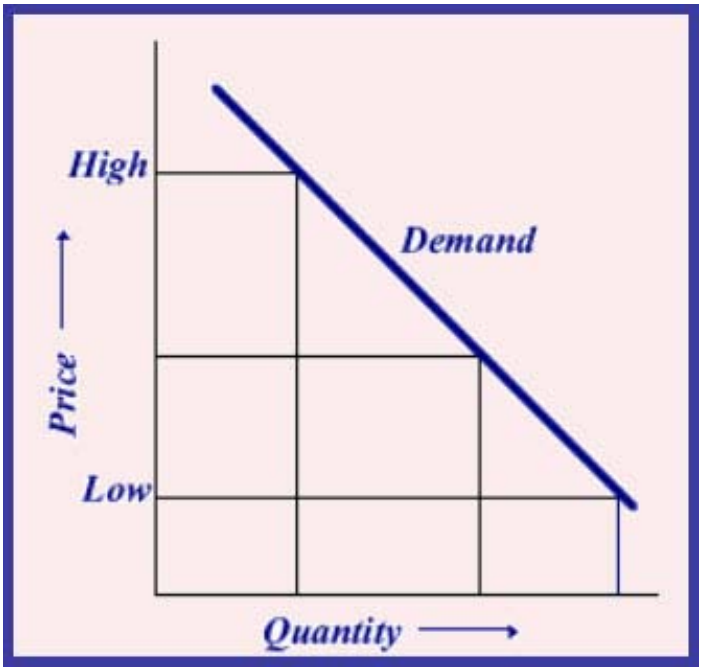
DEMAND: THE CONSUMER RULES



The Law of Demand Pictured on a Demand Curve

Unit Overview

If someone asked you to define the word *demand*, you would probably say that it is the desire to have a particular item. To an economist, however, demand is something more. Yes, it is the desire for a particular product, but it is also the ability and willingness to pay for that product. How does this affect the decisions of what, how and for whom to produce? What is the relationship between the price an individual is willing to pay and the quantity in demand? What changes affect the demand curve, and how do they impact consumers? You will find the answers to these questions in this unit so let's get started.

How an Economist Defines Demand

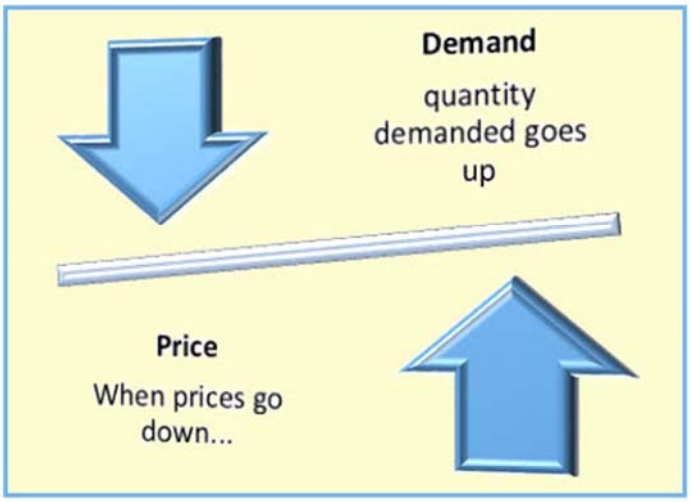
The study of economics is divided into two major categories—**microeconomics** and **macroeconomics**. The two terms are based on the Greek prefixes micro, meaning small, and macro, meaning large. Macroeconomics examines the big picture by focusing on the behavior and decision-making of entire economies. On the other hand, microeconomics analyzes the behavior and decision-making of smaller units, such as individuals, families, households and businesses.

One important topic covered under microeconomics is the concept of demand. Generally, people think of demand as the desire to own a particular item. For an economist, however, desire is just one of the factors that creates a **demand** for something. Consumers must not only want a product but must also have the ability and willingness to pay for that product. In the market system, buyers demand goods, and sellers supply them. This interaction between the two groups leads to agreement on the price and the quantity that is produced.

Go to Questions 1 and 2.

The Law of Demand

The **law of demand** simply puts into words something that every consumer knows to be true. It states that consumers buy more of a good when its price decreases and less of a good when its price increases. In other words, when the price of a certain product is high, consumers will buy less; when the price is low, consumers will buy more. All of us recognize this on a daily basis when we make purchasing decisions. For example, would you buy a doughnut for breakfast if it cost $1? In fact, at that price, you might even buy two or three. Would you buy that same doughnut if it cost $2? It is likely that fewer people would purchase a doughnut at this price. Even a true doughnut lover would probably purchase one or two rather than three or four under this condition. As the price of a doughnut goes higher and higher, fewer and fewer people will agree to buy it.



Go to Questions 3 and 4.

