Microeconomics: Week 1 (13.08.13 & 15.08.13)

Tuesday, August 13, 2013
8:41 AM

MICROECONOMICS = A STUDY OF HOW AN INDIVIDUAL MAKES CHOICE UNDER SCARCITY,

↓ RESOURCES ARE SCARCE

SCARCITY

⇓

CHOICE → TRADE-OFF

⇓

OPPORTUNITY COST ⇒ ALL RESOURCES YOU MUST GIVE UP IN ORDER TO ENGAGE IN AN ACTIVITY.

= EXPLICIT COSTS + IMPLICIT COSTS

EX STUDYING AT BE FOR 4 YRS.

WHAT IS OPPORTUNITY COST OF DOING THIS ACTIVITY?

→ TIME & ENERGY & EFFORT
TUITION FEES
BOOK EXPENSES
ACCOMODATION COSTS
⋮
} EXPLICIT COSTS

&

• FORGONE SALARY (INCOME)
Ex. 4 × 10,000 = 40,000 PAHT FORGONE
• SKILLS & EXPERIENCE FORGONE
} IMPLICIT COSTS

DECISION RULE: IF BENEFITS (B) > COSTS (C), DO ACTIVITY X.
IF " — " < COSTS (C), DO NOT DO ACTIVITY X.

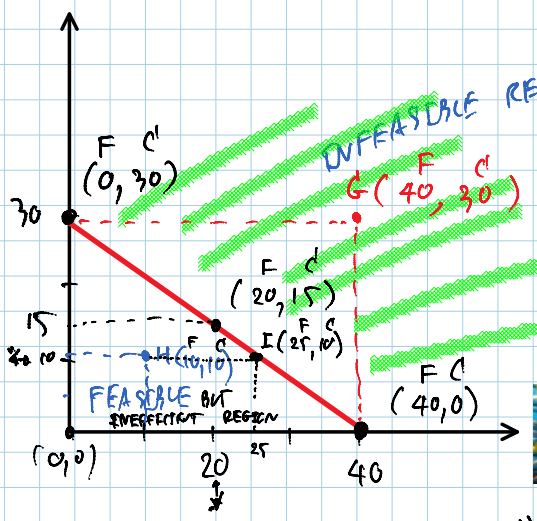
A SIMPLE MODEL OF PRODUCTION POSSIBILITY CURVE

OBJECTIVE: TO GET A BETTER UNDERSTANDING OF S – C – O CONCEPT.

FROM A HOLLYWOOD MOVIE: CAST AWAY (2000)

WATCH: http://www.youtube.com/watch?v=2TWYDogv4WQ

OF COCONUTS / DAY



FISHES / DAY

CONSIDER MR. TOM HANK

- TWO ACTIVITIES
  - GATHERING COCONUTS
  - CATCHING FISHES
- AVAILABLE RESOURCE : TIME → 24 − 6 = 18 WORKING HOURS

THIS CURVE IS CALLED "PRODUCTION POSSIBILITY CURVE" (PPC)

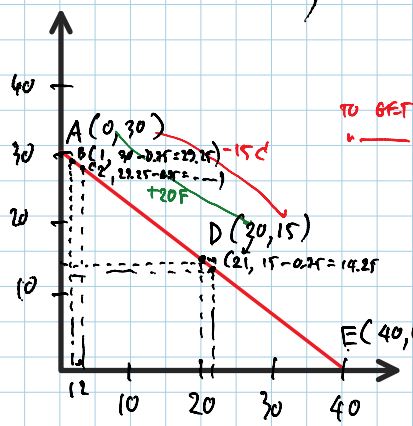
OR

"PRODUCTION POSSIBILITY FRONTIER" (PPF)

PPC ; SHOWS COMBINATION OF TOM'S PRODUCTION CHOICES GIVEN HIS AVAILABLE RESOURCES (TIME).

