The Law of Supply and Demand

by Israel M. Kirzner

The theory of supply and demand is recognized almost universally as the first step toward understanding how market prices are determined and the way in which these prices help shape production and consumption decisions—the decisions that make up not only the skeleton, but also the flesh and blood of the economic system. Austrian economics thoroughly agrees with this. However, when we dig just a little below the surface of the “law” of supply and demand, we encounter difficulties that have, directly or indirectly, led Austrians to explain the determination of prices differently from how it is often, at least implicitly, presented. I will try to explain the sense in which Austrians are unhappy with the textbook presentations of supply and demand—and are yet fully in agreement with the general emphasis on supply and demand as being the key to economic understanding.

The Basic Proposition

The basic insight underlying the law of supply and demand is that at any given moment a price that is “too high” will leave disappointed would-be sellers with unsold goods, while a price that is “too low” will leave disappointed would-be buyers without the goods they wish to buy. There exists a “right” price, at which all those who wish to buy can find sellers willing to sell and all those who wish to sell can find buyers willing to buy. This “right” price is therefore often called the “market-clearing price.”

Supply-and-demand theory revolves around the proposition that a free, competitive market does in fact successfully generate a powerful tendency toward the market-clearing price. This proposition is often seen as the most important implication of (and premise for) Adam Smith’s famed invisible hand. Without any conscious managing control, a market spontaneously generates a tendency toward the dovetailing of independently made decisions of buyers and sellers to ensure that each of their decisions fits with the decisions made by the other market participants. Were this tendency to be carried to the limit, no buyer (seller) would be misled so as to waste time attempting to buy (sell) at a price below (above) the market-clearing price. No buyer (seller) would in fact pay (receive) a price higher (lower) than necessary to elicit the agreement of his trading partner. To the extent that this proposition is valid, free competitive markets achieve what F. A. Hayek has justifiably called a “marvel.” But it is in regard to the validity of this proposition (and in particular to our reasons for being convinced that this proposition is both valid and relevant) that Austrians differ sharply with mainstream textbook economics. And it is precisely because of the universally acknowledged centrality of the supply-and-demand proposition
for all of economics that this disagreement is so important.

The Role of Knowledge

The mainstream textbook approach to this proposition is, in one way or another, explicitly or implicitly, based on the assumption of perfect knowledge. The Austrian approach does not make the perfect-knowledge assumption the foundation for this proposition; quite the contrary, Austrians base the proposition squarely on the insight that its validity proceeds from market processes set in motion by the inevitable imperfections in knowledge, which characterize human interaction in society.

In certain respects the mainstream view is not unreasonable. In many contexts we generally take it for granted that human beings are aware of the opportunities available to them. When economists believe, for example, that a price increase will cut the quantity people seek to purchase, and a price decrease will stimulate sales, this belief is based on the reasonable assumption that such price increases or decreases are in fact likely to become known to prospective buyers soon enough to make a difference.

The mainstream view takes this not unreasonable assumption and pursues it relentlessly, in effect, to its logical—but no longer quite so reasonable—conclusion. This conclusion is that in any free market, the market-clearing price is instantaneously (or, at least, very rapidly) established. If every market participant knows what every other market participant is prepared to do (including, especially, the quantity he is prepared to buy or sell at any given price), it follows that any price higher than the market-clearing price cannot emerge (since prospective sellers would realize that they would be left with unsold goods).

It follows, similarly, that any price lower than the market-clearing price cannot emerge (since prospective buyers would realize that they will be left without the goods they wish to buy and for which they are in fact prepared to pay a higher price if necessary). The proposition that free-market prices are thus inevitably market-clearing prices proceeds inexorably from the belief that market prices are, in effect, instantaneously known to all potential market participants.

The Dangerous Assumption

The assumption that all market participants are always fully aware of market opportunities in which they might be interested is often presented, in mainstream textbook expositions, as part of the assumption of so-called “perfect competition.” Perfect competition explicitly presumes universal market omniscience. One way of expressing the Austrian unhappiness with the mainstream textbook treatment is to point out that to start supply-and-demand analysis by assuming that competition is “perfect” (in the textbook sense) is not only to be wildly (and therefore unhelpfully) unrealistic; it is in fact also to rob the analysis of all significant economic content—since the principal results sought to be shown turn out to be simply statements repeating the governing assumption in slightly different language.

To demonstrate that the interplay of supply and demand in a free market generates a powerful tendency toward the market-clearing price is to meet a daunting analytical challenge. To demonstrate that in a perfectly competitive market the only possible price is the market-clearing price is simply trivially to identify what has already been planted in the initial assumption. To unpack the mathematically implied properties of a definition may, of course, be a significant (mathematical) contribution. But to demonstrate the attainment in free markets of the market-clearing price by restricting analytical attention to the situation in which this price is the only one permitted to be conceivable, is, as a matter of economic analysis, a hollow triumph indeed.

This difficulty that Austrians find with the textbook discussions of supply and demand can be presented in somewhat different terms. The traditional classroom blackboard demonstration of the law proceeds by drawing the classic supply-and-demand diagram—a downward sloping demand curve intersecting an upward sloping supply curve. (For present purposes we forgo the details surrounding the construction of this diagram; it is one familiar...
to the hosts of students who have ever been exposed to elementary economics.) The core of the classroom analysis generally consists of discussion showing, first, that any market price higher than that indicated by the intersection of the two curves (that is, a price higher than the market-clearing price) must tend to produce competitive pressure toward a decrease in price (since the high price will generate a surplus of unsold merchandise); and second, that any market price lower than that indicated by the point of intersection must produce competitive pressure toward an increase in price (since the low price will generate a shortage of goods offered for sale, as compared with the quantities prospective buyers wish to buy).

Austrians do not have serious disagreement with such discussions in themselves; they simply point out that those discussions are utterly inconsistent with the assumption of perfect competition (which textbook analysis takes as its operative assumption). A little careful analysis of the perfect-competition assumption (which analysis can, however, unfortunately not be fitted into this space) suffices to show that under perfect competition there cannot in fact exist two curves (the demand curve intersecting with the supply curve). Under perfect competition the supply-and-demand diagram shrivels instantly to a single point—the point where the two curves would have intersected (had the curves themselves existed!). This is so because any point on a market supply curve or on a market demand curve that is not that intersection point can have analytical existence only by suspending some or all of the conditions that define the state of perfect competition. The diagram (valuable though it certainly is!) is simply not consistent with the assumed conditions under which it is supposed to be operating.

Our discussion has unfortunately been overwhelmingly negative. We have pointed out problems that Austrians have with mainstream supply-and-demand analysis—but we have not suggested how an alternative approach might avoid these difficulties. Subsequent articles in the present series will attempt to fill this gap. For Austrians, the law of supply and demand, properly explained, is at least as centrally important for economic understanding as it is for mainstream economics. We will show how Austrians deploy insight into the entrepreneurial character of dynamically competitive markets (insights that can have no place within the mainstream textbook paradigm) to explain the law of supply and demand in an intuitively and analytically satisfying way.

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