## Unit One B - Day One (pages 72-82)

## Demand

Market: an institution or mechanism, which brings together buyers ("demanders") and sellers ("suppliers") of particular goods and services.

The rest of this unit assumes a perfectly competitive market. This means that there are a large number of buyers and sellers acting independently of one another.

## Three questions the market can answer. Any economic system should be able to answer these questions.

1) The market decides what will be produced.
2) The market decides how things will be produced?
3) The market decides for whom the products will be produced.

Demand -

Quantity Demanded: the total amount of a given commodity that all households wish to purchase. (These commodities must meet the definition of demand.)

Suppose you owned a CD player and CDs cost $\$ 50$ a piece. How many a year would you buy? Let's say two. Now suppose they cost $\$ 35$ a piece. Would you buy more CDs or fewer CDs? What if the cost was $\$ 20$ dollars a year? Finally, how many would you buy if they cost $\$ 5$ a piece. Let's look at this on a chart.

| Price (\$) | Quantity Demanded |
| :---: | :---: |
| 50 | 2 |
| 35 | 5 |
| 20 | 13 |
| 5 | 25 |

This is what we call a demand schedule. It is a table that shows how much consumers are willing and able to purchase at various prices.

You can have a demand schedule for an individual or a market. The market demand schedule is just the summation of all the individuals demand schedules.

In looking at the table you will notice that as the price decreases quantity demanded (notice not your demand) increases. As price increases your quantity demanded for CD'S. This is called the law of demand.

The law of demand: as price increases your quantity demanded for a good or service will decrease and vice versa. The law of demand represents an indirect relationship.

Price Increases then Quantity Demanded Decreases
Price Decreases then Quantity Demanded Increases


This is what is called a DEMAND CURVE: A graph of a demand schedule: a demand curve is drawn on the assumption that everything except the commodity's own price is held constant (ceteris paribus) a change in any of the variables previously held constant will shift the demand curve to a new positions.

Demand curve is downward sloping due to diminishing marginal utility.
Utility: Satisfaction derived from consuming a commodity. Measured with "Utils"

MARGINAL UTILITY: The change in satisfaction resulting from consuming a little more or a little less of a commodity

LAW OF DIMINISHING MARGINAL UTILITY: The utility any household derives from successive units of a particular commodity diminishes as total consumption of the commodity increases while the consumption of all other commodities remains constant


## Change in Quantity Demanded

|  | A decrease in price leads to an increase in Quantity Demanded |
| :---: | :---: |
|  | An increase in price leads to a decrease in Quantity Demanded |

## DETERMINANTS OF DEMAND:

When a determinant changes the demand curve shifts. The direction of the shift comes from the determinant that causes the change.
1.
2.
3.
4.
5.
6.
7.
8.
Price

1) CONSUMERS INCOMES: a rise in average household income shifts the demand curve for most commodities to the right. This indicates that more will be demanded at each possible price. The direction of the shift depends on whether the good is inferior or normal/superior.

SUPERIOR GOODS (also called normal): those goods whose demand varies directly with income. (Examples: Steak, Luxury cars...)

Increase in income will lead to increase in demand for the normal good
Decrease in income will lead to decrease in demand for the normal good
INFERIOR GOODS: those goods whose demand varies inversely with income. (Ex: Hamburgers, used cars...)

Increase in income will lead to decrease in demand for the inferior good
Decrease in income will lead to increase in demand for the inferior good
2) CONSUMERS TASTES AND PREFERENCES: A change in tastes and preferences in favor of a commodity shifts the demand curve to the right more will be bought at each price. (CD's change demand for records)

If people prefer more of a product you will get an increase in demand. If they prefer less of a product you will get a decrease in demand.
3) THE PRICE OF COMPLEMENTARY GOODS:

A fall in the price of a complementary commodity will shift a commodity's demand curve to the right.
Example: A decrease in the price of peanut butter means the demand curve for jelly will increase. Notice this means more jelly will be bought at each price.
Price

An increase in the price of peanut butter will cause demand curve for jelly to decrease.
Graph this - An increase in the price of toothbrushes results in a decrease in demand toothpaste.
4) THE PRICE OF SUBSTITUTES:

A rise in the price of a substitute for a commodity shifts the demand curve for the commodity to the right.
Example: An increase in the price of margarine leads to an increase in the demand for butter.


Graph this - A decrease in the price of beef leads to a decrease in demand for pork.

## 5) CHANGE IN POPULATION:

A rise in population will shift the demand curves for commodities to the right, indicating that more will be bought at each price. (Baby boom after WWII, other examples?)

A decrease in population will shift the demand curve for the commodity to the left.

