

Why Economics Will Change

Remarks at the University of Missouri
Columbia, Missouri, April 4, 2002

Ronald Coase

© 2002 by Ronald Coase

What I'm going to talk about today is why economics will change. I talk about it because I don't only think it *will* change, I think it *ought to* change. And also I'd like to say something about the part which the University of Missouri will play in bringing it about. It will take a long time. It won't be an easy task, but I'm glad there are people here who are willing to undertake it. What I'm saying today is not in an ordinary sense a lecture, it is just a talk, perhaps one would say a battle cry. It is just intended to give my views on this subject, why I think that economics will change.

It is a striking – and for that matter depressing – feature of economics that it has such a static character. It is still the subject that Adam Smith created. It has the same shape, the same set of problems. Now of course we've made improvements, we've corrected some errors, we've tightened the argument, but one could still give a course based on Adam Smith. In some respects it would be better; in some respects it would be worse. But we could base what we say on Adam Smith.

Adam Smith was a great man. He was perhaps the greatest economist who has ever been, but the difference between what has happened in economics and what we find in the natural sciences such as physics, chemistry, or biology is really quite extraordinary. Isaac Newton was a great man. He made a great contribution, but you wouldn't really base a lecture today in physics on Isaac Newton, or in chemistry on Lavoisier, or in biology on Charles Darwin. Charles Darwin was a great man, but we no longer accept his views on inheritance and therefore on how evolution works. Changes in physics, chemistry, and biology continue to this day.

It so happens that before taking a degree in commerce, for a short period I started to take a degree in chemistry. What was taught then as chemistry was completely different from what is taught today. Francis Crick has called the old chemistry just a series of recipes. And my recollection of what I was taught suggests that that was accurate.

I don't only think economics *will* change, I think it *ought to* change.

You couldn't give a course today based on what people believed fifty years ago in chemistry. And if you take biology you clearly could not; it has been completely changed by Crick and Watson with DNA.

Now in a modern course on economics you could still use Marshall's *Principles of Economics* published in 1890 (over a hundred years ago), or you could still use Samuelson's *Economics*, first edition, published I think about 1948. The fact of the matter is that in essentials the subject has not changed. That is what I want to speak about. Thomas Kuhn in his *The Structure of Scientific Revolutions* points out that scientists aren't receptive to proposals for a change in their subject unless they are dissatisfied with the old views. You then get what he calls a paradigm shift.

Well, all this suggests that economists are satisfied. Now the fact is that they are satisfied. They are very pleased. To go to a meeting of the American Economic Association is to see thousands of self-satisfied economists. Now there is a reason why this is so. They have found economics useful and are quite happy therefore to go on using it. Now it's true: it is useful. The concepts which have been developed for handling various problems are useful for handling a wide range of problems. Opportunity costs, supply and demand schedules, marginal costs, marginal revenues, maximization of profits – they're all very useful concepts that you can use, and not simply for economic problems but for others as well.

And the empirical work that is done is very useful. I would cite the work of the National Bureau of Economic Research as extremely useful work, but it's not work which really changes one's vision. One doesn't think of the economic system in a different way. If for example, tax rates go up, what will happen to the tax receipts? Well, they might go up, they might go down, and in an extraordinary case they might even remain the same. What the National Bureau does is to tell one whether, when tax rates go up, the tax receipts go up or down. But one always knew they had to do one or the other, and it doesn't change one's view at all of how the system operates. It gives you useful information, but useful information within the existing scheme.

Now, what we need if the subject is to proceed is not only that sort of empirical work. We do need empirical work, but we need something additional: empirical work which actually changes the way we look at the problem.

