

theory is how much can be derived from propositions that are so simple. For example, once one accepts that, as a general matter, demand decreases as price increases, much else follows. Graduate students sometimes reduce all of microeconomics to only four words—people maximize, markets clear.

Richard Posner's achievement was to use these same axioms to illuminate the forces at work in the Anglo-American legal system. He laid bare the architecture of the common law by showing how much of it could be derived from the axioms of economics. The claim was never that only these mattered, but rather that even by themselves they showed that the law had a logic and coherence that before we had only known intuitively. After *Economic Analysis of Law*, no one wrote about the common law the same way again.¹¹

Law and Economics is now well into its seventh decade. It has always renewed itself, has always remained at the cutting edge, and has always kept first principles squarely in mind. Its practitioners remain committed to physics rather than stamp collecting. It is in that spirit that Gary Becker, Ronald Coase, Merton Miller, and Richard Posner reflect on the future of Law and Economics, under the strong hand of Richard Epstein, himself a formidable practitioner of the discipline.¹²

The Roundtable Discussion

RICHARD EPSTEIN: On this kind of occasion, there always is a temptation to turn back to history. Quite by coincidence, the other day Stephen Stigler gave me a sheaf of papers which included correspondence between Friedrich von Hayek and Henry Simons. It contained a proposal for the creation of the Institute of Political Economy at the University of Chicago. In describing this program in a letter to Hayek, this is what our friend Henry Simons wrote:

A distinctive feature of Chicago economics as represented recently by Knight and Viner, is its traditional liberal political philosophy, its emphasis on the virtues of the dispersion of economic power, free markets, and a political decentralization, real federalism for large nations and for supernational

¹¹ This landmark book, first published in 1973, is now in its fourth edition. See Richard A. Posner, *Economic Analysis of Law* (Little, Brown 4th ed 1992).

¹² Among many other works, his foundational book on property remains required reading for everyone in the law. See Richard A. Epstein, *Takings: Private Property and the Power of Eminent Domain* (Harvard 1985).

organizations. With the scattering of the Austrians and the vastly changed complexion of economics at Cambridge and Harvard, this intellectual tradition of Smith, Ricardo, Mill, Menger, Wieser, Sidgwick, Marshall, Pigou, Taussig, Locke, Hume, Bentham, de Tocqueville, and Humboldt is now almost entirely unrepresented among the great universities save for Chicago—and it may not long be well represented at Chicago.

So we see a situation that has replicated itself constantly for a period of over fifty years. Chicago has always thought itself to be a highly distinctive institution with a rather highly distinctive view. It often manages to think of this view as its collective view, even though the individuals who embrace this view are often very quick to disagree with one another. Today, in effect, is an occasion for us to reflect, to comment and to evaluate what has happened to the law, what has happened to economics, and what has happened to the synergy between Law and Economics over the past fifty years. The one point we can make with complete confidence is that Simons was wrong in his prophecy about the survival of this tradition. “It may not long be well represented at Chicago” cannot be true given the glorious history of Law and Economics at this University. Surely, for example, we have an eminent panel here. But our distinction goes deeper. Milton Friedman and George Stigler would be worthy additions to this or to any other panel if they were in this room today.

We are now going to talk about Law and Economics both in terms of its past and in terms of its future. We have a stellar cast to guide us in this particular discussion. The pattern that we are going to follow is one of remarkable simplicity. The University of Chicago is known for its great contribution to social ordering: the principle of alphabetical order. Having staked our claim to that principle, I’m going to ask the panelists—who are seated in alphabetical order—each to spend eight to ten minutes—this is not a strict boundary but a presumptive boundary—to outline their thoughts about the past and the future of Law and Economics. Then we will have some discussion within the panel about the subject, and then we will open it up to questions from the floor.

I have received very precise marching orders from the Law Review. I want to thank them—Ross Davies, Bo Rutledge, Chris Bowers, Howard Nielson—and all the others on the staff who put this thing together.

And I have received strict instructions to mention the following kinds of questions as focal points of the discussion:

(1) What have been the most important achievements in theory or practice of Law and Economics? What are its major disappointments or failures?—Answer: none. (laughter).

(2) What is the most promising and important work still waiting to be done in Law and Economics? How should this work be done? This query has to do with the relative merits of mathematical modeling versus empirical investigation, working from the top down or the bottom up and meeting somewhere in the middle. Finally, to what audience ought this stuff be directed?

So without further ado, we will start with Gary, then go down the panel, and I've got lots more questions to ask once we have received the authoritative answers to the ones that I've just posed.

GARY BECKER: Thank you. I'm happy to participate in a symposium even though I'm certainly not an expert in Law and Economics. A relatively small fraction of my time over the years has been spent on this subject. That doesn't prevent me from having strong opinions. (laughter). And, like my other panelists here, I am going to express these opinions about what I think its successes have been and its failures or its limitations, and I won't make many predictions about the future, but I will talk about where I think it has succeeded and where it has not succeeded.

There is no question in my mind that Law and Economics has had enormous success in many different dimensions. I'll mention a few in a moment.

The reasons for its successes are two. The first reason is that it uses three principles—not two principles—but three principles. The two principles that were already mentioned by Dean Baird were (1) people maximize and (2) markets clear. And those are clearly very important components of Law and Economics. So whether it's companies, or whether it's individuals, we assume that they are basically trying as best they can to increase their benefits, reduce their costs—whether deciding to pollute, to trespass, or to commit a crime—and that's a common theme throughout all the analysis. And without these principles, I think most of all economics would be lost and it's a very powerful, even though a very simple, basis.

Next, economists focus on markets. Markets don't always work perfectly by any means, but there are markets. Indeed, there are markets even in activities where there are no prices, as in crime. There is a criminal market. It is not absurd to talk about a criminal market, or a marriage market, or a market for government. And these concepts are important. Markets try to reconcile the unbounded desires of individuals with the limited resources available. That is really the main function of markets. And they

operate in every aspect of the law as well as in other aspects of the economy and of social and political life. And so Law and Economics soundly builds on the importance of markets.

The third concept that Dean Baird did not mention, but presumed, is the importance of efficiency. Economists put a great deal of emphasis on efficiency, not because private economies are always efficient, or because governments are always inefficient, but because if one moves to a more efficient outcome, it is possible to make everyone better off. Everybody could be made better off by having a more efficient organization of either a legal system, a political system, or any market. And I think that potential to make everybody better off drives a lot of the contributions in Law and Economics—from Coase's theorem to Posner's emphasis on court interpretation under the common law. And it drives much of economics. Since it's only a potential improvement whenever an economy moves to a more efficient outcome, the potential may not be realized and some people may be made worse off. Efficiency is therefore not the only criterion. But any intelligent discussion of either legal systems, economies, or political behavior must give enormous attention to the role of efficiency and to asking whether a change in a new law, or a new political program, has made the economy more or less efficient.

So, to come back to my main theme, one reason for the great success of Law and Economics is that the principles of economics are so fundamental, so simple really. I had a teacher, Frank Knight, who used to say that economics is so simple he was surprised why not everybody is a great economist. They are simple. The trick is to apply them in interesting ways, of course. And that isn't always so simple. But the basic principles are simple, learnable and, as I'll come back to, they are being learned not only by economists but by many lawyers and others.

The second reason why I think Law and Economics has been so successful—and this might be more controversial—is that there was nothing before it came that had comparable scope and impact. When you bring a theory to bear on a body of doctrine and when, prior to that theory, there was no systematic analysis available, it is easy for the theory to win even though it has many limitations. And I'll come to some of the limitations. So I think that one of the reasons explaining the great success of the economic analysis of the law and other applications of economics—whether in sociology, demography, and so on—is that economics provided a general systematic way of looking at phenomena in areas where there hadn't been any prior theory or analysis of comparable scope. In my judgment, that is an important factor in ex-

plaining the success of Law and Economics, even though it has many limitations, as I think everybody would recognize.

The success is found in many parts of the law, many of which I'm certainly no expert, such as environmental law or securities law. Criminal law, the area that I had worked some on, has been a controversial field, but the work of the last ten or fifteen years has done as much as anything to give greater attention to the role of economic thinking in the criminal area. So I would include criminal law as one of the successful areas of Law and Economics.

