

Lesson 9 The Magic of Markets

Markets do not arise spontaneously in nature. Markets only arise atop certain legal, institutional and cultural foundations. To illustrate, for most of human history, to walk up to a large group of people who you didn't know with valuable items would have been a recipe for robbery and perhaps murder. In many parts of the world today, this is still the case. Therefore, wherever there are functioning markets, there also exist laws and cultural norms respecting property rights and contracts. With these in place, and with confidence that they will be enforced by institutions like courts of law, people can trust one another enough to engage in trade and lending. Really, the genius of a modern market economy is that it does not require that we trust other people. What we trust instead are the laws and the institutions and what gives us the confidence to trade and to invest is the knowledge that if people do not respect our property rights (ie if they try to steal from us) that the state will enforce such respect on our behalf.

This legal/institutional foundation took a long time to develop, but the benefits have been immense, because free (uncontrolled by buyers, sellers or government) markets are unequalled at allocating scarce resources efficiently between competing uses. While we can also rely on tradition or upon the government to do this job, history has shown that neither is as effective as markets can be.

So, what is it about markets that make them so effective? In a word, prices. The real function of a market is to generate accurate price information. With accurate prices, millions of individual households and firms can make decisions as to which items to buy and which to produce. These decisions will in turn further influence prices in a rather neat feedback loop. The genius of a market economy is that it does not require any omniscient authority to decide the three basic economic questions. Instead, a market economy, by letting individuals make their own decisions, generates the prices that in turn further inform individual decision making (ie it is guided by an 'invisible hand').

As an example, let's take water. Water can be used for irrigation and for drinking, among other things. Now, some places allocate water according to government decree, and the results are usually that agriculture is allocated a lot of water and that a lot of this water is wasted by inefficient irrigation systems. In a market economy, though, it would be clear that people are willing to pay more for drinking water than farmers can afford to pay for irrigation water. So, the price of water will rise, and people who really need the

water the most for drinking will get it. This higher price for water will now act as a **signal** to farmers of water's relative scarcity, which should cause them to improve their irrigation systems so they don't waste this now-valuable resource. As well, the higher price may also act as an **incentive** for water utility companies to develop more aqueducts and canals to increase the quantity of water available to both households and farms

Generally, then, if the price for a good rises, those consumers who don't really need it or who can satisfy their need with a substitute will stop buying it, leaving it for those people who really do need it. At the same time, producers will notice the increase in price and devote more of their scarce resources to producing the good. Overall, the effect is that scarce resources are directed where they are needed most, as expressed by the prices that people demonstrate they are willing to pay.

The other great thing about markets is that everyone who uses them is made happier. The reason is that a price set by a market is always less than or equal to what the purchasers of the good were willing to pay. On the other side, the market price is always greater than or

equal to the price the producers were willing to accept. For instance, consider a drinks seller at the beach. Most of the people who buy drinks from him would probably be willing to pay more than the \$2 per drink that he charges as the drink gives them more than \$2 of satisfaction. This extra satisfaction that people enjoy and would be willing to pay for over and above the market price is called **consumer surplus**. Those who are not thirsty and therefore not willing to pay \$2 simply do not buy drinks. For the drinks seller as well, the \$2 per drink is probably more than the minimum he would require to stay in business. This extra money over and above the minimum he would require to stay in business is called **producer surplus**. If he needed more than \$2, he would simply go out of business. Generally, as transactions in markets occur without coercion, almost by definition they must make both parties happy, other

wise why would they deal with one another?

Following on from this is the idea of allocative efficiency. **Allocative efficiency** occurs when resources are sent where they are most needed, as indicated by prices. If markets are allowed to operate freely, prices accurately reflect the relative scarcity of resources and desirability of goods. These accurate prices in turn permit buyers and sellers to maximize their overall satisfaction (ie the sum of producer and consumer surplus or what economists call **welfare**). If for whatever reason markets are manipulated and not allowed to operate freely (whether by government intervention or other manipulation), then some potential consumer and/or producer happiness will be lost, thus limiting total welfare and resulting in allocative inefficiency.

Exercise 9

1. Define:
 - a) SIGNALLING FUNCTION OF PRICES
 - b) INCENTIVE FUNCTION OF PRICES
 - c) CONSUMER SURPLUS
 - d) PRODUCER SURPLUS
 - e) ALLOCATIVE EFFICIENCY
 - f) WELFARE

2. Thinking about the legal and institutional foundations of markets, can you think of anywhere you have lived or have experience with that is lacking in these in some way? Has this deficiency had negative economic consequences?

3. After reading the following paragraph, identify which part illustrates the signalling function of price and which part illustrates the incentive function of price in resource allocation.

Imagine you are an entrepreneur in the garment industry. You make jeans and jean jackets. You notice that the price for jean jackets is rising so you shift some production away from jeans and into jean jackets. At the same time, your labour costs are rising so you buy some new and improved sewing machines to cut down on your need for operators.

4. Five students at the beach want to buy soft drinks. The happiness (or utility) that each will get from the drink is indicated by the price they are willing to pay for it, as shown below:

Andrew (who is really thirsty)	- \$5
Barb (who is pretty thirsty)	- \$4
Cassandra (who could drink)	- \$3
David (who likes sweet tastes)	- \$2
Edmund (who drinks socially)	- \$1

Freddy the drinks seller, meanwhile, is willing to sell his drinks for \$1.50 each but as the other drinks sellers are all charging \$2 (probably because they hire helpers or have more expensive rent) he sells his drinks for \$2 as well. The five students at the beach now approach Freddy the drinks seller...

a) What is the market price for drinks on the beach?

b) How many drinks will Freddy sell to the group?

c) How much money were the students who bought drinks willing to spend on drinks? How much did they actually spend? What was their 'consumer surplus' in dollars?

d) How much money was Freddie willing to accept for the drinks he sold to the students? How much did he actually receive? What was his 'producer surplus' in dollars?

e) What would be the impact on consumer and producer surplus in this case if the government mandated a price of \$1.50 per drink? Has there been any impact on overall welfare (ie the sum of consumer and producer surplus) and allocative efficiency?

f) What would be the impact on consumer and producer surplus (ie welfare) and on allocative efficiency if the government (or drinks sellers association) mandated a price of \$4 per drink?