IOHS ECONOMICS IN BRIEF 2012

What is Economics?

People have to make choices because of *scarcity*, the fact that they don't have enough resources to satisfy all their wants. *Economics* studies how people allocate resources among alternative uses. Macroeconomics studies national economies, and microeconomics studies the behavior of individual people and individual firms. Economists assume that people work toward maximizing their *utility*, or happiness, and firms act to maximize profits.

More specifically…When studying any subject, a key first step is to learn the lingo. Here are definitions for three of the most important words in economics:

- *Economics* studies how people allocate resources among alternative uses. The reason people have to make choices is *scarcity*, the fact that we don't have enough resources to satisfy all our wants.
- *Microeconomics* studies the maximizing behaviour of individual people and individual firms. Economists assume that people work toward maximizing their *utility*, or happiness, while firms act to maximize profits.
- *Macroeconomics* studies national economies, concentrating on economic growth and how to prevent and ameliorate recessions..

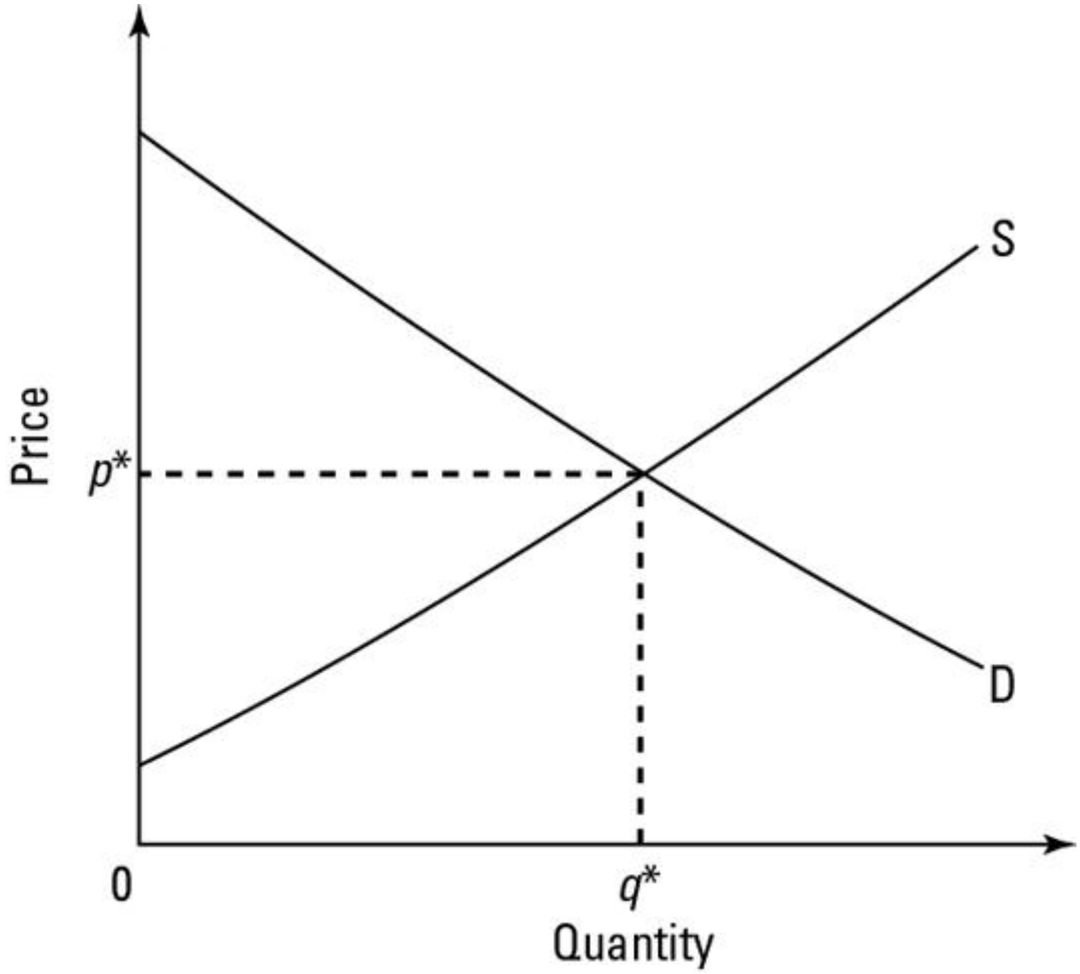
Four Basic Market Structures

An industry consists of all firms making similar or identical products. An industry's market structure depends on the number of firms in the industry and how they compete. Here are the four basic market structures:

- **Perfect competition:** Perfect competition happens when numerous small firms compete against each other. Firms in a competitive industry produce the socially optimal output level at the minimum possible cost per unit.
- **Monopoly:** A monopoly is a firm that has no competitors in its industry. It reduces output to drive up prices and increase profits. By doing so, it produces less than the socially optimal output level and produces at higher costs than competitive firms.
- **Oligopoly:** An oligopoly is an industry with only a few firms. If they collude, they reduce output and drive up profits the way a monopoly does. However, because of strong incentives to cheat on collusive agreements, oligopoly firms often end up competing against each other.
- **Monopolistic competition:** In monopolistic competition, an industry contains many competing firms, each of which has a similar but at least slightly different product. Restaurants, for example, all serve food but of different types and in different locations. Production costs are above what could be achieved if all the firms sold identical products, but consumers benefit from the variety.

Finding Market Equilibrium Price and Quantity

Buyers and sellers interact in markets. *Market equilibrium* occurs when the desires of buyers and sellers align exactly so that neither group has reason to change its behavior. The market equilibrium price, p^*, and equilibrium quantity, q^*, are determined by where the demand curve of the buyers, *D,* crosses the supply curve of the sellers, *S.* At that price, the amount that the buyers demand equals the amount that the sellers offer.



In the absence of *externalities* (costs or benefits that fall on persons not directly involved in an activity), the market equilibrium quantity, q^*, is also the socially optimal output level. For each unit from 0 up to q^*, the demand curve is above the supply curve, meaning that people are willing to pay more to buy those units than they cost to produce. There are gains from producing and then consuming those units.

Identifying Market Failures

Sometimes markets fail to generate the socially optimal output level of goods and services. Several prerequisites must be fulfilled before perfect competition can work properly and generate that output level. Causes of market failure include the following:

- **Externalities caused by incomplete or nonexistent property rights:** Without full and complete property rights, markets are unable to take all the costs of production into account.
- **Asymmetric information:** If a buyer or seller has private information that gives her an edge when negotiating a deal, the opposite party may be too suspicious for both parties to reach a mutually agreeable price. The market may collapse, with no trades being made.
- **Public goods:** Private firms can't make money producing certain goods or services because there's no way to exclude nonpayers from receiving them. The government or philanthropists usually have to provide such goods or services.
- **Monopoly power:** Monopoly power is the ability to raise prices and restrict output in order to increase profits. Both monopolies (firms that are the only sellers in their industries) and collusive oligopolies (industries with only a few firms that coordinate their activities) can possess monopoly power. Monopolies and collusive oligopolies produce less than the socially optimal output level and produce at higher costs than competitive firms.

Linking Macroeconomics and Government Policy

Macroeconomics studies national economies, concentrating on economic growth and how to prevent and ameliorate recessions. Governments fight recessions and encourage growth using monetary policy and fiscal policy.

Economists use *gross domestic product* (GDP) to keep track of how an economy is doing. GDP measures the value of all final goods and services produced in an economy in a given period of time, usually a quarter or a year. A *recession* occurs when the overall level of economic activity in an economy is decreasing, and an *expansion* occurs when the overall level is increasing. The *unemployment rate,* which measures what fraction of the labor force consists of those without jobs who are actively seeking jobs, normally rises during recessions and falls during expansions.

Anti-recessionary economic policies come in two flavors:

- **Expansionary monetary policy:** The government can increase the money supply to lower interest rates. Lower interest rates make loans for cars, homes, and investment goods cheaper, which means increased consumption spending by households and increased investment spending by businesses.
- **Expansionary fiscal policy:** Increasing government purchases of goods and services or decreasing taxes can stimulate the economy. Increasing purchases increases economic activity directly, giving businesses money to hire new workers or pay for increased orders from their suppliers. Decreasing taxes increases economic activity indirectly by leaving households with more after-tax dollars to spend.

Economics Basics

Economics may appear to be the study of complicated tables and charts, statistics and numbers, but, more specifically, it is the study of what constitutes rational human behavior in the endeavor to fulfill needs and wants.

As an individual, for example, you face the problem of having only limited resources with which to fulfill your wants and needs, as a result, you must make certain choices with your money. You'll probably spend part of your money on rent, electricity and food. Then you might use the rest to go to the movies and/or buy a new pair of jeans. Economists are interested in the choices you make, and inquire into why, for instance, you might choose to spend your money on a new DVD player instead of replacing your old TV. They would want to know whether you would still buy a carton of cigarettes if prices increased by $2 per pack. The underlying essence of economics is trying to understand how both individuals and nations behave in response to certain material constraints.

