It's the Law

Supply and Demand

Supply

Demand

Elasticity

Tom's SHELL

Self-Serve	Cash or Credit
Regular	ARM 9
Plus	LEG 9
Premium	FIRST BORN 9

Balance the market

Find the magic number

Give and take

So What?

A new style of Nikes just came on the market. The shoes are selling for $150 a pair, and customers are lining up outside stores to buy them. Some stores are running out of the Nikes. As a result, some of the people who were able to buy the shoes are reselling them for more than $150. Nike is increasing production and rushing more shoes to retailers as quickly as possible. Then, almost overnight, there are plenty of the new Nikes available. The lines at the stores disappear.

Welcome to the world of supply and demand! What was "hot" yesterday is "not" today. But, why is that important? It has an impact on *you* as well as on businesses. What if you wanted to buy the Nikes, but the stores were sold out? There is demand, but no supply. What happens when Nike increases production and there is an abundance of shoes? There is supply, but the demand is decreasing. The goal is to match supply with demand so you can buy all of the shoes you want, and Nike can sell all of the shoes it makes.

Objectives:

- **A** Explain the nature of supply and demand.
- **B** Explain factors that affect supply and demand.

Objective A

How Much Do They Want?

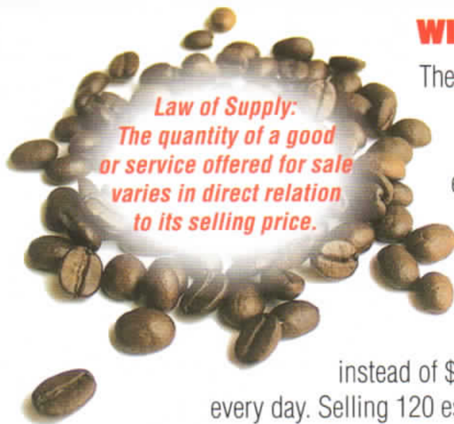
Coffee shops and Internet cafes are booming. You can find one on almost every corner. Why is that? The answer is there is demand for the products they sell. This means that consumers are ready to buy at a particular price at a particular time. Many customers are willing to pay the price to drink specialty coffee and surf the Web. Sounds simple, doesn't it? Actually, it's a little more complicated than that.

What They Can Afford

For demand to exist, consumers must have a desire for a good or service. Customers want specialty coffee, so there is demand. But here's the catch. Potential customers also must have the buying power to pay for the good or service. If customers want specialty coffee but do not have money to pay for it, there is no demand. For example, a person might want a $5 espresso roast grande but only have $3.

Furthermore, paying for the coffee means that customers spend money on coffee rather than on something else. They are giving up some buying power in exchange for the coffee. Customers must be willing to do that, or there is no demand for coffee. An example is a person who has $5 but prefers to buy a value meal. In both cases, demand for coffee does not exist.

As you can see, the money involved has a lot to do with demand. In fact, there is a law of demand which states that the quantity of a good or service that consumers will buy varies inversely with the price of the good or service. In other words, consumers usually will buy more at lower prices, and less at higher prices. For example, how many espresso roast grandes would you buy if they were $8 each? Would you buy more if they were $2 each? The answer probably is yes.



What Is Available

The other side of the story is supply. Supply is the quantity of a good or service that producers are able and willing to offer for sale at a specified price in a given period of time. For example, the corner coffee shop may have enough ingredients to make 100 espresso roast grandes each day. That is the amount, or supply, that is available to sell.

Money also has a lot to do with supply. According to the law of supply, the quantity of a good or service that will be offered for sale varies in direct relation to its selling price. The higher the price, the greater the quantity supplied because producers are able to earn more profit. For example, the coffee shop is able to sell an espresso roast grande for $6 instead of $5. Therefore, the shop decides to keep enough ingredients in stock to make 120 of them every day. Selling 120 espresso roast grandes for $6 each means higher profits. However, if the shop is only able to sell the coffee for $4, it might cut back on the supply because profits will decrease.

