

INTRODUCTION TO ECONOMICS

BADRI NARAYAN RATH, IIT HYDERABAD

1

WHAT IS ECONOMICS?

- Economics is about making choices and you make economics choices everyday.
- ✓ Whether to get a part-time job or focus on your studies
- ✓ Joining at IITs vs joining at NITs
- ✓ Live in hostel or rent a room outside campus
- ✓ Entering job markets vs going for higher study
- ✓ Taking a course on Economics or Psychology or English or Sociology within the LA basket.

FORMAL DEFINITION

- **Economics** is the social science that analyzes the production, distribution, and consumption of goods and services.
- Economics is the study of how people use their **scarce resources** to satisfy their unlimited wants.
- Resources (Inputs of factors of production used to produce goods and services that people want).
- Labour, Capital, Natural resources (both renewable & exhaustible), Entrepreneurial ability

THE ART AND SCIENCE OF ECONOMIC ANALYSIS

- You have been hearing about economics issues for years:
 - Unemployment, Inflation, poverty, fiscal deficits, stock prices, computer prices, etc.
 - When explanations of these issues go into any depth, you may feel confused.

○ Why Study Economics?

- The economics profession thrives because its models usually do a better job for understanding the complex world.
- Economics ideas help economists to influence policy (ministerial cabinet posts, Central Bank/World Bank/IMF, NITI Aayog, Indian Economics service, etc.)
- Better job perspective
- But not all economists are wealthy, nor is personal wealth the goal of the discipline (like not all doctors are healthy or not all child psychologists have well adjusted children).



ECONOMIC PROBLEM

Unlimited Needs
& Wants

Limited
Resources

Scarcity

Choices

HOW
to
produce

W
r



TEN PRINCIPLES OF ECONOMICS

Society and Scarce Resources:

- The management of society's resources is important because resources are scarce.
- *Scarcity*. . . means that society has limited resources and therefore cannot produce all the goods and services people wish to have.

TEN PRINCIPLES OF ECONOMICS

- How people make decisions.
 - People face tradeoffs.
 - The cost of something is what you give up to get it.
 - Rational people think at the margin.
 - People respond to incentives.

TEN PRINCIPLES OF ECONOMICS

- How people interact with each other.
 - Trade can make everyone better off.
 - Markets are usually a good way to organize economic activity.
 - Governments can sometimes improve economic outcomes.

TEN PRINCIPLES OF ECONOMICS

- The forces and trends that affect how the economy as a whole works.
 - The standard of living depends on a country's production.
 - Prices rise when the government prints too much money.
 - Society faces a short-run tradeoff between inflation and unemployment.

PRINCIPLE #1: PEOPLE FACE TRADEOFFS.

“There is no such thing as a free lunch!” There is no free lunch because all goods and services involve a cost to someone.



PRINCIPLE #1: PEOPLE FACE TRADEOFFS.

To get one thing, we usually have to give up another thing.

- Guns v. butter
- Food v. clothing
- Leisure time v. work
- Efficiency v. equity

Making decisions requires trading off one goal against another.

#1: PEOPLE FACE TRADEOFFS

○ Efficiency v. Equity

- *Efficiency* means society gets the most that it can from its scarce resources.
 - *Equity* means the benefits of those resources are distributed fairly among the members of society.
-
- Policies: **Unemployment insurance, Redistribution of income from rich to poor**
 - Although above policies aimed at achieving greater equity, but they have a cost in terms of reduced efficiency.
 - It reduces the reward of working hard.
 - People work less and produce fewer goods and services
 - In this process, when govt. tries to cut the economic **pie** into more equal slices, the **pie** get smaller.

PRINCIPLE #2: THE COST OF SOMETHING IS WHAT YOU GIVE UP TO GET IT.

- Because people face trade-offs, making decisions require comparing costs and benefits of alternatives.
 - Decision to join the B.Tech. program at IIT Hyderabad/IIIT Raichur (Benefit???, Costs???)
 - The cost at studying does not truly represent what you **give up** to spend 4 years in IITs/IIITs.
- The *opportunity cost* of an item is what you give up to obtain that item. (e.g. College athletes, Entrepreneur).
- Opportunity cost = Explicit costs + Implicit costs

PRINCIPLE #3: RATIONAL PEOPLE THINK AT THE MARGIN

- *Economists* normally assume that people are **rational**. **Rational people** systematically and purposefully do the best they can to achieve their objectives.
- A rational people know that decisions in life are rarely black and white.
 - ✓ At dinner time, the decision we face is not between fasting or eating like a pig, rather whether to take extra spoon of rice/curry.
 - ✓ When exams roll around, your decision is not between blowing them off or studying 24 hrs. a day, rather whether to spend an extra hour reviewing your notes instead of watching T20 world cup match/TV.
- Economists use the term marginal changes to describe small incremental adjustment to an existing plan of action.
- Comparing Marginal benefits and Marginal costs

PRINCIPLE #4: PEOPLE RESPOND TO INCENTIVES.

- An incentive (reward or punishment) that induces a person to act.
- Because rational people make a decisions by comparing costs and benefits, thus, they respond to incentives.
- Incentives are crucial to analyzing how markets work.
- (Market for petroleum)
 - ❖ Excise duty on petrol and diesel by the govt. of India
 - ❖ Benefits & Perks to employee
 - ❖ Research incentives to faculties in IITs/IIMs.

PRINCIPLE #5: TRADE CAN MAKE EVERYONE BETTER OFF.

- People gain from their ability to trade with one another.
- Competition results in gains from trading.
- Trade allows people to specialize in what they do best.
- Ford and Toyota
- Dell and Lenovo
- Increasing trading partners around the world
- Global Value Chains (GVCs)

PRINCIPLE #6: MARKETS ARE USUALLY A GOOD WAY TO ORGANIZE ECONOMIC ACTIVITY.

- The collapse of Communism in the Soviet Union and Eastern Europe in the 1980s may be the most important change in the world during the past half century.
- **Communism:** The government officials decides the allocation of resources in the economy (what goods and services are to produce, how much, and who produces/consumes?)
- **Central Planning:** The govt. could organize economic activity in a way to promote economic wellbeing for the country as a whole.
- **Market Economy:** the decisions of a central planners are replaced by the decisions of the millions of firms and households.

- Father of Economics (Adam Smith): His book, 1776: “*An Inquiry into the Nature and Causes of the Wealth of Nations*”
- Adam Smith made the observation that households and firms interacting in markets act as if guided by an “invisible hand.”
 - Because households and firms look at prices when deciding what to buy and sell, they unknowingly take into account the social costs of their actions.
 - As a result, prices guide decision makers to reach outcomes that tend to maximize the welfare of society as a whole.
 - In Communist countries, *prices were not determined in the marketplace but were dictated by central planners.*
 - *Mixed economy: Capitalism & