

MI OPEN BOOK PROJECT

# Economics and You

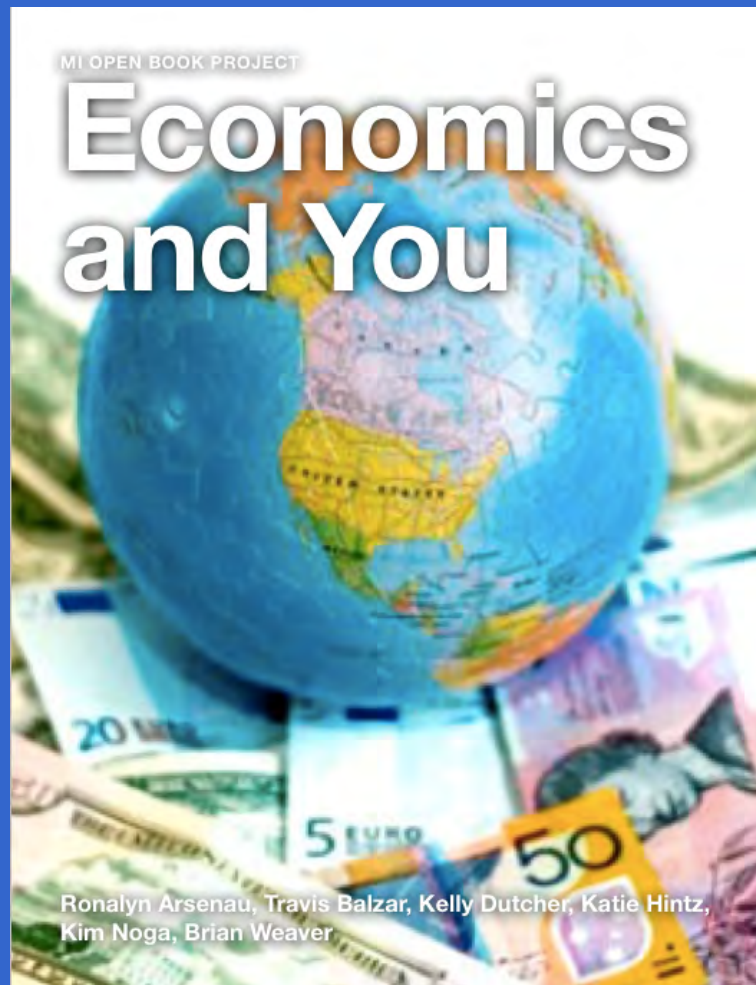
Ronalyn Arsenau, Travis Balzar, Kelly Dutcher, Katie Hintz,  
Kim Noga, Brian Weaver

# Economics and You



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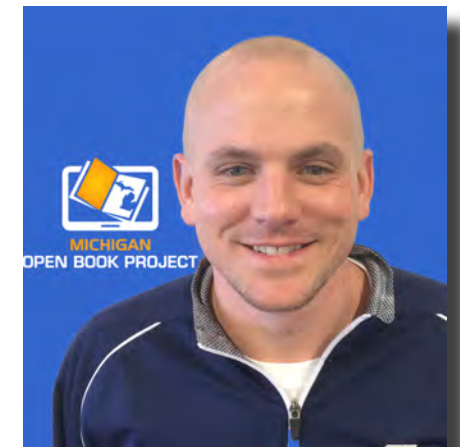
Ronalyn Arseneau teaches Economics and Business at Westwood High School in Ishpeming. She is a member of the State Executive Board of the Michigan Business Education Association, serving as Vice-President for Membership. She and her husband, Barry, enjoy traveling to spend time with their three children and their grandson.

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Travis L. Balzer is a Shepherd High School social studies teacher concentrating in Economics, Civics and History. Mr. Balzer (Mr. B) resides in Shepherd with his bride Haley, and daughters Makayla and Mia Jean. A Gladwin High School graduate. Parents Vicki and Teddy reside in Gladwin. Travis' sister, Kristal and two sons, Isaac and Adam reside in the Lansing area. Mr. Balzer earned an Economics and Management degree from Albion College and proceeded to obtain teaching certification from Saginaw Valley State University in Social Studies. In addition, obtaining a masters in Educational leadership from Grand Valley State University. Hunting, exercising including P90X, biking, running



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Kelly Dutcher teaches Economics, Civics, U.S. History, and College Readiness at Harbor Springs High School. Aside from teaching, she is also a Michigan Youth in Government advisor, and class of 2017 sponsor. Mrs. Dutcher is a graduate of Lake Superior State University where she received her BS in Social Studies and Secondary Education. She is currently working towards receiving her MA in American History and Government at Ashland University, and will spend a month this summer as a James Madison Memorial Fellow studying in Washington D.C. Kelly loves teaching at the high school level, and helping bring social studies to life for her students. She shares her life with her husband Jordan and three joyful girls: Daphne, 5; Audrey, 3; Meredith 2.







## **Katie Hintz**

### **Gladwin Public Schools**

#### *Gladwin High School*

Katie is completing her seventh year as a teacher at Gladwin High School, where she has taught every Social Studies course available, including: American Government, Sociology, Current Events, World History, Economics, Social Problems in the United States, and Law. A graduate of Saginaw Valley State University's Secondary Education Program, she majored in History, minored in Sociology and earned a Social Studies Endorsement. As Social Studies Department Chair, she was inspired to participate to the Open Book Project because of the disjointed resources that most economics teachers are forced to scrape together to create a captivating curriculum.

Currently, she is working on completing her Masters in Global History at with American Public University. Her final thesis on the Food Industry is due to be published September,

## **Kim Noga**

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Kim has a B.A. in History/ Social Studies and an M.A. in Curriculum and Teaching, both from Michigan State University. For the past 14 years she has been employed at Ionia High School where she teaches Economics, U.S. History, and Humanitarian Studies. Her hobbies include reading and traveling the world.