Make It a Combo

The law of supply and the law of demand need to be considered together. By combining them, we get the law of supply and demand. This law states that the supply of a good or service will increase when the demand is great and decrease when demand is low. When demand is great, prices usually increase, and the supply increases. When demand is low, prices usually decrease, and the supply also decreases. If you think about it, this makes sense. It is profitable for businesses to sell more products when customers want them and are willing to pay the price.

The combination of supply and demand has an influence on what is available. Businesses tend to supply more of a product when they think consumers are willing and able to buy more. On the other hand, they usually decrease the supply when they find that fewer consumers will buy. Businesses are trying to balance supply and demand so they have the products that customers want. They are trying to achieve equilibrium—the point at which the quantity supplied is equal to the quantity demanded.

What's the Market?

Furthermore, supply and demand influence prices. As supply and demand change, prices also change. This change creates either a buyer's market or a seller's market.

When a **buyer's market** exists, the price of a product is low because there is a large supply and a small demand. This is the best time for consumers to buy because they can purchase products at reduced prices. Businesses must lower prices to encourage consumers to buy the large supply. For example, an automobile manufacturer produces 100,000 two-seater convertibles, but is only able to sell 60,000 at the original price of $50,000. To sell the remaining 40,000, the manufacturer needs to lower the price because it has overproduced in relation to the actual demand for the convertible. The manufacturer might even lose money because it must lower the price to the point that consumers are willing to buy. As a result, the consumers who buy the convertibles at the reduced price are able to conserve their money.

What happens when this situation is reversed? When the quantity demanded is much greater than the quantity supplied, prices are higher and a **seller's market** exists. The demand is so great that consumers will buy regardless of high prices. For example, suppose the automobile manufacturer produced only 30,000 two-seater convertibles, but 60,000 consumers wanted them. Then, the manufacturer could charge more than $50,000 because many consumers are competing to buy the convertibles. Consumers are willing to pay the price to own the car.

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Objective

What's the Price?

How do businesses figure out to what extent the changes in price will affect sales? The key to this problem is **elasticity**, which is an indication of how changes in price will affect changes in the amounts demanded and supplied. When consumers adjust their demand for products based on price, demand is said to be **elastic**. This means that demand changes when prices change. When prices go up, consumers often cut back and buy less, which leads to a decrease in demand. On the other hand, consumers often demand more when prices start to fall.

The goal of businesses is to find the equilibrium price. This is the point at which the quantity of a good that buyers demand is equal to the quantity that sellers are supplying. Then, everyone wins. However, this situation rarely occurs because there are so many goods available. Also, many of these goods are extras or luxuries that consumers do not need to survive. Think of the wide range of items that you can purchase if you have the money—DVDs, plasma TVs, jewelry, cruises, etc. The demand for these goods is very elastic and often driven by price. For example, more consumers will book a cruise when the price is low than when it is high.

Elasticity

is an indication of how changes in price will affect changes in amounts that are demanded and supplied—consumer demand often changes when prices fluctuate.

Another factor that often creates elastic demand is the availability of substitute products. Let's focus on the cruise, again. Many cruise lines offer trips ranging from three days to two weeks. They also offer many different types of accommodations from an inside cabin to a suite with a balcony. If one cruise is too expensive, consumers have many other less costly ones to choose from. They can make substitutions to get the cruise that has the right price.

Finally, the amount of a consumer's income that must be spent on a product also creates elastic demand. For example, expensive products such as cars, houses, and boats usually require the use of a lot of income. The demand for those items changes based on the level of a consumer's income. Those consumers who have high incomes are more likely to buy those products than consumers in the middle- or low-income range. The reason for this is that most consumers spend the majority of their income on the goods and services they need to survive. The demand for these types of goods and services usually is inelastic.

Inelastic demand exists if the demand for a good or service is constant, even if the product's price changes. Some products are considered necessities that consumers must purchase regardless of their cost. Most consumers consider it necessary to pay for electricity, prescription drugs, gasoline, and certain food products. The demand for these products will remain about the same even when prices increase. For example, when the price of gasoline increases, consumers continue to buy because they need to operate their automobiles. They need to be able to drive to work or take their children to school.

