INTRODUCTION TO ECONOMIC CONCEPTS

RATIONALITY.
 OPPORTUNITY COST.
 NO FREE LUNCH.
 TRADE OFFS.
 INCENTIVES.
 MARGINAL ANALYSIS.

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1. RATIONALITY

• ECONOMICS IS ALL ABOUT ALLOCATION OF RESOURCES-HOW CAN OUR SOCIETY MAKE THE BEST USE OF OUR ABILITIES AND THE GIFTS THAT THE WORLD GIVES US? WHAT DOES 'BEST' MEAN?

• RATIONALITY-WHAT IS RATIONAL FOR ONE MAY NOT BE SO FOR OTHERS.

• WHEN A PERSON FACES A CHOICE, HE/SHE WILL PICK THE PERSON THAT SHE LIKES BEST.

• ECONOMICS TRIES TO SELL STORIES ABOUT THE WORLD, TYPICALLY CALLED MODELS.

• THEY SAY-HERE IS HOW I THINK THINGS WORK. IF THIS BILL PASSES WHAT DO I THINK WILL CHANGE? IF WE ARE HIT BY AN UNEXPECTED EVENT, WHAT DO I THINK WILL HAPPEN?

ADAM SMITH

- APPROACHED THE SUBJECT FIRST AS ONE OF MORAL PHILOSOPHY.
- HIS 1776 'WEALTH OF ECONOMICS' WAS AN ANALYSIS OF THE MARKET ECONOMY AND HOW IT CONTRIBUTED TO THE ECONOMIC WELFARE OF THE PEOPLE.

• CENTRAL TO HIS THESIS WAS THE CONCEPT OF THE 'RATIONAL ECONOMIC MAN'.

- INDIVIDUALS MADE ECONOMIC DECISIONS ON THE BASIS OF REASON AND THEIR OWN SELF INTEREST, NOT FOR THE GOOD OF SOCIETY-
 - INVISIBLE HAND GUIDED THE ECONOMY FOR THE BENEFIT OF ALL. ESSENTIALLY WHAT WE NOW CALL CAPITALISM.

MAN IS A COLD, RATIONAL CALCULATOR

As individuals, we are self-interested.

We aim to improve our personal well-being by consuming goods & services, and achieving goals.

We make decisions by collecting information and calculating which actions will help us achieve our aims without being too costly.

WHAT IS RATIONAL CHOICE?

WHILE IT IS LIKELY MORE FINANCIALLY <u>LUCRATIVE</u> FOR AN EXECUTIVE TO STAY ON AT A COMPANY RATHER THAN RETIRE EARLY, IT IS STILL CONSIDERED RATIONAL BEHAVIOR FOR HIM/HER TO SEEK AN EARLY RETIREMENT IF HE/SHE FEELS THE BENEFITS OF RETIRED LIFE OUTWEIGH THE UTILITY FROM THE PAYCHECK THAT HE/SHE RECEIVES.

WHAT IS RATIONAL CHOICE?

- RATIONAL CHOICE THEORY ASSUMES THAT ALL PEOPLE TRY TO ACTIVELY MAXIMIZE THEIR ADVANTAGE IN ANY SITUATION AND THEREFORE CONSISTENTLY TRY TO MINIMIZE THEIR LOSSES.
- THE THEORY BASED ON THE IDEA THAT ALL HUMANS BASE THEIR DECISIONS ON RATIONAL CALCULATIONS, ACT WITH RATIONALITY WHEN CHOOSING, AND AIM TO INCREASE EITHER PLEASURE OR PROFIT.
- RATIONAL CHOICE THEORY ALSO STIPULATES THAT ALL COMPLEX SOCIAL PHENOMENA ARE DRIVEN BY INDIVIDUAL HUMAN ACTIONS.

• THEREFORE, IF AN ECONOMIST WANTS TO EXPLAIN SOCIAL CHANGE OR THE ACTIONS OF SOCIAL INSTITUTIONS, HE NEEDS TO LOOK AT THE RATIONAL DECISIONS OF THE INDIVIDUALS THAT MAKE UP THE WHOLE.

RATIONALITY IS...

• THAT ALL CONSUMERS SEEK TO MAXIMIZE UTILITY.

CONSUMER RATIONALITY: MAKING CHOICES ON THE BASIS OF PREFERENCE.

• A CONSUMER IS RATIONAL IF HE CHOOSES THE FEASIBLE ALTERNATIVE THAT HE PREFERS.