We can see where all this self-satisfaction leads to. If we study what economists have said about their subject, how do they describe it? Well, I'll mention some pretty important economists. Take John Maynard Keynes. He says of economics that it is a method, it is a way of

We need empirical work which actually changes the way we look at the problem.

thinking, not a doctrine. John Hicks says it is a discipline, not a science. Lionel Robbins talks about economics as studying human behavior as a relationship between ends and scarce means which have alternative uses. Gary Becker talks about an economic approach. In effect what they are saying is that economics is a bag of tools, a way of analyzing problems, and it no doubt is. It has resulted in what is termed "economic imperialism," namely, taking those tools and analyzing other subjects. I know about economics and law, and there's no doubt at all that in studying the legal system, the use of these tools can be very helpful – and has been. All this explains, I think, why economists are so happy. They have these tools, they are useful, they go around not only improving economics but do a lot to improve other subjects

Now it is true that there have been a lot of complaints about formalism in economics – the elegant but sterile reasoning and so on – but also talks about the lack of realism in economic discussion. Of course, this is all true, but it's rather natural if you consider the subject simply, as Keynes did, as a way of thinking. Just thinking, you're not likely to be so

What is wrong is the failure to look at the system as the object of study.

interested in doing empirical work, and the formalistic character of the arguments seems quite natural.

Now what's wrong with this situation? What's wrong with economists acting in this sort of way? I'll tell you a tale about an English economist, Ely Devons. I was at a conference and he said, "Let's consider what an economist would do if he wanted to study horses." He said, "What would he do? He'd go to his study and think, 'What would I do if I were a horse?' And he'd come up with the conclusion that he'd maximize his utility." That wouldn't take us very far if we were interested in horses, but we aren't really interested in horses at all. What Devons said was, I think, part of the problem, but not the whole of it. I think it's not really the most important objection – the lack of realism.

What I think is important is that economists don't study the working of the economic system. That is to say, they don't think they're studying any system with all its interrelationships. It is as if a biologist studied the circulation of the blood without the body. It is a pretty gory thought, but it wouldn't get you anywhere. You wouldn't be able to discuss the circulation of the blood in a sensible way. And that's what happens in economics. In fact the economic system is extremely complicated. You have large firms and small firms, differentiated firms and narrowly specialized firms, vertically integrated firms and those single-stage firms; you have in addition non-profit organizations and government entities – and all bound together, all operating to form the total system. But how one part impinges on the other, how they are interrelated, how it actually works – that is *not* what people study. What is wrong is the failure to look at the system as the object of study.

Now how does it look? Well, that it's complicated is not a question, nor that it could take a long time if we start, as I hope we will, to study this system. Studying it may take one hundred years. It may take two hundred years. But anyway, we should start.

You won't be surprised after hearing the introduction that I think the key to the development of a sensible analysis is the comparison between the additional production resulting from the rearrangement of activities and the cost of the transactions needed to bring the rearrangement about. If you can get extra production, a higher standard of living by rearranging activities, you will do so if the costs of transactions are less than the value of what is gained. Therefore it follows that if you can lower

We will never, when we're dealing with the economic system, deal with an easy-to-analyze set of problems.

transaction costs, there'll be more rearrangements, and the economic system will become more productive. Transaction costs, in my view, become the factor upon which the productivity of the economic system depends.

However, transaction costs depend, as we learned from the new institutional economics, on the working of the legal system (the system of property rights, the enforcement of property rights, the ability to foresee what the legal decisions will be, and so on). They also depend on the political system, they depend on the educational system, and they are interrelated with other social systems. And in consequence, economists should enlist the support of lawyers, sociologists, anthropologists, and others in our work in order to understand why transaction costs are what they actually are. It's the opposite of economic imperialism. We should invite these other practitioners in these other fields into our realm to help us in understanding how the economic system actually operates.

The influence of the level of transaction costs of course is also affected by technological factors. And one example which is very much discussed today is the influence on transaction costs, and on the organization of industry, of the development of the Internet. A large component of transaction costs is of course the costs of obtaining information. And since the Internet in fact lowers the cost of getting information, it has an effect of lowering transaction costs. As a result, one would expect there to be major changes as a result of the coming of the Internet, coming about through making it easier to get information and therefore lowering the transaction costs of doing business.

Now this has been described in a recent article which appeared in the New York Times in January of this year.¹ It was by Professor Hal Varian of the University of California at Berkeley. This is what he says. "There

The key to the development of a sensible analysis is the comparison between the additional production resulting from the

rearrangement of activities and the cost of the transactions needed to bring the rearrangement about.

was never a new economics to go along with the new economy. Sure, there was a lot of talk about increasing returns, network effects, switching costs and so on. But these are hardly new concepts; they've been part of the economics literature for decades. Furthermore, although these are important ideas, they aren't Big Ideas. They explain certain phenomena well, but they have limited reach. Those in search of a really big idea had to look further back in the economics literature. They hit gold with 'The Nature of the Firm,' a 1937 paper...." It's interesting to think that a paper in 1937 has now become a part of the literature on the Internet. Of course it is understandable. Transaction costs fall: what are the effects?