Although demand may be inelastic, it still might change slightly. However, this change is not significant. For example, the demand for milk is usually inelastic because milk is considered a necessity. When the price increases, some consumers may not buy as much but the overall demand will stay about the same. Therefore, price does not influence inelastic demand the same way that it influences elastic demand.

Summary

The economic principle of supply and demand determines what goods and services will be available and how much they will cost. Also, understanding how supply and demand interact is basic to understanding how prices are determined.

TOTAL RECALL

1. What is demand?
2. Explain the law of demand.
3. What is supply?
4. Explain the law of supply.
5. Explain the law of supply and demand.
6. What is a buyer's market?
7. What is a seller's market?
8. What is elastic demand?
9. What three factors determine a product's elasticity?
10. What is inelastic demand?

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What Makes the Difference?

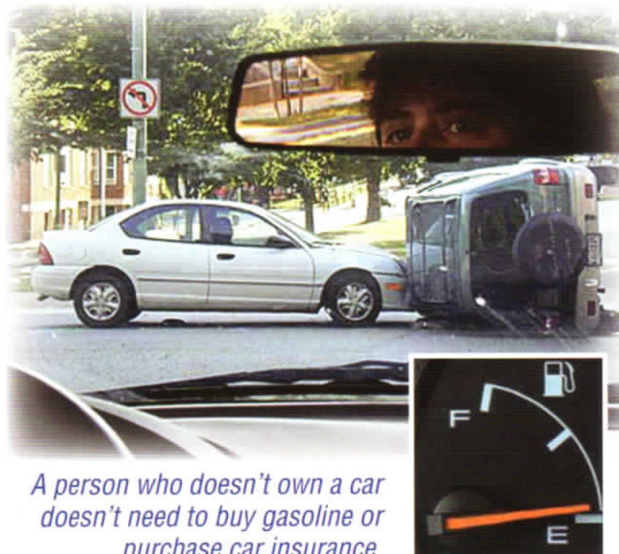
You might think that price is the only factor that affects supply and demand. Although price has a lot to do with it, there are many other factors that have an important influence.

Demand or No Demand

First, let's examine the major factors that affect demand. Some of these factors influence the type of product in demand as well as the quantity demanded.

Utility

The usefulness, or utility, of a product to a potential consumer determines the basic demand for the product. If the product is useful or needed, there will be a demand for it. However, usefulness of a product depends on the consumer. What is useful to one person may be of no use to another person. For example, a person who doesn't own a car doesn't need to buy gasoline or purchase car insurance. However, these products are very useful to car owners because they cannot operate their vehicles without them. The utility of these products to car owners creates demand.



A person who doesn't own a car doesn't need to buy gasoline or purchase car insurance.

The Gray Zone

The weather service was predicting a blizzard to hit the northeast part of the country. Consumers started to stock up on supplies in anticipation of not being able to leave their homes for several days. Shelves were quickly emptied of bottled water and canned goods.

In one small town, the local grocery store owner raised prices on the products that were on the shelves. A loaf of bread went from $1.75 to $3.25, and a jar of peanut butter went from $2.80 to $4.50. Even with the price increase, customers bought all of the stock and asked for more. Fortunately, the store had additional products in the storage area to put on the shelves. However, now the price of bread was $4.75 a loaf, and peanut butter was $6.75 a jar. When only a few items were left, the prices went up even more.

After the storm had passed, some of the store's customers talked about the way the store owner had handled the situation. They thought maybe the owner had taken advantage of the demand to raise prices because it was the only store in town. What do you think? Is it always ethical to raise prices when the demand is great and the supply is limited?

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How useful consumers think some products are also depends on a person's age, gender, occupation, education, and income. For example, women have more use for cosmetics than men do. College students need to buy textbooks and supplies that other consumers do not need. Also, external influences have an effect on a person's idea of usefulness. Advertisements, commercials, and store displays encourage people to think they need certain products. And, don't forget about peer pressure. Consumers' friends have an impact on the products they demand.

