

# **Supply and Demand Economics**

by Sophia



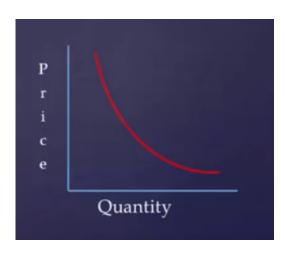
## WHAT'S COVERED

Do you ever wonder why the price of gas moves around so much? Why is it high one week and lower the next? The laws of supply and demand have a lot to do with this behavior. This tutorial provides an overview of supply and demand and economic markets. Our discussion breaks down as follows:

- 1. Supply and Demand
  - 1a. Market Price and Equilibrium
  - 1b. Surplus and Shortage
  - 1c. Opportunity Cost
- 2. Economic Markets

# 1. Supply and Demand

The law of demand in economic terms is defined as a downward sloping curve on a graph where price is the y-axis and quantity is the x-axis. What we're going to see is as price goes down, quantity sold increases. So, as a product becomes more available at a lower price, people will tend to want to buy more of it, and therefore, the quantity demanded will go up.

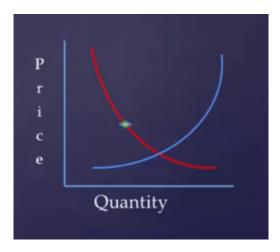


The law of supply, on the other hand, is the opposite story. As the price increases, more producers will want to get into the market, which will affect how much product will be available in the market, because more people are coming in and trying to make a profit on the current price. As price goes lower, the law of supply says that the quantity will also go down.



# 1a. Market Price and Equilibrium

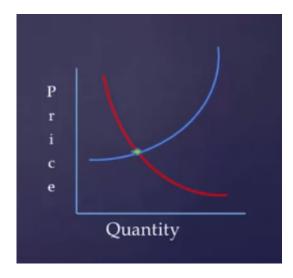
**Market price** is the current price of a good or service at which a customer is willing to pay. Let's put our supply and demand curves together on a graph, and set the market price at the point marked with the dot. This will represent, given the current situation, what a customer is willing to pay.





Keep in mind that these things are always in flux, so you'll never see them static, like they're represented here. This is just for the sake of demonstration.

**Equilibrium price** is the price at which quantity demanded and quantity supplied will meet. Recall where we set our market price, the price at which a customer is willing to pay given the supply of a particular product. What's going to happen is that the lines will move around until equilibrium is met, as shown below.



This is the price, given the supply and demand curves, where price will be at an equilibrium, all other things being equal.



#### **Market Price**

The current price of a good or service which a customer is willing to pay.

## **Equilibrium Price**

The price at which quantity demanded and quantity supplied meet.

## 1b. Surplus and Shortage

**Surplus** is when there's more supply of a product than demand. **Shortage** is when there's more demand for a product than there is supply.

This is going to affect the price, obviously. Surpluses will mean lower prices, while shortages mean higher prices.

The size of a business is going to have an effect on how they can cope with surpluses and shortages. Larger organizations have more flex--more money--available, and they're able to look for more substitutions for a product than a small organization or an individual, who's going to find reacting to a shortage much more difficult. In addition, surpluses and shortages can be manipulated artificially.

EXAMPLE Apple Corporation can restrict supplies of a new product in order to increase demand, and thereby be able to charge more money for that product.



#### Surplus

When there is more supply of a product than demand.

#### **Shortage**

When there is more demand for a product than supply.

# 1c. Opportunity Cost

Opportunity cost are the benefits received by making another choice or taking alternative action.

## **IN CONTEXT**

Suppose you spend 10 hours commuting and working, eight hours sleeping, and the rest doing whatever you choose. Well, if you spend so many hours eating, watching TV, and studying, that makes up 24 hours in a day. However, suppose what you have planned suddenly equals 25 hours in a day. You obviously can't have that. That means in order to accomplish those other things that you want to get done, you're going to have to take time out of either working or sleeping.