We can say, therefore, that economics, often referred to as the "dismal science", is a study of certain aspects of society. Adam Smith (1723 - 1790), the "father of modern economics" and author of the famous book "An Inquiry into the Nature and Causes of the Wealth of Nations", spawned the discipline of economics by trying to understand why some nations prospered while others lagged behind in poverty. Others after him also explored how a nation's allocation of resources affects its wealth.

To study these things, economics makes the assumption that human beings will aim to fulfill their self-interests. It also assumes that individuals are rational in their efforts to fulfill their unlimited wants and needs. Economics, therefore, is a social science, which examines people behaving according to their self-interests. The definition set out at the turn of the twentieth century by Alfred Marshall, author of "The Principles Of Economics" (1890), reflects the complexity underlying economics: "Thus it is on one side the study of wealth; and on the other, and more important side, a part of the study of man."

In order to begin our discussion of economics, we first need to understand (1) the concept of scarcity and (2) the two branches of study within economics: microeconomics and macroeconomics in more detail than previously covered.

1. Scarcity
Scarcity, a concept we already implicitly discussed in the introduction to this tutorial, refers to the tension between our limited resources and our unlimited wants and needs. For an individual, resources include time, money and skill. For a country, limited resources include natural resources, capital, labor force and technology.

Because all of our resources are limited in comparison to all of our wants and needs, individuals and nations have to make decisions regarding what goods and services they can buy and which ones they must forgo. For example, if you choose to buy one DVD as opposed to two video tapes, you must give up owning a second movie of inferior technology in exchange for the higher quality of the one DVD. Of course, each individual and nation will have different values, but by having different levels of (scarce) resources, people and nations each form some of these values as a result of the particular scarcities with which they are faced.

So, because of scarcity, people and economies must make decisions over how to allocate their resources. Economics, in turn, aims to study why we make these decisions and how we allocate our resources most efficiently.

2. Macro and Microeconomics
Macro and microeconomics are the two vantage points from which the economy is observed. Macroeconomics looks at the total output of a nation and the way the nation allocates its limited resources of land, labor and capital in an attempt to maximize production levels and promote trade and growth for future generations. After observing the society as a whole, Adam Smith noted that there was an "invisible hand" turning the wheels of the economy: a market force that keeps the economy functioning.

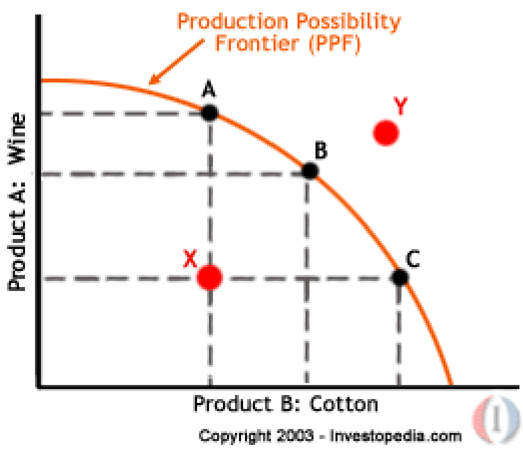
Microeconomics looks into similar issues, but on the level of the individual people and firms within the economy. It tends to be more scientific in its approach, and studies the parts that make up the whole economy. Analyzing certain aspects of human behavior, microeconomics shows us how individuals and firms respond to changes in price and why they demand what they do at particular price levels.

Micro and macroeconomics are intertwined; as economists gain understanding of certain phenomena, they can help nations and individuals make more informed decisions when allocating resources. The systems by which nations allocate their resources can be placed on a spectrum where the command economy is on the one end and the market economy is on the other. The market economy advocates forces within a competitive market, which constitute the "invisible hand", to determine how resources should be allocated. The command economic system relies on the government to decide how the country's resources would best be allocated. In both systems, however, scarcity and unlimited wants force governments and individuals to decide how best to manage resources and allocate them in the most efficient way possible. Nevertheless, there are always limits to what the economy and government can do.

Production Possibility Frontier, Growth, Opportunity Cost and Trade

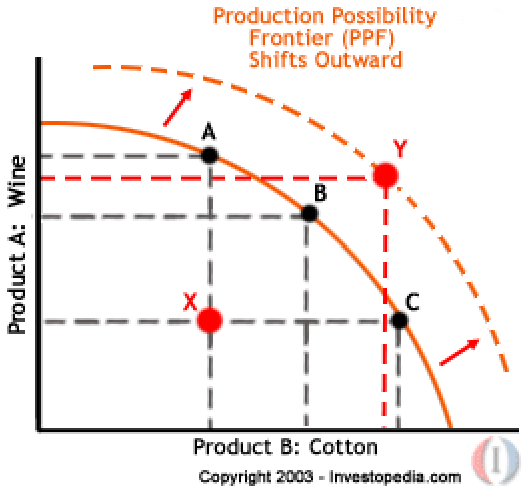
A. Production Possibility Frontier (PPF)
Under the field of macroeconomics, the production possibility frontier (PPF) represents the point at which an economy is most efficiently producing its goods and services and, therefore, allocating its resources in the best way possible. If the economy is not producing the quantities indicated by the PPF, resources are being managed inefficiently and the production of society will dwindle. The production possibility frontier shows there are limits to production, so an economy, to achieve efficiency, must decide what combination of goods and services can be produced.

Let's turn to the chart below. Imagine an economy that can produce only wine and cotton. According to the PPF, points A, B and C - all appearing on the curve - represent the most efficient use of resources by the economy. Point X represents an inefficient use of resources, while point Y represents the goals that the economy cannot attain with its present levels of resources.



As we can see, in order for this economy to produce more wine, it must give up some of the resources it uses to produce cotton (point A). If the economy starts producing more cotton (represented by points B and C), it would have to divert resources from making wine and, consequently, it will produce less wine than it is producing at point A. As the chart shows, by moving production from point A to B, the economy must decrease wine production by a small amount in comparison to the increase in cotton output. However, if the economy moves from point B to C, wine output will be significantly reduced while the increase in cotton will be quite small. Keep in mind that A, B, and C all represent the most efficient allocation of resources for the economy; the nation must decide how to achieve the PPF and which combination to use. If more wine is in demand, the cost of increasing its output is proportional to the cost of decreasing cotton production.

Point X means that the country's resources are not being used efficiently or, more specifically, that the country is not producing enough cotton or wine given the potential of its resources. Point Y, as we mentioned above, represents an output level that is currently unreachable by this economy. However, if there was a change in technology while the level of land, labor and capital remained the same, the time required to pick cotton and grapes would be reduced. Output would increase, and the PPF would be pushed outwards. A new curve, on which Y would appear, would represent the new efficient allocation of resources.



When the PPF shifts outwards, we know there is growth in an economy. Alternatively, when the PPF shifts inwards it indicates that the economy is shrinking as a result of a decline in its most efficient allocation of resources and optimal production capability. A shrinking economy could be a result of a decrease in supplies or a deficiency in technology.

An economy can be producing on the PPF curve only in theory. In reality, economies constantly struggle to reach an optimal production capacity. And because scarcity forces an economy to forgo one choice for another, the slope of the PPF will always be negative; if production of product A increases then production of product B will have to decrease accordingly.

B. Opportunity Cost

Opportunity cost is the value of what is foregone in order to have something else. This value is unique for each individual. You may, for instance, forgo ice cream in order to have an extra helping of mashed potatoes. For you, the mashed potatoes have a greater value than dessert. But you can always change your mind in the future because there may be some instances when the mashed potatoes are just not as attractive as the ice cream. The opportunity cost of an individual's decisions, therefore, is determined by his or her needs, wants, time and resources (income).

This is important to the PPF because a country will decide how to best allocate its resources according to its opportunity cost. Therefore, the previous wine/cotton example shows that if the country chooses to produce more wine than cotton, the opportunity cost is equivalent to the cost of giving up the required cotton production.

Let's look at another example to demonstrate how opportunity cost ensures that an individual will buy the least expensive of two similar goods when given the choice. For example, assume that an individual has a choice between two telephone services. If he or she were to buy the most expensive service, that individual may have to reduce the number of times he or she goes to the movies each month. Giving up these opportunities to go to the movies may be a cost that is too high for this person, leading him or her to choose the less expensive service.

Remember that opportunity cost is different for each individual and nation. Thus, what is valued more than something else will vary among people and countries when decisions are made about how to allocate resources.

C. Trade, Comparative Advantage and Absolute Advantage

Specialization and Comparative Advantage

An economy can focus on producing all of the goods and services it needs to function, but this may lead to an inefficient allocation of resources and hinder future growth. By using specialization, a country can concentrate on the production of one thing that it can do best, rather than dividing up its resources.