- ECONOMISTS, WHILE DEVELOPING ANY THEORY OF ECONOMICS, MAKE THE FUNDAMENTAL ASSUMPTION THAT ENTITIES, WHICH ARE PART OF THE THEORY, EXERCISE RATIONAL BEHAVIOUR WHILE MAKING DECISIONS.
 - FOR EXAMPLE, IF A PERSON CHOOSES A JOB WITH A PROFILE OF HIS LIKING INSTEAD OF A HIGH PAYING JOB, THEN IT WOULD BE ALSO TERMED AS RATIONAL BEHAVIOUR.

2. OPPORTUNITY COST

DEFINITION – THE COST EXPRESSED IN TERMS OF THE NEXT BEST ALTERNATIVE SACRIFICED

OPPORTUNITY COST

- OPPORTUNITY COST IS THE MOST FUNDAMENTAL COST CONCEPT.
- THE OPPORTUNITY COST OF DOING OR GETTING SOMETHING IS:
 - WHAT YOU COULD HAVE DONE OR GOT INSTEAD

ALSO CALLED IMPLICIT COSTS: THIS COULD BE A SACRIFICE NOT INVOLVING
 PAYING OF MONEY

• EXAMPLE: OPPORTUNITY COST FOR ATTENDING A COURSE INCLUDES:

• WHATEVER ELSE ONE COULD HAVE BOUGHT WITH THE TUITION FEES

• PLUS THE WORK, FAMILY PARTICIPATION, AND RECREATION THAT YOU ARE NOT DOING BECAUSE YOU ARE HERE.

OPPORTUNITY COSTS

• OPPORTUNITY COST IS WHAT YOU FOREGO.

• THE INCOME THAT WOULD HAVE BEEN RECEIVED IF THE INPUT HAD BEEN USED IN ITS MOST PROFITABLE ALTERNATIVE USE.

IT DENOTES THE REAL COST OF USING AN INPUT.
FOR EG: COSTING ENTREPRENEUR SERVICES IN A FIRM



• COSTS OF STUDYING IN COLLEGE

• COSTS OF WATCHING A MOVIE

EXAMPLE OF OPPORTUNITY COST

POSSIBLE HEALTH EXPENDITURE IN A YEAR

Paediatric Care (No Children	Care of Elderly (No of Elderly	Opportunity Cost of Treating
Treated in '000's)	Treated in '000's)	Children in Terms
		of Elderly Patients
		Forgone
0	30	0
1	28	2
2	24	6
3	18	12
4	10	20
5	0	30



• COST CAN BE INCURRED WITHOUT FINANCIAL EXPENDITURE.

• HELPS US VIEW THE TRUE COST OF DECISION MAKING



• OPPORTUNITY COST CAN BE HARD TO USE IN PRACTICE.

DOLLAR/RUPEES COSTS (PRICES) ARE

- EASIER TO DETERMINE
- EASIER TO ADD UP.

- THE OPPORTUNITY COSTS ARE USEFUL FOR ECONOMIC EVALUATION.
- THESE COSTS CLASSIFICATION THUS BECOMES THE BASIS FOR MEASURING BENEFITS LIKE COST BENEFIT AND COST EFFECTIVENESS ETC

3. NO FREE LUNCH

• TINSTAAFL- THERE IS NO SUCH THING AS A FREE LUNCH.

• ECONOMIC THEORY-WHATEVER GOODS AND SERVICES ARE PROVIDED, THEY MUST BE PAID FOR BY SOMEONE.

- RELATED TO OPPORTUNITY COST.
 - EX. WHEN SOMEONE TAKES YOU TO LUNCH AND PAYS FOR YOUR MEAL, YOU'VE STILL MADE AN INVESTMENT. YOU GAVE YOUR TIME AND ENERGY TO BE THERE-CHOOSING IT OVER A VARIETY OF OTHER THINGS YOU COULD DO.

• HENCE, IT IS LINKED TO THE CONCEPT OF OPPORTUNITY COST.



The Production Possibility Frontier



- A move along the curve illustrates the concept of opportunity cost.
- In order to increase the production of capital goods, the amount of consumer goods will have to decrease.

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4. TRADE OFFS

- IN ECONOMICS, THE TERM TRADE-OFF EXPRESSED AS AN OPPORTUNITY COST, WHICH IS THE MOST PREFERRED POSSIBLE ALTERNATIVE.
- TRADE-OFF INVOLVES A SACRIFICE THAT MUST BE MADE TO GET A CERTAIN PRODUCT OR EXPERIENCE. A PERSON GIVES UP THE OPPORTUNITY TO BUY 'GOOD B,' BECAUSE THEY WANT TO BUY 'GOOD A' INSTEAD.





DIFFERENCE BETWEEN TRADE OFFS AND OPPORTUNITY COSTS.

