

Chapter 17: Behavioral Economics & Risk Taking



By Wayne Geerling
Monash University

1

Behavioral Economics in *This Is Spinal Tap*

2

What is Behavioural Economics?

- Field of economics that studies
in economic decision making

3

Are you Spock (*an econ*) or Kirk (*a human*)?

4

Positive Decisions?

5

Bounded Rationality

- Concept of reasoning
information
of the brain
Not enough

6

How Do Economists Explain Irrational Behavior?

- What are some behaviors that do not fit assumptions about fully rational behavior?
- 1. Misperceptions of probabilities
- 2. Inconsistencies in decision making
- 3. Judgments about fairness

7

1. Misperceptions of Probabilities

- Probabilities are often perceived

Why do people
play the lottery?

The Monty Hall Problem
– stay or switch

8

Poll Everywhere

- **Should you switch doors or stay?**
- Switch
- Stay

9

Seeing Patterns Where None Exist

Gambler's Fallacy

belief that outcomes that have
recently are
to occur soon

Hot Hand Fallacy

belief that
sequences exhibit a

10

2. Inconsistencies in Decision-Making

- Decisions should be consistent & transitive.
Mistakes are made because of:

Framing & priming effects

Status quo bias

Intertemporal decision-making

11

A. Framing

12

The Second Cheapest Wine

13

B. Priming Effect: The Order Matters

- Occurs when the order of questions influences answers or choices.

14

C. Status Quo Bias

- Exists when decision makers want to maintain their current choices.

Which system, opt-in or opt-out, will have a greater participation rate?

15

D. Intertemporal Decision-Making

- Intertemporal = across time. Requires valuing the present & future

Can you resist eating 1 marshmallow now, in order to get a second one later?

16

“I wish I’d partied a little less. People always say ‘be true to yourself.’ But that’s misleading, because there are two selves. There’s your short term self, and there’s your long term self. And if you’re only true to your short term self, your long term self slowly decays.”

17

3. Judgments about Fairness

- How does our view of fairness affect decisions?
 - A individual acts in their own
- Ultimatum game
 - A sequential game in which two players decide how to divide a sum of money
 - Illustrates that people a proposal to help themselves in the name of

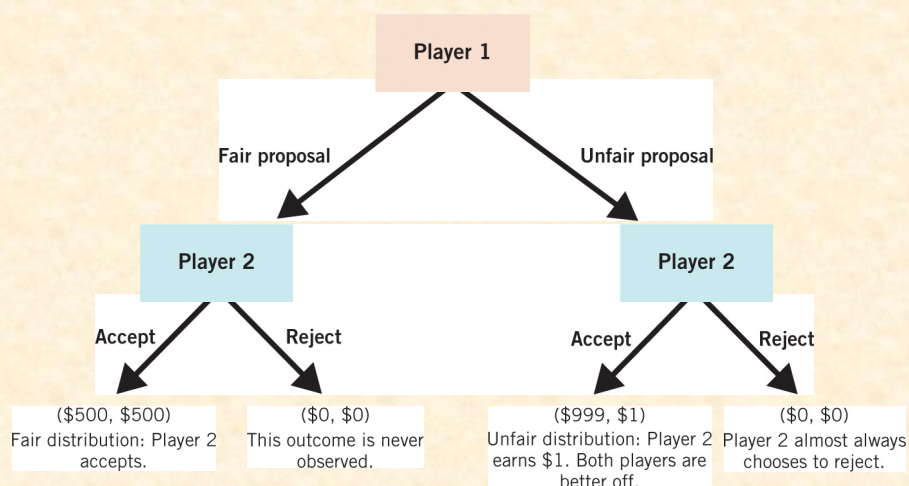
18

The Ultimatum Game

- Two players play a sequential game once.
- Player 1 options:
 - Decides how to split \$1,000
 - Fair proposal: Each gets half the money
 - Unfair proposal: Player 1 gets \$999; Player 2 gets \$1
- Player 2 options:
 - Accepts the proposal
 - Rejects the proposal (both players get \$0)

19

The Ultimatum Game, Illustrated



Ultimatum Game Results

- Economic theory of rationality will tell us that Player 2 should the unfair proposal.

21

Capuchin Monkeys and Fairness

22

What Is the Role of Risk in Decision Making?

- Preference reversal
 - Occurs when people's risk tolerance is not

23

Assessing Risk in The Lonely Island's "YOLO"

24

Preference Reversal

- **Risk-averse:**
 - Prefers a certain payoff to a gamble with a higher expected value
- **Risk-neutral:**
 - Chooses the option with the higher expected value regardless of the risk
- **Risk-loving:**
 - Prefers a gamble with lower expected values, but higher winnings over certainty

25

The Allais Paradox

Choose Gamble A or B

Gamble A:

No gamble – receive
\$1 million in cash

Gamble B:

A lottery ticket that pays \$5 million 10% of the time, \$1 million 89% of the time & nothing 1% of the time

Choose Gamble C or D

Gamble C:

A lottery ticket that gives you \$5 million 10% of the time

Gamble D:

A lottery ticket that gives you \$1 million 11% of the time

26

Which combination did you choose?

- A) AC
- B) AD
- C) BC
- D) BD

27

Allais Paradox

- Compute the
- Gamble A:
- Gamble B:
- Gamble C:
- Gamble D:

28

Allais Paradox

- **Risk-averse**
 - Will choose
 - Will choose
- **Risk-neutral**
 - Will choose
 - Will choose
- **Risk-loving**
 - Will choose
 - Will choose
- Allais discovered paradox:
 - of people chose A and C!

29

Preference Reversal

30

Bounded Rationality: How to Guard Yourself against Crime

- Which of these solutions will protect you from a criminal at the lowest cost?

31