Human Behavior and Demand

The law of demand is the result of three patterns of human behavior. The **substitution effect**, **the income effect,** and the **principle of diminishing marginal utility** describe different reactions that encourage consumers to change their spending habits. They also explain why price increases or decreases influence the number of goods that are purchased. When the price of a doughnut goes up, doughnuts become more expensive than other options, such as breakfast sandwiches or bagels. This causes a drop in the number of doughnuts demanded by buyers. A consumer could eat breakfast sandwiches three days a week and could decide to purchase doughnuts only two days per week. This change in spending habits is due to the substitution effect. Consumers react to an increase in prices by purchasing less of one good and more of another. The substitution effect also occurs as a result of a drop in prices. When the price of doughnuts goes down, consumers will buy more, and the demand for doughnuts will increase. They will be less likely to purchase other breakfast items as substitutes.

Televisions: Name Brands or Lesser-Known Brands?

A change in prices impacts our feelings and emotions. If costs increase, we feel poorer. When our limited budgets no longer cover as many concert tickets, clothes or doughnuts as they once did, we feel as if we have less money and cut back on some items. The income effect occurs when we buy fewer doughnuts without increasing our purchase of other foods. Of course, the income effect operates in reverse when prices decrease. We feel wealthier when prices are lower. This leads to greater spending and increased demand. It is also the basis for the law of demand—when a good's price is lower, people buy more of it; when a good's price is higher, people buy less of it.

As you know, economists apply the word ***utility*** to describe the usefulness or satisfaction that a person receives from a particular good or service. It is, after all, the reason that we purchase something in the first place. However, do we get the same amount of satisfaction when we buy more than one of the same item? The answer to this question is based on the economic principle of diminishing marginal utility. Consumers derive the most satisfaction from their first purchase of a particular product and less if they buy the same product a second time. Utility continues to decrease, or diminish, with each additional purchase of the same good. For example, when you buy a newspaper, why do you not buy more than one copy of the same publication? Buyers gain little or no satisfaction from reading the same stories again. Therefore, additional purchases of the same newspaper are subject to diminishing marginal utility.

Go to Questions 5 through 7.

Illustrating the Law of Demand

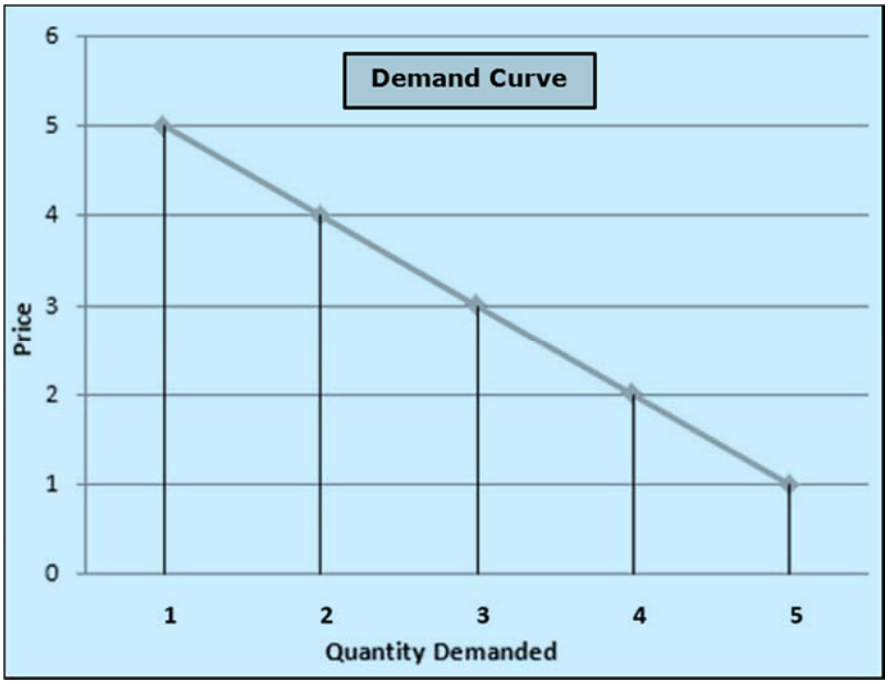
Mark is chairperson of the student council's fund-raising committee at his school. The committee has decided to raise money by selling doughnuts before classes every morning for a few weeks. The members have decided on the type of doughnut to sell but are debating how much to charge per doughnut. They conduct a poll to see what prices students would be willing to pay for this item. To analyze this information, however, Mark and his committee need to think like economists.

A **demand schedule** is a tool used by economists to organize data. It lists in a table the quantity of a good that people will buy at each price in the market. The table below shows the numbers of doughnuts that students are willing and able to purchase at specific prices.