## **Brian Weaver**

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Mr. Weaver has been teaching high school social studies for fourteen years. After one year at New Directions Alternative High School in the Big Rapids Public Schools he moved to Big Rapids High School where he has taught US History & Geography, American Government, World History & Geography, Economics, Geography, Psychology, and Modern Social Problems. Before becoming a high school teacher, Mr. Weaver worked in higher education as a development officer and administrator. As Director of Development for Ferris State University he oversaw fund raising activities for Kendall College of Art and Design and served as Director of the Kendall Foundation. In ten years of service at Northern Michigan University he served in a variety of development posts including Director of Development Research and Director of Annual Giving. Mr. Weaver caught the teaching bug during his service in the Peace Corps on the central Philippines island of Leyte where he taught in a two-room school house. His many interests include reading, woodworking, and home improvement



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# Choices in Individual Households

## QUESTIONS TO GUIDE INQUIRY

- 1) Demand- What are markets? What factors influence consumers purchasing decisions?
- 2) Supply- What factors influence the production decisions of producers?
- 3) Price- Collectively, how do consumers and producers work to determine price?
- 4) Market Structures--How does competition impact the choices you make as a consumer?



# Demand

## QUESTIONS TO GUIDE INQUIRY

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1. **Demand-** What are markets? What factors influence consumers purchasing decisions?

In this economics unit you will explore how buyers and sellers meet together in markets to trade. Also you will look at the process of how prices are determined. Next, you will take a special look at what equilibrium is in economics as well as how it responds to a change in certain factors that affect supply or demand. Finally you will be asked to judge the fairness and efficacy of how equilibrium is reached in current American markets.

### Demand

How do we as individuals make economic decisions? Due to scarcity, we know that we have economic decisions to make each and every day. We must decide what we are going to spend our limited resources on, and where we are going to make those purchases. These decisions are impacted by many factors. So the main economic question we will be asking ourselves is this: Given limited resources, how do we, as individuals, as well as businesses, use trade-offs to make the best economic decisions possible?

Microeconomics is the study of factors that affect the economic choices of individuals, households, and businesses, as well as how changes in these factors can affect these decision makers, and how prices are determined in the

marketplace. Throughout this chapter each factor will be explored in detail in order for you to answer the following questions:

- What are markets?
- What factors influence consumers purchasing decisions?



Image source: Shutterstock:/ Den Rise

•This is Paul. Gas prices affect him because he has to pay for his own gas from the money he makes at a part-time job he has while attending school. When gas prices are high, he can't afford to drive to school and back every day, and he can't go where he'd like to with his friends on the weekends. When prices go down, he doesn't worry as much about the cost of driving."

Think about how gasoline prices impact your driving decisions. Do you drive less and purchase less gasoline when the cost of gasoline is high?

**Demand** is the desire to own something coupled with the power to obtain it. If both conditions don't exist (desire and ability), demand does not exist. Simply put, **the law of demand** states that consumers will purchase more of a good when the price of the good is lower and less when the price of the good is higher.

Bottom line: no matter what your income is, the price of a good that you desire is a strong influence on your decision whether or not to purchase it.

### Substitution Effect

The **substitution effect** takes place when a consumer reacts to a rise in the price of one good by consuming less of that good and more of a substitute good. The substitution effect can also apply to a drop in prices as well--the good in which the price has dropped may become the substitute good. As you can see, the substitution effect can impact demand. Keep this in mind as you watch how substitute goods impact the illustration of changing demand in a graph:

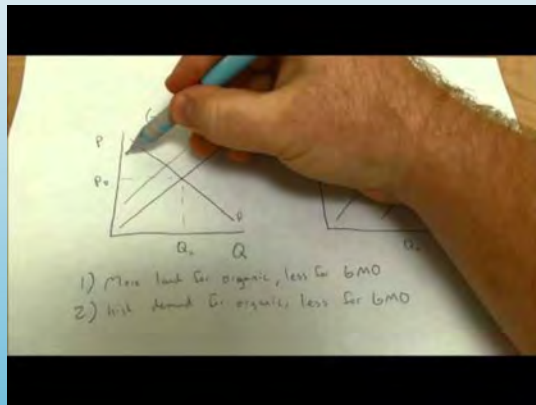
### Interactive 2.1 The Law of Demand



*Learn more about the Law of Demand in this video.*



## Interactive 2.2 The Substitution Effect



[Learn more here!](#)

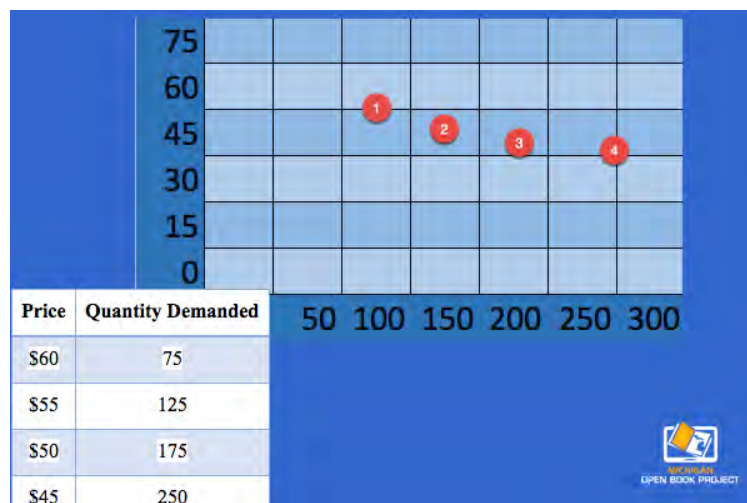
We can create a demand schedule based on the various prices people will pay for an item. We can then use this demand schedule to create a graph of demand for the item at various price points. Quantity demanded represents individual points on that demand graph. Demand, on the other hand, refers to the entire demand curve at all price points.

Let's look at an example of a demand schedule and graph.

A new video game was recently released, and the following is a demand schedule, which is a table that shows how many video games people will buy at a given price. As the price goes down, you will notice that the quantity demanded increases.

Similarly, as the price goes up, the quantity demanded decreases.

## Interactive 2.3 Demand Curve In Action



Watch this tutorial to learn how to create a demand curve.

Quantity demanded is represented by each individual point on this demand graph. Demand, however, constitutes the entire demand curve, or all of the points taken together. A demand shift will move the entire demand curve to the right or to the left. For example, if a new video game is released that uses innovative technology that no other game on the market has, then demand could increase, which would shift demand to the right. On the other hand, if the game system that this video game is played on is replaced by a newer system with more functionality, the demand for this video game would shift to the left. These are known as demand **determinants**,

When an increase in demand occurs, quantity demanded would increase at every price level, so the entire demand curve would shift to the right. When demand decreases, the entire demand curve would shift to the left, so there would be fewer quantity demanded at each price level. A shift of the demand curve to the left indicates a decrease in demand, while a shift to the right indicates an increase in demand across all price points.