However, there are parts of the law where it has been less successful. One of the areas I've worked on a lot—not so much on legal problems but on other aspects—is the family. I think Law and Economics potentially can be a major contributor to the family, and there have been some significant contributions. On the other hand, I think one would have to say this field has not been one of the areas of its greatest success. Family law is not one of the strongest parts of the law in general, and therefore less attention has been paid to applications of economics to legal aspects of the family. But it's a great field and holds great promise, and it will lead Law and Economics down somewhat different directions than it has taken in other areas.

Another area where the field has not succeeded—and maybe I am asking too much of it—is in trying to get a better assessment of which laws in fact do get passed. Not simply which laws *should* get passed but which laws *do* get passed. In order to have a robust analysis of Law and Economics, it's not sufficient to understand the impact of particular laws or even to understand how courts make decisions in interpreting particular laws. There is an intimate interaction between the laws and regulations that get passed and the interpretation that we find in the courts. And I think Law and Economics, along with other parts of economics, has not yet been very successful in giving us a powerful understanding of the trade-off between different types of laws and regulations and interpretations that we see actually out there in the real world. This is a limitation of all of economics and it's a limitation of political science as well. In my judgment, it is just one of the areas about which we don't know enough. But it has to be said that a field that is dealing with laws suffers a very serious limitation when it is unable to give an important and powerful interpretation and understanding of which laws do get passed.

Finally, I feel Law and Economics is currently in a less dynamic and more static phase—a “mopping up” phase, so to speak, as opposed to an exciting phase. The first bloom is off, as the ideas of Coase and Posner and Landes and Merton Miller and many

others have been absorbed and helped organize the field. And that is true for all theories, since theories evolve in cycles. There is an initial excitement: a new theory comes along, people are excited. It seems to open up new phenomena; it helps us interpret a lot of phenomena. That certainly has been true in Law and Economics. But then, of course, these ideas get absorbed, people learn, and they ask, "What have you done for me lately?" And lately, there has been less excitement, less novelty. There's further application which is useful and more absorption of basic ideas takes place. That is to be expected.

There is one aspect of Law and Economics, however, that troubles me. I think Law and Economics has been too theoretical a discipline. And I'll put my work in that category as well. That doesn't mean there has been no contact with the real world. There has been enormous interaction with the real world, mainly interpretation of some institutions and of case law, but there has been relatively little quantitative analysis in the field of Law and Economics, particularly because theoretical problems attracted most of the economists that have gone into this field, and most lawyers do not have much training in quantitative analysis. Overall, Law and Economics, with a few major exceptions such as Dick Posner and Bill Landes, and Ronald Coase in looking at institutions, has been a theoretical discipline. The problem with having a discipline that is too theoretical is that you begin to discuss the problems raised by other theorists rather than the problems raised by trying to understand the world out there. To some extent that is happening in Law and Economics. If that is not corrected, there is a greater likelihood the field will become sterile and will not grow like other fields that have a closer interaction between data and various forms and theory.

So let me summarize what I have said. I think Law and Economics has been enormously successful—it's one of the great success stories in social sciences. If one looks at the applications of economics outside of traditional areas, Law and Economics would rank up with the first or second most significant application in my judgment. But it has not been fully successful because it replaced a field of analysis that was weak and unsystematic. And therefore the fact that it has significant limitations so far—maybe they will be eventually eliminated—was less clear since it's been relatively easy to replace what had gone on before.

And finally I think that despite its enormous success, Law and Economics has entered into a more static, a more sterile period. The risk is that the detachment of the theory from the real

world may make the period of sterility more extended than in other areas where theories have gone through this cycle.

So I have great confidence in what has been accomplished, I have great hopes about the future, but I also have some worries about the future.

Thank you.

RICHARD EPSTEIN: All right, Ronald, do you want to take over?

RONALD COASE: I never wanted to take over anything.

When I first received this invitation to take part in this roundtable, I was very reluctant to accept, and when I saw the set of questions that we had to answer, I was appalled. The only bright feature that I felt existed was that I had all these other people on the roundtable so that they could do most of the talking. Here I was encouraged to note that Professor Epstein was also present. (laughter).

Now the reason why I found some difficulty and little pleasure in accepting is that I know next to nothing about law. I am an economist. My only acquaintance with the law was when I was an undergraduate taking a degree in commerce, I took some law courses in 1929 and 1930. Well, my memory of them isn't too good, although my memory nowadays of what happened last week isn't too good either. (laughter).

I'll give my views, such as they are, on the subject of Law and Economics.

As I see it, the subject is divided into two parts which are separating more and more as time goes by. One is—and here Judge Posner is the person who has made the greatest contribution—the use of economics to analyze the law, the economic analysis of law. And this part embraces the use of economic approaches and economic concepts, first, to discuss the doctrines with which lawyers work and, second, to discuss the working of the legal system.

Now, an economist really isn't much interested in this part of Law and Economics—at least this economist isn't. I am interested in the working of the economic system and that doesn't mean that I'm not interested in the legal system. I'm interested in the effect that the working of the legal system has on the working of the economic system. What difference does it make if you have a different legal system? What difference does it make if the laws are changed? What difference does it make if you have regulation of this type or some other type? That's why I'm interested in Law and Economics. And it is why when I came to the University of Chicago, I only really came because it also gave me an opportu-

nity to edit the *Journal of Law and Economics*, which I thought would be important in forwarding this process.

If we look at the two parts of Law and Economics and focus on the Posner side, we see a vast literature of high quality and it seems to me that the literature reflects what Gary has said: it is a subject which is now well developed and therefore in some sense less exciting. I am sure that there is a lot more to be done, but a lot is being done. It's fine work and so on. So this is a look from the outside. I am very impressed.

Now let's talk about the parts of Law and Economics that interest me.

Well, what difference does it make if different countries use different legal systems at different times and so on or the same country uses different legal systems?

Let me give my viewpoint. I adopt the view which comes from Adam Smith that the productivity—the efficiency, if you like—of an economic system depends on, as Adam Smith puts it, the division of labor, or as I would say, on the specialization of people, of firms, of countries. But you can't have specialization without exchange and, therefore, the ability to make exchanges is a very necessary part of a good economic system. The greater the ease of making exchanges, the more possibilities there are, the more productive and the more efficient the economic system will be.

Now, I have always argued that the market unfortunately isn't free, just as lunches aren't free, and that there are costs of transacting. To make exchanges possible—and therefore the specialization which is the root of greater productivity possible—you have to have relatively low transaction costs. And the aspect of the legal system that therefore interests me is its effect on transaction costs. Does it make exchanges easier or more difficult? Well, we know that in fact it does both. If you have to get two hundred licenses in order to import goods or make anything, it is quite clear that the transaction costs are extremely high and indeed there may be no production at all. On the other hand, you can make laws that make transactions easier, like defining the rights of people and so on.

Well, that's the part of Law and Economics that interests me, and I must say it doesn't seem to me at all static at the present time. There is a lot of work to be done, but a lot of work is being done. It's very exciting at the present time. Of course, there are other institutions which can operate too. I've always mentioned firms which are an alternative to the market and their existence and their performance depends on the state of the law as well.

Now—and again this refers back to the point that Gary made—the studies of the contracting process are going forward all over the world. I am impressed by the work that is being done. The influence of Chicago is not confined to other American universities but is influencing work going on in China or in Russia or even in France or countries like that. (laughter). You notice the influence, and I'm very impressed. My feeling is that in about two—say one—hundred years time we will really understand this whole business. In the meantime, a lot of work is being done. Next month, I happen to be going to a conference which is dealing with joint venture contracts in China. And a lot of contracts, hundreds of contracts, are being studied by the Chinese, actually in Hong Kong as you would expect, but there are also American firms interested as work on contracting is going on in business schools.

One of the interesting features to my mind is that this work is going on everywhere and is ultimately going to be very fruitful—not static at all and dealing with the real world—but it is going on in some law schools, a lot in business schools in different places, and even some in engineering schools. Oddly enough, very little in economics departments. But in a way it is what you would expect: if economics departments, as Gary has indicated, aren't doing the work, other places will. There's competition, as you know, in the world and that affects things. In Stockholm, I expressed a somewhat similar view and, after a lecture of mine, audience members asked me what was the future of economics departments if I had this pessimistic view. And I said, well, they will be like departments of theology. They continue to exist but the interesting work takes place elsewhere. (laughter). And one of the places that it takes place is in law schools. (laughter and applause).

RICHARD EPSTEIN: We now turn to one of the least theistic people or theological people I've ever met—I will not say the former, only the latter—Merton Miller, who will speak about his views of the subject. He has also taught at the Law School, mainly in the area of financial regulation.

MERTON MILLER: Thank you. It's a great pleasure to be here and see so many former students in attendance. Let me say that like Gary and Ron, I felt something of an outsider at first. I'm an economist—not a Law and Economics specialist—until I suddenly stopped to think. Like the character in Molière, Monsieur Jourdan, who was surprised he was speaking prose all his life, I suddenly realized I've been doing Law and Economics, in that subfield of economics known as finance, for the last thirty years. I

am a *practitioner* of Law and Economics not a philosopher or historian of Law and Economics.

I am involved with Law and Economics in two ways actually. The first is what might be called forensic Law and Economics, where I serve as an expert economics witness in a lawsuit. It is exciting work, it's lucrative work, but I try to keep it down to a minimum of those cases that pose particularly important general principles. Let me give you an example by offering a "hypothetical," as the lawyer taking my deposition called it. (Incidentally, as long as I'm here, I'd like to advise the law school students that there's a difference between a hypothetical and a counterfactual. They are two quite different concepts and I'll answer any hypothetical, but counterfactuals pose some severe difficulties.)

As for the hypothetical then, suppose the government says that a bank has violated its capital requirements—it doesn't have enough capital—and suppose the government closes the bank down for failure to meet those requirements. The bank claims injury from the government action, and it sues for lost profits.

What happens then? Mountains of data and spread sheets are assembled, accountants are hired and estimates are made of the profits that the bank would have earned had it been allowed to continue. And, incidentally, once you are playing this game in which you've got nothing to lose by asking for too much, these numbers mount up and get huge. In one case the plaintiff's estimates of its lost profits went up into the billions even though the firm had never earned more than \$50 million.

To someone in finance, of course, there is no sense in the idea of lost profits. It's almost an oxymoron, because we in finance start from the position that a firm can *always* raise additional equity capital to put itself back into capital compliance. It may not *want* to raise it, but it always *can* raise the funds. It *should* want to raise the money if the expected rate of return on the new capital that it is putting in is greater than the weighted average cost of the capital.

Suppose that is the case and that the bank floats and restores its capital. It will then earn precisely the same profits it would have earned if it had not been ruled out of capital compliance. No profits lost here! There is a *cost* to this transaction, of course, namely the flotation cost, a transaction cost that Ron always rightly stresses. But aside from the transaction costs, no damage has been suffered.

Now suppose we go in the other direction: the bank *doesn't* float because it estimates that the expected rate of return on funds raised by the flotation is less than the cost of the capital.

Then the bank *won't* float, which tells us it really had no good earnings prospects. And if they had no good earnings prospects, then again there were no profits to lose. In either case, therefore, economic analysis of the problem says that because you can always float capital, if it's profitable to do so, then there can't be any lost profits. I see from the squirming in the audience that I'm going to get some problems here. (laughter). I hope you're not working for the other side.

Expert witness work is one phase of Law and Economics for me. But there is another important side of Law and Economics that takes up most of my time. That's the study of the costs and benefits of current and prospective financial regulation, my subspecialty for the last several years. I can't speak on the economics of crime, except as it applies to the securities industry. (laughter). Securities crime looms so large because our Securities and Exchange Commission was set up initially on the utterly false premise that the crash of 1929 and all the subsequent ills of the economy and the banking industry can be traced to some kind of criminal conspiracy in Wall Street during the 1920s. That false premise pervades not only the whole structure of the financial regulatory system, but even pervades the personality of the Commission itself, which is one of the most lawyer-dominated, lawyer-run agencies in the whole government. And I don't mean that as a compliment (laughter), because the Commission is supposedly dealing with matters of economics and it is run basically by people who are criminal lawyers.

Criminal lawyers are fine when they are dealing with well-defined criminal cases—I think they're fine; I don't know; I'll stipulate that for their benefit here. But criminal lawyers don't understand the *impersonal* market forces that are at work in the capital markets and they bog down in all sorts of surface clichés about “fairness” and “level playing fields” and “equal access to information.” I was once teasing someone at the Commission by saying, “Look, if you were right and you finally got to the point where everybody had equal access to the same information, nobody would trade. In fact, if you force everybody to have the same information before trading, you destroy the incentives to acquire the information in the first place.”

In terms of promulgating its regulations, the Commission never offers a cost-benefit analysis. As George Stigler pointed out a long time ago,¹³ the Commission has never even asked whether there are any benefits at all, let alone whether the benefits of its

¹³ George J. Stigler, *Public Regulation of the Securities Market*, 37 J Bus 117 (1964).

regulations are worth the obvious costs. Instead, they talk in clichés like the “stunning sunlight of disclosure.” (laughter). Well, that’s fine if you can show that disclosure has some benefit or that there are no private incentives to disclose and that there are no costs for all of these disclosure requirements that you are imposing on the public.

Cost-benefit analyses represent the normative side of the field and I like to think that I am active in it. There is also a positive or descriptive side to my brand of Law and Economics. Gary mentioned that we don’t have very good theories of what laws we get, but we can make some pretty good guesses as to what *regulations* we will get. A powerful searchlight for finding one’s way through the regulatory universe is found in the great ’71 paper of George Stigler: look for the *cui bono*, Stigler insists, not the *pro bono*. In sum, we’ve got a good theory of why we see the *regulation* that we do, but we don’t have any theory of why we see the *deregulation* we do. That is a more difficult problem on which further work is urgently needed.

With that as a background, let me turn to Richard’s two questions: What are the achievements of Law and Economics? I think they are amazing. Just getting the recognition in the law of this country that there exist many issues that look legal but are really economic, or that can be broken down or illuminated with economic analysis was a huge accomplishment. Other countries are behind us in this respect by twenty-five years at least, maybe more. This has really been a major accomplishment in the parts of the law with which I am familiar. We’ve come so far that even the Commission, slowly being dragged kicking and screaming every step of the way, is beginning to recognize the power of economic analysis.

The failure of Law and Economics, as I see it, is that it hasn’t gone far enough: Judges are still wrestling with ancient legal chestnuts that are better handled from a Law and Economics perspective. But I don’t despair. I suspect, Gary, that what’s keeping Law and Economics from taking over even stronger is just generational. That’s the way things work. It’s hard to get some of these notions into the minds of some lawyers and judges that were trained in the old way. The concepts are just too foreign and I despair that some will never be educated. There is only one way to deal with them and that’s to let them retire and die off. (laughter). That’s by no means peculiar to this field. Of course, my college classmate, recently deceased, Thomas Kuhn, wrote a book entitled *The Structure of Scientific Revolutions*. He wrote about the Copernican revolution and I’m sure we all think, “Well, Coperni-

cus published his book and everybody said, 'that's it: the sun is the center and the planets go around it.'" No. People stuck with the old system for many years. The old system gave just as accurate readings for the planetary motions and it avoided certain serious paradoxes with which astronomers did not want to grapple. So how did the Copernican system take over? It took over gradually as the older generation who were trained in the previous system eventually were replaced with younger professors who were trained in the newer system.

So, with that bit of encouragement, I would urge the young law students here to keep plugging away at Law and Economics—someday you will take over the world. (applause).

RICHARD EPSTEIN: With our concession to the youth movement, we now turn to Judge Posner.