Buying power

If consumers do not have money to spend, they cannot buy products. Therefore, buying power, the amount of money available, is a major factor affecting demand. For example, if you spend all of your income on necessities such as rent and utilities, you will not have money available to buy other goods. However, if you receive a raise that gives you an extra $40 a week, you will have money to spend on other products. Your buying power just increased. Now, you might be able to purchase the DVD player or microwave oven that you want (demand).

Price of other goods

Expensive

In many cases, there are substitute products available. For example, a person who needs to buy new tires has many options depending on the type of vehicle. There are a variety of tires made by several manufacturers in different price ranges. If the person only wants inexpensive tires that will last a short time, there is no demand for high-quality, expensive tires that come with a 60,000-mile warranty. Therefore, if lower priced substitutes provide what customers want, the demand for those items increases. At the same time, the demand for the higher priced product decreases.

Inexpensive

The price of complementary products also has an effect on demand. Some products are used together so the demand for the main product influences the demand for the complementary product. For example, snow skiing is a popular activity. However, if the cost of lift tickets increases substantially, the demand might decrease. If fewer people are skiing, the demand for skis and accessories also decreases.

Consumers

Consumers themselves have an effect on demand. For example, the number of consumers in certain groups often determines the demand for certain products. There is more demand for daycare when there is an increase in the number of working mothers. There is more demand for retirement communities when there is an increase in the number of senior citizens.

A consumer's standard of living also influences the decision to buy or not to buy. People usually buy products to maintain the quality of life and general living conditions to which they are accustomed. For example, the demand for Rolls Royce automobiles is significantly less than the demand for Chevrolets because buying a Rolls Royce reflects a very high standard of living.

Finally, consumer expectations affect demand. If consumers think prices will drop and they will get a bargain later, they often wait to buy. This decreases demand. However, they might demand a lot now if they think the price is the lowest it will ever be.

To Supply, or Not to Supply

Since businesses try to provide the products that consumers want, it is easy to understand why demand has a big influence on supply. When demand is high, businesses increase production to make sure that adequate quantities are available for sale. When demand is low, businesses cut back to avoid having too many products that cannot be sold. However, there are other factors that cause changes in supply.

Cost of production

Businesses consider the cost of producing a product when deciding how much of it to supply. If production costs are higher than the prices most consumers will be willing to pay, businesses will produce less. They will supply only enough to meet the limited demand. Remember the Rolls Royce? It is expensive to make them, and the selling price is very high. Therefore, the company produces only a few to sell to those who can afford to pay the price.

On the other hand, when production costs decrease, businesses often make more because they can charge a lower price. Consumers usually buy more when prices are low, so businesses increase the supply. For example, the cost of producing DVD players has decreased significantly over time. As a result, the supply has increased, while the selling price has continued to go down.

Another issue that affects the cost of production is labor costs. When employees demand and receive higher wages and better benefits, the cost of production increases. This might result in a business making fewer products but charging more for each one. Or, a business might decide to stop making the product.

Limited demand: *Rolls Royce—expensive to make, and the selling price is very high. The company produces only a few to sell to those who can afford to pay the price.*

Number of producers

As more and more companies enter the market and provide similar products, the supply also increases. For example, at one time only a few clothing manufacturers made jeans. As the popularity of jeans increased, more and more companies started making jeans. Today, department stores produce their own private-label jeans, and sell designer and brand-name jeans made by others. Consequently, there is an enormous supply of jeans on the market.

Future prices

Would you sell a product today for $10 if you knew that you could sell it for $20 in two months? Probably not. The same is true of businesses. If they expect prices to increase substantially, they might wait to sell. That affects supply because businesses are keeping products off the market until the price is right. For example, if coffee growers think the price of coffee beans will double in the near future, they might store the beans until then to earn more profit. In the meantime, the supply of coffee decreases.

On the other hand, if businesses think prices will decrease in the future, they might increase supply now. Then, the supply in the future will be less because of lower prices.

