Ultimatum Game

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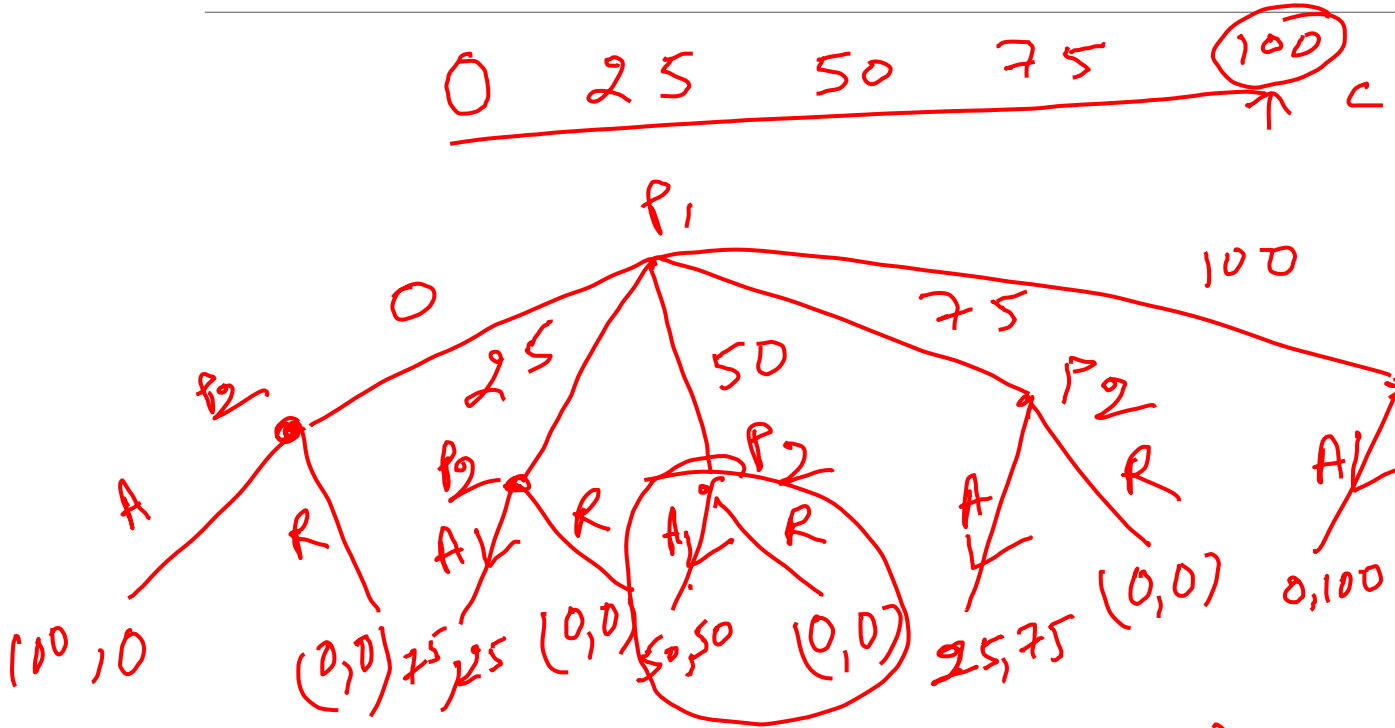
The Ultimatum Game

- Two players intends to divide a fixed amount between them.
- P1 (proposer) offers a division of the “pie”
- P2 (responder) decides whether to accept it
- If accepted both player gets their agreed upon shares
- If rejected players receive nothing.
- How to Model this?



2 optimal strategies

1) Accept all, no how much player 1 offers

(A A A A A)

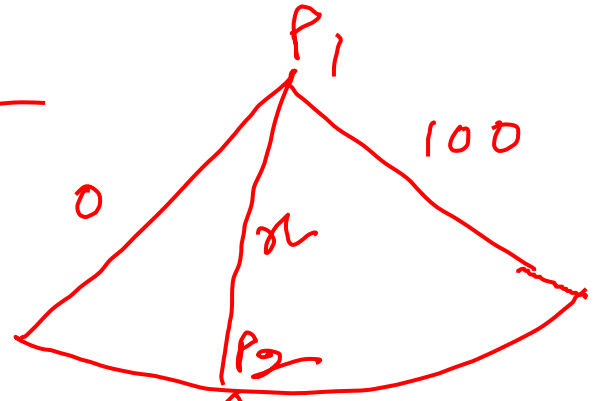
2) Accept all but 0

(R A A A A)

$\Rightarrow$ (offer 0, accept all) $\equiv$

$\Rightarrow$ (offer 25, accept all but 0)

0 ⟶ 100



1) whole game

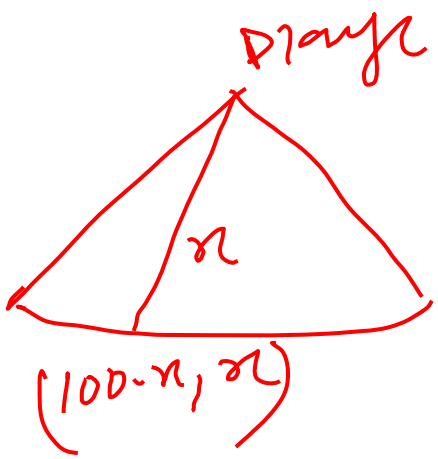
2) subgame starting at after player 1 makes an offer (x)

E/2 — E/2 → 0 —

SPNE → (offer 0, accepts all)

SPE

Dictator Game



$\Rightarrow$ offer 0

Experimental Data

- Great Deal of Experimental work
  - Important to Distinguish between monetary and utility version.
  - Experimental work is restricted to monetary version
- General finding
  - Unfair" offers are often rejected {iRrational}.
  - These effects are observed even when the amounts of money are on the order of a month's income.

Experimental Game Theory

- Game theory:
  how rational individuals should behave
- Experimental game theory:
  Look at how people actually behave
  - experiment by setting up real economic situations
  - account for people's economic decisions