I quote again from something he says later on. "New-economy advocates found this [the idea of transaction costs] a compelling idea. One consequence of the Internet has surely been to make it cheaper

If you can get extra production by rearranging activities, you will do so if the costs of transactions are less than the value of what is gained.

to communicate. This should, in turn, lower transaction costs and change company boundaries. Their conclusion was that companies would inevitably downsize and outsource, spin off unnecessary functions, and carry out more and more transactions using the Internet instead of internal memos." However, Professor Varian questions this remark. He says that although the Internet lowers the costs of transactions between firms, it also lowers the cost of communication within firms and makes therefore larger organizations easier to run and organize.

But there are even other factors to take into account. Since you can make transactions more easily, less costly, you can get rid of functions that you have to perform but at which you are inefficient. Getting rid of the operations at which you are inefficient enables you to lower the costs of your core activity. And this may in effect lead to greater activity, greater

production, and therefore larger firms. So you really can't say whether firms are going to get larger or smaller. Some firms will emerge as small firms, because people can now find them and deal with them, but other firms will find, because they can concentrate more on those activities at which they are efficient, that they get larger. And in fact the whole thing is much more complicated than that, because the costs of different operations are going to change, but not in the same way, so

The collection of contracts by CORI will greatly help.

there will be a switching of demand as between different activities. Another thing: the lower costs of some businesses will result in greater production there, but some of the things that are produced will be inputs for other businesses, and their costs will change. So you've got a whole series of interrelated changes which are going to affect the outcome. We will never, when we're dealing with the economic system, deal with an easy-to-analyze set of problems. This is just an example of the complications with which you have to deal when once you try to deal with the working of the actual economic system.

Unfortunately, we lack the data by and large to carry out the necessary operations. We can specify what seems possible, what could happen. But specifying what will happen depends on the availability of the data. And this is where the University of Missouri comes into this talk. CORI, the Contracting and Organizations Research Institute here at the University of Missouri, is undertaking the task of obtaining the

Contracts are, in effect, the neurons of the economic system.

information which will enable us to put these vague ideas into a concrete form. It's something that needs to be done, and it is going to be done here. The collection of contracts by CORI will greatly help, because contracts are the major means by which one firm interrelates with another firm, or one organization interrelates with the consumer. They are, in effect, the neurons of the economic system. Of course, studying the contracts has

to be supplemented by a study of the actions of the firms in modifying and interpreting the terms of the contracts.

Well, this task has to be done and it's being done here. I envy you. At my age, when the act of living is a burden, I wouldn't have come here if I didn't believe that the work which is being done here is of the utmost importance for the future of economics. Economics will change, and the change will come in part because of the work which is being done here at the University of Missouri in Columbia.

Thank you.

Footnote

1 Hal R. Varian, "A New Economy With No New Economics," *The New York Times (on the Web)*, January 17, 2002.

Contracting and Organizations Research Institute (CORI)

at the University of Missouri has a library of over 10,000 contracts immediately accessible online for research use.

Note: *Ronald Coase is currently Clifton R. Musser Professor Emeritus of Economics at the University of Chicago Law School. He has been affiliated with the University of Chicago since 1964. Earlier he served on the faculty of the Dundee School of Economics and Commerce (1932-1934), the University of Liverpool (1934-1935), the London School of Economics (1935-1951), the University of Buffalo (1951-1958), and the University of Virginia (1958-1964). He was the editor of the Journal of Law and Economics from 1964 to 1982. In 1991 he was awarded the Alfred Nobel Memorial Prize in Economic Sciences.*

*This talk was delivered at a session organized by the Contracting and Organizations Research Institute at the University of Missouri. The text was transcribed from videotape, and then edited by Ronald Coase and Alexandra Benham. The text was published in the Newsletter of the **International Society for New Institutional Economics**, Volume 4, Number 1 (Summer 2002) and appears here with the permission of Ronald Coase.*