Disasters and emergencies

The weather and other natural disasters may influence supply. For example, if orange trees in Florida freeze, the supply of Florida oranges will decrease. If the wheat crop in Iowa is destroyed by a tornado, the supply of flour will be reduced. Or, a snow emergency might wipe out a city's supply of road salt, so there is none available for future storms.

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Government

Various governmental rules and regulations have an effect on supply. For example, there are taxes on many types of imported goods that are intended to limit the supply of those goods. There are also taxes on products that the government thinks are harmful in order to control the supply.

The government places restrictions on the use of certain resources that often affects supply. An example is high-sulfur coal, because the sulfur is a pollutant. Furthermore, the government pays some farmers *not* to plant certain crops, which reduces the supply.

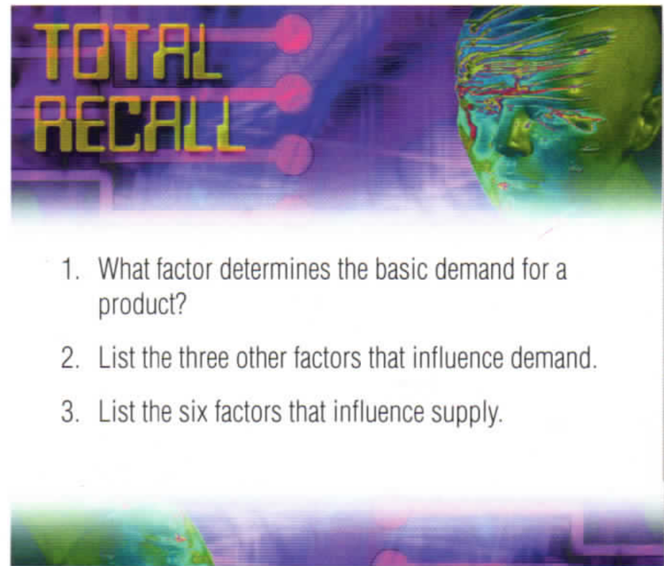
Technology

Advances in technology tend to lower the cost of production and increase supply. At one time, most products were made by hand. Now, computerized production methods and automated equipment produce large quantities in a short period of time. They have replaced the large number of employees needed to do the same amount of work. Also, advances in technology usually reduce prices over time, which leads to an increase in supply. For example, when television was first available, the supply was limited, and the price was high. Today, there is a huge supply of TVs in all sizes, shapes, and styles. You can buy a small black-and-white for less than $30!

Finally, technology has led to a decrease in the supply of some products, and has even eliminated the supply of others. At one time, office employees used typewriters instead of computers. Telephones have gone from rotary dial, to touch-tone, to mobile. The mimeograph machine that was once used to produce copies is no longer made. Neither is the Commodore 64, the popular home computer of the 1980s.

Summary

Although price affects supply and demand, many other factors also have a major influence. Other than price, factors that affect demand include utility, buying power, price of other goods, and consumers themselves. Demand also affects supply. Other factors that affect supply include cost of production, number of producers, future prices, disasters and emergencies, government, and technology.



1. What factor determines the basic demand for a product?
2. List the three other factors that influence demand.
3. List the six factors that influence supply.

Make It Pay!

Consider all of the products that are available to buy. Some are those that you buy on a regular basis because they are necessities, such as toothpaste and shampoo. Think about why you buy the brands that you do. Are you influenced by price because you have limited funds? Or, do you buy these brands for other reasons? What are those reasons?

Now, consider the products you buy that are *not* necessities, such as mp3 players. What influences you to buy them? Is it because your friends buy those products, or because you have extra money to spend? Are you willing to pay whatever it takes to have the latest electronic device?

Finally, think about the difference between buying necessities and buying the products you want. Would it matter to you if the store ran out of the brand of toothpaste you usually buy? Would it matter if the store ran out of the iPod you had your heart set on buying today? In each case, what would you do to solve your problem of supply and demand?

1375 King Avenue, P.O. Box 12279, Columbus, Ohio 43212-0279 Ph: (614) 486-6708 Fax: (614) 486-1819

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