## 6) CONSUMER EXPECTATIONS ABOUT PRICE:

If consumers expect prices to rise in the near future the demand for goods will increase. (Increase in Demand)

If consumers expect prices to fall in the near future the demand for goods will decrease. (Decrease in Demand)
7) CONSUMER EXPECTATIONS ABOUT INCOME: If consumers expect overall incomes to fall the demand will decrease now.
(Ex: an announced increase in future sin taxes will increase demand for those goods before the tax goes in effect.)

When students are in their last year of college they often get job offers a few months before they graduate. They then run out and buy new clothes, a new car... because they expect higher wages.

## Unit One B - Day Two (pages 84-90)

SUPPLY: The number of units of a good or service that a seller is willing and able to sell at various prices.

QUANTITY SUPPLIED: the total amount of a given commodity that all businesses/firms wish to sell (which must meet the requirement of supply).

SUPPLY SCHEDULE: A table that shows how much sellers are willing and able to supply at various prices.

| Price (\$) | Quantity Supplied |
| :---: | :---: |
| 50 | 25 |
| 35 | 13 |
| 20 | 5 |
| 5 | 2 |

LAW OF SUPPLY: As price of goods and services increase, sellers usually will want to supply more of those goods or services, and vice versa


Supply curve

Price Increases then Quantity Supplied Increases
Price Decreases then Quantity Supplied Decreases
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Shifts in the Supply Curve


## DETERMINANTS OF SUPPLY

## 1) RESOURCE PRICES:

A rise in the price of inputs shifts the supply curve to the left indicating that less will be supplied at any given price.

A fall in the price of inputs shifts the supply curve to the right.
Graph this - A decrease in the price of beef leads to an increase in supply of hamburgers.

## 2) TECHNOLOGICAL CHANGE:

A decrease in production costs will increase the profits that can be earned at any given price of the commodity. This change shifts the supply curve to the right.

An increase in production costs will decrease the profits that can be earned at any given price of the commodity. This change shifts the supply curve to the left.

## 3) TAXES

An increase in the taxes will shift the supply curve to the left.

## 4) SUBSIDIES

A subsidy is a payment to a company to produce (or not produce) something. This makes it cheaper for the company to produce so the supply curve shifts to the right.

## 5) EXPECTATIONS:

If the supplier expects future profits of their good to rise they will decrease the supply of the good now. This will shift the curve to the left.

If the supplier expects future profits of their good to fall they will increase the supply of the good now. This will shift the curve to the right.

Graph this - A increase in the expected future profits of Apple leads to a decrease in the supply of iPhones.
6) NUMBER OF SELLERS:

An increase in the number of sellers will shift the supply curve for the product to the right.
Graph this - Three grocery stores close within a month in Evansville, IN which leads to a decrease in the supply of groceries.

## Unit One B - Day Three (pages 93-98)

| $\mathbf{Q}$ | lice price at which the quantity <br> demanded equals the quantity <br> supplied is called the equilibrium <br> price. |
| :--- | :--- |
| Notice that equilibrium is defined |  |
| as a state of balance between |  |
| opposing forces |  |

\(\left.\begin{array}{l}Shortage: <br>
In this case the producer has set the <br>
price too low. This means quantity <br>
demanded is much higher than <br>
quantity supplied. <br>
This market is not in equilibrium. <br>
As sellers realize they can not keep <br>
the product on the shelves, they will <br>
raise the price. The market will <br>

work its way to equilibrium.\end{array}\right]\)| Surplus |
| :--- |
| In this case the producer has set the |
| price too high. This means quantity |
| demanded is much lower than |
| quantity supplied. |

What happens to equilibrium when
whe of the determinants of demand

change? $\quad$| In this case a determinant of |
| :--- |
| demand causes an increase in |
| demand. This caused the price to |
| increase and the quantity to |
| increase. |

| ( |  |  |
| :---: | :---: | :---: |
|  |  |  |
|  |  | Draw a decrease in supply. |

## Unit One B - Day Four (pages 148-172)

\(\left.\left.$$
\begin{array}{l}\text { PRICE CEILING: The maximum } \\
\text { PRICE price a seller may charge for a } \\
\text { legal } \\
\text { product or service. }\end{array}
$$\right] \begin{array}{l}This allows people to purchase <br>
G\&S at a lower price than they <br>
would have otherwise been able to <br>
get it for. This allows many a <br>

chance to afford these things.\end{array}\right\}\)| A price ceiling is below |
| :--- |
| equilibrium point. |
| Notice that a ceiling keeps the |
| price low and does not allow the |
| market to drive the price up. This |
| keeps buyers in the market that |
| would have otherwise gotten out. |
| At that price the quantity supplied |
| and the quantity demanded cannot |
| reach equilibrium. Hence a |
| shortage. |
| Real life examples would be - |
| Rent controlled housing, Patient |
| Protection and Affordable Care Act |
| (Obamacare). |


| Price Floor |
| :--- |
| Ex: minimum wage, price " <br> fixed by government which are <br> above equilibrium prices. |
| floors of agriculture products, "sin" |
| taxes. |
| Notice that the floor keeps the <br> price above the equilibrium. <br> Suppliers are willing to increase Qs <br> at this artificial price while some <br> demanders are driven out of the <br> market. The net result is a surplus. |
| Qd |