JUDGE POSNER: Thank you. But given the age of the panel, I'm not sure we're in a great position to discuss the future of Law and Economics. (laughter). But I'll try. The impact of Law and Economics has been various. One point that ought to be particularly stressed in the Law School is that a number of important areas of *practical* law have been altered by economic analysis. Admittedly, it is difficult to tell whether the real impact is the impact of economic ideas or, as may well be the more important case, economics gave respectability to the instincts of people who favored efficient policies for different reasons. Business-oriented people and conservative lawyers were troubled by the antitrust jurisprudence of the 1950s, but they didn't have the vocabulary or conceptual system with which to criticize that jurisprudence. When the ideas were produced in academia for consumption in the practical world, these conservative judges and business-oriented people found their voice and found there was a respectable body of academic thinking that they could use to support their predilections. But even if the main thing that economics does is give a patina of academic respectability to people's instincts or a vocabulary in which people can express their preferences, that contribution can have a big impact on policy.

If you look across the whole legal system, you see a lot of areas where the impact of economic thinking is visible, but most of the work has been done within the last twenty-five years. The antitrust field is an obvious example. Antitrust thinking is now pervaded by economic analysis. The deregulation movement certainly got a lot of its intellectual fire power from economic analysis, and the regulation that remains also shows the stamp of economic thinking. There are remarkable developments, for example, in the environmental field with the emergence of tradeable sulfur-

dioxide emission permits and other efforts by regulatory agencies to bring the market into the regulatory process.

There have been parallel developments in other areas of regulation. We have all read about the FCC auctions that have now collected some twenty-odd billion dollars by auctioning off frequencies; even regulators now use the market to try to allocate or prevent congestion of the airwaves.

In Professor Miller's field, where tens of billions of dollars are affected, we have seen the emergence of the passive index funds, where, instead of trying to pick winners or pick market turns, the managers try to maximize diversification. Twenty years ago it would have been thought a breach of trust for any money manager with fiduciary obligations, such as a pension fund manager, to invest passively and worry more about diversification than about picking individual stocks and making sure you weren't holding the stock of a bankrupt company. Now it is thoroughly accepted that diversification with passive investing is proper fiduciary behavior, and many billions of dollars have been affected by this economic concept.

The Federal Sentencing Guidelines for white collar crime show the stamp of economic reasoning. There was an economist on the Sentencing Commission, and John Lott, now at the Law School, was an influential member of the Commission's staff. The bankruptcy laws are being overhauled, and I think the revisions will show a significant stamp of economic thought. All sorts of remedial questions in law, such as the computation of damages in personal injury and commercial cases, now reflect the stamp of economic reasoning.

Human capital has become a concept in the law of employment discrimination. Employers confronted with wage differentials between men and women and young and old will often appeal to human capital concepts to try to give a noninvidious explanation for these differences. Although Gary suggested that family law is a laggard in the economic analysis of law, just in the last year or so feminist legal scholars have discovered that there are lots of resources in the economics of the family for making the kind of arguments that they want to make. For example, they want to say that a wife shouldn't depend on the love of her husband to make sure that she gets her fair share of the household output. There ought to be efforts to monetize the economic value of housework so as to create a more secure basis for spousal claims. The idea that the professional degree of one's spouse is a marital asset because it was created in part by the support of the other spouse is now almost orthodox in divorce law.

Law and Economics has also had profound effects on legal education and scholarship. We have a better understanding of the legal system as a result of economics than we used to have. It used to be that the understanding of law was stuck at a most superficial, rhetorical level so that, for example, because tort and contract law use different vocabularies, they were thought to belong to different universes. Now we see with the help of economics that torts and contracts are parallel, indeed interchangeable in many respects, dealing with somewhat different activities but using very similar analytic methods. Law becomes simpler when it is viewed in terms of its implicit economic structure.

Economics has made interdisciplinary legal studies thoroughly respectable. There have always been extralegal perspectives on law, but they didn't seem to offer too much to the practical lawyer. Now we can see that a lot of conventional legal thinking can be blown out of the water by the power of economic reasoning. Mert mentioned how the casual invocation of "fairness" as an answer to difficult legal problems has become increasingly untenable, even incredible, as a response to the challenges of economics.

One of the most important things that economic analysis has done for legal education is to stimulate an oppositional analysis. One of the most fruitful consequences of a scholarly movement is, like the grain of sand in the oyster, to stimulate something exciting that may be entirely opposed to the irritant itself, in this case economics. The critical legal studies movement is, in large part, an angry response—but not a worthless response—to the economic analysis of law. The emphasis that important legal scholars like Professor Sunstein place on behavioral economics—on psychological quirks that interfere with people's rational behavior—is a development stimulated in significant part by the challenge that economics has posed to traditional legal rules that are valued by many people but that need new foundations.

Another thing that economics has done for law—and this feeds directly into the question of the future of this movement—is to create what sociologists of science call a "progressive" research program as contrasted with a "degenerate" one in which people have a good idea, the idea is absorbed, and the field, having succeeded in its aims, then goes out of business. There has been a steady and substantial growth in the amount of economic scholarship on law throughout the twenty-five years of its active period, because young people coming into academic law—in an era when there's much more pressure on academic lawyers to do research and publish than used to be the case—see that the economic ap-

proach provides almost infinite opportunities for interesting research. And there doesn't seem to be any logical stopping point. Every study in the economics of law suggests as many avenues for new research as it closes off. Many of these studies reveal our ignorance of essential characteristics of the legal system and suggest the next stage in research. The ability of this field to attract brilliant young economists and law professors interested in economics—often dual lawyer/economics Ph.D.s—is the most important portent of a healthy field. These are the people whose future—whose careers—depend on economic analysis of law *having* a future. If they didn't think it had a future, they'd be paying a very high price in making it their field of specialization.

The only reason the field may seem to have lost a little something in excitement is simply that, as a field grows, the work in it necessarily becomes more specialized. It becomes increasingly difficult for someone to keep up with the entire literature of the field; you have to specialize and if you specialize, your impact is going to be limited. Your work may actually have more consequences in the real world or for the future of social thought, but it's going to be concentrated on a more limited subject matter than when the field was entirely new.

Another thing, which is somewhat special to law, that sustains the dynamism of Law and Economics is that even in periods when economic theory may be stable, the law itself is in constant flux. It is continuously throwing up new problems. Even if you're operating with a stable body of theoretical and empirical tools, you have opportunities to apply it to entirely new fields and problems because of America's tremendous legal and policy dynamism.

One reason that the field holds such promise is that so much remains to be done. Gary mentioned our difficulty in predicting what laws will be passed, and Mert mentioned that it's a lot easier to explain how interest groups obtain regulation than to explain how the public interest obtains deregulation. Another dimension of our ignorance about the lawmaking process is that we have great difficulty understanding judicial behavior. Judges do a lot of the lawmaking in the United States, but it seems that they have been constrained to act without reference to incentives, at least the obvious incentives. Can their behavior be explained in rational terms, and this explanation be used to explain the structure of the judge-made law? That is a big challenge for the economic analysis of law.

We have had in the last thirty-five years an extraordinary explosion of litigation in the United States. We find an inflection

point around 1960, when what had been very slow growth for the first two hundred years of colonial and then U.S. law suddenly took off and has continued at extremely high levels. Not only is there this very high rate of growth aggregated across all state and federal courts, but also great variance in growth in different legal systems and, as a result, great variance in the amount of litigation activity in different states and, even more so, in different countries. We don't have many clues as to the causes of these important trends and variances in judicial behavior. But we are coming into a period in which we have much better judicial statistics, and legal statistics of all sorts, and much better ways of getting access to the statistics and analyzing them. For the first time, a great deal is known statistically about the incomes of lawyers and law firms and changes in the sizes of law firms and the nature of legal practice. Judicial statistics have become increasingly abundant, comprehensive, and detailed. The empirical data for analysis by economic scholars of law are growing more accessible with the computer and the Internet, making it much easier to do empirical research. Gary is right to express concern about the excessive ratio of theory to data analysis in the economic analysis of law, but this will change as the analysis of data becomes simpler.

So I think the future of economic analysis of law is as promising as the past. The last twenty-five years have been very successful. The next twenty-five years should be as successful. (applause).

