## Macro Unit 1b

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

Notice that the remainder of this unit assumes a perfectly competitive market. This means that there are a large number of independently acting buyers and sellers.

## 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.

## Project the definition of demand up on the overhead.

Demand-
The number of units of a good or service that a buyer is willing (I am not willing to buy sweet potatoes) and able (I am not able to buy a Porsche) to buy at various prices. (a range of prices)

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

Suppose you owned a C.D. player and c.d.'s cost $\$ 50$ a piece. How many a year would you buy. Now suppose they cost $\$ 35$ a piece. How many a year would you buy then? What if the cost was $\$ 20$ dollars a year? Finally how many would you buy if they cost $\$ 5$ a piece. Lets 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 curve is just the summation of all the individuals demand curves.

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 C.D.'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


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




## DETERMINANTS OF DEMAND:

When a determinant changes the demand curve shifts. The direction of the shift comes from the determinant that causes the change.
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 (also called 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...)
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. (C.d.'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 baked potatoes means the demand curve for sour cream will increase. Notice this means more sour cream will be bought at each price.
Price

An increase in the price of baked potatoes will cause demand curve for sour cream to decrease.

## (Can you graph this?)

## 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.
Price

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

## 5) CHANGE IN POPULATION (number of consumers):

A rise in population will shift the demand curves for commodities to the right, indicating that more will be bought at each price. (THIS ALSO INCLUDES NEW MARKETS.) (Baby boom, Germany)

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.

## SPEND TIME MAKING SURE THEY UNDERSTAND THE DIFFERENCE BETWEEN A CHANGE IN DEMAND AND A CHANGE IN QUANTITY DEMANDED.

## Micro Unit 2 Lesson 2 \& 3

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

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

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

| $\begin{aligned} & \mathbf{P} \\ & \\ & \mathbf{P} \\ & \mathbf{P}^{\prime} \end{aligned}$ |  | A decrease in price leads to a decrease in Quantity Supplied. |
| :---: | :---: | :---: |



## 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.

## 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.

## 6) NUMBER OF SELLERS:

An increase in the number of sellers will shift the supply curve for the product to the right.

| O | The price at which the quantity <br> demanded equals the quantity <br> supplied is called the equilibrium <br> price. |
| :--- | :--- |
| Notice that equilibrium is defined <br> as a state of balance between <br> opposing forces |  |

Shortage:
In this case the producer has set the
price too low. This means quantity
demanded is much higher than
quantity supplied.
This market is not in equilibrium.
As sellers realize they can not keep
the product on the shelves, they will
raise the price. The market will

work its way to equilibrium. $|$| 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
Werease in Demand
one of the determinants of demand
change?
\(\left.\left.$$
\begin{array}{l}\text { What happens to equilibrium when } \\
\text { the one of the determinants of } \\
\text { supply change? }\end{array}
$$\right\} \begin{array}{l}In this case a determinant of supply <br>
causes an increase in supply. This <br>
caused the price to decrease and the <br>

quantity to increase.\end{array}\right\}\)| Price ceiling |
| :--- |
| 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. |


| Price Floor |
| :--- |
| Ex: minimum wage, price floors of <br> agriculture products. <br> by government which are above <br> equilibrium prices. |
| Notice that the floor keeps the price <br> above the equilibrium. Suppliers are <br> willing to increase Qs at this artificial <br> price while some demanders are driven <br> out of the market. The net result is a <br> 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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Discuss the subject of the slope of a line. How is it found? (rise over run) or the vertical axis divided by the horizontal axis. Notice that this is 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.

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

1) Luxuries versus necessities. This is what we have been discussing. Your quantity demanded for heart surgery will not change much with the change in price.

Ex of elastic demands: Sports cars, riding lawn mowers, V.C.R's.
Ex of inelastic demands: food, electricity, health care.
2) Availability of substitutes. The greater the number of substitute the more elastic the product. If the price of beef went way up 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: c.d.'s, sugar,
inelastic: U.S. mail, local telephone company, gasoline
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. A house would have an inelastic demand curve.
elastic: automobiles, houses, boats
inelastic: soft drinks, computer disks
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.

Have students do Activity 21. Answer any questions they have about elasticity.
Examples of Elastic curves: steak, ice cream, riding lawn mowers...
Examples of Inelastic curves: water, electricity, medicine...
Elastic demand curve
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:

