# Chapter 4/5 Demand/Supply

# **Demand**

- Def: ability, willingness and desire to purchase a product at all possible prices.
- \*Law: The quantity of products demanded will vary inversely with its price.

# **Demand**

- Schedule
- Graph

# Demand

Demand is abstract, can be measured over any amount of time and has nothing to do with how much of the product is actually out there to be purchased.

# Change

- Change in QD
- Change in D
- What's the difference?
- Also, what's a substitute and a compliment?

## Income effect

If P falls, you feel as if you have more \$ to burn = increase in consumption

The inverse is true

Carbon Freeze

http://www.youtube.com/watch?v=FCB0v CGvkiO

### **Substitution Effect**

- ♦ I'll replace a similar item with one that is less expensive
  - For example, P of pizza declines, pizza becomes relatively cheaper →
  - -consumers are more willing to purchase pizza when its relative price falls →
  - they substitute pizza for other goods

### **Substitution Effect**

- Substitution Effect
  - When the price of a good falls, its relative price makes consumers more willing to purchase this good
  - Alternatively, when the price of a good increases, its relative price makes consumers less willing to purchase this good
- Important to remember that 🕴 🕒

the change in the relative price the price of one good compared to the prices of other goods—that causes the substitution effect

### **Determinants of Demand**

- ◆Change in Demand
  - 1.Individual income
  - 2.Consumer tastes
  - -Trends and advertising
  - 3.Prices of related products
    -Subs and compliments
  - 4.# of potential buyers
  - 5.Expectations of future products and prices

# Direction

- ◆Increase in demand = right moving shift
- Decrease in demand = left
  moving shift

# Supply

- Law: The higher the price of a product the more of the product will be supplied
- Def: Desire and willingness to produce a product at all prices.
- Supply is abstract and has nothing to do with how many people will actually purchase the product.

# **Supply Curve**

- Use a supply schedule to create it
- Always positive
- If I can sell it for more, I'll make more of it.

### QS

 Quantity supplied works just like QD. A change of the sale price will change producer motivation

# **Determinants of Supply**

- Variables that affect supply
  - 1. Cost of inputs
  - 2. Technology
  - 3. # of producers
  - 4. Producer expectations about the future
  - 5. Price of alternative products

### **Markets**

- A market sorts out the conflicting price perspectives of individual participants – buyers and sellers
- \* Wanker represents all the arrangements used to buy and sell a particular good or service
- Markets reduce the transaction costs of exchange – the costs of time and information required for exchange
- The coordination that occurs through markets occurs because of Adam Smith's invisible hand

### D/S Create a Market

- Demanders and suppliers have different views of price
  - Demanders pay the price
  - Suppliers receive it
- Thus, a higher price is bad news for consumers but good news for producers
- As the price rises, consumers reduce their quantity demanded along the demand curve and producers increase their quantity supplied along the supply curve

# Market Equilibrium

- When QD=QS, all products are sold. Producers place a high emphasis on trying to figure this out.
- \*Shortage: when there is more D than S, <u>P will Δ to level market</u>
- \*Surplus: When there is more S than D, *P will Δ to clear market*

# • Consumer Surplus • Producer Surplus • Pretty Woman

# **Demand Change**

- \*Increase in demand causes a shortage at the original price.
- ◆Thus prices will rise, Eq will be restored at a higher P and Q.
- ♦ Visa-Versa
- \*REMEMBER: D does not affect S

# **Supply Change**

- ◆Increase in S will cause a surplus at the original price
- Thus prices will fall and Eq will be restored at a lower P and higher Q
- +Visa-Versa
- ◆REMEMBER: S does not have an effect on D

# Simultaneous Shifts in Demand and Supply

- As long as only one curve shifts, we can say for sure what will happen to equilibrium price and quantity
- \* If both curves shift, however, the outcome is less obvious

### Who has control?

\*It makes a lot of sense to believe that, together, Consumers and Producers control price due to their own self-interest. Adam Smith is given credit for this philosophy. He called it the <a href="mailto:invisible">invisible</a> hand. Society benefits from this state of nature. Unintentionally of course.

# Unjust Markets (when needs are out priced)

- \*So what happens when consumers and producers don't unintentionally set appropriate prices? Government?
- Smith didn't think this to be too much of problem. He thought Governments should stay out of the way. (laissez faire)

### Smith's mistake

Adam Smith wasn't wrong in most cases. But he wasn't naïve; he knew there would still be markets where consumers and producers endangered society. He simply underestimated the problem, so government needs to step in. Thus a Mixed Economy is born from Capitalism.

### Government Intervention

- ↑ Throughout our course we'll examine how Gov't interacts with economics.
- ◆So how does it deal with unjust price setting, when price is too high on needed items?
  - -Price Ceilings (Rent)

### More Unjust markets

- \*What happens when producers of needed products aren't profitable? This can be the case in a perfectly competitive market.
- ◆Price Floors (agricultural products)

### **Problems**

- \*Floors and Ceilings create inefficient markets, which hurt and benefit both consumers and producers.
- How? Get in small groups and discuss.

### Quantity control

- Taxi Medallions
- Import Restrictions
- Note: any time the gov't steps in and creates an inefficient market there is a trade-off. There will be winners and losers, if it is argued that the winners don't out-gain the loser's loss, then the gov't intervention will cease.

### Natural Inefficient Markets

- \*Gov't will subsidize these markets because there are spillover benefits. Ex: Public goods
- Or because there are spillover costs. Ex: pollution

### Spillover effects of Gov't

Even though most text books don't discuss it, there may also be spillover effects of price ceilings and floors, making them efficient in the long run.