MICROECONOMICS : STUDY OF HOW AN INDIVIDUAL MAKES "CHOICES" UNDER SOME CONSTRAINTS.

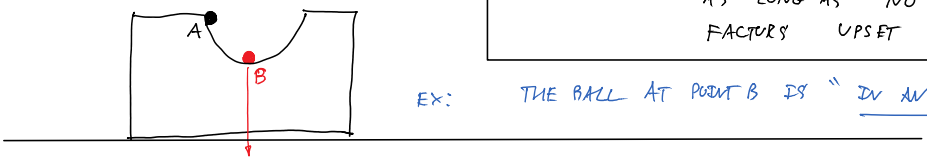
- CONSUMPTION CHOICES
- PRODUCTION CHOICES
- INVESTMENT
- WORK VS, LEISURE

- PHYSICAL CONSTRAINT
- FINANCIAL CONSTRAINT
- TIME CONSTRAINT

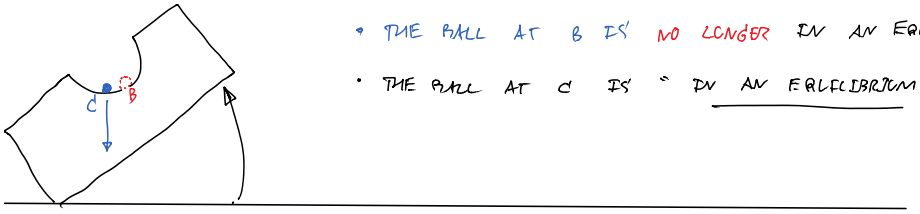
TOOLS USED IN MICROECONOMICS (3)

(1) EQUILIBRIUM ANALYSIS

"EQUILIBRIUM" IS A STATE OR A CONDITION THAT WOULD CONTINUE INDEFINITELY AS LONG AS NO OUTSIDE FACTORS UPSET THE EQUILIBRIUM

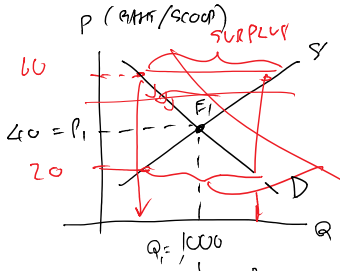


EX: THE BALL AT POINT B IS "IN AN EQUILIBRIUM"



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

IN ECONOMICS



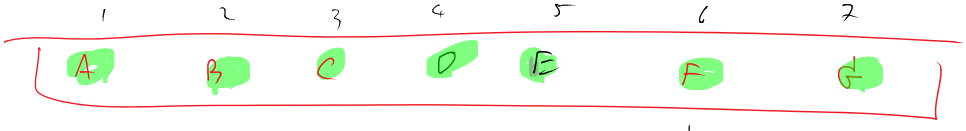
ICECREAM MARKET

EXCESS DEMAND OR SHORTAGE

$Q^D = 1000$ (QUANTITY DEMANDED)

$Q^S = 1000$ (QUANTITY SUPPLIED)

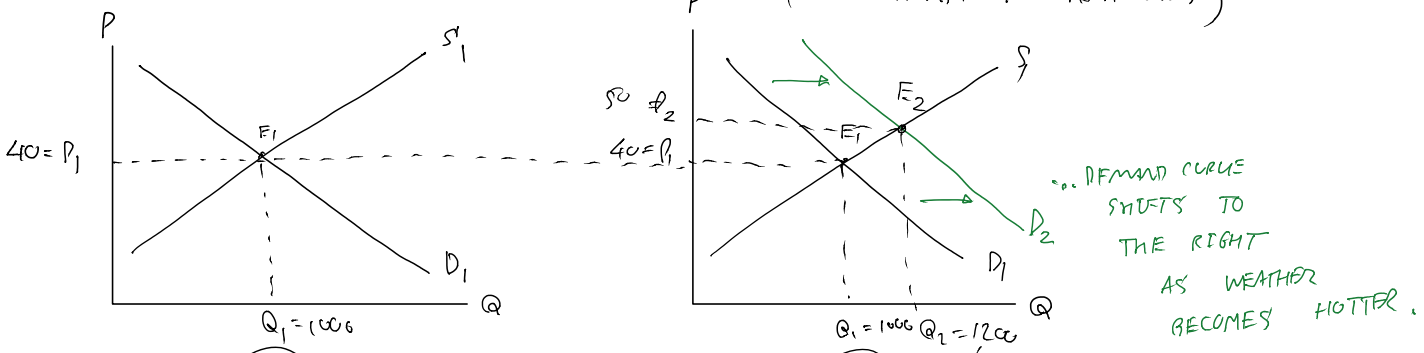
PASSPORT CONTROL



II COMPARATIVE STATICS ANALYSES (BEFORE-AND-AFTER ANALYSES)

OR

(TWO-SNAPSHOT ANALYSES)



∴ DEMAND CURVE SHIFTS TO THE RIGHT AS WEATHER BECOMES HOTTER.

B/F

$P_1 = 40$

$Q_1 = 1000$

A/F

$P_2 = 50$

$Q_2 = 1200$

P ↑

Q ↑

III CONSTRAINTED OPTIMIZATION

MAKE IT AT THE BEST USE

EX) A CONSUMER TRIES TO MAXIMIZE HIS/HER UTILITY GIVEN BUDGET CONSTRAINT.