For example, let's look at a hypothetical world that has only two countries (Country A and Country B) and two products (cars and cotton). Each country can make cars and/or cotton. Now suppose that Country A has very little fertile land and an abundance of steel for car production. Country B, on the other hand, has an abundance of fertile land but very little steel. If Country A were to try to produce both cars and cotton, it would need to divide up its resources. Because it requires a lot of effort to produce cotton by irrigating the land, Country A would have to sacrifice producing cars. The opportunity cost of producing both cars and cotton is high for Country A, which will have to give up a lot of capital in order to produce both. Similarly, for Country B, the opportunity cost of producing both products is high because the effort required to produce cars is greater than that of producing cotton.

Each country can produce one of the products more efficiently (at a lower cost) than the other. Country A, which has an abundance of steel, would need to give up more cars than Country B would to produce the same amount of cotton. Country B would need to give up more cotton than Country A to produce the same amount of cars. Therefore, County A has a comparative advantage over Country B in the production of cars, and Country B has a comparative advantage over Country A in the production of cotton.

Now let's say that both countries (A and B) specialize in producing the goods with which they have a comparative advantage. If they trade the goods that they produce for other goods in which they don't have a comparative advantage, both countries will be able to enjoy both products at a lower opportunity cost. Furthermore, each country will be exchanging the best product it can make for another good or service that is the best that the other country can produce. Specialization and trade also works when several different countries are involved. For example, if Country C specializes in the production of corn, it can trade its corn for cars from Country A and cotton from Country B.

Determining how countries exchange goods produced by a comparative advantage ("the best for the best") is the backbone of international trade theory. This method of exchange is considered an optimal allocation of resources, whereby economies, in theory, will no longer be lacking anything that they need. Like opportunity cost, specialization and comparative advantage also apply to the way in which individuals interact within an economy.

Absolute Advantage

Sometimes a country or an individual can produce more than another country, even though countries both have the same amount of inputs. For example, Country A may have a technological advantage that, with the same amount of inputs (arable land, steel, labor), enables the country to manufacture more of both cars and cotton than Country B. A country that can produce more of both goods is said to have an absolute advantage. Better quality resources can give a country an absolute advantage as can a higher level of education and overall technological advancement. It is not possible, however, for a country to have a comparative advantage in everything that it produces, so it will always be able to benefit from trade.

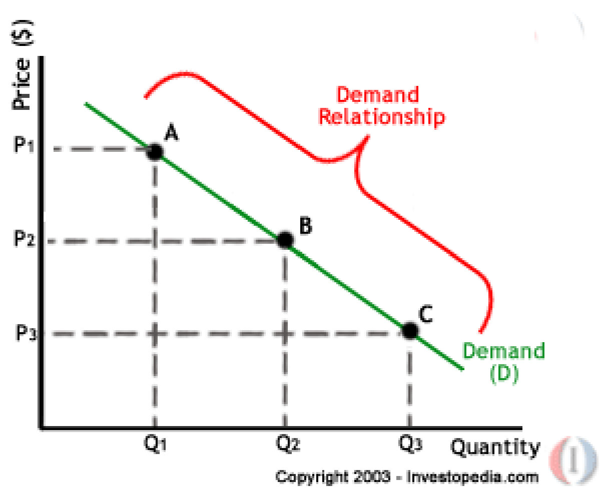
Economics Basics: Demand and Supply

Supply and demand is perhaps one of the most fundamental concepts of economics and it is the backbone of a market economy. Demand refers to how much (quantity) of a product or service is desired by buyers. The quantity demanded is the amount of a product people are willing to buy at a certain price; the relationship between price and quantity demanded is known as the demand relationship. Supply represents how much the market can offer. The quantity supplied refers to the amount of a certain good producers are willing to supply when receiving a certain price. The correlation between price and how much of a good or service is supplied to the market is known as the supply relationship. Price, therefore, is a reflection of supply and demand.

The relationship between demand and supply underlie the forces behind the allocation of resources. In market economy theories, demand and supply theory will allocate resources in the most efficient way possible. How? Let us take a closer look at the law of demand and the law of supply.

A. The Law of Demand

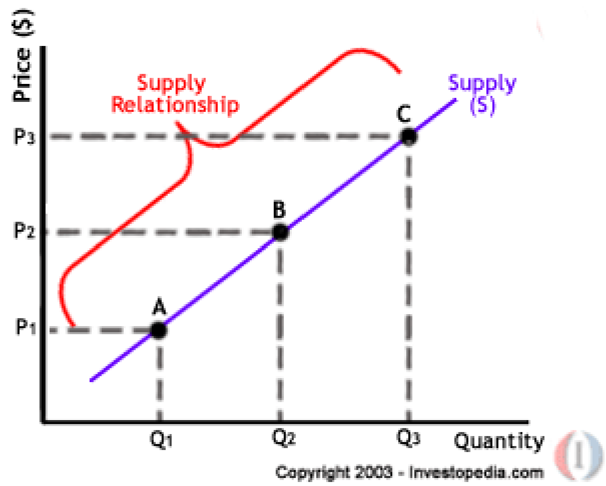
The law of demand states that, if all other factors remain equal, the higher the price of a good, the less people will demand that good. In other words, the higher the price, the lower the quantity demanded. The amount of a good that buyers purchase at a higher price is less because as the price of a good goes up, so does the opportunity cost of buying that good. As a result, people will naturally avoid buying a product that will force them to forgo the consumption of something else they value more. The chart below shows that the curve is a downward slope.



A, B and C are points on the demand curve. Each point on the curve reflects a direct correlation between quantity demanded (Q) and price (P). So, at point A, the quantity demanded will be Q1 and the price will be P1, and so on. The demand relationship curve illustrates the negative relationship between price and quantity demanded. The higher the price of a good the lower the quantity demanded (A), and the lower the price, the more the good will be in demand (C).

B. The Law of Supply

Like the law of demand, the law of supply demonstrates the quantities that will be sold at a certain price. But unlike the law of demand, the supply relationship shows an upward slope. This means that the higher the price, the higher the quantity supplied. Producers supply more at a higher price because selling a higher quantity at a higher price increases revenue.



Elasticity

The degree to which a demand or supply curve reacts to a change in price is the curve's elasticity. Elasticity varies among products because some products may be more essential to the consumer. Products that are necessities are more insensitive to price changes because consumers would continue buying these products despite price increases. Conversely, a price increase of a good or service that is considered less of a necessity will deter more consumers because the opportunity cost of buying the product will become too high.

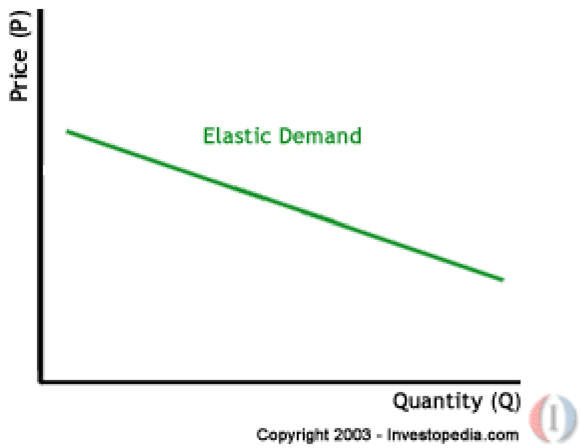
A good or service is considered to be highly elastic if a slight change in price leads to a sharp change in the quantity demanded or supplied. Usually these kinds of products are readily available in the market and a person may not necessarily need them in his or her daily life. On the other hand, an inelastic good or service is one in which changes in price witness only modest changes in the quantity demanded or supplied, if any at all. These goods tend to be things that are more of a necessity to the consumer in his or her daily life.

To determine the elasticity of the supply or demand curves, we can use this simple equation:

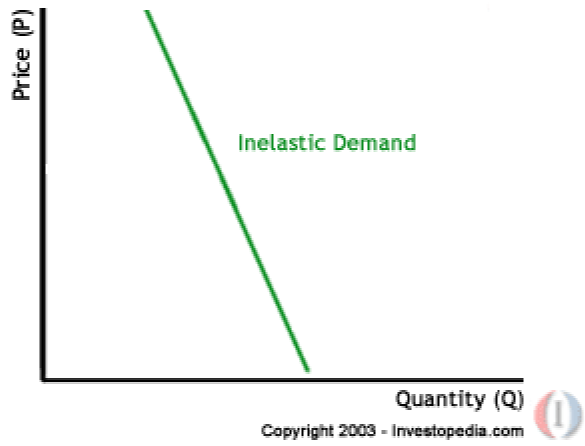
Elasticity = (% change in quantity / % change in price)

If elasticity is greater than or equal to one, the curve is considered to be elastic. If it is less than one, the curve is said to be inelastic.

