

LECTURE 06: THE PRICE SYSTEM I

At the heart of economics is a scientific mystery: How is it that the pricing system accomplishes the world's work without anyone being in charge? Like language, on one invented it. None of us could have invented it, and its operation depends in no way on anyone's comprehension or understanding of it. Somehow, it is a product of culture; yet in important ways, the pricing system is what makes culture possible. Smash it in the command economy and it rises as a Phoenix with a thousand heads, as the command system becomes shot through with bribery, favors, barter and underground exchange. Indeed, these latter elements may prevent the command system from collapsing. No law and no police force can stop it, for the police may become as large a part of the problem as of the solution. The pricing system--How is order produced from freedom of choice?--is a scientific mystery as deep, fundamental, and inspiring as that of the expanding universe or the forces that bind matter. For to understand it is to understand something about how the human species got from hunting-gathering through the agricultural and industrial revolutions to a state of affluence that allows us to ask questions about the expanding universe, the weak and strong forces that bind particles and the nature of the pricing system, itself.

—Vernon Smith, “Microeconomic Systems as an Experimental Science,” *American Economic Review*, Dec. 1982.

- I. Reading Read
- II. What is our goal?
 - a. *Efficiency*—Maximizing output with a given amount of input.
 - i. Also known as minimizing waste.
 - b. Efficiency seems like a dry, heartless concept but it isn't.
 - i. By being able to do more with less, we can use what's saved to do other things—in effect we lower our opportunity cost and do the things we would normally forgo.
 - ii. These other things are not just consumer items. Innovation, art, education, meditation, music, socializing, and traveling are all things we can do.
 - iii. Indeed the history of humanity includes more of these higher pursuits as people save the time and money to not just make these things but appreciate them. Efficiency helped bring about the works of Mozart, Shakespeare, Aristotle, and Confucius—people don't ponder art and philosophy when they're struggling to survive.

III. Of Competition and Cooperation

- a. Most people think of economics as about competition, and competition is certainly a big part of it
- b. But economics is also about cooperation. A Snickers candy bar capture cooperative efforts in ways we can't even imagine. As does a pencil.
- c. This extended order illustrates that markets link one another. The farmer who grows peanuts for Snickers candy bars could also sell those peanuts to make other products such as peanut butter, peanut oil, and other candy bars. There is rich competition *and* cooperation.
- d. *The Great Economic Problem*—arranging our limited resources to satisfy as many of our infinite wants as possible
 - i. Recall that economics is the study of optimality/efficiency. How to get the most out of life.

IV. Central planning

- a. One solution to this problem is through a single bureaucracy that's responsible for allocating resources. But it has problems of information and of incentives.
- b. The value of a resource changes from person to person and at different points of time. Knowledge is disperse, in flux, and sometimes hard to convey.
 - i. Consider oil: it's used for making asphalt and it's used for growing vegetables. Imagine an oil refinery breaks down and we have less oil. What do we cut back on?
 - ii. It depends on how much people value each of these things, on the margin.
 - iii. It depends on how easy it would be to grow vegetables without the oil.
 - iv. It depends on how easy it would be to make the asphalt without the oil.
 - v. It depends on how easy it would be to use something besides vegetables.
 - vi. It depends on how easy it would be to use something besides asphalt.
 - vii. And maybe someone suspects they can use oil more efficiently in one of these areas, but will only bother if it's needed (as doing things a new way has switching costs). Even if you could find this person, it would be hard for them to estimate precisely how likely they could get this method to work.

- c. Similarly, there's no incentive to care about strangers, especially if it means hurting yourself. Maybe your friend paves roads for a living; even if vegetables are the best place for them to go, you are more likely to help your friend. Especially if he pays (bribes) you to help him.
- d. Central planning is not a good way to coordinate economic activity. Over and over again, centrally planned economies have resulted in the suffering of their citizens.
 - i. When in doubt, ask yourself how the traffic is moving. Are people trying to get into centrally planned economies (Venezuela, North Korea, Cuba) or out of them?