TRADE-OFF DENOTES THE OPTION WE GIVE UP, TO OBTAIN WHAT WE WANT

OPPORTUNITY COST IS THE COST OF THE SECOND BEST ALTERNATIVE GIVEN UP TO MAKE A CHOICE.

BASIS FOR COMPARISON	TRADE-OFF	OPPORTUNITY COST
Meaning	Trade-off implies the exchange of one thing to get the another.	Opportunity cost implies the value of choice foregone, to get something else.
What is it?	The choices sacrificed.	The value of next best alternative.
Represents	What is given up to get what is wanted?	What could have been done, with what was given up?

5. INCENTIVES

• ECONOMIC INCENTIVES ARE OFFERED TO ENCOURAGE PEOPLE TO MAKE CERTAIN CHOICES OR BEHAVE IN A CERTAIN WAY.

• USUALLY INVOLVE MONEY, BUT THEY CAN ALSO INVOLVE GOODS AND SERVICES.

- ECONOMIC CONCEPT OF **INCENTIVES** IS A POWERFUL TOOL FOR EXPLAINING HUMAN BEHAVIOR.
- INCENTIVES ARE REWARDS OR PENALTIES FOR BEHAVIOR.
- **INCENTIVES** CAN BE EITHER POSITIVE OR NEGATIVE, AND CAN THUS ENCOURAGE OR DISCOURAGE A PARTICULAR ACTION.



Economic power is exercised by means of a positive, by offering men a reward, an incentive, a payment, a value; political power is exercised by means of a negative, by the threat of punishment, injury, imprisonment, destruction. The businessman's tool is values; the bureaucrat's tool is fear.

- Ayn Rand

AZQUOTES

POSITIVE AND NEGATIVE INCENTIVES

REWARDS VS PENALIZATION.

- HOW DO THEY AFFECT US?
 - POSITIVE ECONOMIC INCENTIVES LEAVE YOU BETTER OFF IF YOU DO WHAT WAS ASKED OF YOU. THESE BENEFIT YOU IN SOME WAY.
 - REWARD IN THE FORM OF MONEY OR OTHER FINANCIAL GAIN SUCH AS A BETTER PRICE, A FREE ITEM OR AN UPGRADED ITEM ASSOCIATED WITH MANY THINGS PEOPLE WOULD LIKE TO GET.
 - NEGATIVE INCENTIVES LEAVE YOU WORSE OFF FINANCIALLY BY MAKING YOU PAY MONEY, COSTING YOU SOMETHING. FINES, FEES, PARKING CHALLANS, ETC. THEY ARE CALLED NEGATIVE BECAUSE THEY ARE THINGS YOU DON'T WANT TO GET.



6. MARGINAL ANALYSIS COSTS UTILITY

 IN GENERAL, PEOPLE WANT TO GET THE MOST VALUE OUT OF THEIR RESOURCES. THE SAME GOES FOR BUSINESSES—COMPANIES MUST ENSURE THAT THE BENEFITS OF CERTAIN ACTIVITIES OUTWEIGH THE COSTS IN ORDER TO BE PROFITABLE.

• ONE TOOL FOR WEIGHING THIS RELATIONSHIP IS MARGINAL ANALYSIS, THE EXAMINATION OF THE COSTS AND BENEFITS OF A MARGINAL (SMALL) CHANGE IN THE PRODUCTION OF GOODS OR AN ADDITIONAL UNIT OF AN INPUT OR GOOD.



• FOR EXAMPLE, A BAKERY MIGHT USE MARGINAL ANALYSIS TO DETERMINE THE POTENTIAL BENEFITS OF AN INCREASE IN BREAD PRODUCTION. THIS DECISION-MAKING TOOL IS USEFUL FOR HELPING PEOPLE AND BUSINESSES DECIDE HOW TO ALLOCATE THEIR SCARCE RESOURCES IN ORDER TO MINIMIZE COSTS AND MAXIMIZE BENEFITS.

WHAT IT MEANS

- NET BENEFITS = TOTAL BENEFITS TOTAL COSTS
- TO CONDUCT MARGINAL ANALYSIS, WE MUST ANALYZE HOW THE BENEFITS ARE AFFECTED BY:
- BUYING ONE ADDITIONAL UNIT OF A GOOD
- PRODUCING ONE ADDITIONAL UNIT OF OUTPUT
- ADDING ONE ADDITIONAL UNIT OF AN INPUT
- THE INPUT OR OUTPUT THAT CHANGES BY ONE IS THE CONTROL VARIABLE OF OUR FORMULA. MARGINAL ANALYSIS FOCUSES ON WHETHER OR NOT YOU SHOULD CHANGE THIS CONTROL VARIABLE BY ONE.

