### **FRAMING**

## **FRAMING BIAS**

- ► How information is processed is often dependent on how the question is asked or framed.
- ► Equivalent descriptions should lead to equivalent judgments or decisions.
- ▶ Framing bias refers to the fact that decisions can sometimes depend on the frame.

#### **HOW WOULD YOU LIKE YOUR BURGER?**

- ▶ Group A is told ground beef was "75% lean".
- ▶ Group B is told ground beef was "25% fat".
- ► Group A estimated the meat to be lower in quality and taste than group B predicted.
- ►After both groups tasted the same burgers, the "fat" people liked the burgers less than the "lean" people did.

#### ASIAN DISEASE EXAMPLE

- ►Imagine that the U.S. is preparing for the outbreak of unusual Asian disease, which is expected to kill 600 people. Two alternative programs to combat the disease has been proposed. Assume that the exact scientific estimates of the consequences of the program are as follows:
  - ► If program A is adopted, 200 people will be saved.
  - ▶ If program B is adopted, there is a one-third probability that 600 will be saved, and a two-thirds probability that no people will be saved.

#### **ASIAN DISEASE EXAMPLE**

- ► A substantial majority of the respondents choose program A:
- ▶They prefer the certain option over the gamble.

### **ASIAN DISEASE EXAMPLE**

- ►Imagine that the U.S. is preparing for the outbreak of unusual Asian disease, which is expected to kill 600 people. Two alternative programs to combat the disease has been proposed. Assume that the exact scientific estimates of the consequences of the program are as follows:
  - ▶ If program C is adopted, 400 people will die.
  - ▶ If program D is adopted, there is one-third probability that nobody will die and a two-thirds probability that 600 people will die.

### **ASIAN DISEASE EXAMPLE**

►In the second frame, a large majority of people choose the gamble.

## **QUESTION 1**

- ►Imagine you have \$2000 in the bank.
  - $\blacktriangleright \text{Do nothing}.$
  - ► A lottery 50% chance you will lose \$300 and 50% chance you will win \$500.

## **QUESTION 2**

- ▶Imagine you have \$2000 in the bank.
  - ▶Do nothing.
  - ►A lottery 50/50 chance of ending up with \$1700 or \$2500.

## **EXAMPLE**

► Most people reject the first gamble, but take the second one.

### FRAMING IS EVERYWHERE

▶If you sink 1% of your money into one stock that goes to zero, you will probably be very upset. If your portfolio loses 1% of its value, you are more likely to shrug it off. The effect on your wealth is identical.

### FRAMING IS EVERYWHERE

► A 4% raise when inflation is running at 3% makes most people happier than a 2% raise when inflation is zero.

## **SUMMARY**

- ▶ Frame dependence or framing bias.
- ► Choices between gambles and sure outcomes are resolved differently depending on whether the outcomes are good or bad.

# MENTAL ACCOUNTING

## MENTAL ACCOUNTING

► A specific form of framing in which people segregate decisions.

### **GAMBLING WITH THE HOUSE MONEY**

▶ Players who are ahead in the game do not seem to treat their winnings as "real money".

## **QUESTION 1**

- ▶You have just won \$30. Now choose between:
  - a. A 50% chance to gain \$9 and a 50% chance to lose \$9.
  - b. No further gain or loss.

## **QUESTION 2**

- ▶You have just lost \$30. Now choose between:
  - a. A 50% chance to gain \$9 and a 50% chance to lose \$9.
  - b. No further gain or loss.

## **QUESTION 3**

- ▶You have just lost \$30. Now choose between:
  - a. A 33% chance to gain \$30 and a 67% chance to gain nothing.
  - b. A sure \$10.

#### **BONUS VS. INHERITANCE**

- ► Suppose you will receive a special bonus.
- ►It will add \$500 to your paycheck every month for 12 months for a total of \$6000.
- ► How do you expect this would change your monthly consumption?

## **BONUS VS. INHERITANCE**

- ► Now suppose that \$6000 will be paid in one lump sum.
- ► How would you treat the bonus money differently especially in terms of how you spend immediately following receiving the bonus?

## **BONUS VS. INHERITANCE**

- ▶What if the \$6000 is not a bonus, but it is a inheritance?
- ► How would you expect your family's consumption to change as a result of this gift?

### **SUMMARY**

- ► Mental accounting and framing
- ▶ People use mental accounting structure by developing rules that help them deal with impulses.