

## **Demand and Supply<sup>1</sup>**

### **The Freeman: Ideas on Liberty**

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No series on the basic notions of economics can continue long without introducing demand and supply. These concepts, as illustrated with demand and supply curves, are fundamental to how economists understand economic behavior.

### **The Basics of Demand and Supply**

Although a complete discussion of demand and supply curves has to consider a number of complexities and qualifications, the essential notions behind these curves are straightforward. The demand curve is based on the observation that the lower the price of a product, the more of it people will demand. There may be occasional exceptions to this behavior (and indeed economists have developed the theoretical possibility of such an exception), but they are so few and transient that economists refer to the negative relationship between price and quantity demanded as the “law of demand.” Because of the law of demand, demand curves (such as D in the figure) are always shown as downward sloping, with the price on the vertical axis and the quantity demanded (over some period) on the horizontal axis.

The basic notion behind the supply curve is that the higher the price of a product, the more of it producers will supply. In other words, as with the curve S in the figure, supply curves are upward sloping. A justification for this upward-sloping relationship between price and quantity supplied is that the cost of producing additional units of the product increases as more is produced. So it takes a higher price to motivate additional output. But this is not necessarily the case when there is time for new firms to enter an industry, or for existing firms to expand their plant size. Such long-run adjustments to a higher price can permit more of the product to be made available at the original cost (or even a lower cost), in which case the supply is horizontal (or negatively sloped). But over periods of time that can extend to several months or more, it is reasonable to assume that supply curves slope upward.

Obviously, a lot of things affect the amount of a product that will be demanded and supplied besides its price. But for any set of demand and supply curves, all of these other influences are held constant, since the purpose of the analysis is to allow us to concentrate on the effects of the product's price on the amount demanded and supplied.

## **Communicating through the Market**

The simple diagram here allows us to consider the most important insight from demand and supply analysis, which is how people coordinate their decisions by communicating through market prices.

Assume that we start off with a price for denim jeans given by  $P_1$  in the figure. The most important thing about that price from an economist's perspective is that it fails to coordinate the decisions of suppliers and consumers. At price  $P_1$  suppliers are willing to supply only  $Q_S$  pairs of jeans, but consumers want to buy  $Q_D$  pairs. Consumers will be frustrated because they are unable to obtain all the jeans they want at the prevailing price, and in response to this frustration they will start bidding up the price of jeans relative to the price of other products. By doing so, they communicate to suppliers that they want more resources devoted to the production of additional jeans because they are worth more than what those resources are currently producing elsewhere. Suppliers respond appropriately to this information by moving up the supply curve, increasing the availability of jeans.

But the increase in price does more than communicate information from consumers to suppliers. It also is the means by which consumers communicate valuable information to one another. As consumers bid up the price of denim jeans, they are telling each other that these jeans are in short supply and that everyone should economize on their use, take better care of the ones they have, use substitute clothing, and so on. And consumers respond appropriately to this information by backing up the demand curve as they reduce the number of jeans they demand. This process continues to increase the price of denim jeans until it reaches  $P^*$  in the figure, the price determined by the intersection of the demand and supply curves. This price is often called the equilibrium price, because at  $P^*$  there is no pressure for the price either to increase or decrease. (Our discussion could have started at a price greater than  $P^*$  and the communication would have taken the form of price decreases.) At  $P^*$  we can clearly observe the miracle of market communication and cooperation. Millions of people pursuing their private advantages as consumers and producers, with almost no direct knowledge of, or interest in, the concerns and circumstances of others, are led to a completely coordinated pattern of decisions by responding to the information contained in market prices. Each consumer decides to consume an amount perfectly

compatible with the amounts that all other consumers are deciding to consume and all producers are deciding to supply.

### **It's the Process**

The equilibrium price, along with the equilibrium quantity  $Q^*$  in the figure, is typically presented as the most important feature of demand and supply analysis. But seldom do real-world markets ever get to equilibrium. The world is constantly changing, and demand and supply curves constantly shift. Equilibrium is a moving target. The most important insight from demand and supply analysis is that the market process is constantly directing people to accommodate one another in ways that move them toward the coordination represented by equilibrium, and not just for one product, such as denim jeans, but for thousands of products. Things may not stay still long enough for equilibrium to be reached in any market. But freedom and market communication accomplish a pattern of cooperation that can never be duplicated by the coercion of central planning.

One of the best ways to appreciate the coordination and cooperation of market communication is by considering the problems that arise when political authorities censor it with price controls.

### **Reference:**

Lee, Dwight R. "[Demand and Supply.](http://www.fee.org/publications/the-freeman/article.asp?aid=3666)" [The Freeman: Ideas on Liberty - October 1998.](http://www.fee.org/publications/the-freeman/article.asp?aid=3666) Retrieved from the World Wide Web on 15 November 2006 at <http://www.fee.org/publications/the-freeman/article.asp?aid=3666>.

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<sup>1</sup> Slightly modified for instructors and students using Common Sense Economics ([CommonSenseEconomics.com](http://CommonSenseEconomics.com))