MARGINAL ANALYSIS FORMULA

- CHANGE IN NET BENEFITS = MARGINAL BENEFITS MARGINAL COST.
- MARGINAL BENEFIT, ALSO KNOWN AS MARGINAL REVENUE, IS THE INCREASE IN TOTAL BENEFITS AS A RESULT OF A CHANGE IN OUTPUT OF A GOOD BY ONE UNIT. THE EQUATION FOR MARGINAL BENEFIT IS:
- MR = MARGINAL BENEFIT TR = TOTAL REVENUE $MR = \Delta TR$ ΔQ
 - Q = CONTROL VARIABLE
 - DELTA SYMBOL (TRIANGLE) = THE CHANGE IN UNITS

MARGINAL ANALYSIS FORMULA

- MARGINAL COST IS THE INCREASE IN TOTAL COST AS A RESULT OF A CHANGE IN OUTPUT OF A GOOD BY ONE UNIT. IT'S REPRESENTED BY THE FOLLOWING EQUATION:
- MC = MARGINAL COSTTC = TOTAL COST
 - DELTA SYMBOL (TRIANGLE) = THE CHANGE IN UNITS

MC = <u>ΔTC</u> ΔQ



- UTILITY- THE ABILITY OF A GOOD OR SERVICE TO SATISFY A NEED OR WANT= SATISFACTION.
- MARGINAL-ONE MORE UNIT OF SOMETHING, THE DIFFERENCE BETWEEN TWO THINGS.
- MARGINAL ANALYSIS-WHAT WILL HAPPEN IF I PRODUCE OR CONSUME ONE MORE
 UNIT.
- MARGINAL COST- THE COST OF PRODUCING OR CONSUMING ONE MORE.
- MARGINAL BENEFIT- THE BENEFIT OF PRODUCING OR CONSUMING ONE MORE.

LAW OF DIMINISHING MARGINAL UTILITY

- THIS LAW STATE THAT AS THE AMOUNT CONSUMED OF A COMMODITY INCREASES, THE UTILITY DERIVED BY THE CONSUMER FROM THE ADDITIONAL UNITS, I.E MARGINAL UTILITY GOES ON DECREASING.
- ACCORDING TO MARSHALL, "THE ADDITIONAL BENEFIT A PERSON DERIVES FROM A GIVEN INCREASE OF HIS STOCK OF A THING DIMINISHES WITH EVERY INCREASE IN THE STOCK THAT HE ALREADY HAS"

HOW MUCH OF A PARTICULAR ACTIVITY?

- PURSUE ACTIVITIES AS LONG AS THE MARGINAL BENEFITS (MB) EXCEED THE MARGINAL OPPORTUNITY COSTS (MOC).
- PURSUE ACTIVITIES UPTO THE POINT WHERE MB=MOC.
- IF THE MARGINAL BENEFIT OF ANOTHER UNIT OF THE ACTIVITY IS GREATER THAN THE MARGINAL OPPORTUNITY COST, GO FOR IT.
- IF THE MARGINAL BENEFIT OF ANOTHER UNIT OF THE ACTIVITY IS LESS THAN THE MARGINAL OPPORTUNITY COST, STOP.















EXCEPTIONS

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- MONEY
- HOBBIES
- ART AND MUSIC
- LIQUOR?

ALL CONCEPTS INTER-LINKED

 THE PPF (PRODUCTION POSSIBILITY FRONTIER) MODELS THE TRADE-OFFS AND OPPORTUNITY COSTS THAT NECESSARILY ACCOMPANY DECISION-MAKING IN THE FACE OF SCARCITY.



PRODUCTION POSSIBILITY FRONTIERS

- SHOW THE DIFFERENT COMBINATIONS OF GOODS AND SERVICES THAT CAN
 BE PRODUCED WITH A GIVEN AMOUNT OF RESOURCES
- NO 'IDEAL' POINT ON THE CURVE
- ANY POINT INSIDE THE CURVE SUGGESTS RESOURCES ARE NOT BEING UTILISED EFFICIENTLY
- ANY POINT OUTSIDE THE CURVE NOT ATTAINABLE WITH THE CURRENT LEVEL OF RESOURCES

USEFUL TO DEMONSTRATE ECONOMIC GROWTH AND OPPORTUNITY COST

CONCLUSION: CONCEPTS ILLUSTRATED BY THE PRODUCTION POSSIBILITIES FRONTIER

TRADEOFFS
 OPPORTUNITY COST

ECONOMIC GROWTH