That time that you take out of there--that missed hour of work or sleep--represents the opportunity cost of what you could have done because you're studying or recreating instead.

# 2. Economic Markets

Economic markets are defined by competition, or the attempt to sell similar products as other businesses (the people I'm in direct competition with). Now, each business, in this case, is going to strive for the best combination of price and quality to gain a competitive advantage over their other firms in the market and sell more to the customer.

Economic Market	Definition	Example
Perfect Competition	An industry market structure characterized by a very large number of firms all selling a homogeneous or identical product.  Gaining a competitive advantage is most challenging in a perfectly competitive market because many firms are all selling the same product. How well a firm does in that market is affected by the total amount of supply on hand and the timing to the market.	This is highly theoretical, but the closest you'll find to it in everyday life is agriculture. Rice is rice, and it doesn't matter how much you market it or advertise it, it's still going to be rice.
Monopolistic competition	An industry market structure characterized by a large number of firms selling similar products.  There are many firms, but each can differentiate its products through	Consider clothing or hamburgers. I have pickles on my hamburger and you don't. I have flashy lines on my shoes and you don't. This product differentiation elicits a gut reaction that makes consumers

	branding, quality, or other features to gain an edge. While it is easier to gain some advantage in this structure compared to perfect competition, it is still challenging to achieve a significant edge.	perceive the value of one as higher than the other.
Oligopoly	An industry market structure characterized by only a few firms selling similar products.  These firms can influence prices and compete with each other. However, due to their small number, they often engage in strategic behavior (such as collusion or non-price competition), which can lead to higher prices for consumers.	Take a look at gasoline. There are only a few big oil companies out there. If one particular oil company wants to gain a competitive advantage over their competitors, they can do that through price.
Monopoly	An industry market structure characterized by one firm supplying a unique product to the entire market.  Barriers to entry prevent competition. In other words, it's very hard for competitors to get in and sell that same product. In addition, there's very little need for marketing of the product because you own that particular product.	Up until the 1980s, De Beers Diamonds controlled about 90% of the world's diamond sales. They would simply buy out other mines that competed with them and hence created a large barrier to entry. Today, they control about 40% of the world's diamonds. This is mainly due to the restructuring of their business due to increased awareness of blood diamond sales and things like that.  Another example is the cable company in your local area. If they have a contract with your city, they have a government-backed or government-insured monopoly that says that no other competition can come in and offer that same type of product.



## **Perfect Competition**

An industry market structure characterized by a very large number of firms selling a homogeneous (identical) product.

# **Monopolistic Competition**

An industry market structure characterized by a large number of firms selling similar products.

#### Oligopoly

An industry market structure characterized by a few firms selling similar products.

## Monopoly

An industry market structure characterized by one firm supplying a unique product to the entire market. Barriers to entry prevent competition.



## **SUMMARY**

Today we learned about **supply and demand**, including the supply curve and the demand curve, and how they react together and affect market and equilibrium price. We also learned about the four types of **economic markets**: perfect competition, monopolistic competition, oligopoly, and monopoly.

Good luck!

Source: ADAPTED FROM SOPHIA INSTRUCTOR JAMES HOWARD



## **TERMS TO KNOW**

#### **Equilibrium Price**

The price at which quantity demanded and quantity supplied meet.

#### **Market Price**

The current price of a good or service which a customer is willing to pay.

#### **Monopolistic Competition**

An industry market structure characterized by a large number of firms selling similar products.

#### Monopoly

An industry market structure characterized by one firm supplying a unique product to the entire market. Barriers to entry prevent competition.

#### Oligopoly

An industry market structure characterized by a few firms selling similar products.

#### **Perfect Competition**

An industry market structure characterized by a very large number of firms selling a homogeneous (identical) product.

#### **Shortage**

When there is more demand for a product than supply.

## Surplus

When there is more supply of a product than demand.