Some examples of situations that would cause demand shifts include: improvements in technology, an increase (or

decrease) in consumer income levels, anticipated substantial product price increases, an increase or decrease in the number of buyers of a product, and a decrease in the availability of related products.

**ACTIVITY:**

Price per Bike	Quantity Demanded
\$1200	75
\$1000	100
\$900	120
\$750	150
\$650	175

Using the chart above, plot the demand chart either electronically using Google Docs, or on a separate sheet of paper.

There are situations that occur that change the entire demand curve, not just the quantity demanded at a certain price point. For instance, if an individual were to win a high profile mountain bike race using this brand of mountain bike, the entire demand curve might shift to the right, with the quantity demanded increasing at every price point. We would label this new demand curve D1. This new demand curve constitutes an increase in demand.

If, on the other hand, there is a defect found in the mountain bike and a recall occurs, gaining a great deal of media attention, quantity demanded at all price points may decrease, moving the entire demand curve to the left. We would label this new demand curve D2. This demand curve constitutes a decrease in demand.

These additional demand curves represent shifts in demand. Remember, a shift to the right represents an increase in demand, while a shift to the left represents a decrease in demand.

**Activity 2.1 - Create a demand schedule and graph for a product. Then describe a situation which would cause a**

**Interactive 2.4** Council for Economic Education Activity



*Complete this activity to practice your new knowledge on demand.*



demand shift to the right or left and add a demand shift to your graph.

PRICE ELASTICITY OF DEMAND

Suppose you are going out with friends to pick up a pizza. When you stop at the Pete’s Pizza, you see a sign on the door saying that since the minimum wage increased, Pete’s Pizza must raise its price of pizza by \$2.00. If you have regularly purchased pizza from Pete’s Pizza , you may very well refuse to purchase the pizza if its price increased by \$2.00. You might tell your friends that you’d rather go somewhere else to eat because you can get tacos at Jose’s Fiesta for less money than pizza at at Pete’s Pizza. In this case, the price of pizza is **elastic**.

On the way home from Jose’s Fiesta, your gas tank is on empty, so you stop to get gasoline. When you pull into the gas station, you see that the price of gasoline has increased 40 cents per gallon since you went by earlier. Because your gas tank is on empty, you decide to fill up your tank anyway, paying the increased price. The price of gasoline in this case is inelastic. Gasoline in general, is a necessity that is price inelastic because we have very little choice as to whether we put gasoline in our car or not, unless we live in a city where there are other public transportation options available.

We know that consumers react when prices of a product rise by decreasing the quantity demanded of that product. The concept of **price elasticity of demand** relates to how much quantity demanded changes based upon a change in price. In order to calculate price elasticity of demand, we would divide the percentage change in quantity demanded by the percentage change in price. The result tells us whether demand for the product is perfectly inelastic, inelastic, unit elastic, or elastic. The following chart shows the values for price elasticity of demand:

Price Elasticity of Demand Value	Result
0	Perfectly inelastic. Demand does not change when the price changes.
0-1	Inelastic. The percentage change in demand from price A to price B is smaller than the percentage change in price.
1	Unit elastic. The percentage change in demand is exactly the same as the percentage change in price. This means that a 5% increase in price would result in a 5% decrease in quantity demanded.
> 1	Elastic. The percent of quantity demanded decreases more than the percent of increase in price. This means that a 5% increase in the price of a product might result in a 10% decrease in quantity demanded of that product.

## Factors Affecting Price Elasticity of Demand

There are many factors that will affect the price elasticity of demand. Some of those factors include:

- **Substitute Availability** - If there are close substitutes available for the product, the demand will be more elastic because consumers can find an alternate product instead of paying the increased price.
- **Necessity** - If the product is considered by the consumer to be a necessity, the demand will be inelastic. On the hand, an item that is not a necessity will likely have more elastic demand.
- **Income** - The higher a consumer's income, the less elastic the price of the goods they purchase becomes. Those with higher incomes are less likely to purchase based upon price, so if the price increases, they are less likely to let that price increase affect their purchasing decision. People with lower incomes are more likely to let price increases affect their purchasing decisions.
- **Level of price** - Higher priced goods are generally more elastic than inexpensive goods. For instance, a video game console might be more price elastic than a candy bar.

- **Habit-forming goods**, such as cigarettes, tend to be price inelastic, as consumers of those goods will purchase them regardless of price increase.

### Activity 2.2:

**Name three products that are price elastic and three products that are price inelastic. Explain for each product why it is price elastic or inelastic.**



# Supply

## QUESTION TO GUIDE INQUIRY

### 1. Supply- What factors influence the production decisions of producers?

As explored in the previous chapters, individuals make decisions that will make themselves better off. The same is true of producers. The main economic question producers ask themselves is very similar: Given limited resources, how do they, as producers, make the best economic decisions they possibly can?

By the end of this chapter you will be able to answer this question:

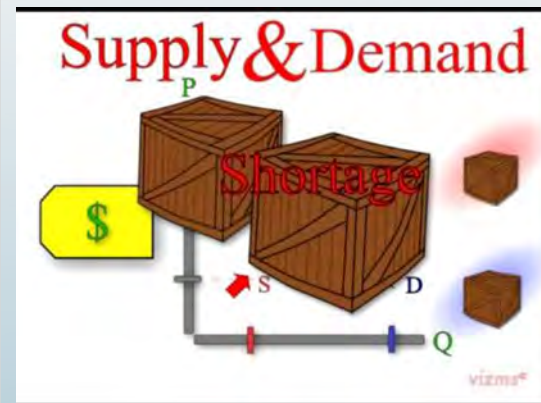
- What factors influence the production decisions of producers?

In order to understand **the Law of Supply** first a basic definition of supply is needed. **Supply** is the quantity of a good or service that producers are willing and able to offer for sale at each possible price during a given time period.

Looking at supply is not complex, it is logical.