RICHARD EPSTEIN: Now that we are done with the first part of the program, what I would like to do is to go back around to the panel and to ask if they have any further comments on what has been said. Now the little quotation that I read at the beginning gave Law and Economics a certain intellectual or ideological cast in favor of small government, dispersment of power, and so forth.

With the maturity and the increasing development of law, does one want to lose that orientation? Does one, in fact, lose that sort of mission? How might Law and Economics become more of an analytical discipline, less of a political one, and is that a good or a bad thing? Gary, do you want to start? Unfairly, of course.

GARY BECKER: Well, let me start with the question you raised. George Stigler wrote a very interesting paper on why the study of economics tends to make people politically conservative. Not inevitably conservative, of course; there have been some great economists and are some great economists who would not, by any stretch of the use of the word "conservative," be called conservative.

But on the whole, it's true that economists are generally more conservative than others and the reasons are very simple. The appreciation of how markets function and how individuals choose gives one an orientation toward the belief that a decentralized system is typically going to operate better than a centralized system, whether coming from the government or from some other source. So this association of Law and Economics with "conservative" or smaller government is not a happenstance of the particular economists who have been attracted to Law and Economics, but it is an implication of bringing economics into any discipline.

And I don't think that's going to disappear, although there will be a considerable diversity of opinion among economists and among Law and Economics people. So that would be my comment on that one.

Let me make only a couple brief comments. I've listened to the various erudite comments by my other panelists. I've learned considerably from them. On the whole, I would generally agree with their emphasis.

I do agree with Ronald that clearly the study of the impact of the law on the economy is extremely important. We don't know nearly as much as we would like to know about the impact and there is exciting work going on, and maybe in two hundred years—you say a hundred—we'll have a better understanding of the law's effect on the economy. Of course, the converse is also true.

The impact of the economy—I don't mean economics—on the evolution of law is extremely important and we probably know even less about that direction. So, I agree with Ronald, that this question is part of a broad area that we are still learning about and in which there's good research going on.

But I don't think there are any enormous breakthroughs at the moment going on in these areas. Of course, it's always hard to predict what a breakthrough will be, what a great idea will be, and to ask any of us to predict what are going to be the great innovations in Law and Economics is a question that I always refuse to answer. If I knew them, I would be doing them now. (laughter).

These breakthroughs are unpredictable and a younger or older person will come along with a great idea, and they'll have an impact. None of the things that the various panelists contributed would have been predictable prior to their introduction. And so I don't think we can predict the breakthroughs.

What we can say is that there have been enormous successes of the Law and Economics movement of various kinds. As I have

emphasized, however, part of the success has to do with the fact that the movement came up against relatively little opposition in terms of systematic theory. That's not a criticism of economics. It's a criticism of what was there before.

There are many gaps remaining—enormous gaps—in things we don't know. This is a great opportunity for new people coming into the field for this opportunity to be realized. I believe—and there I may differ with my good friend, Dick, and others—for these opportunities to be realized, it will take more than just people coming along and doing further applications. It will take—maybe in response to these applications—somebody coming along and showing comparable insights to what Dick and Ronald and Mert and others have made.

RICHARD EPSTEIN: All right. Ronald, I have a question for you. Is that all right? Along this same line, you wrote about the Federal Communications Commission in 1959,¹⁴ and talked about the importance of markets and well defined property rights in the broadcast spectrum. To some extent, your arguments have now influenced actual policymaking. But why, if Law and Economics is such a powerful discipline, does it turn out that its influence is so delayed and so halting?

RONALD COASE: I've never thought that the influence would come quickly. I don't regard, at my age, a hundred years as a particularly long period of time. (laughter).

If one talks about the particular example that you gave—initially put forward, I might say, in *The University of Chicago Law Review* by Leo Herzel¹⁵ and remarked on by me in 1959—the idea that the use of the radio frequency spectrum should be priced has been adopted, but why was it adopted? Not for the reasons that I put forward, but because selling off the frequencies would raise some money for the government at a time when it was anxious to reduce the deficit. (laughter). But I think that's often the case. I don't think one should mind that people adopt one's ideas for reasons which don't commend themselves to oneself. That's the usual way that things happen. (laughter).

When I was in the civil service—and I was a civil servant for a period—my boss never agreed with my ideas, but I always put them forward to him because I thought, "Some day or other he'll be in a committee and people will say, 'What should we do about

¹⁴ R.H. Coase, *The Problem of Social Cost*, 2 J L & Econ 1 (1960).

¹⁵ Leo Herzel, Comment, "Public Interest" and the Market in Color Television Regulation, 18 U Chi L Rev 802 (1951).

this?" and he won't know but he'll feel obliged to say something (laughter), so he'd remember what I had told him." (laughter).

RICHARD EPSTEIN: And we wonder why influence is so difficult to trace. (laughter). Isn't the same thing true in securities, Merton?

MERTON MILLER: The influence?

RICHARD EPSTEIN: Yes.

MERTON MILLER: I don't know. I was going to comment further in a somewhat different way on the problem of efficiency that we started to talk about earlier. But let me say first, I never got to the second question on your list which was of some particular interest to our law school students. What is the most promising work still to be done in Law and Economics and how should you do it? What is the role of mathematical modeling versus empirical research? We worry about these things in finance too and my personal feeling is to go easy on the mathematical stuff. We have had much more experience with mathematics than you have and, from our point of view, mathematical modeling generally has been found very useful for checking the rigor of your ideas and for looking for holes in the argument. But I don't think I could find many cases where the mathematical modeling actually led to new truths. I think you get the new truth and then you show that it is indeed rigorous and consistent.

But let me go back to this point about efficiency because I think it has a big impact on the securities area. There is the feeling—and I've seen it in the Law and Economics literature—that somehow there is efficiency in the law, that we're moving inexorably to eliminate waste and inefficiencies, in that we're using an analogy based on the price system and the behavior of competitive markets. I wonder, however, how strong those efficiency arguments really are, whether they're more than just interesting analogies.

The economic relations *we* talk about can be expressed in the form, $y = a + bx + \varepsilon$. The "bx" part represents the systematic part we've explained; and the epsilon represents the unsystematic part that we haven't succeeded in explaining. We calibrate the importance of the systematic part by calculating a number known as R^2 lying between zero (no explanatory power) and unity (complete explanation). When it comes to the "efficiency" of the law, that is the extent to which what we see has a systematic explanation, I wonder what the R^2 really is. If you're going to keep using the concept of legal efficiency, you'd better start providing some measurement. That should be a major point in the research agenda of the field of Law and Economics.

RICHARD EPSTEIN: Now that leads me to my last question before we throw it open. This question deals with the efficiency of the common law. In the same period that we've seen the rise of Law and Economics, we've seen some clear overlap between tort and contract. But if you go back to decisions starting in the early 60s, the dominant trend has been to exclude the use of private contracts to allocate the provision of medical services, residential leases, and all sorts of finished products. So the question to Dick is, if the common law is so efficient, do we really have powerful justifications for these restrictions on contractual freedom or did the efficiency of the law end just at the time that the mastery of Law and Economics began? (laughter).

RICHARD POSNER: Yes, well, that would be a nice irony, but it's difficult to discuss such specific . . .

GARY BECKER: Well, let me just add something so that Dick can answer my question as well. To come back to Mert's question, I don't believe that we have moved very strongly in making laws more efficient if we interpret "law" more generally to include regulation. The example I would take is an area that Richard Epstein has worked on a lot: the labor field. We've had enormous growth in legislation in that area, not only in the United States but throughout Europe as well.

It's hard to interpret any of that legislation as adding to efficiency. Dick gave examples earlier where there clearly has been a greater appreciation of economic principles—antitrust and a number of these other areas truly reflect economic thinking—but it's a very mixed picture. In some areas we move toward efficiency and in some areas we move very strongly in the opposite direction. I'm not talking about minor changes. I think what's happened in the labor field has been extremely important. Maybe it's worth having, but it certainly cannot be justified on efficiency grounds.

RICHARD EPSTEIN: Now we leave it to the judge.