15.08.13

C (UNITS / DAY)



TO GET +20 F, HE MUST GIVE UP −15 C

+1 F → −15 C

$\frac{-15}{+20} = \frac{-3}{4}$

OR

= −0.75

GIVEN HIS EXISTING RESOURCES AND THE CURRENT STATE OF TECHNOLOGY

LINE AE IS TOM'S PPC.

FACT #1

- COMBINATIONS ON PPC ARE ALL FEASIBLE (TO PRODUCE) AND EFFICIENT.
- COMBINATIONS OUTSIDE PPC ARE INFEASIBLE.
- COMBINATIONS INSIDE PPC ARE FEASIBLE BUT INEFFICIENT.

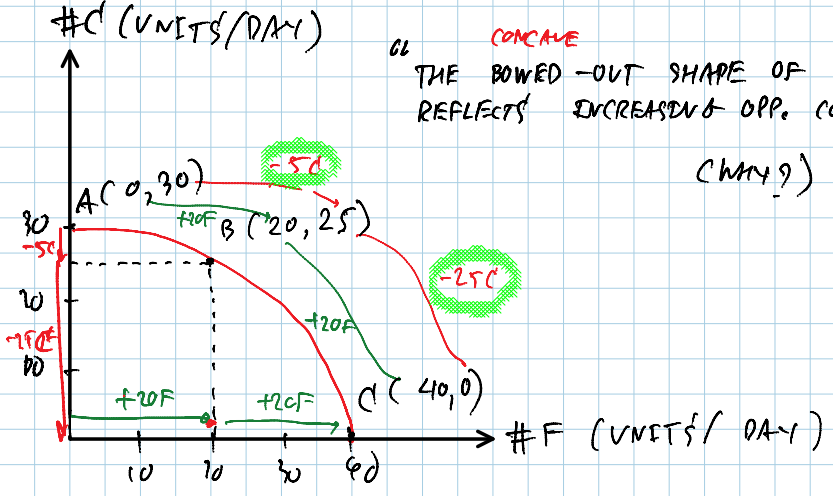
FACT #2: TOM FACES TRADE-OFF: TO OBTAIN MORE OF FISHES, HE MUST GIVE UP SOME COCONUTS, VICE VERSA.

OPPORTUNITY COST OF GETTING AN EXTRA UNIT OF FISH IS $\frac{3}{4}$ FORGONE UNIT OF COCONUT.

SURPRISINGLY, THE SLOPE OF PPC REFLECTS THIS OPPORTUNITY COST.

GIVEN A STRAIGHT LINE PPC, IT SHOWS THAT THE OPPORTUNITY COST IS CONSTANT. (i.e., $-\frac{3}{4}$)

FACT #3 IN REALITY, THE OPPORTUNITY COST IS TYPICALLY INCREASING.



CONCAVE

"THE BOWED-OUT SHAPE OF PPC REFLECTS INCREASING OPP. COST."

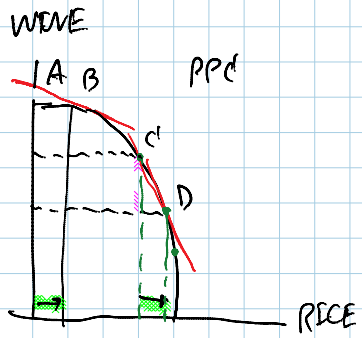
(WHY?)

Q: WHY IS THE OPPORTUNITY COST INCREASING?

A: DIFFERENCES IN SPECIALIZATION OF INPUTS THAT USE TO PRODUCE OUTPUTS

SUPPOSE TOM HAS 100 WORKERS AND STORY CONTINUES AS DISCUSSED IN THE CLASS...

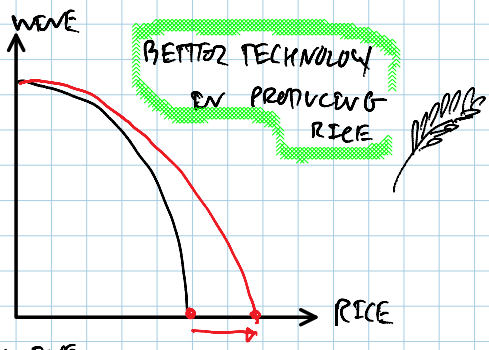
ANOTHER EXAMPLE : AN ECONOMY THAT PRODUCES TWO GOODS: RICE AND WINE GIVEN EXISTING RESOURCES AND CURRENT INNOVATION.