Tip from an economist: Professor of economics Daniel Hamermesh encourages economics students, “put [yourself] into the particular problem being discussed and ask, “How would I behave if I were confronted with those choices?” Microeconomics is very logical, and most of us think very logically in our daily lives. When confronted with economics questions, though, we too, often forget our logic and get scared because somehow, the questions seem different. They’re not.”(Hamermesh, Economics is Everywhere)

## Interactive 2.5 Supply and Demand



As a simple introduction to the law of supply watch this video

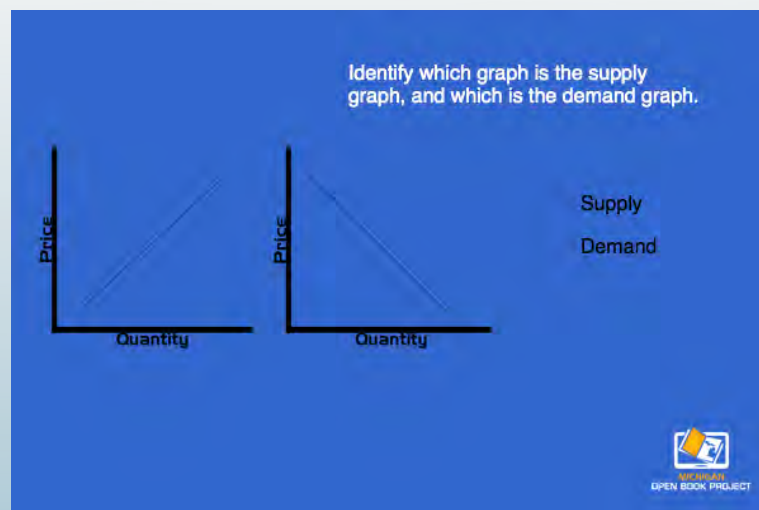
Logically, business owners and producers make decisions that make themselves better off.

Decisions are usually made to follow the objective of making a profit [the difference between cost to produce a good and the price received for selling the good.]

An illustration of the law of supply can be simplified by examining my need for a babysitter. If I need a babysitter this weekend for my three small children, how many of my students would be interested in working for me, or supplying babysitting services? The short answer is, it depends how much I am willing to pay. Based on the observation of the law of supply, the number of students willing to work depends on how much the job pays. As shown below, I may have two students interested in supplying babysitting for \$1 per hour and 23 students willing to at \$20 per hour.

On the graphs below, label which graph is the Supply Curve and Demand Curve, then decide how they are related.

## Interactive 2.6 Supply Demand Practice



Price	Quantity Supplied (How many students in a class of 25 might be interested)
\$1 an hour	2
\$5 an hour	10
\$10 an hour	17
\$20 an hour	23

The higher the price of a good or service, the more producers are willing to make it available.



**Quantity supplied** is represented by each individual point on this supply graph. Supply, however, constitutes the entire supply curve, or all of the points taken together. A supply shift will move the entire supply curve to the right or to the left. For example, if a newly invented machine cuts the time for producing a watch in half, the supply would increase, which would shift supply to the right. On the other hand, if the cost of leather increases, then the supply for watches would shift to the left. These are known as supply determinants.

Reminder: in the last section we learned, “When an increase in demand occurs, quantity demanded would increase at every price level, so the entire demand curve would shift to the right...”

The same is true for supply--kind of. As seen below, a shift of the supply curve to the right indicates an increase in supply (graph 3),

while a shift to the left indicates a decrease in supply across all price points.

Interpreting the graphs above:

In Graph 1 there is an overall increase in the level of supply. This is indicated with a rightward shift. The effect of an increase in supply is price will decrease and quantity supplied will increase.

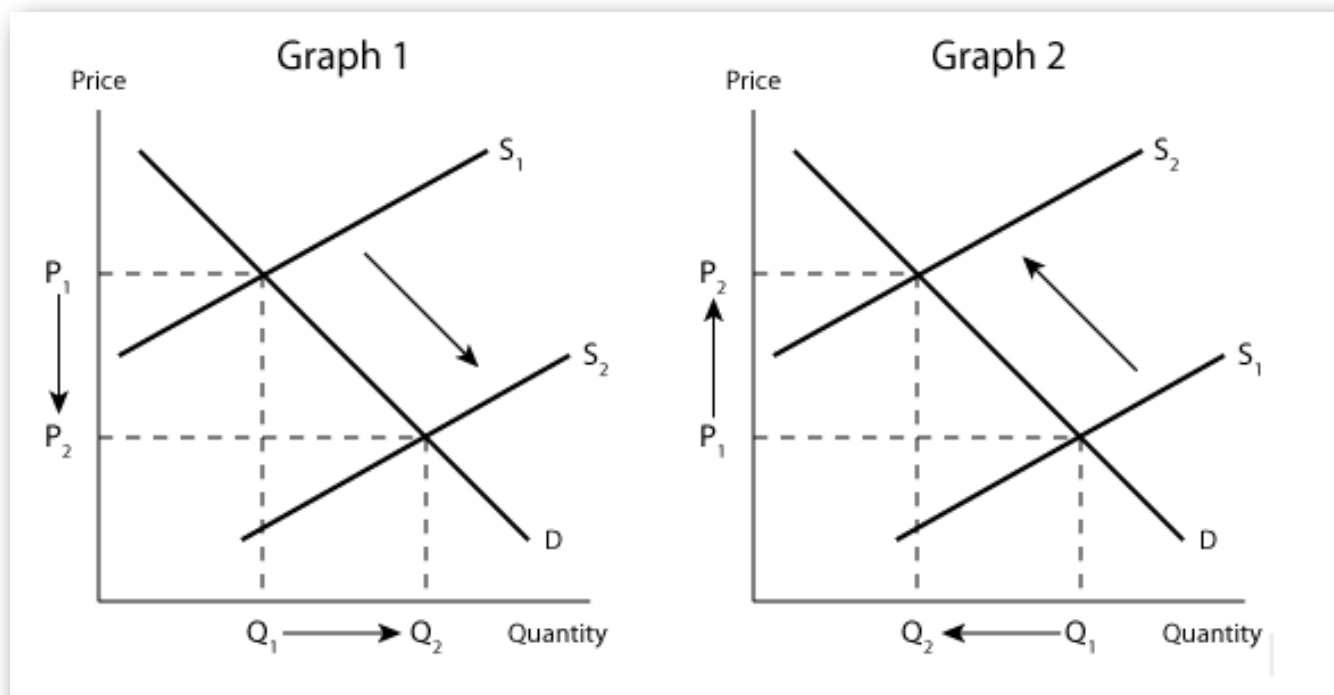
Graph 2 indicates a decrease in supply. Read the graph. What happens to price and quantity when overall supply decrease? Price \_\_\_\_\_ and Quantity \_\_\_\_\_

So what causes these graphs, and therefore prices to move?