RICHARD POSNER: Actually, I think the effect of a lot of the new legislation dealing with employment is exaggerated. I think the Age Discrimination in Employment Act, for example, while creating some opportunities for lawyers (laughter), has had little or no effect on the age composition of the work force. I can't go into detail; but employers, with relatively simple mechanisms like the early retirement buyout, not only get around the object of the law, but make the employees themselves pay for the administration of the law.

GARY BECKER: Yes, but I don't know of any good study that has estimated the cost of this law. Take universities and re-

tirement policy. It's not obvious that the fact that we no longer can force people to retire has been a trivial cost to universities. Any program that we introduce has to be completely general and cannot be tailored to individuals. Now maybe it hasn't had a big effect, but I think it's an area . . .

RICHARD POSNER: The university did not believe that this law was going to go into effect. As a result, it did nothing to prepare for it. Firms in the age discrimination era implicitly say to their employees that, as a result of the law, your employment package now includes another fringe benefit. You can stay on and work beyond the ordinary retirement age. Well, you're going to have to pay for that.

RICHARD EPSTEIN: Yes, but what about the transition effect?

RICHARD POSNER: In the case of universities, they were given a number of years of warning and they believed that they were going to get this law repealed.

RICHARD EPSTEIN: In any event, please go back to the first part of the question.

RICHARD POSNER: There's certainly a lot of inefficient legislation. I think that common law rulemaking tends to be more efficient. To some extent, it's true, the judges were caught up in the collectivist mood of the 60s and 70s; but if you look at those patterns carefully, they tend to be concentrated in particular states and often are reversed eventually. I don't think the aggregate impact has been that bad.

But what surprises me about what you said, Gary, is that, if we compare the extraordinary deregulation of important parts of the American economy, such as financial services and telecommunications, and the near collapse of the labor movement, we find that the effect of these developments has been to make this a freer country than it was in the 60s. These labor laws are in the category of annoyances. (laughter). They are irritants that good lawyers reduce to where there is only a very minor impact.

GARY BECKER: I'd like to see that demonstrated. I believe the picture is very mixed. There have been areas where we've had enormous deregulation and improved telecommunications, financial markets, and transportation. Those have been very important. On the other hand, we've had more important and large areas where regulations have increased enormously, not only in labor, but environmental fields, and I don't know of anybody who has demonstrated that these increased regulations have had a minor impact. Maybe that's true; I don't know anybody who's

demonstrated it. I doubt if it's true. If you look at the total amount of regulation on the federal register, that's grown greatly.

RICHARD POSNER: Environmental regulation has benefits. Minimum wage regulation and age discrimination regulation have no benefits. (laughter). So the question is: Are the costs large or small? And I think the costs of those laws are small.

GARY BECKER: Maybe, but the total amount of regulation has certainly increased. It hasn't declined, despite the deregulatory movements we've had.

RICHARD POSNER: If you look at the way people are working in this country—how hard they're working, how much turnover there is in the labor force, how free employers feel in shifting their businesses all over the world and extracting concessions from their employees, it doesn't seem to me that American employers are operating in a labor market in which the law is making it difficult for them to operate efficiently.

GARY BECKER: That may be true, but what evidence do you have?

RICHARD POSNER: There have been studies of the impact of the age discrimination law on the age profile of employees,¹⁶ and it seems that businesses have been given enough flexibility by the law to avoid the most serious inefficiencies. The impact of the age discrimination law on the average college and university has been very slight, and the retirement age unaffected. Wisconsin, for example, had an age discrimination law before the federal law and the number of people staying on to teach at the Wisconsin universities after normal retirement age was minuscule. Elite universities may be different. Because the work is so light in the elite universities (laughter), people can continue "working" indefinitely (applause). But the workers who have physically and mentally demanding jobs (laughter) get tired and they want to retire. They do not want to work into their seventies.

GARY BECKER: The average unemployment in Europe is 11.5 percent. It cannot be explained by any cyclical factors. It has to be related to regulation and taxes. Taking a little broader world perspective on what's been going on in the labor markets, to claim that these regulations have had trivial effects flies in the face of what we know has been happening in country after country.

RICHARD POSNER: That's an extraordinary example. We have 5 percent unemployment.

GARY BECKER: I know.

¹⁶ Richard A. Posner, *Aging and Old Age* ch 13 (Chicago 1995).

RICHARD POSNER: So you're not going to blame, you're not going to use the European regulation to . . .

GARY BECKER: I'm talking about in general the impact of regulation. I'm trying to get a more worldwide perspective.

RONALD COASE: Yes, I'd like to join in. (laughter and applause).

RICHARD EPSTEIN: Go ahead.

RONALD COASE: Law and Economics isn't an American subject. It's a subject for all countries, and I think it's a mistake which is often made here, I might say, to discuss problems solely in terms of what happens in the United States. I think what's happening in Europe is very worrisome at the present time and may have very unfortunate effects.

RICHARD POSNER: But it's worrying for completely different reasons, because they don't have strong antidiscrimination laws in Europe.

RONALD COASE: I didn't mean this particular thing about which you continue to argue. (laughter).

RICHARD POSNER: There are laws about the employment relation in Europe that we do not have. We have a different set of laws which apparently have no effect.

RICHARD EPSTEIN: No effect seems to be . . .

RICHARD POSNER: Okay, a slight effect. (laughter).

RICHARD EPSTEIN: The decline in levels of permanent employment traces its roots to an employment relationship that is more heavily taxed and regulated than independent contractors, so it's not at all clear that the rise of temps is a preferred market response or whether it's an effort to evade regulation which minimizes part, but not all, of the damages. The stagnation in American wage levels is also consistent with a very different profile. We grew much more rapidly . . .

RICHARD POSNER: That bothers you? Stagnation in wages?

RICHARD EPSTEIN: Sure, it does. I hope it bothers me. Yes, it does bother me. But I'm only a moderator. Now, I mean . . . (laughter).

GARY BECKER: It bothers me too.

RICHARD EPSTEIN: Well, thank you, we've been stung to the quick. In any respect, once we start to talk about Medicare and Social Security and indeed the entire worldwide question of what we do with guaranteed state provision of pensions and health benefits, I do think we get a somewhat somber picture. But now, let us open this up to the audience. Anyone who is intrepid

and foolish enough to ask a question (laughter) will be summarily dispatched with a very clever answer. (laughter).

AUDIENCE MEMBER: We have more litigation than we ever have had. Aren't those transaction costs? Is there something going on here? If the common law is so efficient, shouldn't the people who craft the law make it pure enough that people won't litigate? What's the problem? Are the judges arguing with the legislature to the point that none of us can predict what's going to happen to anything?

MERTON MILLER: I just want to make a personal note: that's why I'm not a lawyer. (laughter). My father was a lawyer and I was filled, as a young boy, with thoughts of Clarence Darrow and so on. And he would come home and I'd say, "How'd it go today, Dad?" He'd say, "Terrible. I think this one may have to go to court." (laughter).

I don't know why there is this huge increase in litigation. Maybe transaction costs have become lower in the sense that it costs less to bring a suit now. So you're going to get more of them.

RICHARD EPSTEIN: That presupposes the stakes are constant, but if the stakes quadruple by regulation, it may well be that the litigation costs are higher but they just haven't kept pace with the amount that's in the pot. And that's my theory about the situation. With the decline of property rights, it turns out that there are more contingent and fewer fixed claims on resources. That constellation of forces generates the results that our audience member has described. Next question. (laughter). Other comments on that, Gary?

GARY BECKER: No, I don't have anything. Your answer, I thought, was very good.

RICHARD EPSTEIN: Oh, I'll take it. (laughter). It's high praise for me. Are there any other questions about this? We don't have to keep this thing going. You do not need to stay here until six o'clock. This is an option right rather than an obligation, but nonetheless, an audience so large should have somebody intrepid.

AUDIENCE MEMBER: I was wondering, in the 1930s or 20s, you have economists like Walton Hamilton, Thurman Arnold and so on, working on questions of economics of law. And I was wondering whether the decline of Law and Economics reflected the decline of institutional economics.