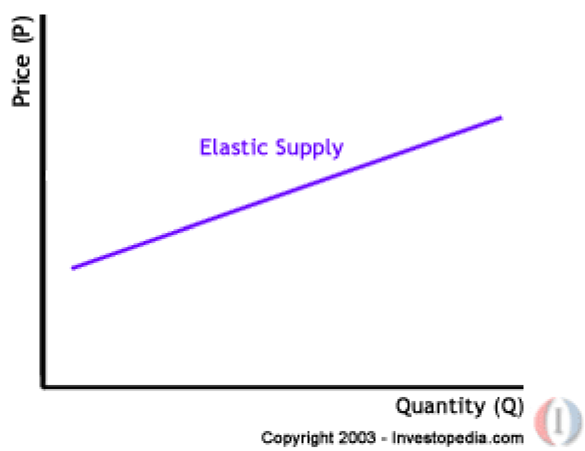
As we mentioned previously, the demand curve is a negative slope, and if there is a large decrease in the quantity demanded with a small increase in price, the demand curve looks flatter, or more horizontal. This flatter curve means that the good or service in question is elastic.



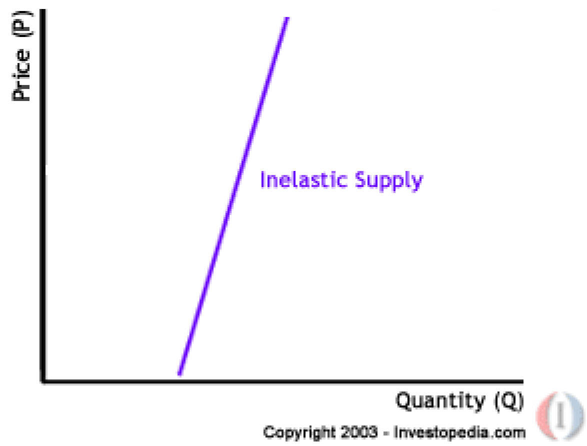
Meanwhile, inelastic demand is represented with a much more upright curve as quantity changes little with a large movement in price.



Elasticity of supply works similarly. If a change in price results in a big change in the amount supplied, the supply curve appears flatter and is considered elastic. Elasticity in this case would be greater than or equal to one.



On the other hand, if a big change in price only results in a minor change in the quantity supplied, the supply curve is steeper and its elasticity would be less than one.



A. Factors Affecting Demand Elasticity

There are three main factors that influence a demand's price elasticity:

1. The availability of substitutes - This is probably the most important factor influencing the elasticity of a good or service. In general, the more substitutes, the more elastic the demand will be. For example, if the price of a cup of coffee went up by $0.25, consumers could replace their morning caffeine with a cup of tea. This means that coffee is an elastic good because a raise in price will cause a large decrease in demand as consumers start buying more tea instead of coffee.

However, if the price of caffeine were to go up as a whole, we would probably see little change in the consumption of coffee or tea because there are few substitutes for caffeine. Most people are not willing to give up their morning cup of caffeine no matter what the price. We would say, therefore, that caffeine is an inelastic product because of its lack of substitutes. Thus, while a product within an industry is elastic due to the availability of substitutes, the industry itself tends to be inelastic. Usually, unique goods such as diamonds are inelastic because they have few if any substitutes.

2. Amount of income available to spend on the good - This factor affecting demand elasticity refers to the total a person can spend on a particular good or service. Thus, if the price of a can of Coke goes up from $0.50 to $1 and income stays the same, the income that is available to spend on coke, which is $2, is now enough for only two rather than four cans of Coke. In other words, the consumer is forced to reduce his or her demand of Coke. Thus if there is an increase in price and no change in the amount of income available to spend on the good, there will be an elastic reaction in demand; demand will be sensitive to a change in price if there is no change in income.

3. Time - The third influential factor is time. If the price of cigarettes goes up $2 per pack, a smoker with very few available substitutes will most likely continue buying his or her daily cigarettes. This means that tobacco is inelastic because the change in price will not have a significant influence on the quantity demanded. However, if that smoker finds that he or she cannot afford to spend the extra $2 per day and begins to kick the habit over a period of time, the price elasticity of cigarettes for that consumer becomes elastic in the long run.

B. Income Elasticity of Demand

In the second factor outlined above, we saw that if price increases while income stays the same, demand will decrease. It follows, then, that if there is an increase in income, demand tends to increase as well. The degree to which an increase in income will cause an increase in demand is called income elasticity of demand, which can be expressed in the following equation:

$$EDy = \frac{((Q\text{ current} - Q\text{ previous}) / (Q\text{ previous}))}{((Y\text{ current} - Y\text{ previous}) / Y\text{ previous}))}$$

ED = Elasticity of Demand
Q = Quantity
Y = Income
EDy = Income Elasticity of Demand

If EDy is greater than one, demand for the item is considered to have a high income elasticity. If however EDy is less than one, demand is considered to be income inelastic. Luxury items usually have higher income elasticity because when people have a higher income, they don't have to forfeit as much to buy these luxury items. Let's look at an example of a luxury good: air travel.

Bob has just received a $10,000 increase in his salary, giving him a total of $80,000 per annum. With this higher purchasing power, he decides that he can now afford air travel twice a year instead of his previous once a year. With the following equation we can calculate income demand elasticity:

$$EDy = \frac{((2-1) / (1)) = 1}{((80000-70000)) / (70000) = 0.14}$$

$$EDy = 1 / 0.14 = 7$$

Income elasticity of demand for Bob's air travel is seven - highly elastic.

With some goods and services, we may actually notice a decrease in demand as income increases. These are considered goods and services of inferior quality that will be dropped by a consumer who receives a salary increase. An example may be the increase in the demand of DVDs as opposed to video cassettes, which are generally considered to be of lower quality. Products for which the demand decreases as income increases have an income elasticity of less than zero. Products that witness no change in demand despite a change in income usually have an income elasticity of zero - these goods and services are considered necessities.

Utility

We have already seen that the focus of economics is to understand the problem of scarcity: the problem of fulfilling the unlimited wants of humankind with limited and/or scarce resources. Because of scarcity, economies need to allocate their resources efficiently. Underlying the laws of demand and supply is the concept of utility, which represents the advantage or fulfillment a person receives from consuming a good or service. Utility, then, explains how individuals and economies aim to gain optimal satisfaction in dealing with scarcity.

Utility is an abstract concept rather than a concrete, observable quantity. The units to which we assign an “amount” of utility, therefore, are arbitrary, representing a relative value. Total utility is the aggregate sum of satisfaction or benefit that an individual gains from consuming a given amount of goods or services in an economy. The amount of a person's total utility corresponds to the person's level of consumption. Usually, the more the person consumes, the larger his or her total utility will be. Marginal utility is the additional satisfaction, or amount of utility, gained from each extra unit of consumption.

Although total utility usually increases as more of a good is consumed, marginal utility usually decreases with each additional increase in the consumption of a good. This decrease demonstrates the law of diminishing marginal utility. Because there is a certain threshold of satisfaction, the consumer will no longer receive the same pleasure from consumption once that threshold is crossed. In other words, total utility will increase at a slower pace as an individual increases the quantity consumed.

Take, for example, a chocolate bar. Let's say that after eating one chocolate bar your sweet tooth has been satisfied. Your marginal utility (and total utility) after eating one chocolate bar will be quite high. But if you eat more chocolate bars, the pleasure of each additional chocolate bar will be less than the pleasure you received from eating the one before - probably because you are starting to feel full or you have had too many sweets for one day.

Chocolate Bars Eaten	Marginal Chocolate Utility	Total Chocolate Utility
0	0	0
1	70	70
2	10	80
3	5	85
4	3	88

This table shows that total utility will increase at a much slower rate as marginal utility diminishes with each additional bar. Notice how the first chocolate bar gives a total utility of 70 but the next three chocolate bars together increase total utility by only 18 additional units.

The law of diminishing marginal utility helps economists understand the law of demand and the negative sloping demand curve. The less of something you have, the more satisfaction you gain from each additional unit you consume; the marginal utility you gain from that product is therefore higher, giving you a higher willingness to pay more for it. Prices are lower at a higher quantity demanded because your additional satisfaction diminishes as you demand more.

In order to determine what a consumer's utility and total utility are, economists turn to consumer demand theory, which studies consumer behavior and satisfaction. Economists assume the consumer is rational and will thus maximize his or her total utility by purchasing a combination of different products rather than more of one particular product. Thus, instead of spending all of your money on three chocolate bars, which has a total utility of 85, you should instead purchase the one chocolate bar, which has a utility of 70, and perhaps a glass of milk, which has a utility of 50. This combination will give you a maximized total utility of 120 but at the same cost as the three chocolate bars.

Monopolies, Oligopolies and Perfect Competition

Economists assume that there are a number of different buyers and sellers in the marketplace. This means that we have competition in the market, which allows price to change in response to changes in supply and demand. Furthermore, for almost every product there are substitutes, so if one product becomes too expensive, a buyer can choose a cheaper substitute instead. In a market with many buyers and sellers, both the consumer and the supplier have equal ability to influence price.

In some industries, there are no substitutes and there is no competition. In a market that has only one or few suppliers of a good or service, the producer(s) can control price, meaning that a consumer does not have choice, cannot maximize his or her total utility and has have very little influence over the price of goods.

