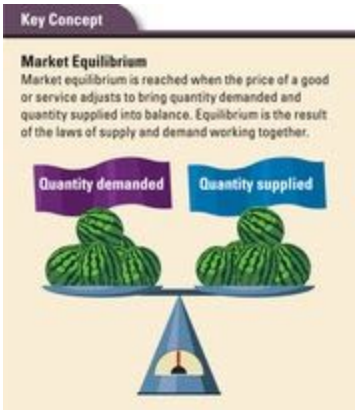
What Happens When Demand Meets Supply?

If you have ever been to a farmers market or a flea market, you have probably seen people haggling over a price. You also surely noticed that it took an agreement between a buyer and a seller before a deal was made. If the buyer did not like the price, he or she might have walked away. If the seller had not wanted to accept the buyer's offer, no sale was made. You may think of such encounters as simple purchases. But to an economist, they represent the coming together of demand and supply.



Market Equilibrium: The Point Where Buyers and Sellers Agree

In a market where consumers and producers are completely free to buy and sell goods and services, demand and supply work together to determine prices. This is true whether the market is a local farmers market or a global market. The very interaction of demand and supply drives prices to a point called **market equilibrium**. At this point of equilibrium, the quantity of a good or service that consumers are willing and able to buy equals the quantity that producers are willing and able to sell. The quantity demanded, in other words, equals the quantity supplied.

Market equilibrium can be compared to the point reached by a balance scale when each side holds an object of equal mass. The beam of the scale is level. It does not tip up or down. The opposing forces balance each other to create stability. Likewise, when a market is in equilibrium, demand and supply are balanced. Both consumers and producers are satisfied. Neither side has any reason to tip the scale.

Consider watermelons being sold at a weekly farmers market. Suppose that when the season opens, local farmers charge $6.50 per seedless watermelon, hoping to sell 350 melons at this price. You and other customers try to bargain the price down, but the farmers will not budge. Most customers walk away, and the farmers sell only 50 melons.

The next week, the farmers bring 300 new melons and reduce the price to $6.00 a melon. The price is still too high for you and many others. The farmers sell 100 melons and have 200 left over.

Two weeks later, the farmers bring 200 fresh melons to the market and reduce the price to $5.00. All 200 melons get sold, and everyone who wanted to buy a melon got one. The farmers decide to keep the price at $5.00 and bring 200 melons to market each week. At this price, the quantity of melons demanded by buyers equals the quantity supplied by farmers. The melon market at this farmers market has reached equilibrium.

What if the farmers were to reduce the price even more? Let's assume they want to quickly sell 100 melons. They reduce the price to $4.00 a melon. At this price, customers are eager to buy. They demand 300 melons, 200 more than the farmers have to sell. You do not get a watermelon because they are sold out.

Figure 6.2

Reaching Market Equilibrium

A market reaches equilibrium when the quantity demanded by consumers equals the quantity supplied by producers. On the graph, equilibrium is found at the point where the demand and supply curves intersect.

- What is the equilibrium price at this point?
- What is the equilibrium quantity?

Watermelon Demand and Supply Schedule

Price	Quantity Demanded	Quantity Supplied
$4.00	300	100
4.50	250	150
5.00	200	200
5.50	150	250
6.00	100	300
6.50	50	350

The demand and supply schedule in Figure 6.2 shows the quantity of melons demanded and supplied at each price in the market. When these data are plotted on a graph, the resulting demand and supply curves intersect. This point of intersection is the point at which the market is in equilibrium. At the equilibrium point, the quantity of melons demanded equals the quantity supplied.

The price marked by the equilibrium point on a supply and demand graph is known as the **equilibrium price**. At this price, supply and demand are in balance. This price is also known as the **market-clearing price** because at this price, the market will be “cleared” of all surpluses and shortages. At the farmers market, for example, no customer who wants a melon will go home empty-handed when melons are sold at the equilibrium price of $5.00. Nor will any farmers go home with leftover melons.

The quantity marked by the equilibrium point on the same graph is called the **equilibrium quantity**. At this quantity, the amount of a good or service supplied by producers balances the quantity demanded by consumers. In this example, both the graph and the schedule show that the equilibrium quantity is 200 melons.

Prices Move to Bring Markets into Balance

When supply matches demand, consumers and producers both come away satisfied. True, consumers would always be happier to pay less and producers would always be happier to charge more. But in a competitive market, prices are negotiated, not dictated by one side or the other.

A farmers market is a good place to witness the communication that passes between consumers and producers. If a farmer sets prices for a product, such as a watermelon, too high for most shoppers, some consumers will try to drive the price down with hard bargaining. Others will look the goods over in silence and then walk away. On the other hand, if a farmer sets prices too low, early-bird bargain hunters will flock to the stall, sweeping up every melon in sight. The farmer who knows how to read these signals will respond by adjusting the price of melons up or down to match the current demand.

Such interaction between consumers and producers will eventually establish the equilibrium price for watermelons in that market. This equilibrium price—the price at which shoppers agree to buy all the melons the farmer agrees to sell—is the "right" price for both parties.

What goes on at a farmers market is a simplified version of the communication that takes place between all producers and consumers. In a larger market, this kind of negotiation happens more slowly and perhaps less personally than at a local farmers market. But the process is the same. Consumers and producers send each other numerous "trial and error" messages.

Consider, for example, a new product on the toy market—a helicopter that can be controlled by a smart phone. If the producer of this toy helicopter were to price it at $100, and few consumers were to purchase it, consumers would be sending a message to the producer to reduce the price or be left with helicopters on the shelf. On the other hand, if consumers were to form lines out the door to purchase the toy at that price, they would be sending a message to producers that the price may be too low.

The interaction between consumers and producers automatically pushes the market price of a good or service toward the equilibrium price. **Market price** is the price a willing consumer pays to a willing producer for the sale of a good or service.

The process by which markets move to equilibrium is so predictable that economists sometimes refer to markets as being governed by the law of supply and demand. This is a shorthand way of saying that in a competitive free market, the law of supply and the law of demand will together push the price of a good or service to a level where the quantity demanded and the quantity supplied are equal.

Economist Alfred Marshall, who helped develop modern theories of supply and demand, famously compared supply and demand to the blades of a pair of scissors. It would be impossible to determine, he wrote, whether it is the top blade or the bottom blade that cuts through a piece of paper. The two blades operate in unison. In the same way, the laws of supply and demand operate together to arrive at equilibrium.