RICHARD POSNER: I think it's possible that there was a little trough. If you go back to the late 20s and early 30s, you find economic work on bankruptcies by the likes of William Douglas, which became unfashionable and disappeared, and it's only decades later that you have modern economic theory being applied to

these issues. But yes, there was that brief efflorescence of institutional economics, with some legal applications. A very good economist at Columbia, Robert Hale, in the 20s and 30s anticipated a certain amount of the modern economic analysis of law; but his work didn't fit the *Zeitgeist*, so it was ignored for decades.

MERTON MILLER: I want to add one little note. I wasn't aware that Thurman Arnold was an economist. I thought he was a lawyer and that was, of course, part of the problem. (laughter). He played such an active role in antitrust and he really didn't approach it from an economist's perspective.

RICHARD EPSTEIN: He was the source and the inspiration for the view that virtually every corporate transaction was a violation of the antitrust law. This is not a summary of his point of view, but he was certainly very much in the "bigness is badness" camp, rather than looking at market structures and consumer alternatives.

AUDIENCE MEMBER: I know Professor Becker has done some work in the area of preference formation, and I was curious if perhaps Professor Becker and maybe the others could comment on what they see as the areas of the law where the new scholarship on preference formation might matter.

GARY BECKER: Well, it's a good question. It's an important question. There has been, as you indicated, exciting work by a growing number of people on trying to understand how people's preferences get formed and get changed over their lifetime. It's an area I've worked on, Cass Sunstein here has worked on it, and a number of other people here and elsewhere have worked on that question.

I believe preference formation has significant potential in general in economics. It was not particularly stimulated by law nor is its application particularly oriented toward law. It came out of two different motivations: first, some unhappiness with experimental work testing the assumptions made about preferences; and, second, general suspicion of the economist's typical assumption that people have preferences that wouldn't alter, that somehow never change, that people couldn't change by choice or by adaptation. Those assumptions weren't accurate or adequate and left a lot of problems.

Where does it come into law? Laws affect people's preferences. Not necessarily initially, but over time they do. Take for example, desegregation of our schools. Having to go to school with and ride with and interact with African-Americans had a significant impact on the attitudes that younger whites in the South felt in these interactions. I think laws can affect people's preferences

by changing the environment in which they are operating. This has not yet been integrated into Law and Economics but, let me add, it's not yet been integrated in economics more generally. These are new areas of development. They are extremely promising areas. We don't know yet exactly in what direction this is going to take us, but I personally have committed some of my own research to that area because it's been a neglected area. It's something economic analysis, along with other concepts, can say something about and, in particular, it will arguably have important relevance for understanding the interaction between law and behavior, and it goes both ways.

RICHARD EPSTEIN: Do you have something to add?

RICHARD POSNER: I think this is actually one of the new areas in the economic analysis of law: looking at the effect of substitutes for law as a method of social control. Bob Ellickson wrote an important book on that question¹⁷ and Professor Sunstein's work has deservedly gotten attention.¹⁸

An interesting example of the interaction of law and decentralized, unofficial, extralegal methods of regulating people's behavior has to do with the law of privacy. Privacy is inimical to regulation by norms because the enforcement of norms depends on private people observing deviations from the normatively prescribed conduct. The more the law tries to protect people's privacy, the more it undermines non-legal social control through norms. So there are many rich interactions between the law and social norms. Richard, could I just say a word . . .

RICHARD EPSTEIN: I wouldn't dare stop you. (laughter).

RICHARD POSNER: About stagnant wages.

RICHARD EPSTEIN: Yes.

RICHARD POSNER: Because I think it's . . .

RICHARD EPSTEIN: Only if I can say a word about . . .

RICHARD POSNER: It is a particularly good example of the point that both Ronald and Gary made, that we really don't know a lot about the effect of laws. We do not know whether the anti-discrimination laws do have significant effects or don't have significant effects. One reason we don't know is that we really don't know whether wages *have* been stagnant in the United States, because we now understand that the inflation rate has been systematically exaggerated and, even if the exaggeration is small, the effect on the rate of growth of real wages could be large.

¹⁷ Robert C. Ellickson, *Order without Law: How Neighbors Settle Disputes* (Harvard 1991).

¹⁸ Cass R. Sunstein, *Social Norms and Social Roles*, 96 Colum L Rev 903 (1996).

Moreover, the “stagnant” wage figures tend to be based on weekly wages rather than hourly wages. And even if wages really are stagnant, the standard of living is improving tremendously as a result of product improvements; and the term “stagnant” wages is sometimes used simply to describe, in a dramatic way, the apparent increase in the inequality with which income is distributed—and no one knows whether that’s a bad or good thing. So it seems to me that getting the wage profile right and then relating it to the new laws regulating the employment relation would be a great research topic.

RICHARD EPSTEIN: You go first.

GARY BECKER: Let me just comment a little on that. I agree we don’t know with certainty the impact of regulation on the wage movement. Maybe it’s been trivial. I do think there is considerable evidence that wages have been growing much more slowly than they were in the 60s and the 70s, and the confirming evidence is the productivity estimates. The wage growth is consistent with the productivity estimates that we have, although these estimates themselves have problems associated with them. But the link between stagnant wages and regulation is uncertain. Nobody knows. I think the slow wage growth is mainly due to the fact that we’ve had slowdowns in productivity. Part of that may have been due to regulation, maybe a trivial part, maybe a large part. It’s one of these great research topics with which quite a few people have been struggling. Nobody’s yet come up with a good way of cutting into that problem and therefore, if you had to get an honest answer about why productivity has slowed down in the United States or has appeared to slow down in the United States, the honest answer of an economist should be, “We really don’t know.” It may be regulation. I doubt if that’s the major factor, but it could be a significant factor.

RICHARD EPSTEIN: But it is striking that the cusp point lies between 1970 and 1973—the time at which one starts to observe the most vigorous form of labor market regulation. And on the inflation point, the one answer that one might give is, yes, it may be wrong today and understate the true levels of productivity increases. But it’s not at all clear that the same biases did not exist in the index in the earlier period.

GARY BECKER: Weaker then because services were smaller.

RICHARD EPSTEIN: Maybe, but you’re talking about differences of 1 to 3 percent and so even if you add back the productivity gains in both periods, you still have a 40 percent differential which has to be explained. And when you talk about labor market

regulation, it's not just the antidiscrimination laws. It is certainly the tax on labor: Social Security, Medicare taxes, similar taxes, OSHA regulations, and so forth. It's been a very large cumulative impact and some of us, at least myself, find it very worrisome.

But now, I return to my moderator's role. We are coming to the end. There is time for one more question from the audience, and then what I'd like to do is to give every one of the panelists a minute or so to sum up, in any wry or profound way, and then I will call the festivities to an end after taking, of course, the last word. (laughter). Yes.

AUDIENCE MEMBER: Would the panelists comment on the Law and Economics of taxes?

RICHARD EPSTEIN: I'm always happy. (laughter). Does anyone want to try it or should I do that since it's an area that I've done work in. Mert?

MERTON MILLER: Well, it's an enormous part of finance. It's hard to separate out the tax effects from the non-tax effects. You do it as a matter of analytics. Let us imagine first the world with no taxes—I love to imagine those worlds. (laughter). That gets you started, but then you have to put the taxes in. So much transaction activity in the real world is driven by taxes that it's become an important part of study of the field of finance. I'm delighted to hear mentioned my intellectual mentor, Henry Simons, who was a tax man when I knew him and not a Law and Economics man. But he was the one who started the modern analysis of taxation and I hope we're carrying on his tradition.

RICHARD EPSTEIN: The basic principles that he announced were essentially a comprehensive income base, low levels of taxation, and a minimum of special taxes unless they could be justified by some specialized cost imposed like pollution and so forth. The Internal Revenue Code has been schizophrenic; the rate of modification is much more rapid than it used to be, which means that long-term transactional certainty is much more difficult to achieve.

It also turns out that the number of specialized provisions has increased, which means that the ability to categorize and to alter transactions for tax reasons relative to their economic merits has increased. Consequently, the costs of compliance have gone radically upward and the invasions of privacy have increased. It's another triumph for the efficiency of the Law and Economics movement as applied to public policy research, cynically stated. Dick, do you have something to say?