Demand Schedule	
Price of a Doughnut	**Quantity Demanded**
$1	5
$2	4
$3	3
$4	2
$5	1
$6	0

The committee could also study the figures on this demand schedule by plotting them on a graph known as a **demand curve**. It pictures the quantity demanded at each and every price that might be present in the market. When an economist transfers the numbers from a demand schedule to a graph, he or she always marks the **vertical axis** with the lowest possible price at the bottom and the highest one at the top. The **horizontal axis** shows the lowest possible quantity demanded on the left and the highest on the right. Each pair of price and quantity-demanded

numbers from the schedule are plotted on the graph. The demand curve emerges when the economist connects the points.

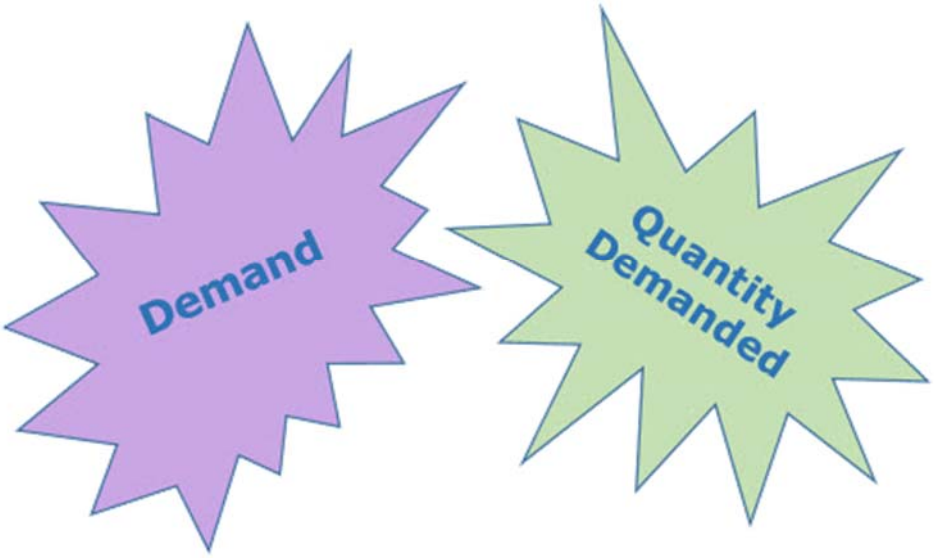


Notice that the demand curve slopes **downward to the right**. As the price decreases, the quantity demanded increases. This means that a demand curve is just another way of stating the law of demand, which emphasizes that higher prices will always result in less demand. All demand schedules and curves support the law of demand. However, demand schedules and demand curves have limitations. They both assume that other factors, which could affect demand, remain the same. In the case of doughnuts, the quality, size and ingredients could affect the students' demand for the product. In other words, demand schedules and curves are only accurate as long as there are no changes other than price. Economists refer to this assumption as ***ceteris paribus***, a Latin phrase meaning *all other things remaining the same or constant*. When price is the only thing that changes, we move along the same demand curve to a different quantity demanded. The curve itself, however, does not move.

Go to Questions 8 through 13.

Why Demand Shifts

As you have already discovered, economists often define words or phrases differently than the average person would expect. This is especially true of the terms ***demand*** and ***quantity demanded***. Economists define demand as a consumer's desire, willingness and ability to purchase something. Demand is created when the buyer wants the product and is able to afford it. In contrast, quantity demanded represents the exact amount, or quantity, of a good or service that the consumer is willing to buy at a specific price.



Changes in quantity demanded are due to price, and all other things remain constant (*ceteris paribus*). Increases or decreases in demand, however, result from changes in a number of other factors, such as consumer income, consumer taste, population, expectations and related goods or services. Economists call these influences **determinants**. When consumers are willing to buy **different amounts** of the product at the **same prices**, the demand curve itself shifts to the right if demand increases or to the left if demand decreases.

- **Consumer Income**: A change in consumer income is one determinant that can affect demand. If incomes increase, buyers purchase more products and choose higher-priced goods and services. Items purchased under these

