Introduction To Price Theory,Part1:Supply& Demand

Understanding the price mechanism is one of the major intellectual achievements of economic study. The economy consists of millions of markets and billions of trades going on constantly. It’s quite possibly the most amazing thing about the free market system, that so many different goods can be traded with such fluency and that individuals can rely on the market to provide them with what they need.

[**Each person has economic goals**](https://azmytheconomics.wordpress.com/2011/09/08/action-and-choice/): food, shelter, health care, entertainment, etc. Because of the gains to specialization, people don’t directly produce what they need; instead they trade for it. The web of trade is huge, and the probability of a [**double coincidence of wants**](http://en.wikipedia.org/wiki/Coincidence_of_wants) is tiny, so money is required to facilitate trade. Each person produces what they specialize in, sells that product for money, and then uses the money to buy what they want. Specialization allows us to be amazingly more productive than we would be individually. Whether it is [**woolen coats**](http://www.stanford.edu/~johntayl/Adam%20Smith%20on%20the%20woolen%20coat.pdf), [**pencils**](http://www.econlib.org/library/Essays/rdPncl1.html), [**toasters**](http://www.thomasthwaites.com/thomas/toaster/page2.htm) or [**cheeseburgers**](http://waldo.jaquith.org/blog/2011/12/impractical-cheeseburger/), modern production would be almost impossible without the web of millions of cooperating individuals. However, specialization would be much more difficult without monetary exchange, and monetary exchange requires a functioning price system.

Relative prices

Prices are ratios of value. If apples cost $1 and a loaf of bread $3, that tells you how many apples you can buy per loaf of bread. Prices don’t mean anything by themselves; you need to know the prices of many goods before you can have a good idea of what money is worth. If you were abducted by Martians, and they gave you 1,000 Martian dollars to spend, you would have no idea if the Martian store you went to was overpriced or underpriced. You would need to know a good variety of other Martian prices to see which prices were relatively low.

So, what determines what the relative prices are? When laymen talk about prices, they mention factors such as greed, the moods of the CEOs of various firms and other random factors. However, there are only two categories of things that determine price: supply and demand.

**Supply**  
Supply is the category of factors that determine how difficult something is to make. The harder something is to make, the more expensive it will be. In Adam Smith’s Wealth of Nations, [**he discusses a situation where hunters can either get one beaver for a given unit of effort or two deer**](http://www.econlib.org/library/Buchanan/buchCv6c1.html). If the effort of production were always exactly double, the relative prices would always be 2:1. Marx’s labor theory of value evolved from Smith’s deer and beaver story. In Marx’s story, goods get their value by how much labor goes into making them. Capital used in production adds value because of the labor that went into making the capital. While Marx didn’t have a very good story of why natural resources have value, as labor is the most scarce of all resources, Marx (and Smith) did have a basic understanding of the supply curve. Each point along the supply curve represents how much of a good suppliers would supply for a given level of of demand for their product. The more people are willing to pay, generally, the more of the good suppliers will bring to market.

**Demand**  
The second category of factors which determine price is demand. Demand is how much people are willing to spend to get a good. The more money, and hence more alternative goods, which they are willing to give up to get a good, the higher their demand. It wasn’t until much later, with the Austrian **[marginalists](http://en.wikipedia.org/wiki/Marginalism" \l "The_Marginal_Revolution)**, that a coherent theory of how demand affected price was developed. They realized that value comes from the subjective utility which people get from various goods. If people do not gain any enjoyment or use out of a good, it will be worthless, even if the good took a tremendous amount of labor or resources to create. Each point along a demand curve represents the amount of money people are willing to pay for a good. The points are [**sorted**](http://en.wikipedia.org/wiki/Sorting_algorithm) from highest willingness to pay to lowest, which ensures that demand curves slope downward\*.

**Combined**  
Supply and demand must both be considered to determine price. Adam Smith was correct, if incomplete, that if deer were half as expensive to produce as beaver, the price would be half. What this ignores is that if people valued deer more, the economy would only produce deer and there would be no price ratio at all. Another major idea to note is that factors of production (such as capital and natural resources) get their value from the goods which they help produce. Steel is valuable not because people value lumps of iron ore, but because people can make useful things out of it. Wood is valuable because people like tables, chairs and houses.