# **Chapter 4**

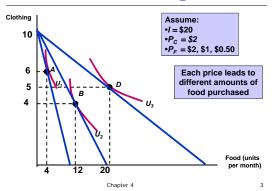
### Individual and Market Demand

### **Question:**

- Why is the Demand Curve downward sloping?
  - Stupid question?
  - Needs explanation?

Chapter 4

## **Effect of a Price Change**



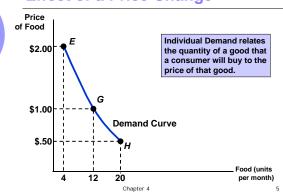
## **Effect of a Price Change**

 By changing prices and showing what the consumer will purchase, we can create a demand schedule and demand curve for the individual

Demand Schedule	
Р	Q
\$2.00	4
\$1.00	12
\$0.50	20

Chapter 4 4

# **Effect of a Price Change**

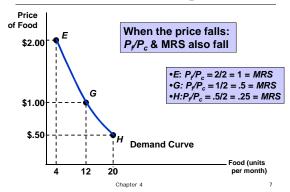


# **Demand Curves – Important Properties**

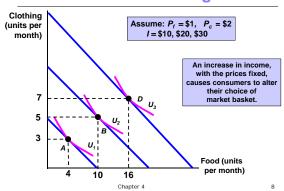
- The level of utility that can be attained changes as we move along the curve.
- At every point on the demand curve, the consumer is maximizing utility by satisfying the condition that the MRS of food for clothing equals the ratio of the prices of food and clothing.

Chapter 4 6

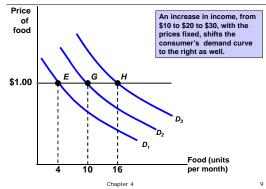
# **Effect of a Price Change**



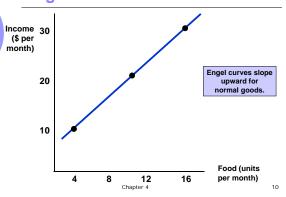
## **Effects of Income Changes**



# **Effects of Income Changes**



# **Engel Curves**



### **Income and Substitution Effects**

- A change in the price of a good has two effects:
  - **(**)
  - ○Income Effect

### **Income and Substitution Effects**

- (
  - Relative price of a good changes when price changes
  - Oconsumers will tend to buy more of the good that has become relatively cheaper, and less of the good that is relatively more expensive.

### **Income and Substitution Effects**

- (
  - Consumers experience an increase in real purchasing power when the price of one good falls.

Chapter 4

13

### **Income and Substitution Effects**

#### Substitution Effect

- The substitution effect is the change in an item's consumption associated with a change in the price of the item, with the level of utility held constant.
- •When the price of an item declines, the substitution effect always leads to an increase in the quantity demanded of the good.

Chapter 4 14

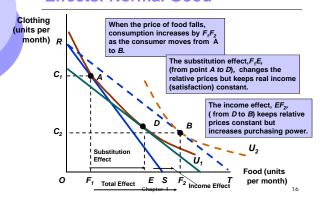
### **Income and Substitution Effects**

#### Income Effect

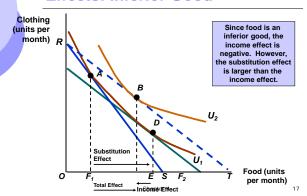
- The income effect is the change in an item's consumption brought about by the increase in purchasing power, with the price of the item held constant.
- When a person's income increases, the quantity demanded for the product may increase or decrease.

hapter 4

# Income and Substitution Effects: Normal Good



# Income and Substitution Effects: Inferior Good



### **Income and Substitution Effects**

- A Special Case--The (
  - The income effect may theoretically be large enough to cause the demand curve for a good to slope upward.
  - This rarely occurs and is of little practical interest.

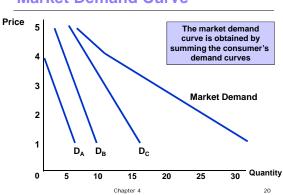
Chapter 4 18

### **Market Demand**

- (
  - A curve that relates the quantity of a good that all consumers in a market buy to the price of that good.
  - The sum of all the individual demand curves in the market

Chapter 4

# **Summing to Obtain a Market Demand Curve**



### **Market Demand**

- From this analysis one can see two important points
  - The market demand will shift to the right as more consumers enter the market.
  - Factors that influence the demands of many consumers will also affect the market demand.

Chapter 4

# **Consumer Surplus**

- Q: Why do consumers exchange 1,000 Won for an apple?
  - OConsumers buy goods because it makes them better off
  - OConsumer Surplus measures how much better off they are

Chapter 4 22

)

24

# **Consumer Surplus**

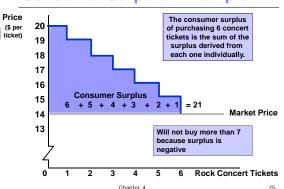
 The difference between the maximum amount a consumer is willing to pay for a good and the amount actually paid.

# **Consumer Surplus - Example**

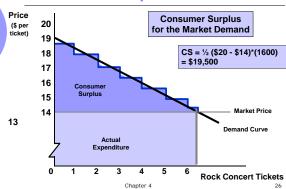
- Student wants to buy concert tickets
- Demand curve tells us ( for each concert ticket
  - ○1<sup>st</sup> ticket worth \$20 but price is \$14 so student generates \$6 worth of surplus
  - OCan measure this for each ticket
  - Total surplus is addition of surplus for each ticket purchased

Chapter 4 23 Chapter 4

## **Consumer Surplus - Example**



# **Consumer Surplus**



### **Network Externalities**

- Up to this point we have assumed that people's demands for a good are independent of one another.
- For some goods, one person's demand also depends on the demands of other people

### **Network Externalities**

- A positive network externality exists if the quantity of a good demanded by a consumer increases in response to an increase in purchases by other consumers.
- Negative network externalities are just the opposite.

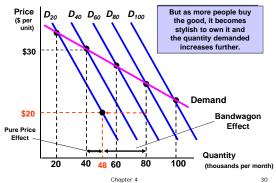
Chapter 4

Chapter 4

### **Network Externalities**

- - This is the desire to be in style, to have a good because almost everyone else has it, or to indulge in a fad.
  - This is the major objective of marketing and advertising campaigns (e.g. toys, clothing).

# **Positive Network Externality: Bandwagon Effect**



Chapter 4

### **Network Externalities**

- (
  - If the network externality is negative, a snob effect exists.
- The snob effect refers to the desire to own exclusive or unique goods.

Chapter 4

 The quantity demanded of a "snob" good is higher the fewer the people who own it.

Pure Price Effect  $D_4$   $D_5$   $D_6$   $D_6$  Quantity (thousands per month)

Demand

Price (\$ per unit)

\$30,000

Net Effect

31

\$15,000

**Network Externality: Snob Effect** 

The demand is less elastic and as a snob good its value is greatly reduced if more people own it. Sales decrease as a result. Examples: Rolex watches and long lines at the ski lift.

Snob Effect

 $D_2$ 

32