A monopoly is a market structure in which there is only one producer/seller for a product. In other words, the single business *is* the industry. Entry into such a market is restricted due to high costs or other impediments, which may be economic, social or political. For instance, a government can create a monopoly over an industry that it wants to control, such as electricity. Another reason for the barriers against entry into a monopolistic industry is that oftentimes, one entity has the exclusive rights to a natural resource. For example, in Saudi Arabia the government has sole control over the oil industry. A monopoly may also form when a company has a copyright or patent that prevents others from entering the market. Pfizer, for instance, had a patent on Viagra.

In an oligopoly, there are only a few firms that make up an industry. This select group of firms has control over the price and, like a monopoly, an oligopoly has high barriers to entry. The products that the oligopolistic firms produce are often nearly identical and, therefore, the companies, which are competing for market share, are interdependent as a result of market forces. Assume, for example, that an economy needs only 100 widgets. Company X produces 50 widgets and its competitor, Company Y, produces the other 50. The prices of the two brands will be interdependent and, therefore, similar. So, if Company X starts selling the widgets at a lower price, it will get a greater market share, thereby forcing Company Y to lower its prices as well.

There are two extreme forms of market structure: monopoly and, its opposite, perfect competition. Perfect competition is characterized by many buyers and sellers, many products that are similar in nature and, as a result, many substitutes. Perfect competition means there are few, if any, barriers to entry for new companies, and prices are determined by supply and demand. Thus, producers in a perfectly competitive market are subject to the prices determined by the market and do not have any leverage. For example, in a perfectly competitive market, should a single firm decide to increase its selling price of a good, the consumers can just turn to the nearest competitor for a better price, causing any firm that increases its prices to lose market share and profits.

Conclusion

Let's recap what we've learned in this tutorial:

- Economics is best described as the study of humans behaving in response to having only limited resources to fulfill unlimited wants and needs.
- Scarcity refers to the limited resources in an economy. Macroeconomics is the study of the economy as a whole. Microeconomics analyzes the individual people and companies that make up the greater economy.
- The Production Possibility Frontier (PPF) allows us to determine how an economy can allocate its resources in order to achieve optimal output. Knowing this will lead countries to specialize and trade products amongst each other rather than each producing all the products it needs.
- Demand and supply refer to the relationship price has with the quantity consumers demand and the quantity supplied by producers. As price increases, quantity demanded decreases and quantity supplied increases.
- Elasticity tells us how much quantity demanded or supplied changes when there is a change in price. The more the quantity changes, the more elastic the good or service. Products whose quantity supplied or demanded does not change much with a change in price are considered inelastic.
- Utility is the amount of benefit a consumer receives from a given good or service. Economists use utility to determine how an individual can get the most satisfaction out of his or her available resources.
- Market economies are assumed to have many buyers and sellers, high competition and many substitutes. Monopolies characterize industries in which the supplier determines prices and high barriers prevent any competitors from entering the market. Oligopolies are industries with a few interdependent companies. Perfect competition represents an economy with many businesses competing with one another for consumer interest and profits.

PERSUASIVE ESSAY

Policy Debate: Are Economic Sanctions Effective in Altering a Country's Actions?

Issues and Background

In today's fluid global marketplace, the failure of unilateral sanctions has become apparent: sanctions simply alter trade patterns without seriously damaging the target nation. Unless multiple countries deploy trade sanctions, the targeted country can avoid their punishing effects by turning to alternative suppliers. Although the United States enjoyed near-monopoly status in the production of many goods earlier in the century, that is not the case today. Instead, sanctions transfer business from U.S. companies to foreign competitors in the same market....

By providing an external focus for hostilities, unilateral sanctions also empower the targeted government in other ways. With the collapse of the USSR and the subsequent end of subsidies to Cuba in 1990, the Cuban military threat has disappeared; the sanctions have not. Indeed, many observers argue that continued U.S. antagonism toward Cuba has been the principal reason Castro has remained in power, despite the Cuban economy's deterioration.
~Aaron Lukas

Former President Carter was right to tell Cubans their country is isolated without true democracy and human rights. But lifting the trade embargo will remove the only incentive Castro has to reform. Instead, the United States should cultivate closer relations with ordinary Cubans, support those struggling for freedom and prod the dictatorship to loosen its grip.
~Stephen Johnson

Economic sanctions have often been used by the U.S. and other countries in attempts to alter the behavior of the target countries. These sanctions typically include general or selective trade embargoes, restrictions on foreign investment, and restriction on travel to and from the affected country. Among the most prominent examples of current or recent U.S. economic sanctions:

- The U.S. has imposed sanctions on Cuba since the early 1960s in response to the overthrow of the U.S.-supported Battista regime.
- A grain embargo was imposed on the Soviet Union in 1979 in response to the invasion of Afghanistan.
- Sanctions were imposed on South Africa and Rhodesia to alter the racist policies of their governments.
- Sanctions have been imposed on Libya since 198? in response to its past support of terrorist groups and its alleged connection to the bombing of Pan Am Flight 103.
- Since 1984, economic sanctions have been imposed upon Iran in a response to its support for terrorists groups and its attempts to acquire nuclear weapons and other weapons of mass destruction.
- Economic sanctions have been imposed on Iraq since the end of the Gulf War in response to its attempts to develop weapons of mass destruction.
- More recently, sanctions have been imposed on North Korea in response to its development of a a nuclear program that could result in the production of nuclear warheads.

While economic sanctions have been a popular tool of international policy, there is substantial disagreement over the effectiveness of these policies. Advocates of sanctions argue that the imposition of economic sanctions imposes substantial economic costs on the citizens of the affected countries. Since the development of the theory of comparative advantage by David Ricardo in the early 1800s, economists have argued that free trade provides economic benefits for all participants. Under this argument, countries may increase their level of *per capita* consumption by specializing in the production of those goods that they can produce at the lowest opportunity cost and trading these goods for those that can be acquired at a lower opportunity cost from other countries. The imposition of sanctions eliminates or reduces these potential gains from trade. (A more extensive discussion of the possible gains from trade appears in the debate investigating whether the U.S. gains from international trade).

It is also important to note that while multilateral sanctions may impose a substantial cost on the target country, unilateral sanctions are most likely to impose substantial costs primarily on the country that imposes the sanctions since the target country has other trading options. For example, the U.S. trade embargo on trade with Cuba initially resulted in the development of close trading ties between Cuba and the Soviet Union. In more recent years, Cuba has traded extensively with Europe and other North, South, and Central American countries. The availability of alternative trading partners substantially weakens the effect of the sanctions on the target country.

Supporters of sanctions argue that U.N.-sponsored sanctions have been effective in ending racist policies in Rhodesia and South Africa. Opponents of sanctions, however, argue that sanctions generally seem to have little or no effect in altering the behavior of the target country. They suggest that the changes in Rhodesia and South Africa would have occurred as a result of internal pressures even in the absence of sanctions.

The U.S. government has often imposed sanctions on countries in the hope that these sanctions will lead to political unrest and the replacement of the current government with one that is likely to be supportive of policies advocated by the U.S. Opponents of economic sanctions, though, argue that sanctions often make it easier for the current political leadership to blame economic problems on the trade restrictions imposed by the U.S. (and/or other nations). Health care problems, poverty, and so forth are blamed on the effect of the sanctions instead of on political and economic problems within the country.

One concern with sanctions is that the children, the poor, and the sick are often the primary victims of the trade restrictions while the leadership is largely unaffected. Long-term sanctions may lead to negative feelings toward the U.S. (and other countries that initiate and support sanctions) on the part of the general population in the target country. Concerns are often expressed that this may lead to an expansion in terrorist activities directed at U.S. targets. Proponents of sanctions argue that allowing free trade trade provides support for governments that engage in substantial human rights violations.

For better or worse, economic sanctions have become one of the most frequently used foreign policy tools of the U.S. It is likely that the debate over their efficacy will continue for some time to come.

Primary Resources and Data

- ***U.S. Interests Section - Havana, "US Legislation on Cuba"***
  http://usembassy.state.gov/havana/wwwhleg.html
  This website contains links to online documents detailing U.S. laws related to Cuba.
- ***U.S. Department of State, "Cuban Liberty and Democratic Solidarity Act of 1996 (Helms-Burton)"***
  http://usinfo.state.gov/regional/ar/us-cuba/helmsbur.htm

This page contains links to U.S. government news releases dealing with the Helms-Burton Act (from 1996 - present). Statements by Presidents Clinton and Bush on the rationale for the suspension of Title II of this Act are provided.

