Supply and Demand Issues

Supply and demand are the starting point of all economic analysis.

The essence of choice is being able to balance the two.
The different quantities that a producer or producers will make available to the market at different prices over a given period of time.
LAW OF SUPPLY

As price increases, producers are willing to produce and sell more.

As price decreases, producers are willing to produce and sell less.

Price and Quantity Supplied are directly related.
## Supply Table

Widgets Per Week

<table>
<thead>
<tr>
<th>Price</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>$4.00</td>
<td>1500</td>
</tr>
<tr>
<td>$5.00</td>
<td>1800</td>
</tr>
<tr>
<td>$6.00</td>
<td>2000</td>
</tr>
<tr>
<td>$7.00</td>
<td>2500</td>
</tr>
<tr>
<td>$8.00</td>
<td>3000</td>
</tr>
</tbody>
</table>
Supply Graph
Producer Costs

Fixed Costs:
Costs that don't change as production levels change
   Ex: Rent, Insurance, Loan Payments, Taxes

Variable Costs:
Costs that increase and decrease with changes in the production levels
   Ex: Labor costs, Materials, Utilities

Total Costs = Fixed Costs + Variable Costs
Changes in Supply

Supply in the market will change if there is a change in:

Production Costs
  Ex: Materials, Labor, Technology, Taxes

Number of Producers in the Market

Profitability of other production options

Expectation of future market price
Increase in Supply

P

P1

S1

S2

Q1

Q2

Q
DEMAND

The various quantities that a person or group is willing to buy at various prices
Law of Demand

As prices *increase*, the quantity people are willing to buy *decreases*

As prices *decrease*, the quantity people are willing to buy *increases*

Indirect price/quantity relationship
# DEMAND TABLE

(Coca-Cola per week)

<table>
<thead>
<tr>
<th>Price</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>$.25</td>
<td>20</td>
</tr>
<tr>
<td>$.50</td>
<td>10</td>
</tr>
<tr>
<td>$.75</td>
<td>7</td>
</tr>
<tr>
<td>$1.00</td>
<td>5</td>
</tr>
</tbody>
</table>
Demand Graph

Price

Quantity

$0.00

$0.25

$0.50

$0.75

$1.00

5 7 10 20
**Income Effect (Price Effect)**

When price rises, a consumer cannot afford to buy as much. But, when price declines, a consumer can afford to buy more. Price changes affect “purchasing power” of income.
**Substitution Effect**

When prices increase on one product, consumers will buy a substitute product instead. But when prices decrease on a product, consumers will switch to that product from other substitutes.

**Substitutes** are products that can be used in place of each other. **Complements** are products that are used together.
REASONS FOR DEMAND

Law of Diminishing Marginal Utility

As we have more and more units of a product, the satisfaction we get from each additional unit decreases.

Marginal = additional, next, or last

Utility = satisfaction
Changes in Demand

If Demand changes, then people want more or less of the product even when the price remains constant.

There are several reasons why Demand might change......
Changes in Demand

A change in people’s income...

When people have more money, they buy more of everything, and when they have less, they buy less.
Change in Demand

People’s tastes and preferences change…..

Advertising changes people’s attitudes, desires, etc. Styles change, fads come and go.
Change in Demand

Situation and needs change...

Changes in Demand

There’s a change in the number of consumers in the market...

When there are more consumers, Demand goes up, and visa-versa
Changes in Demand

Expectations of future price...

If we expect the price to go down soon, we will have reduced Demand now, and visa-versa
Changes in Demand

The prices of substitutes or complements change.

If apples go up in price, the Demand for pears might increase because people will substitute pears for apples.
Increase in Demand

P

P1

D1

Q1

Q2

D2

Q
Decrease in Demand
CHANGES IN DEMAND

Demand will change if there are changes in:

- Income, Wealth, Credit
- Personal Tastes and Preferences
- Situation
- Number of Consumers in the Market
- Expectation of Future Price
- The prices of Complements or Substitutes
Putting Demand and Supply Together

Equilibrium

The situation when quantity supplied equals quantity demanded at a particular price
Putting Demand and Supply Together

Shortages

The situation when quantity demanded is greater than quantity supplied

Exists at any price below the equilibrium price

Is not the same as scarcity
Putting Demand and Supply Together

Surpluses

The situation when quantity supplied is greater than quantity demanded

Exists at any price above the equilibrium price
Summary

The law of demand says that prices and quantity demanded are inversely related.

Relative prices must be distinguished from money, since people respond to changes in relative prices.
Summary

A change in quantity demanded versus a change in demand

A change in quantity demanded is a movement along a demand curve

A change in demand is a shift of the demand curve

The law of supply states that price and quantity supplied are directly related.
Summary

A change in quantity supplied versus a change in supply

A change in quantity supplied is a movement along a supply curve

A change in supply is a shift of the supply curve
Summary

Determining market price and equilibrium quantity

The demand and supply curves intersect at the equilibrium point.

Shortages exist when the price of a good is below the market price.

Surpluses exist if the price of the good is greater than the market price.