There are several specific events or actions that cause the overall level of supply to change. For example, if I had a strawberry farm, what other factors, aside from me deciding to change my price, would affect the supply of my strawberries?

A variety of things would change my supply. Strawberry supplies would likely increase if:

- I bought a new tractor that hoed and planted my fields in twice the time
- The cost of strawberry seeds decreased, or
- The government provides a tax reduction to fruit farmers who plant a minimum of 500 plants



Other actions might cause my strawberry supply to decrease, such as:

- If I expected strawberry prices would be lower next summer,
- If a late frost ruins a % of my plants, or
- If my next door neighbor who typically plants raspberries diversifies and adds strawberries to her fields for this season.

Economists categorize the things like the examples above that affect supply as **determinants**.

Determinants of Supply
Change in technology used in production
Change in the cost of factors of production
Change in the number of producers
Change in Government policy
A change in producers price expectations
Unforeseen circumstances: weather, strike, other

Now, let’s put your new knowledge to a test! It is time to practice your understanding of supply shifting. Watch this video, and complete the notes outline below by filling in the appropriate response below.

Interactive 2.7 Video Notes



Once you have finished watching the video above, fill out this online handout.

Interactive 2.8 Federal Reserve - Economic Low Down - Supply



Watch video from Federal Reserve Bank of St. Louis (3:57) : Episode 1 – Supply – The Economic Lowdown Video Series



# Price

### QUESTIONS TO GUIDE INQUIRY

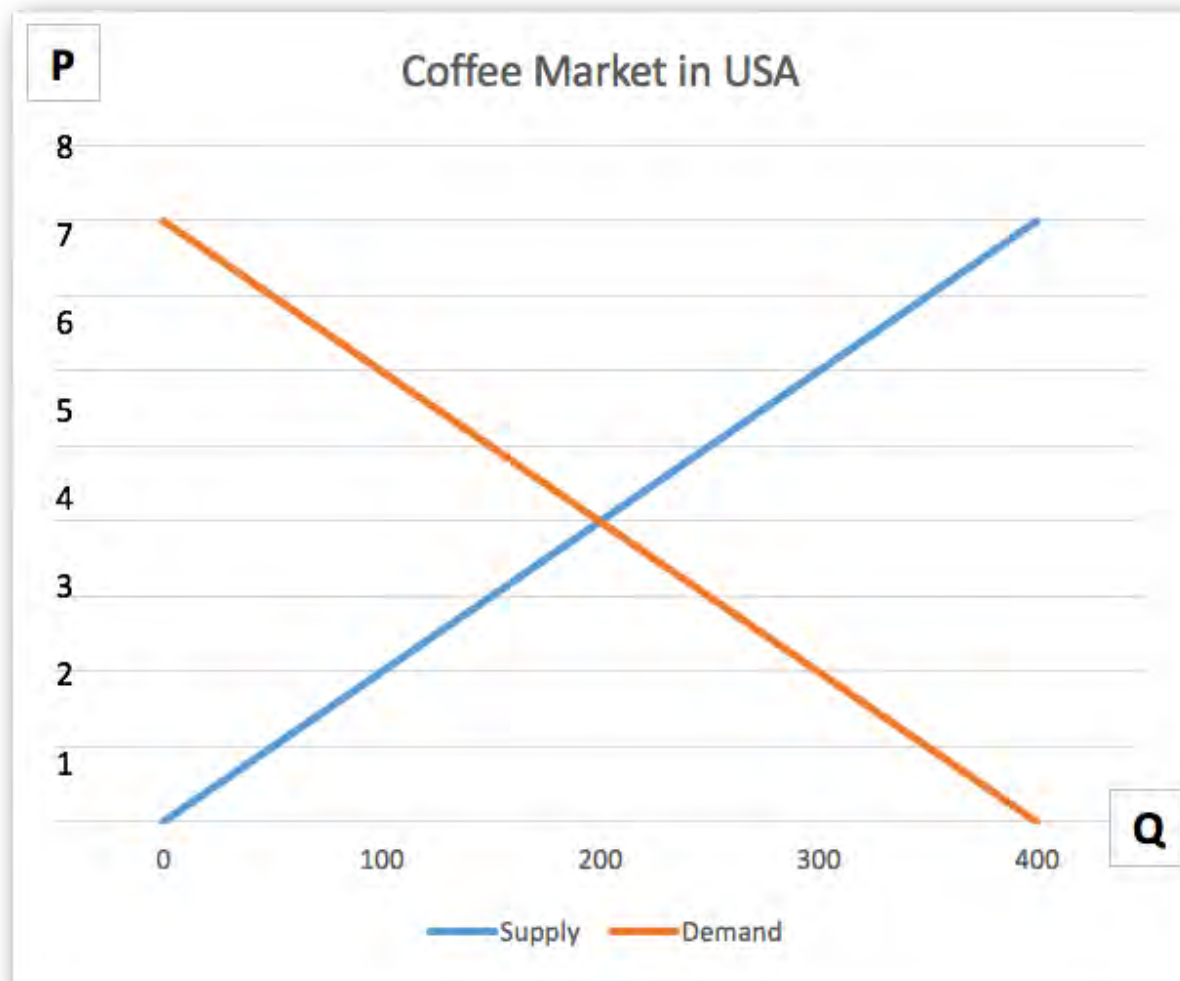
1. **Price-** Collectively, how do consumers and producers work to determine price?

Have you ever walked into a grocery store and wondered what causes the price of bananas to be one price and grapes to be another? This month the average price for bananas is \$.54 per pound, while grapes are averaging \$1.94 per pound. If we took the same averages next month they would likely be different. Why? The answer is found in the way that prices are set in a market economy. In a market economy, prices are not set by a group of government economists who analyze markets and set arbitrary prices. Instead, prices are set by people like you and me, and are changed in response to everyday behavior. By the end of this chapter you will be able to answer this question about price:

- Collectively, how do consumers and producers work to determine price?

**Equilibrium** is the point of balance at which the quantity demanded is equal to the quantity supplied. To see equilibrium graphically, it is the location where supply and demand meet. This location is also referred to as the **market clearing price**. The market clearing price is the exact place where demand of consumers is perfectly proportioned to the supply of producers. There are no products left over, nor is there a surplus. Likewise, there is no shortage; everyone who desired and was able to pay for a product was able to buy one.