- ***CubaNet News, "Cuba News"***
  http://www.cubanet.org/cubanews.html
  This website contains an extensive collection of current and recent news releases dealing with Cuba and U.S.-Cuba relations.
- ***Congressional Research Service, "The Iran-Libya Sanctions Act"***
  http://www.au.af.mil/au/awc/awcgate/crs/rs20871.pdf
  This Congressional Research Service report contains a summary of the provisions of the Iran-Libya Sanctions Act (ILSA) of 1996 (as amended in 2001). This Act represents a continuation of unilateral U.S. sanctions that began in the early 1980s against these countries. The purpose of this Act is to reduce the ability of these countries to expand their military power and their support for terrorist activities. It was passed in response to allegations that Iran was attempting to acquire the capability to produce nuclear weapons and had been actively engaged in funding terrorist activities. One of the more controversial features of this Act is that it requires the U.S. President (with a few exceptions) to impose sanctions against foreign firms that invest above specified threshold levels in the energy sectors of Iran or Libya. The sanctions on Iran terminate if Iran ceases its attempts to develop weapons of mass destruction and is removed from the State Department list of countries that sponsor terrorist activities. Sanctions against Libya are to be lifted if it fulfills the requirements of the U.N. resolutions dealing with the bombing of Pan Am 103.

  In 2001, the Iran-Libya Sanctions Extension Act extended the provisions of the Iran-Libya Sanctions Act for another five years. (The Adobe Acrobat viewer plugin is required to view this document. You may download this viewer by clicking here.)

- ***Institute for International Economics, "Sanctions and Terrorism: Case 90-1, United States and UN v. Iraq"***
  http://www.iie.com/topics/sanctions/iraq.htm
  On this website, the Institute for International Economics provides quotations from many of the key players from the U.S., Iraq, the U.N., and other countries. Relevant U.N. Security Council resolutions are also provided.
- ***UNICEF, "Nearly One Million Children Malnourished in Iraq, Says UNICEF"***
  http://www.unicef.org/newsline/97pr60.htm
  This November 26, 1997 online UNICEF news article indicates that economic sanctions against Iraq have contributed to chronic malnourishment for nearly one million children in southern and central Iraq. Surveys indicated that approximately 25% of Iraqi children under the age of five were underweight in 1997.
- ***U.S. International Trade Data System, "U.S. Trade Sanctions and Embargoes"***
  http://www.itds.treas.gov/sanctions.html
  This website provides a list of the countries, groups, and individuals that are the target of U.S. trade sanctions and embargoes.
- ***USDA Foreign Agriculture Service, "Economic and Trade Sanctions"***
  http://www.brook.edu/dybdocroot/comm/policybriefs/pb034/pb34.htm
  This webpage contains links to information concerning trade embargoes on agricultural commodities. Specific information is available concerning trade with Cuba, Iran, Libya, North Korea, and Sudan.

- ***Robert P. O'Quinn, "A User's Guide to Economic Sanctions"***
  http://www.heritage.org/Research/PoliticalPhilosophy/BG1126.cfm
  Robert P. O'Quinn argues, in this June 25, 1997 Heritage Foundation Backgrounder, that economic sanctions are rarely effective in achieving their goals. He notes that President Clinton "imposed new unilateral economic sanctions on 35 countries that make up 42 percent of the world's population and consume 19 percent of its exports." These sanctions are an important component of U.S. foreign policy and have imposed substantial costs on U.S. consumers and businesses. While economic sanctions are widely used, O'Quinn cites evidence that indicates that sanctions have not achieved their goals in the vast majority of applications. Unilateral sanctions generally impose little harm on the target country while sometimes having a substantial effect on U.S. citizens. O'Quinn also suggests that sanctions, when they impact the target country, generally affect the middle class rather than the leaders of the country.
- ***Sidney Weintraub, "Sanctions: When They Don't Work, Keep Doing the Same"***
  http://www.csis.org/simonchair/issues200108.htm
  Sidney Weintraub critiques the use of sanctions in this August 21, 2001 online article. He argues that they are rarely effective and harm the general population instead of the leadership. The unilateral imposition of sanctions also harm relationships among allied countries who disagree on the need for sanctions. Weintraub suggests that engagement with the target countries has a better track record of improving economic and political conditions.
- ***Institute for International Economics, "Sanctions and Terrorism"***
  http://www.iie.com/topics/sanctions/hotsanction.htm
  The Institute for International Economics provides a discussion of economic sanctions on this site. It is argued that history suggests that economic sanctions have generally been ineffective. This website contains links to a variety of studies, policy briefs, working papers, and other online resources that deal with the topic of economic sanctions.
- ***Peter Wallensteen, "A Century of Economic Sanctions: A Field Revisited"***
  http://www.pcr.uu.se/UPRP_No_1.pdf
  Peter Wallensteen examines the effects of economic sanctions in this 2000 online research paper. He provides a history of the U.S. of sanctions from the 1930s through the end of the 20th century. Wallensteen observes that economic sanctions have generally not been very successful in attaining their objectives. He argues that multilateral sanctions approved through the UN are most likely to be successful.
- ***Project Ploughshare, "Assessing Economic Sanctions"***
  http://www.ploughshares.ca/CONTENT/WORKING%20PAPERS/wp981.html
  This document provides a report on Project Ploughshare's November 1997 Forum on Economic Sanctions. While this group advocates the use of sanctions over the use of military force, concerns are expressed over the humanitarian cost of the sanctions against Iraq. A good discussion is provided of the history of the Iraqi situation. The effectiveness of sanctions in the cases of Iraq and South Africa are also discussed in this document.
- ***Daniel Griswold, "Going Alone on Economic Sanctions Hurts U.S. More than Foes"***
  http://www.freetrade.org/pubs/articles/dg-11-27-00.html
  Daniel Griswold argues that unilateral economic sanctions harm U.S. citizens and U.S. businesses while having little impact on the target country. U.S. firms have lost sales and have been acquiring a reputation of unreliable sellers as a result of these sanctions. Griswold argues that China's growing market sector has been the result of increasingly free trade with the U.S. and the rest of the world. He suggests that such a policy is preferable to the use of sanctions.
- ***Richard N. Haass, "Economic Sanctions: Too Much of a Bad Thing"***
  http://www.brook.edu/dybdocroot/comm/policybriefs/pb034/pb34.htm
  Richard N. Haass argues that the costs of unilateral sanctions has often outweighed the benefits. While there is little evidence of their efficacy, economic sanctions have become a frequently used

tool of U.S. foreign policy. Haass suggests that the U.S. should more carefully evaluate the expected costs and benefits of sanctions before their imposition.

- ***Naomi Koppel, "U.N. Report Slams Economic Sanctions"***
  http://seattlepi.nwsource.com/national/iraq165.shtml
  This August 16, 2000 Associated Press article describes a report on sanctions issued by the U.N. Subcommittee on Human Rights. The report concludes that sanctions against Iraq and Cuba have resulted in substantial harm to the civilian populations.
- ***John Sweeney, "Clinton's Latin America Policy: A Legacy of Missed Opportunities"***
  http://www.heritage.org/Research/LatinAmerica/BG1201.cfm
  John Sweeney provides additional arguments in favor of the trade embargo on Cuba in this July 6, 1998 Heritage Foundation Backgrounder. While the focus of the article is on a general critique of U.S. Latin American policy, a substantial portion of the discussion deals with the Cuban trade embargo. Sweeney argues that the waiver of the Helms-Burton Act penalties against firms that trade with Cuba have seriously weakened its impact.
- ***Thomas H. Henriksen, "It's Time to End Sanctions against North Korea"***
  http://www-hoover.stanford.edu/publications/digest/984/henriksen.html
  This 1998 Hoover Institute document, written prior to the most recent problems involving North Korea, provides several argument against the use of economic sanctions. It is argued that sanctions turn the population of the target country against the country or countries imposing the sanctions. Henriksen suggests that economic engagement is a better long-term strategy.
- ***Kathy Kelly, "Banning Child Sacrifice: A Difficult Choice?"***
  http://www.iacenter.org/sacrific.htm
  Kathy Kelly describes health and economic conditions in Iraq in this March 9, 1998 online document. She had been part of a contingent that brought medicine to Iraq. Kelly describes poor conditions in hospitals and in the countryside that have resulted in higher rates of infant and child mortality and malnutrition. She argues that economic sanctions are the cause of many of these problems.
- ***Leon T. Hadar, "U.S. Sanctions Against Burma: A Failure on All Fronts"***
  http://www.cato.org/pubs/trade/tpa-001.html
  In this March 26, 1998 Cato Institute *Trade Policy Analysis* paper, Leon T. Hadar argues that sanctions against Burma have "harmed American economic interests and done nothing to improve the living conditions or human rights of the people of Burma." He also suggests that the U.S. has harmed its relationships with its allies while reducing the likelihood of influencing the government of Burma (Myanmar). Hadar suggests that the presence of U.S. firms in Burma could have exerted a positive influence for political reform.

  In addition to discussing the case against sanctions, this document provides a detailed description of the origin of sanctions against Burma.

PERSUASIVE ESSAY 2

Policy Debate: Does U.S. immigration policy harm domestic workers?