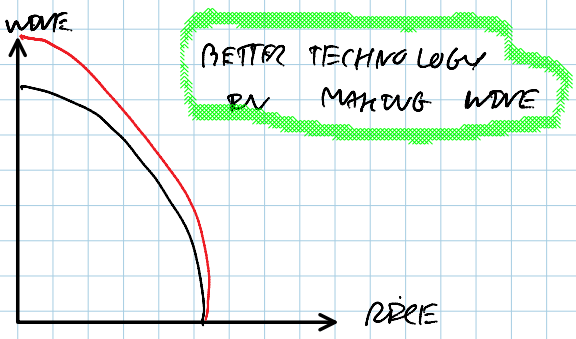


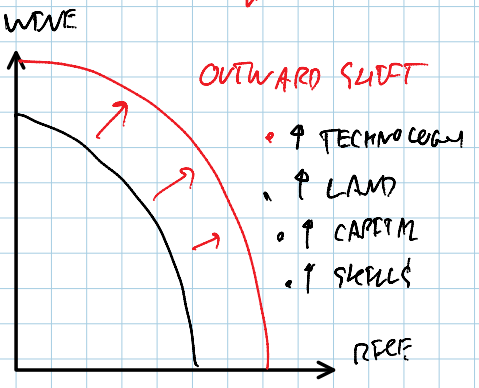
LAND WHICH SOME ARE SUITABLE FOR PRODUCING RICE AND SOME ARE SUITABLE FOR MAKING WINE

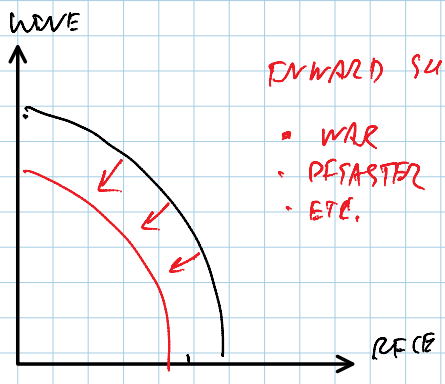
Q: CAN AN PPC SHIFT ?

A: YES, IT COULD.