Equilibrium price will influence the choices of both buyers and sellers. When equilibrium is reached, the quantity demanded is equal to the quantity supplied. For example in the graph of the coffee market below, at the equilibrium price of \$4 consumers will purchase 200 million pounds of coffee, the same quantity that producers are willing to supply.



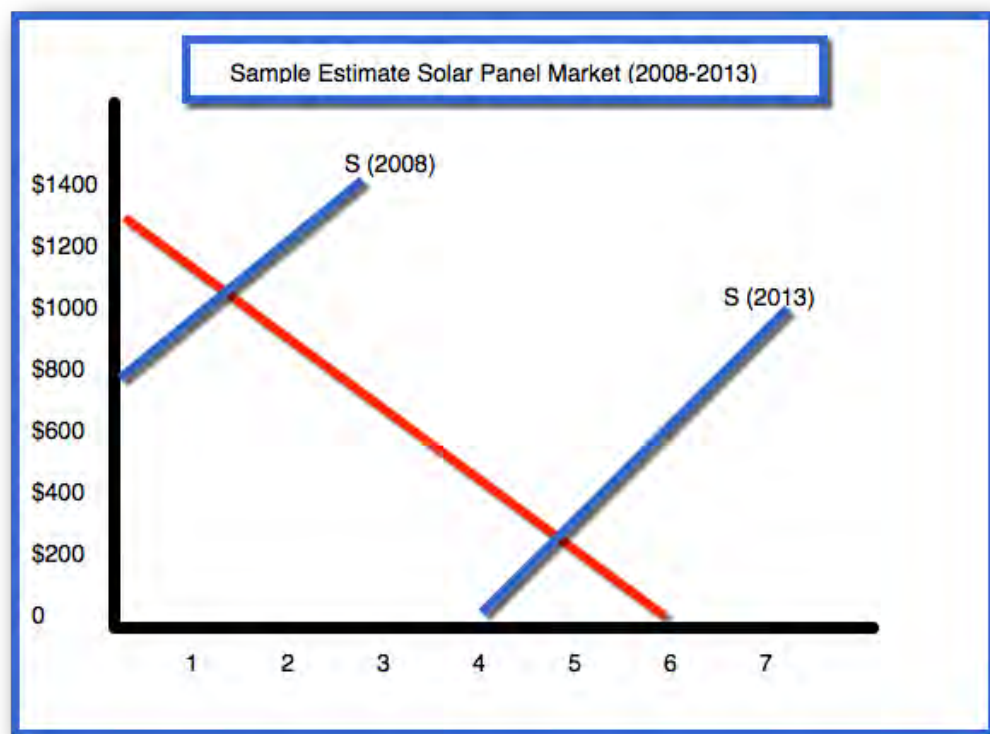
In accordance with the law of demand and the law of supply, when price changes, so does behavior. Consider what would happen if the price of coffee were to lowered to \$2. More consumers would be willing and able to buy coffee, but the incentive for producers to produce would lessen, resulting in a shortage of coffee, or disequilibrium. Notice that 300 million pounds of coffee are demanded while only 100 million are supplied.

Changes in equilibrium occur when demand or supply are shifted in either direction because of a determinant shifting. With the shift comes a new equilibrium price and equilibrium quantity.

### Interactive 2.9 NPR - Solar Panels



*Activity: Listen to the following NPR (National Public Radio) story excerpt. Please select two determinants as shown in the graphic below that you see causing the price of solar panels to drop.*



## Price Controls

As previously discussed, in the American market economy, prices are set through negotiations between buyers and sellers. But what is the backup plan? What happens if there is not enough incentive for producers to continue to make a needed good? Or what happens if supply of a necessary good becomes so scarce that prices skyrocket to a level where only a few individuals can afford the needed good? In the U.S. economy, our government attempts to create fairness when it does not exist naturally. The government may impose a **price ceiling**--a maximum price that can be legally charged by a seller for a good or service.

Additionally, a **price floor**--the minimum price that must be paid for a good or service can also be imposed by the government.

The minimum wage is probably the most well-known example of a price floor. While the government sets this minimum price that an employer must pay a worker for an hour of labor, individual states can set their own minimum wage amount; however, it must be higher than the government's minimum, not lower.

Some economists support the point of view that government regulatory policies slow economic progress. One piece of evidence that supports this claim is shown when the government steps in to set price controls in an effort to protect consumers or producers. When does the government step in? Or when should they? Let's get a basic understanding of how price controls work before answering those questions.

Governments sometimes set prices artificially above the market price (equilibrium). For example they may require a minimum price be paid for milk. This price floor is a policy that is set to protect milk producers and insure enough profit is made to have the incentive to continue producing. And in our country, we definitely need milk farmers. Could you imagine a country with no cheese, chocolate milk, or ice cream?



Because a price floor is set to protect producers, it is logical that a price ceiling is meant to protect consumers. When practicing price controls, the government will never step in and set an exact price, instead they set a limit. This shows the government's respect for the free market system of allowing prices to be set naturally through negotiation of buyers and sellers.

Let's take a step back in time and examine a time in our nation's history where price ceilings were used. During World War II much of the economy was focused on preparing war materials such as uniforms, weapons, food, and other essential supplies. The result was that consumer goods became scarce because there weren't enough raw materials for ample production of both war goods and consumer goods. In order to help make sure that consumers were able to get a fair share of goods, the government, through the Office of Price Administration, set up a system of rationing and price controls.

Response: In writing, please summarize and defend the policy of rationing and price controls during WWII.

### Interactive 2.10 Prices Unlimited



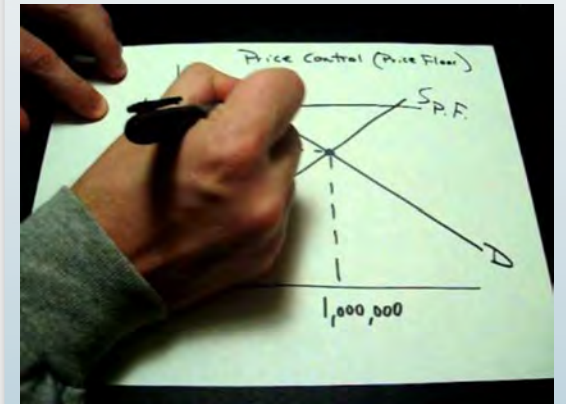
Watch this propaganda video, "Prices Unlimited" created by Universal Pictures Studio in 1944 for the Office of Price Administration that shows the reason for a price ceiling.