Issues and Background

...the net gains from current immigration are small, so it is unlikely that these gains can play a crucial role in the policy debate. Economic research teaches a very valuable lesson: the economic impact of immigration is essentially distributional. Current immigration redistributes wealth from unskilled workers, whose wages are lowered by immigrants, to skilled workers and owners of companies that buy immigrants' services, and from taxpayers who bear the burden of paying for the social services used by

immigrants to consumers who use the goods and services produced by immigrants.
~George J. Borjas

...highly skilled immigrants, who also create jobs for Americans, are not the only ones contributing to our economic boom. Even the less-skilled immigrants contribute to our economy and our lives by working in jobs most Americans do not want, such as cleaning offices, cooking in restaurants, and ringing up purchases in the grocery store. They, in turn, contribute by buying homes, clothes, and groceries. The wonderful cultural diversity brought to the United States by immigrants has become secondary to their willingness to work hard and become part of today's America.
~Bronwyn Lance

Most U.S. residents today are the descendants of immigrants who arrived in the U.S. during the past 150 years. Concern over the effect of immigration on domestic workers, however, have resulted in the passage of several laws designed to restrict immigration. Unions, in particular, have argued for more restrictive immigration policy on the grounds that immigration lowers the wage and employment levels for domestic residents.

There were no substantial restrictions on immigration into the U.S. until the passage of the Quota Law of 1921. This law set quotas on the number of immigrants based upon the country of origin. The Quota Law primarily restricted immigration from eastern and southern Europe. The Immigration and Nationality Act Amendments of 1965 (and subsequent amendments) eliminated the country-specific quota system and instead established a limit on the maximum number of immigrants allowed into the U.S. Under this Act, preferential treatment is given to those who immigrate for the purpose of family reunification. Those possessing exceptional skills are also given priority. No limit, however, is placed upon the number of political refugees allowed to immigrate to the U.S. (The definition of a political refugee, however, is narrowly defined and has sometimes been quite controversial.)

Not all immigrants, of course, enter the country through legal channels. Individuals often enter the country on student or tourist visas and begin working in violation of their visa status. Other individuals enter the country illegally without a valid U.S. visa. The Immigration Reform and Control Act of 1986 addresses the issue of illegal immigration by imposing substantial fines on employers that hire illegal immigrants.

The Illegal Immigration Reform and Immigrant Responsibility Act (IIRAIRA) of 1996 provided several new restrictions to immigration. Host families could only accept immigrants if the host family receives an income that is at least 125% of the poverty level. This Act also required that the Immigration and Naturalization Service maintain stricter records of entry and exit by nonresident aliens.

Those who support stricter limitations on immigration argue that immigrants increase the supply of labor in many labor markets, resulting in lower wages in the affected markets. This argument is somewhat flawed, though, in that it does not take into account the increase in labor demand that also occurs as a result of immigration. The demand for labor is a "derived demand." This means that the demand for labor is derived from the demand for final output. Immigrants provide labor to various labor markets. In return, however, immigrants receive labor income that is used to buy goods and services produced in the domestic economy. As the demand for output rises, so does the demand for the labor that produces this output. Increased immigration, therefore, results in higher levels of both labor demand and labor supply.

Thus, the effect of immigration on wages will vary across labor markets. In those labor markets in which labor supply rises by more than labor demand, wages will fall. In other labor markets, however, labor demand will rise by more than labor supply and wages will rise. Thus, increased immigration will be expected to cause lower wage rates in some occupations while higher wages will be received in other labor markets. The overall effect on domestic wages is, to a large extent, an issue that can only be resolved empirically. Recent studies by David Card, Cordelia Reimers, Kristin Butcher, and George Borjas have found that immigration has little overall impact on wage rates for domestic workers. Increased immigration, however, appears to generate small adverse wage and employment effects for domestic workers who have not completed high school.

While immigration may lower wage rates for some domestic workers, it should be also noted that these lower wage rates benefit producers. Lower wage rates also result in lower equilibrium product prices, thereby benefiting consumers. From society's perspective, the gains from immigration to producers and consumers should be weighed against the losses to low-wage workers.

Advocates of increased immigration note that children do not begin working the minute they are born. It requires substantial expenditures in the form of food, clothing, shelter, education, and other childrearing costs to produce an adult worker. These investments in human capital formation are quite substantial. Immigrant workers, unlike newborn children, are able to begin engaging in productive activities upon their arrival in the country. The cost of much of their human capital formation was borne by the country from which they emigrated. Since most immigrants arrive at a stage in their life in which they are relatively productive, higher immigration rates generally result in an increase in the proportion of the population that is working. As the proportion of the population that is working rises, *per capita* income also rises.

Concern over the future of social security is also used to support relaxed immigration restrictions. Declining birthrates in the U.S., combined with rising lifespans, result in a steady increase in the ratio of retired to working individuals over the next few decades. An increase in the number of younger immigrants could help to alleviate this problem.

Until the last few decades, most immigrants to the U.S. possessed higher levels of education, skills, and training than were the norm in their country of origin. Much of the immigration to the U.S. during this period was from countries in which the return to human capital was lower than in the U.S. The higher rate of return on human capital investments in the U.S. provides skilled workers with more incentive to emigrate to the U.S. In recent decades, however, most immigration to the U.S. has been from countries in which there is a higher level of income inequality. In this case, less skilled workers receive a higher return to emigration to the U.S. This has resulted in a larger proportion of immigrants possessing a relatively low level of human capital accumulation in recent years.

Opponents of immigration often express concern that immigrants use high levels of government services. This has been a more significant issue in recent decades since recent immigrants have generally possessed lower levels of education and training than had been possessed by earlier waves of immigrants. It is interesting to note, though, that illegal immigrants may provide a lower cost to society since they do not generally receive transfer payments from the government.

As an examination of the readings below will suggest, immigration is a topic on which there are some very strong feelings. There is, however, a growing body of empirical evidence that should help resolve some of these disputes.

Primary Resources and Data

- ***Bureau of Citizenship and Immigration Services***
  http://www.immigration.gov/graphics/index.htm
  The Bureau of Citizenship and Immigration Services web site contains information on current U.S. immigration law and policy. It also contains the online edition of the Statistical Yearbook, published by the Immigration and Naturalization Service. This yearbook contains an extensive collection of current and historical U.S. immigration statistics.
- ***Immigration and Naturalization Service, "Immigration and Naturalization Legislation from the Statistical Yearbook"***
  http://www.immigration.gov/graphics/aboutus/statistics/legishist/index.htm
  This website contains descriptions of all major (and most minor) U.S. immigration and naturalization legislation passed between 1790 and the present.
- ***Immigration and Naturalization Service, "Quota Law of May 19, 1921"***
  http://www.immigration.gov/graphics/aboutus/statistics/legishist/468.htm
  The Immigration and Naturalization Service provides a description of the key provisions of the Quota Law of 1921 on this website. This Act established country-specific quotas on immigration.
- ***Immigration and Naturalization Service, "Immigration and Nationality Act Amendments of October 3, 1965"***
  http://www.immigration.gov/graphics/aboutus/statistics/legishist/526.htm
  This website provides a description of the key provisions of the Immigration and Nationality Act Amendments of 1965. These Amendments ended the country-specific quotas for immigrants.
- ***Immigration and Naturalization Service, "Immigration Reform and Control Act of November 6, 1986"***
  http://www.immigration.gov/graphics/aboutus/statistics/legishist/561.htm
  The Immigration Reform and Control Act of 1986 provides amnesty to illegal immigrants who have been in the U.S. for a specified period while imposing penalties on employers of illegal immigrants. This website, provided by the Immigration and Naturalization Service, describes the key provisions of this Act.
- ***WashLaw Web, "Immigration Law"***
  http://www.washlaw.edu/subject/immigration.html
  Washburn University School of Law Library provides this extensive collection of links to online resources that deal with immigration law.
- ***The 'Lectric Law Library Lawcopedia, "Immigration Laws, Policies, and Issues"***
  http://www.lectlaw.com/timm.html
  This web site provides a useful summary of U.S. immigration laws and policies as well as a discussion of current policy issues related to immigration.
- ***Immigration and Naturalization Service, "Illegal Immigration Reform and Immigrant Responsibility Act of September 30, 1996"***
  http://www.immigration.gov/graphics/aboutus/statistics/legishist/act142.htm
  This 1996 law attempted to make illegal entry into the U.S. more difficult. It also substantially slowed down border crossings by road and rail.
- ***George Borjas, "Immigration"***
  http://www.econlib.org/library/Enc/Immigration.html
  George Borjas provides a historical discussion and economic analysis of immigration and U.S. immigration policy in this online article appearing in *The Concise Encyclopedia of Economics*. This article provides a very useful overview of this topic.
- ***Phillip L. Martin, "The Economics of Immigration"***
  http://www.facsnet.org/tools/nbgs/a_thru_h/e/ecnimmigr.php3
  Philip L. Martin discusses some of the economic issues associated with immigration policy in this May 1995 online article. This article, designed to provide background material for journalists, provides a useful overview of the major economic issues associated with immigration and introduces many of the basic concerns that are often raised about U.S. immigration policy.

