

Today's Topic: EUT, Equilibrium in an Exchange Economy

Machina's Paradox: preferences contingent on unrealized outcome  
failure of independence axiom?

FRAMING

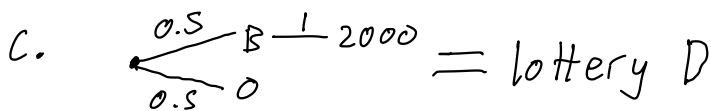
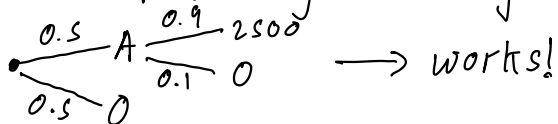
Whether you're saving people or killing them matters, even if the choices are inherently the same.

CP6. A: \$2500 w.p. 0.9                      B: \$2000 w.p. 1

a.  $EU(A) < EU(B) \rightarrow 0.9 \cdot u(2500) + 0.1 \cdot u(0) < u(2000)$

b. C: \$2500 w.p. 0.45                      D: \$2000 w.p. 0.5

construct lottery C using lottery A and something else



d. only the ultimate distribution matters, so ordering is the same

EXCHANGE ECONOMY

No production, only swapping goods.

GENERAL EQUILIBRIUM

A situation where supply & demand are balanced for all goods in our world. Accounts for ripple effects.

Supply for each good must be at least as much as demand.

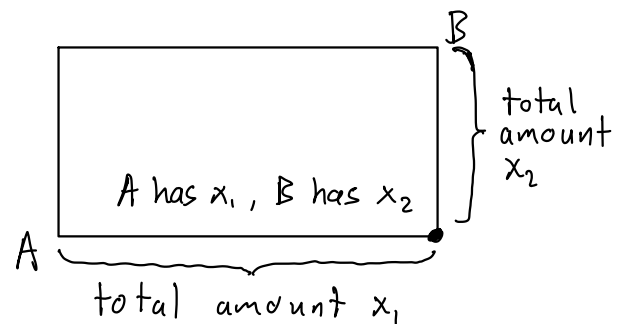
We will deal with 2 people and 2 goods. Each person brings an endowment of one good. Some prices are announced, and each person figures out their optimal consumption bundle accordingly.

### EDGEWORTH BOXES

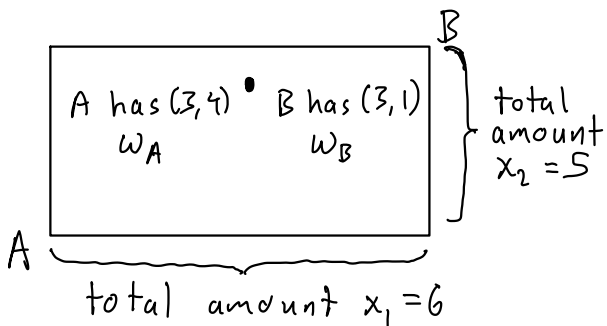
CP1b.



CP1c.



CP1a.



essentially, these are just  $x_2$  | A  $x_1$  and  $x_1$  | B  $x_2$  together

The world is Pareto-efficient if we can't improve anyone's utility without hurting someone else's.