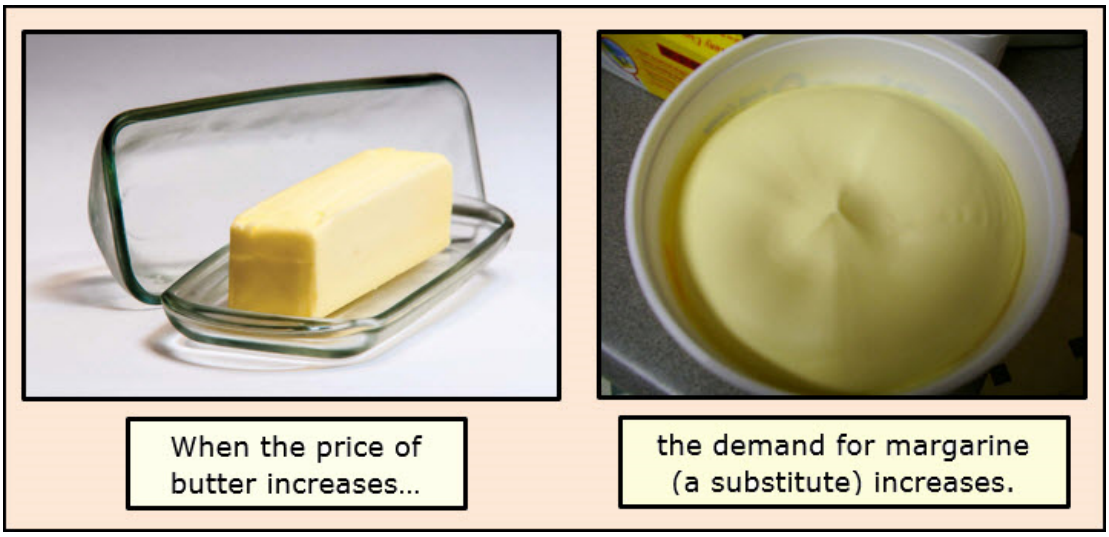
conditions are called **normal goods**. A decrease in incomes, however, results in a decrease in demand. In this situation, consumers are more likely to buy **inferior goods**, a term economists use to refer to products that people would probably not buy if their incomes were higher. For example, if a consumer experiences a decline in income, he or she may choose to buy a used car (classified as an inferior good) rather than a new car (a normal good).

- **Consumer Taste**: Consumers do not always want the same things. For this reason, changes in taste and preference also affect demand. A different season, a new fashion trend, an advertising campaign, new information and updated technology can influence demand for a particular item or service. People will often stand in long lines for hours to be the first to buy the latest smart phone or athletic shoe. When consumers want more of a product, they buy more of it at each and every price available in the market. This shifts the entire demand curve to the right. On the other hand, people may also grow tired of a particular good and demand less of it at each price point. This moves the entire demand curve to the left. Toys are a good example. Certain ones may be very much in demand during one Christmas season but totally out of fashion by the next one.

Winter Weather Increases the Demand for Snowboards and Decreases the Demand for Swimwear.

- **Changes in Population**: When the size of the population changes, demand for most products changes, too. More people must be sheltered, clothed and fed when the population increases. For example, American soldiers married and started families in record numbers when they returned from World War II. This resulted in a jump in the birthrate, known as the **baby boom**, from 1945 through 1964. Towns had to build new schools to accommodate the growing number of children. When these same children entered college, universities had to build more dormitories and classrooms. Today, the baby boomers are retirees, and the market is adjusting to their demands for the services desired by senior citizens.

- **Changes in Expectation**: The way in which individuals envision the future or anticipate the outcome of certain events is another determinant that influences demand. If consumers expect that the price of a particular good or services is about to increase, demand rises because buyers purchase more before the price goes up. When consumers expect the price of a good or service to decrease in the near future, demand temporarily decreases because buyers delay their purchases until the price drops. For example, let's say that you are in the market for a new pair of running shoes. The salesperson suggests that you purchase them today because the store plans to increase its prices next week. Because you expect a higher price in the future, you and other customers increase the demand for the shoes today. If, on the other hand, the salesperson mentions that the same shoes are going on sale next week, it is likely that you would postpone your purchase. Because you expect a lower price in the future, you and your fellow buyers decrease the demand for the shoes today.



- **Changes in Related Products**: Changes in related goods or services also impact demand. Economists divide related goods into two categories: **substitutes** and **complements**. Substitutes are products that can be used to take the place of others. The purchase of generic canned vegetables as opposed to name-brand canned vegetables is one example. For the most part, the demand for name-brand canned goods increases when the price of the generic version, or substitute, goes up. For a minimal or no-price difference, consumers frequently opt for the name brands and increase the demand for them. On the other hand, the demand for the brand-name product decreases when the price of the generic, canned vegetables decreases. This occurs because a significantly lower price often inspires shoppers to select generic substitutes. In this situation, name brands experience a decrease in demand. Complements, such as computers and computer software, refer to products that are purchased and used together. If computer prices decrease, consumers demand more computers and more software. If the price increases, buyers demand fewer computers and, in turn, less software.

Go to Questions 14 through 22.

What's next?

The market system emphasizes the consumers' ability to buy what they want and can afford. At the same time, it stresses that sellers make enough profit to stay in business. In the next unit, you will learn about the supply side of the market. How do economists define supply? Is there a law of supply that counterbalances the law of demand? Are you a supplier? Before moving on to find the answers to these and other questions concerning supply, review the names and terms found in this unit; then, complete Questions 23 through 32.

Go to Questions 23 through 32.