RICHARD POSNER: One point related to taxes. A newspaper published an article recently about income tax enforcement

that was a perfect illustration of Gary Becker's work on the economics of crime and punishment. It pointed out that because Congress has been ungenerous with the Internal Revenue Service, the audit rate has declined. The Service has responded by referring more and more cases for criminal prosecution—and they're explicit about this strategy. They say, "Since we're not catching as many tax evaders, when we do catch them, we are going to press for heavy criminal punishments."

RICHARD EPSTEIN: But it's also clear by the one striking set of figures that the amount of non-cash, non-taxable income in the United States is exceedingly large, often in very low income groups. In addition, that percentage seems to be increasing, which means, of course, that the temptation to evade the law, in order to be at parity with your honorable citizens who have already decided to avoid it, creates a much more difficult political morality on compliance. We do have major problems there, but with all that said, we should go back around the panel again for one or two minutes of summation so that we can be out of here by six o'clock, because we do not believe in temporal trespassing in this exalted hall. (laughter).

GARY BECKER: It's really wonderful to be part of a celebration of a field that's had such great successes. It doesn't happen very often. As an economist, seeing the unanticipated success of economic reasoning since I became a graduate student is a wonderful feeling.

Let me say, as a graduate student, I had the opportunity to attend one of the pioneer courses in Law and Economics, a joint course by Aaron Director and Edward Levi, which was a wonderful course and, unfortunately, only a few economics students then had the sense to go over and listen to both of them discuss the interaction of Law and Economics. So this has been a field that's had enormous successes. And nothing I said was designed to contradict that notion. I believe it's one of the great success stories in social sciences in the last thirty years.

Nevertheless, after hearing my learned colleagues, I still believe that the field is currently stagnating—not declining, because it's growing and there are more people coming into it. I'm measuring it not by numbers but by intellectual creativity, intellectual excitement, and in this respect, I think it's stagnant. That might be temporary. All fields go through this cycle. I've worked a lot in labor economics, and labor economics is also in a stagnant period at present. Many fields go through that cycle, so it's not unusual. In fact, it's usual.

Then it takes somebody coming along, maybe stimulated by some real world observations or in some other way, who gets a new insight and doesn't overthrow what went before, but adds on to what went before, and we get another burst of activity. I think that's how science progresses and it certainly has progressed that way in economics.

I am less optimistic than my learned judge on the panel about the positive impact of this movement on public policy. Yes, we can point to great examples of successes—telecommunications, financial services, et cetera—those are great successes and economists, along with lawyers, played an important part in those successes. But there are also many other examples of enormous importance not only in the United States. I'm taking, as Ronald did, a broader perspective. I don't think we should limit our concern to the United States, Europe, or other parts of the world. There are major areas where policy is moving exactly in the opposite direction to that proposed by Law and Economics.

Look at total regulations. Even in the United States, they've grown enormously over a period where we have been fortunate to have a deregulation movement. Under both Republican and Democratic administrations, regulation has skyrocketed.

So, I think Law and Economics is a great field. It's had a large impact. No doubt it's had impact in practical ways, in anti-trust and so on.

Coming back to a theme I mentioned earlier, what depresses me is that Law and Economics doesn't seem to have had an impact in understanding the laws and regulations that we see emerging. We know there are special interests and general interests that often have another agenda but I don't think it's an accurate reading of the successes of Law and Economics, as numerous as they are, to conclude that somehow legislation and regulation overall have become more efficient.

RICHARD EPSTEIN: Ronald?

RONALD COASE: We've talked about growth and efficiency through a change in the law or for some other reason. I think that one has to realize that the extra value that comes from greater efficiency always goes to someone and that someone always has an incentive to make the change, to bring it about, and that someone sometimes has political power and sometimes does not. When the opportunity occurs, the change will happen.

Now, one example of a move to efficiency is the creation of markets. There are lots of people who have an interest in the creation of markets. For example, I've had an interest—a little concern even—with the rights to pollute which have been traded

on the Chicago Board of Trade. Now, this market came about—and probably wouldn't have come about—without the fact that there were traders who were going to make money out of the institution of a market. So we mustn't assume that there are no incentives to create markets.

I would like to emphasize one other point that I made, namely that the subject of Law and Economics is not an American subject. It is concerned with what's happening in all countries of the world and I think one can at least give an optimistic example of a change in law which led to things being dramatically better, and that's the introduction of household responsibility contracts in China where agricultural output increased, people say doubled. I don't know whether it's doubled or not, but it certainly increased dramatically so that the lives of the peasants are much better than they were. I think if we take an international perspective, the subject will become richer and also America won't fall behind in the development of the subject.

RICHARD EPSTEIN: Mert?

MERTON MILLER: I guess I want to end on a note of "little" think, rather than "big" think by making a point or two about the technology of doing Law and Economics.

My former students here from the Law School are always asking, "What should somebody who's interested in Law and Economics study?" Well, one thing you'd better study is modern finance because finance provides much of the technology that's used in the Law and Economics field.

You must know, for example, about event studies and how to use them. Event studies were invented over at the business school in the early 70s and they've spread all the way through the law now and they are an indispensable tool for measuring the effects of changes in laws and regulations. You must also know modern portfolio theory, the capital asset pricing model, and the nature of risk. Risk, alas, is not a simple, intuitive concept.

You also have to know the efficient market principle, what it means, what its limitations are. That's something that's spreading through the law, but it has to be studied. You should know, if I may say so, the M&M theorems which come into the law in a variety of ways and are taught in every course in corporate finance. Why don't more of you law school students come on over and take some courses in finance at the business school? We have the technology that we can put at your disposal. (laughter).

RICHARD EPSTEIN: Dick, are you going to invite people to court? (laughter).

RICHARD POSNER: I'll offer a footnote to Mert's point. This happened to come up in a workshop yesterday. If two businesses merge and you want to figure out whether it is an anticompetitive merger, you might think, well, look at the stock prices of the firms that are merging. But that wouldn't tell you anything, because stock prices might go up because the firms could collude better with the other firms in the market or because the merged firm was going to be more efficient.

But suppose you looked at the prices of the stock of the *other* firms in the market. Presumably, if the merged firms are going to collude and hold a price umbrella over the other firms, the other firms' stock prices will rise. If their stock prices fall, the implication is that the merged firm is going to lower prices. So, as Mert says, there are many highly practical everyday applications in finance theory and other parts of economics to law.

The other point I want to comment on is the very interesting, probably insoluble, question of influence. Ronald mentioned the FCC's airwaves auction, and points out correctly that the strong motive for it was deficit reduction. But ask yourself, why is it that they decided to sell some airwaves rather than some national parks? We could have gotten \$20 billion for Yosemite alone. (laughter). A different question is, why wasn't it until the 1980s that governments, which are always greedy for money, discovered this revenue source? I think the answer is that, while the impulse for profound policy changes comes from social forces rather than universities, the universities can legitimize measures the impulse for which is not itself efficiency-oriented and can show distinctions between various ways of achieving the end of collecting revenue. In that way, Law and Economics can have an indirect but cumulatively profound influence on policy.

RICHARD EPSTEIN: Well, I think we've come just about to the end of our appointed hour. But what I'd like to say is, it seems to be quite clear that we're fighting this battle, intellectual and otherwise, in multiple fora. It seems to me that the level of sophistication that we are capable of bringing to problems of public affairs is greater now than it ever has been before because of the accumulated learning of the last fifty years. But the mission of translation perhaps is more uncertain now than it's ever been before, not only here in Chicago but throughout the United States and the rest of the world.

And certainly, if I were younger than I am today—and I guess I'm the youngest person up here—I would think that all of these challenges mean that, whatever we say about the future, the bumps and turns and the excitement that exists today will

certainly transmit itself, not only in the grand theories and lofty disputes of our times, but also in the tough, nitty-gritty questions which arise whenever we talk about the interaction of theory and practice. That's what this university has been devoted to. That's what this law school has been devoted to. That's what this panel has fought about. And so what I think we ought to do is to give our panelists a fine hand to thank them for all that they've done to keep us spirited and combative for the rest of the year. Thank you. (applause).