### Economic argument against price controls.

It would be nice if the government protections of price floors and price ceilings had no negative effects to either producers or consumers. Unfortunately, there are major consequences to these price control policies, especially if they are long lasting.

In summary-- price controls will lead to shortages or surpluses. The problem of **shortage** exists when the quantity of a good or service demanded in a market is more than the quantity supplied. This can also be referred to as excess demand. When the actual price is below their equilibrium price, a shortage exists because the low price encourages buyers and discourages sellers. On the other hand, a **surplus** exists when the quantity supplied exceeds the quantity demanded and the actual price of a good is higher than the equilibrium price. As you can see, both shortages and surpluses as a result of price controls are inefficient and ineffective. Because of that, the government rarely utilizes this tool.

### Interactive 2.11 Price Floors



Take a look at the graphs in the video. They show the location of a price floor and price ceiling

Conclusion:

Now that we have studied Demand, Supply, and Prices it is your turn to make a decision.

Using your newly acquired economic knowledge decide:

How fair and effective are markets at reaching equilibrium?

In the next section you will be asked to take the idea one step further in applying the ideas of supply and demand to business and labor.

# Market Structures

## QUESTION TO GUIDE INQUIRY:

1. **Market Structures--How does competition impact the choices you make as a consumer?**

The simplest market structure is that of pure competition. Also known as **perfect competition**, a perfectly competitive market occurs when a large number of firms are all producing essentially the same product. Further, the assumption can also be made that the market is in equilibrium and all firms are selling the same product for the same price. Unfortunately, an additional characteristic of perfect competition is that each firm ends up producing so little of the particular product in contrast to the total product supply that no one firm can influence prices. Therefore, the only decision that a firm's producers can make is how much to produce.

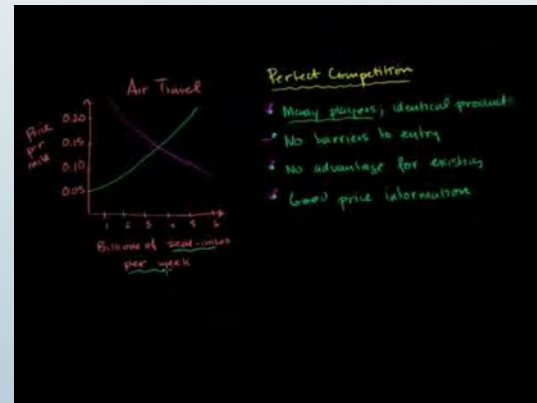
As there are very few industries that meet all four of the strict conditions to reach the perfect competition ideal, there are some that come close. All four of these conditions must be met for a market to be considered perfectly competitive:

1. Many sellers as well as buyers participate in the market.
2. Sellers offer identical products.
3. Sellers as well as buyers are well informed about products.
4. Sellers are able to enter and exit the market freely.



The following video illustrates an excellent application of the four conditions of perfect competition. Afterwards, try to complete the extended thinking task.

### Interactive 2.12 Khan Academy - Perfect Competition



Extend your thinking: In the video, the airline industry is used as an example of perfect competition. Using your knowledge about the four conditions that must be met, develop your own example of perfect competition in today's marketplace. Be sure to use descriptions and examples to illustrate each of the characteristics.

## Monopolies

While in a perfectly competitive market there are many buyers and sellers, there are situations in which monopolies do occur. A **monopoly** is formed when barriers prevent firms from entering a market that has a single supplier. Monopoly markets have only one seller but can have any number of buyers. It is because of the exclusive control of a commodity or service in a particular market that makes possible the manipulation of price by the single supplier. **Natural monopolies** are markets that run most efficiently when one large firm provides all of the output. An example of such a natural monopoly might be public water.

When huge wastes of time, energy, and money would be expended to avoid a monopoly, the government often steps in to allow a single provider to provide necessary services thus avoiding waste. Often in return for allowing a natural monopoly to exist, the natural monopoly agrees to the government's price controls.

In some cases, the government itself creates its own monopoly, a **government monopoly**. This happens when government actions end up creating barriers to entry in markets and a monopoly occurs. Why would the government create a monopoly you might ask? A primary reason is for the benefit of many. For example, one action that the government can give monopoly power to a company is through the issuance of a patent. A patent gives a company the exclusive right to sell a new good or service for a

specified period of time. This tends to promote research and development by the company of its product which in turn ends up benefitting many.

Because we live in a market economy, just like perfect competition, **monopolistic competition** also occurs.

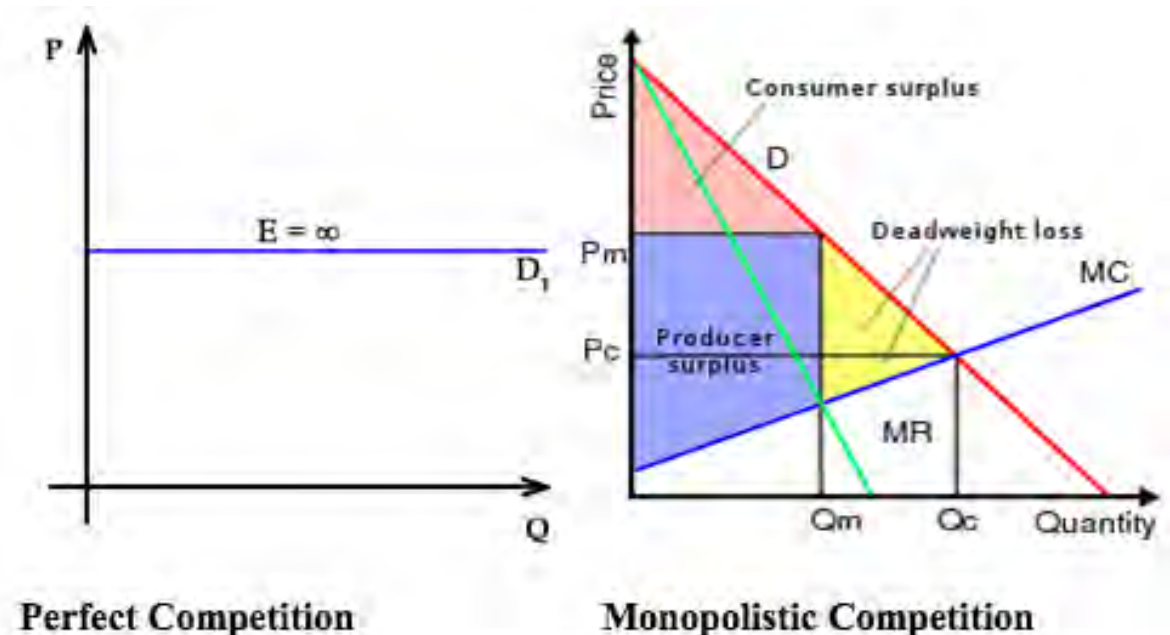
Monopolistic competition is different from a monopoly. As you already know, a monopoly exists when a person or entity is the exclusive supplier of a good or service in a market. In this type of competition, many companies compete in an open market to sell products that are similar but not identical. The minor differences in products is what makes monopolistic competition a somewhat modified version of perfect competition. This occurs because each firm holds a monopoly over its own particular product design. And while the goods in a particular market are similar enough that they could be substituted for one another, they are not identical. For example, a restaurant in a large city would be an example of monopolistic competition because although there are multiple restaurants that serve similar types of dishes, no dish is identical to another restaurant's similar dish. Typically, markets that have monopolistic competition are inefficient for two reasons. First, as its optimum output, the firm charges a price that exceeds marginal costs. The second source of inefficiency is the fact that these firms operate with excess capacity.