MATHEMATICALLY, SUPPOSE WE HAVE 2 GOODS: X & Y

P_X = PRICE OF GOOD X (BAHT/UNIT)

P_Y = PRICE OF GOOD Y (BAHT/UNIT)

M = MONEY INCOME (BAHT/WK)

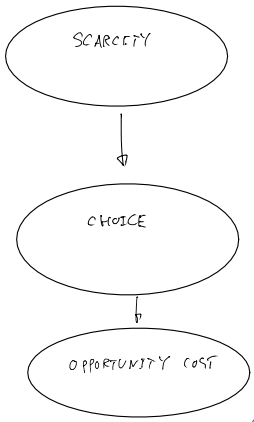
MAXIMIZE $U(x, y)$ → OBJECTIVE FUNCTION

SUBJECT TO $P_x \cdot x + P_y \cdot y \leq M$ → CONSTRAINT

TOTAL EXPENDITURES ON X & Y

$(x^* = 9, y^* = 9)$

SCARCITY - CHOICE - OPPORTUNITY COST (S-C-O)



⇒ RESOURCES ARE SCARCED (LIMITED)
- TIME
- MONEY
- PHYSICAL CONSTRAINTS

⇒ ALL THINGS THAT A PERSON MUST GIVE UP (OR SACRIFICE OR FORGO) IN ORDER TO ENGAGE IN "AN ACTIVITY".

INCLUDE BOTH EXPLICIT COSTS AND IMPLICIT COSTS (HIDDEN COSTS)

OPPORTUNITY COST = EXPLICIT COSTS + IMPLICIT COSTS

Ex: Q: WHAT ARE THE OPP. COST OF STUDYING AT BE FOR 4 YRS?

A:

TUITION FEES =	160,000 × 4 =	640,000 BAHT	EXPLICIT COSTS
ACCOMODATION COSTS =	5,000 × 48 =	240,000 BAHT	
ALLOWANCES =	5000 × 48 =	240,000 BAHT	
UTILITY BILLS =	3,000 × 48 =	144,000 BAHT	
		1,164,000 BAHT	

FORGONE SALARY/INCOME ONE COULD HAVE EARNED IF HE OR SHE WORKS INSTEAD = 10,000 × 48 = 480,000 BAHT

OPPORTUNITY COST = 1,164,000 + 480,000 ≈ 1.7 M

DECISION RULE : IF EXPECTED BENEFITS (B) > COSTS (C), THEN DO THE ACTIVITY.

IF B < C, DO NOT DO THE ACTIVITY.

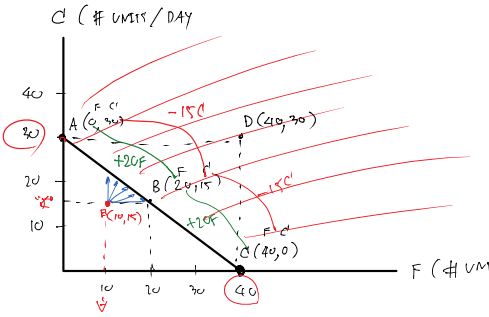
PRODUCTION POSSIBILITY CURVE (PPC): A CURVE SHOWING ALL POSSIBLE COMBINATIONS OF PRODUCTION GIVEN AVAILABLE RESOURCES AND THE STATE OF TECHNOLOGY.

LET'S CONSIDER A GUY: MR. TOM HANK.

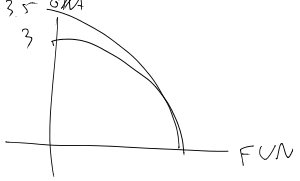
2 PRODUCTION ACTIVITIES: CATCHING FISHES

GATHERING COCONUTS

HIS TIME = 24 - 8 = 16 WORKING HOURS.



$-\frac{30}{40} = -\frac{3}{4}$



FACT #1 LINE AC IS SO CALLED "PRODUCTION POSSIBILITY CURVE (PPC)"

FACT #2
- CHOICES "OUTSIDE" THE PPC ARE INFEASIBLE TO PRODUCE. (UNATTAINABLE) (WHY?)
- CHOICES "ALONG" THE PPC = ARE FEASIBLE TO PRODUCE AND EFFICIENT.
- CHOICES "INSIDE" THE PPC ARE "FEASIBLE" TO PRODUCE BUT AVAILABLE... NOT EFFICIENT ☹

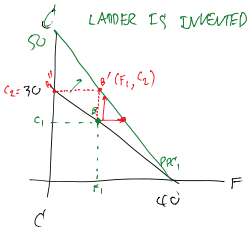
FACT #3 MARIE-CLAIRE FACES "TRADE OFF". GIVEN = RESOURCES, TO DE ∞, HE MUST GIVE UP SOME, VICE VERSA.

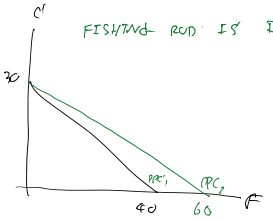
FACT #4 JUMPING FROM A → B:
TO OBTAIN 20F, HE MUST GIVE UP 15C.
" 1F " $\frac{15}{20} = \frac{3}{4} = 0.75$C

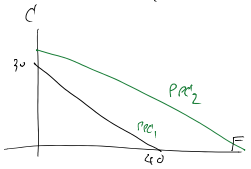
THEREFORE, OPPORTUNITY COST OF AN EXTRA FISH IS EQUAL TO $\frac{3}{4}$ UNIT OF FOREGONE COCONUT.

THE SLOPE OF THE PPC $\left(-\frac{3}{4}\right)$ REFLECTS THIS OPP. COST OF A FISH.

FACT #5







BOTH LADDER AND FISHING ROD ARE USED