What happens when both supply and demand change?
In economics we do not deal with absolute terms. That means we do not really know how far the curves shift. This means that any time you shift both curves, either Quantity or Price will not be able to be determined. (Indeterminant)
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## Unit One B - Day Five (pages 108-132)

How do we find slope? $\qquad$ In economics slope is known as elasticity.

The responsiveness, or sensitivity, of consumers to a change in the price of a product is measured by the concept of Price elasticity of demand. Simply put, if consumers respond (relatively) to a change in price it is said to be elastic. If they do not respond (relatively) to a change in price the product is said to be inelastic.

- If the price of a good rises and consumers stop purchasing it then the demand for that good is elastic.
- If the price of a good rises and consumers continue purchasing it then demand for that good is inelastic.

There are four things that go into determining the elasticity of a demand curve.

1) Luxuries versus necessities. Your quantity demanded for heart surgery will not change much with the change in price.

Ex of elastic demands: Sports cars, riding lawn mowers, consumer electronics Ex of inelastic demands: food, electricity, health care.
2) Availability of substitutes. The greater the number of substitutes for the product the more elastic the demand. If the price of beef skyrockets you would just switch to chicken. Therefore, we can say that the demand curve for beef is very elastic. Its quantity demanded changes with a change in price.
elastic: CDs, sugar
inelastic: U.S. mail, local cable company
3) Proportion of income. The greater the price of a good relative to one's budget, the greater the elasticity of demand. If the price for candy bars increased $10 \%$ (or 4 cents) your quantity demanded would not change much. However, if the price of a 100,000 -dollar house increase $10 \%$ (or $\$ 10,000$ ) your quantity demanded would most likely change a lot.
elastic: automobiles, houses, boats
inelastic: soft drinks, fast food meals
4) Time: The longer the time period the more elastic a demand curve becomes. A person will not run out and buy a smaller car if the price of gas goes up. Instead they will wait until their older car wears out.
elastic: steak, ice cream, riding lawn mowers
inelastic: water, electricity, medicine
vs. Inelastic demand curve



A good is perfectly inelastic when there will be no change in quantity demanded no matter what the $\%$ change in price. ex. Medicine


A good is perfectly elastic when there is a major change in quantity demanded when there is a small $\%$ change in the price. ex:

## Unit One B - Day Seven (pages 1020-1026)

Exchange rates are based on supply and demand for money. When we buy goods from other countries we actually pay in their currency. This means that if their price level goes down we will demand more of their products. If we demand more of their products we need more of their currency. This means an increase in the demand for their currency.

Foreign exchange rate: the price of one currency in terms of another.

## Foreign Exchange (FOREX) Graph

A supply and demand graph for Dollars in terms of Euros.


If Europeans want to buy more American goods (for any reason) they must do so in American dollars. Therefore, as Europeans seek to buy more American goods the Demand for US Dollars (USD) will shift to the right (grow).

| Price of a <br> dollar in <br> Yen | Dollars in terms of Yen <br> appreciation: an increase in the value of a currency <br> in terms of other currencies. |
| :--- | :--- | :--- |
| Example - Japanese products become more |  |
| expensive which results in the people of Japan |  |
| seeking more American goods. Therefore, the |  |
| USD appreciates in terms of Yen. Demand curve |  |
| shifts to the right (grows). |  |



If the Euro appreciates what happens to the demand for the USD? It goes up because the Euro (and hence European products) is now more expensive relative to the U.S. dollar.

## Graph it.

If we have an increase in the demand for European products we have an increase in the demand for Euro's. This means the price of a Euro goes up and the foreign exchange value of the dollar has decreased.

Graph it.

If Germany, then wants to buy more American goods how does this affect the price of the euro?


| Price of <br> Euro in <br> Dollars |  |  |
| :--- | :--- | :--- |
|  |  | If Germany then wants to buy more American <br> goods they would in effect supply more Euro's. <br> This shifts this supply curve out and lowers the <br> price of Euros for us. |

If you're struggling greatly with FOREX don't sweat it. We'll be coming back to them multiple times throughout the semester. This is just the first taste of this topic.