## Monopolistic Competition compared to Perfect Competition

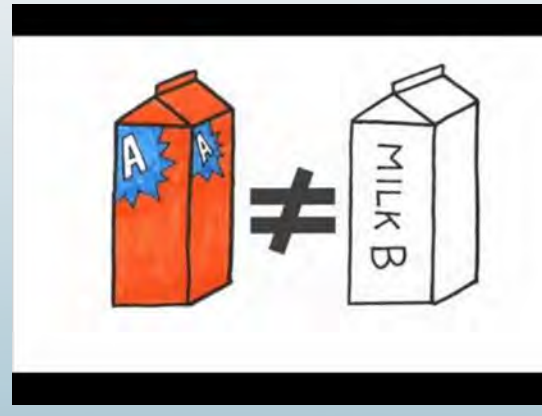
When comparing the two types of competition there are three main points to think about:

- Perfectly competitive markets have no barriers of entry or exit. Monopolistically competitive markets have a few barriers of entry and exit.
- The two markets are similar in terms of elasticity of demand, a firm's ability to make profits in the long-run, and how to determine a firm's profit maximizing quantity condition.
- In a perfectly competitive market, all goods are substitutes. In a monopolistically competitive market, there is a high degree of product differentiation.

If we were to illustrate similarities and differences using graphs, they would look like this:

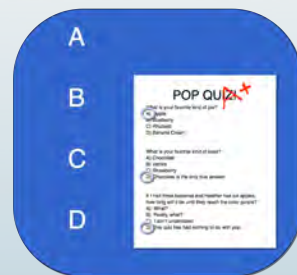


### Interactive 2.13 Monopolistic Competition



A short video that provides an excellent illustration of monopolistic competition can be found in the widget to the left.

### Interactive 2.14 Extend Your Thinking

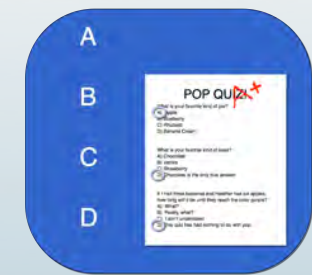


*As you reflect on the characteristics of both perfect and monopolistic competition answer the question in this widget.*

## Oligopolies

In addition to monopolies, oligopolies are another form of a market structure. An oligopoly occurs when a market is dominated by a few large, profitable firms who possess significant **market power** (usually 70-80% of product output), thus preventing smaller firms from entering the market. Many oligopolies make differentiated products such as cigarettes, automobiles, computers, ready-to-eat breakfast cereal, and soft drinks. Although product differentiation is not required for an oligopoly to form, if a firm can successfully differentiate its products, it will gain market power and resist competition more easily. Oligopolies are defined by one firm's interdependence on other firms within the industry. When one firm changes its price or level of output, other firms are directly affected. When firms collude, they use restrictive trade practices to voluntarily lower output and raise prices in much the same way as a monopoly, splitting the higher profits that result.

### Interactive 2.15 Extend Your Thinking



*Using your knowledge about oligopolies and monopolies, answer the questions in this quiz widget.*



## Regulation and Deregulation

As you recall, market power is a firm's ability to control prices and total market output. Obviously market structures like monopolies and oligopolies are bad for the consumer and ultimately, for the economy in general. The federal government does have a number of policies in place, along with executive agencies to regulate business practices, break up monopolies, block corporate mergers, and preserve incentives to protect consumers' best interests in the marketplace. Perhaps one of the most effective pieces of legislation to authorize the government's role in the regulation of business was the passing of the Sherman Antitrust Act, passed by Congress in 1890. Watch a brief history of the Act and learn about its significance in the video.

Founded on September 26, 1914, the mission of the Federal Trade Commission is to prevent business practices that are anticompetitive or deceptive or unfair to consumers; to enhance

### Interactive 2.16 The Sherman Anti-Trust Act Explained



### Interactive 2.17 FTC History



informed consumer choice and public understanding of the competitive process; and to accomplish this without unduly burdening legitimate business activity. Here's a brief history of the FTC and how this agency utilizes its authority through legislation such as the Sherman Antitrust Act to break up monopolies and prevent other harmful business practices from occurring.

## Deregulation

While antitrust laws may have been intended to increase competition, much other regulation had the opposite effect. As Americans grew more concerned about inflation in the 1970s, regulation that reduced price competition came under renewed scrutiny. In a number of cases, government decided to ease controls in cases where regulation shielded companies from market pressures.

Transportation was the first target of deregulation. Under President Jimmy Carter (1977-1981), Congress enacted a series of laws that removed most of the regulatory shields around aviation, trucking, and railroads. Companies were allowed to compete by utilizing any air, road, or rail route they chose, while more freely setting the rates for their services. In the process of transportation deregulation, Congress eventually abolished two major economic regulators: the 109-year-old Interstate

Commerce Commission and the 45-year-old Civil Aeronautics Board.

Although the exact impact of deregulation is difficult to assess, it clearly created enormous upheaval in affected industries.