

Lecture 3 – Economic Principles

- Key Concepts
 - Decision-making on the margin
 - Supply
 - Demand
- Main Issues
 - Factors that shape supply and demand
 - How do we model them?
 - Why are they useful concepts?
- Examples
 - Corn prices and acreage
 - Organic dairy markets & rBST (recombinant bovine somatotropin)
 - xyz

Review of Decision-Making on the Margin

- Marginal revenue or benefit = Marginal cost
- Requires being able to make discrete adjustments like work one more hour, produce and sell one more unit of output
- Use this to understand how markets work to balance supply and demand
- Firms produce up to the point where additional supply costs what consumers willing to pay.

Supply

- What factors influence supply of a good?
 - Costs of inputs
 - Technology for transforming inputs to outputs
 - Natural shocks
 - Regulations
- What do we expect to happen to the cost of production when output rises?
 - Price to increase
 - When might price decrease?

Corn Production in 2007

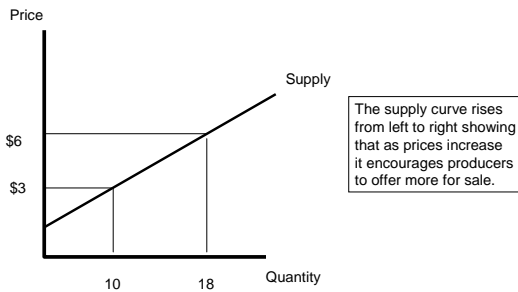
- What impact did rising fuel prices have on corn prices and why?
 - Increases in input prices *ceteris paribus* (all else equal) push up output prices because it makes production more costly.
- What impact did rising corn prices in 2006 have on land use decisions in Wisconsin in 2007?

Crop	Planted Acreage for 2006, 2007 and Prospective March 2008			
	2006	2007	2008	2006/07
WISCONSIN				
Corn, all	3,630	4,050	3,430	+10
Corn, sweet	1,830	1,790	1,830	-22
Oats	370	370	360	-4
Rye	30	40	40	+6
Wheat, white	230	290	330	+14
Wheat, red	14	0	0	-122
Soy, all	3,340	3,020	3,030	-4
Soy, edible beans	58	61	53	+10
UNITED STATES				
Corn, all	78,217	85,600	84,614	+8
Corn, sweet	39,252	40,631	39,765	+10
Oats	4,340	3,740	3,430	-9
Rye	1,812	4,020	4,141	+4
Wheat, white	14,899	15,287	14,313	-4
Wheat, red	40,297	12,212	40,283	-2
Soy, all	1,450	1,322	1,339	-8

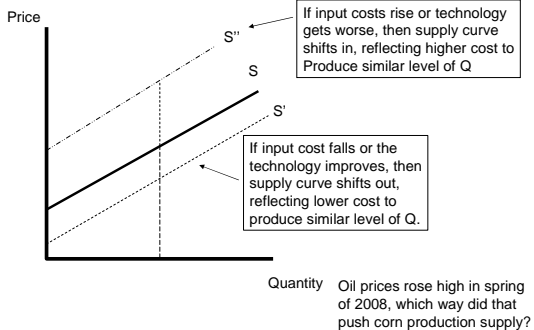
2006: 3.65 million acres corn
1.65 million acres soy
2007: 4.05 million acres corn
1.35 million acres soy
2008: 3.65 million acres corn
1.65 million acres soy

Corn and soy choices linked.
Why soy up in 2008?

Supply Curve - 1



Supply Curve - 2



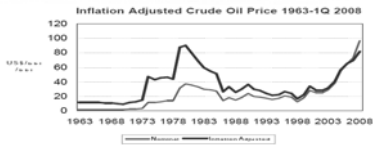
Shifts along and of supply curves

- When do you move up or down the supply curve?
 - When prices for the good change
- When do you shift the supply curve?
 - When other factors that influence supply change:
 - Input prices Technology
 - Regulations Natural shocks
- Make sure you understand the difference:
 - Price of the good moves you up and down the supply curve.
 - All other factors move the supply curve

Example from Iraq War

- What did Bush administration think would happen to oil supplies from Middle East and oil prices?
- What actually happened? Why? Supply Side Issues?

Then and Now: The Price Dimension



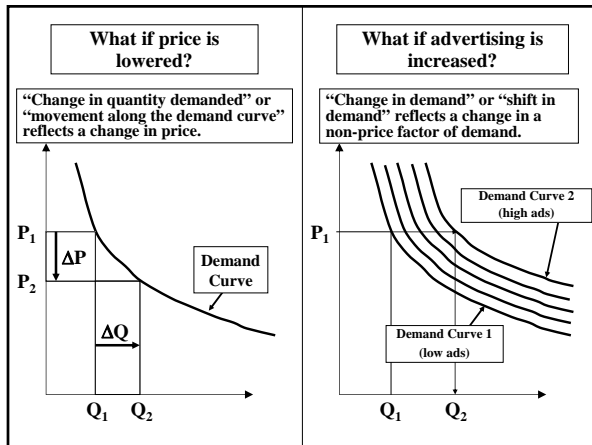
Demand Function

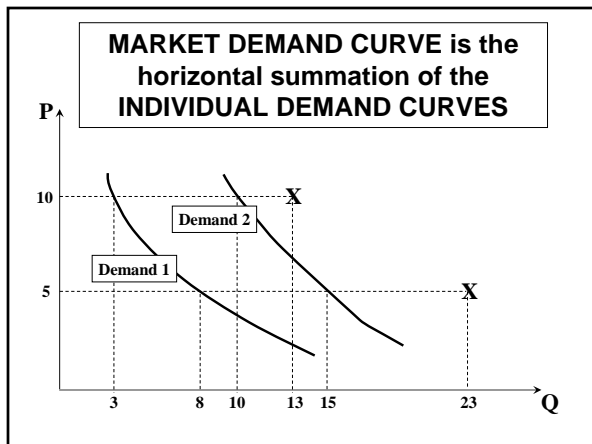
Expresses demand as a function of relevant factors, e.g.,

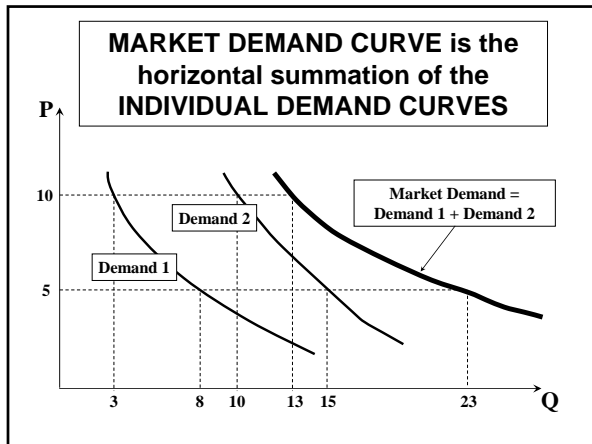
- product's price
- product's attributes
- consumer tastes & preferences
- consumer income
- price of related goods
- advertising
- number of customers
- final product's demand (for intermediate goods)
- prevailing interest rates

Demand Curve

Vary product's price holding fixed the levels of all other factors of demand







Law of Demand

$P \uparrow \Leftrightarrow Q \downarrow$

$P \downarrow \Leftrightarrow Q \uparrow$

