably smaller than one might initially assume. It is certainly possible for a researcher to be involved in both subfields, but the substantially different research agendas of the two areas mean that having sufficient knowledge to work in either one is not a necessary indicator of sufficient knowledge to work in the other. The two areas should be thought of as separate but overlapping areas of research.

Recency and the Recognition of Forensic Economics

The recency of its development is the primary reason that forensic economics is less well recognized than law and economics by the economics profession as a whole. While law and economics has been a functioning research agenda for more than 40 years, the forensic economics research agenda has been recognized for only 1/4 of that period. Clearly, law and economics is in a more advanced state than forensic economics. There are more journals devoted to law and economics. More courses are being offered in law and economics, and so forth. In addition to these obvious factors, forensic economics is having to overcome a hurdle that did not confront law and economics in its early days. Law and economics was, from its outset, primarily an academic discipline, without a professional side that involved compensated participation in the litigation process. In contrast, forensic economics grew out of a desire by professional economic consultants and expert witnesses to establish contact with each other to discuss common problems that were both professional and academic in nature. Because of this professional involvement, many academic economists developed suspicions that forensic economics is simply the narrow application side of law and economics and does not have a true research agenda of its own. Suspicion has existed among economists not involved in forensic work that forensic economists are in the business of developing testimonial uses of knowledge to make money, not to seek knowledge for its own sake, as is the case generally in economics.

With respect to many full-time practicing forensic economists, that presumption is not without some foundation. For many full-

time consultants, research interest is exclusively commercial. If new approaches and new ideas do not have immediate and direct application to how they prepare reports and testify in court, they do not make time to consider them and learn about them. Much research by forensic economists does stem from questions created in case practice and some of that research is directed at finding answers because of the potential commercial use for those answers. Inherently, this raises questions of possible bias and lack of objectivity. In fact, however, the journals of forensic economics have been very scrupulous in the development of their standards for acceptance of research in forensic economics. To a lesser degree, these same standard apply to papers presented at professional sessions in forensic economics. As a result, forensic economics seems to have gradually gained acceptance from researchers in other subfields of economics. Since this emphasis on high standards for research is increasing rather than declining, it seems fair to predict that the research agenda of forensic economics will be increasingly accepted as legitimate in the future. This will be especially true as more and more courses in forensic economics are taught in respected academic institutions.

The achievements of forensic economics over the past decade are a source for celebration. Leaders in the forensic economic community have been doing the right things to gain acceptance from the economics profession as a whole. It takes time to develop quality research in journals, but those developments are taking place. The quality of papers today in forensic economic journals is substantially higher than it was 10 years ago. Courses are being established in forensic economics at major universities and units on forensic economics are being integrated into many economics courses. Recognition always comes later than it is earned, but it is beginning to come. Many individuals deserve thanks for this success in such a short period, but Jack Ward, editor of the *Journal of Forensic Economics*, and Mike Butler, editor of the *Journal of Legal Economics*, deserve special mention.

Endnotes

1. Phillip Eden and Raleigh Rawls were particularly known for serving as mentors for economists doing forensic work in the 1970's and early 1980's. Ward and Olson (1993) provide additional background information about research and publications in forensic economics prior to 1985.
2. The lack of reference to forensic economics in the *New Palgrave* is not surprising when it is considered that no forensic economics journals were in existence when the *New Palgrave* was being compiled for publication.
3. The Coase theorem is implied, but not explicitly stated, in Ronald Coase's article on "The Problem of Social Cost," *Journal of Law and Economics* 3(1):1-44 (1960). The essence of the Coase theorem is that the assignment of property rights does not prevent efficient social outcomes if transactions costs are sufficiently low. This principle constitutes the underlying basis for the economics of property rights, contracts and much of tort law.
4. This fifth element of interdisciplinary research is emphasized by Brookshire (1991).

References

- Becker, Gary S. 1964, 1993. *Human Capital*. New York: Columbia University Press for the National Bureau of Economic Research.
- _____. 1981. *A Treatise on the Family*. Cambridge, Massachusetts: Harvard University Press.
- Brookshire, Michael. 1991. "An Agenda for Future Research in Forensic Economics." *Journal of Forensic Economics*. 4(3): 287-96.
- Coase, Ronald. 1960. "The Problem of Social Cost." *Journal of Law and Economics*. 3(1): 1-44.
- Cooter, Robert, and Thomas Uhlen. 1988. *Law and Economics*. Glenview, Illinois: Scott Foresman and Company . (A 1997 2nd edition also exists, published by Addison Wesley.)
- Friedman, David. 1987. "Law and Economics" in *The New Palgrave Dictionary of Economics*, New York: MacMillan Press Ltd.
- Ray, Clarence G. 1991 "The Economic Expert and Civil Litigation." *Journal of Legal Economics*. 1(1): 1-3.
- Ward, John O., and Gerald W. Olson. 1987. "Forensic Economics: A Perspective and Agenda for Research." *Journal of Forensic Economics*. 1(1): 1-9.
- _____. 1993. "Forensic Economics: The Development and Outlook for the Field" in *Litigation Economics*, edited by Patrick A. Gaughan and Robert Thornton. Greenwich, Connecticut: JAI Press.
- Ward, John O., and Thomas R. Ireland. 1996. *The New Hedonics Primer for Economists and Attorneys*. Tucson, Arizona: Lawyers & Judges Publishing Co. .