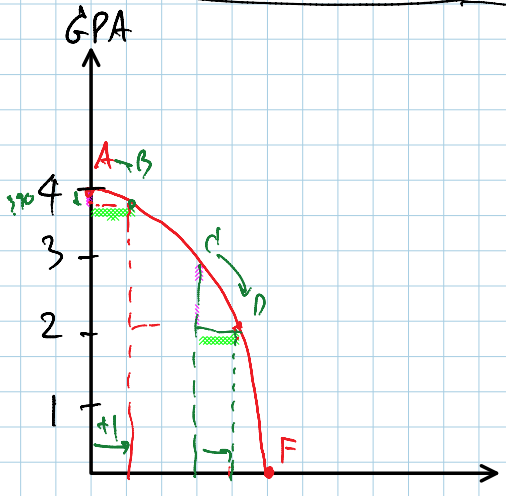


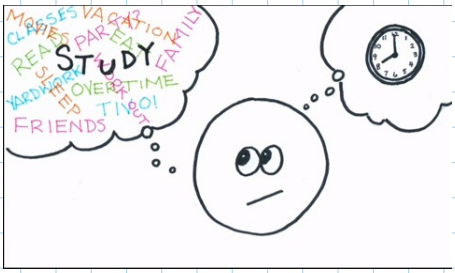






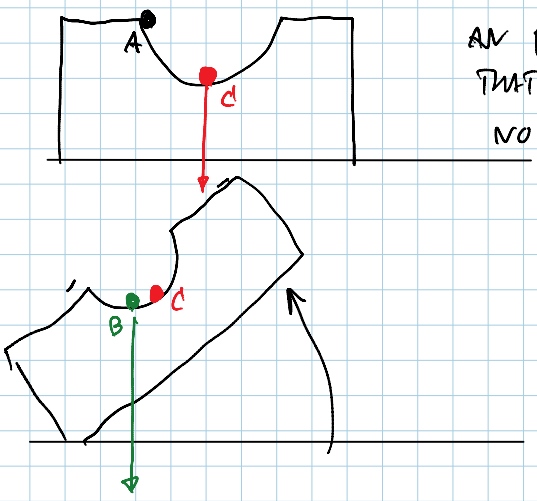
APPLICATION TO YOUR LIFE ON THE UNIVERSITY





TOOLS USED IN MICROECONOMICS

① EQUILIBRIUM ANALYSIS

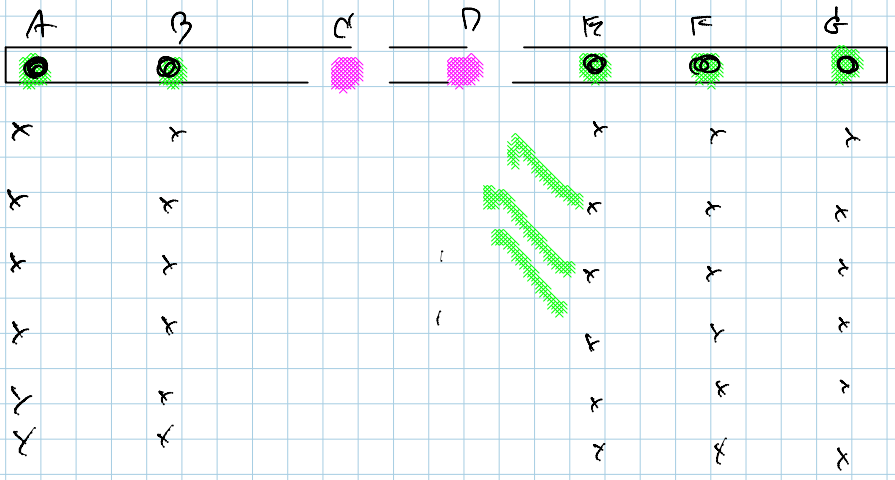


- BALL AT POINT C IS IN AN EQUILIBRIUM.

AN EQUILIBRIUM IS A STATE OR A CONDITION THAT CONTINUES INDEFINITELY AS LONG AS NO OUTSIDE FACTORS "UPSETS" THIS EQUILIBRIUM.

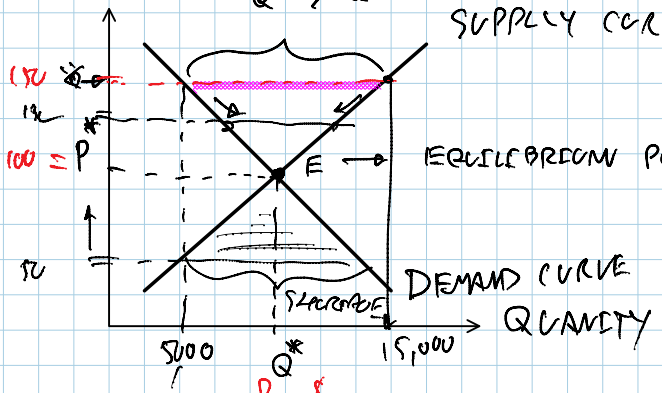
- BALL AT POINT C IS NO LONGER AN EQUILIBRIUM
- BALL AT POINT B IS IN AN EQUILIBRIUM.

EX: PASSPORT CONTROL



PRICE $Q^S > Q^D$ → SURPLUS OR EXCESS SUPPLY = 15,000 − 5000 = 10,000

SUPPLY CURVE



EQUILIBRIUM POINT WHERE

QUANTITY DEMANDED (Q^D)

=

QUANTITY SUPPLIED (Q^S)

$Q^D = Q^S = 10000$