Different Perspectives in the Debate

- ***George J. Borjas. "The New Economics of Immigration"***
  http://www.theatlantic.com/issues/96nov/immigrat/borjas.htm
  George J. Borjas examines the economic effects of immigration in this article appearing in the November 1996 issue of *The Atlantic Online*. He notes that, as a result of the low levels of education and training possessed by most recent immigrants, high levels of immigration have contributed to rising levels of income inequality in the U.S. during the past two decades. Borjas also observes that recent waves of legal immigrants tend to receive a relatively high level of transfer payments. He indicates that immigrants in earlier decades tended to receive relatively high wages after a few years of residence and were unlikely to receive welfare benefits. Borjas argues that U.S. immigration law should be modified to provide preferential treatment for skilled workers. He also suggests that a larger number of immigrants should be allowed when the economy is strong and fewer immigrants allowed when unemployment rates are relatively high.
- ***David M. Kennedy, "Can We Still Afford to be a Nation of Immigrants?"***
  http://www.theatlantic.com/issues/96nov/immigrat/kennedy.htm
  In this November 1996 *The Atlantic Online* article, David M. Kennedy examines changes that have occurred in the causes and consequences of immigration into the U.S. He observes that early voluntary immigration into the U.S. (slaves made up a large share of early immigrants) was the result of the Industrial Revolution that disrupted life in first northern and then southern Europe. The growth of the U.S. economy accommodated this migration of workers who had been displaced in Europe. Kennedy notes that modern immigration is primarily from Asia and Central and South America, areas that are experiencing their own transition to more industrial economies. He raises concerns that the migration of less-skilled workers today, however, is not as easy to absorb into an economy in which the demand for unskilled labor is not growing as rapidly as in earlier decades. He also suggests that the introduction of a larger number of low-wage unskilled workers will reduce incentives to invest in capital and will result in a lower rate of economic growth. Kennedy also notes that the priority given on visa applications to family reunification results in a relatively large immigration of elderly individuals. This trend, if it continues, may make the problems facing the Social Security system more severe.
- ***Vernon M. Briggs Jr., "Immigration Policy: A Tool of Labor Economics? Immigration and the U.S. Labor Market: Public Policy Gone Awry"***
  http://www.levy.org/docs/ppb/ppb7.pdf
  In this 1993 *Levy Public Policy Brief*, Vernon M. Briggs Jr. argues that U.S. immigration law should be revised to provide priority for immigrants who possess the human capital characteristics that are needed in U.S. labor markets. He also suggests that the current policy of providing priority based upon family reunification results in the entry of a large number of immigrant workers who possess low levels of education and training. Since there is no evidence of a shortage of unskilled workers, Briggs argues that this policy depresses wages for workers in these low-wage markets.
- ***Rand, "Publications of the RAND Center for Research on Immigration Policy, 1989-1999"***
  http://www.rand.org/education/crip.pubs.html
  This page contains links to a collection of studies on immigration conducted by the RAND Center for Research on Immigration Policy.
- ***The CNMI Guide, "Characteristics of the CNMI Labor Force and the Need to Control Immigration"***
  http://www.cnmi-guide.com/info/essays/economics/20.html
  The Commonwealth of the Northern Mariana Islands (Saipan, Tinian, and Rota) has been a U.S. Commonwealth since 1978 (and had been a U.S. Trust Territory since 1947). This online article describes concerns over a proposal to impose U.S. immigration laws on islands that rely extensively on immigrant labor.

- ***Carnegie Endowment for International Peace, "Research Perspectives on Migration: Immigrants and Welfare"***
  http://www.ceip.org/programs/migrat/rpm1sum.htm
  The Carnegie Endowment for International Peace examine the levels of welfare use by U.S. immigrants. They find that low-income immigrants are less likely to receive welfare than are domestic residents with the same income levels. Because a large proportion of immigrants have relatively low wages, however, immigrants receive a growing share of welfare benefits. Elderly immigrants and refugees, in particular, receive higher levels of transfer payments than other immigrant groups.
- ***Glenn Spencer's American Patrol Report***
  http://www.americanpatrol.org/
  This site provides anecdotal evidence of problems associated with a high level of immigration of low-wage workers.
- ***Center for Immigration Studies***
  http://www.cis.org/
  This organization provides a variety of arguments and studies suggesting that there should be greater restrictions on immigration into the U.S.
- ***Julian Simon, "Immigration: The Demographic and Economic Facts"***
  http://www.cato.org/pubs/policy_report/pr-immig.html
  Julian Simon argues that immigration tends to provide net benefits to the U.S. in this December 11, 1995 Cato Institute study. He notes that immigration rates are only about one-third of their level in the early part of the twentieth century. Simon provides a summary of research findings that indicate that immigration generates little or no adverse wage or employment effects for domestic residents.
- ***Alexis De Tocqueville Institute, "Immigration"***
  http://www.adti.net/gw-immigration.html
  The Alexis De Tocqueville Institute provides annotated links to resources that discuss the beneficial impacts of immigration on the U.S. economy.
- ***Bronwyn Lance, "The Economic Impact of Immigrants"***
  http://www.adti.net/html_files/imm/worldandi_lancemay2000.html
  In this May 2000 online document, Bronwyn Lance cites anecdotal evidence and research studies that indicate that immigration benefits the U.S. economy. She notes that immigrants have higher labor force participation rates than domestic residents. Lance cites a study that she co-authored that suggests that higher levels of immigration leads to rising property values in cities.
- ***Bronwyn Lance, "The Traffic Jam and Job Destruction Act: Why Congress Must Do Away With Border-Clogging Provision Slipped Into 1996 Law"***
  http://www.adti.net/html_files/imm/Section110.html
  In this June 1999 online article, Bronwyn Lance discusses the problems with the entry and exit reporting requirements of the Illegal Immigration Reform and Immigrant Responsibility Act. She observes that these requirements cannot be easily met with current technology and have resulted in substantial delays in border crossings.
- ***American Immigration Law Foundation***
  http://www.ailf.org/
  The American Immigration Law Foundation provides an extensive collection of online studies and other resources that suggest that immigration provides net benefits to the U.S. economy.

APPLICATION – WHAT'S WRONG WITH THIS PICTURE? (Respond)

This is a series of doctored photos depicting scenes we'll never see in the real world. Explain why. Concepts include: public goods, comparative advantage, opportunity cost, economies of scale, adverse possession, moral hazard, elasticity, marginal utility, and externalities.

Photo #1:

Concept: Public good. **What's wrong with this picture?**

Photo #2:

Concept: Opportunity cost **What's wrong with this picture?**

Photo #3:

Concept: Economies of scale **What's wrong with this picture?**

Photo #4:

Concepts: Equilibrium, law of one price. **What's wrong with this picture?**

Photo #5:

Concept: Equilibrium. **What's wrong with this picture?**

Photo #6:

Concepts: Incentives, adverse selection and moral hazard. **What's Wrong with this Picture?**

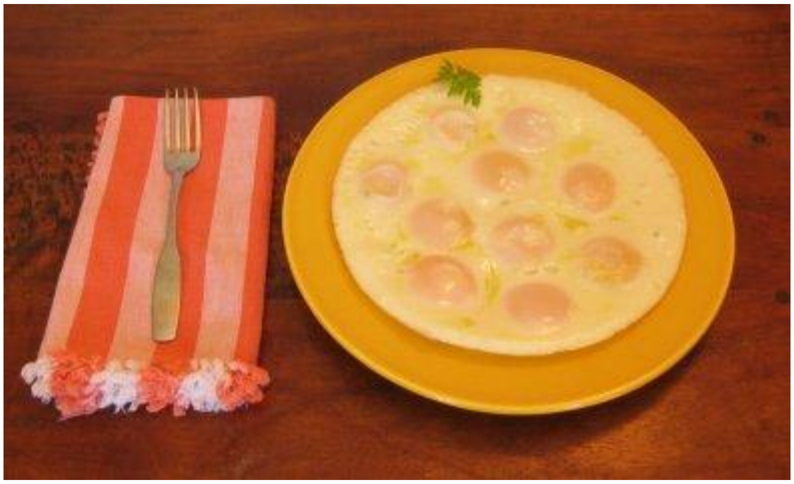
Photo #7:

Concept: Opportunity cost, comparative advantage **What's wrong with this picture?**

Photo #8:

Concepts: elasticity, price discrimination **What's wrong with this picture?**

Photo #9:



Concept: Law of diminishing marginal utility (or benefit) **What's wrong with this picture?**

Photo #10:

Concept: comparative advantage, absolute advantage **What's wrong with this picture?**

Photo #11: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Concept: Opportunity cost **What's wrong with this picture?**

Photo #12:

Concepts: incentives, equilibrium, efficiency **What's wrong with this picture?**

Photo #13:

Concepts: risk, opportunity cost **What's wrong with this picture?**

Photo #14:

Concepts: Incentives, externalities, law and economics **What's wrong with this picture?**

Photo #15:

Concepts: opportunity cost, substitutes, demand **What's wrong with this picture**

Photo #16:

Concepts: There's no such thing as a free lunch, incentives, equilibrium. **What's Wrong with this Picture?**

Photo #17:

Concepts: Externalities, opportunity cost **What's wrong with this picture?**

END TEXT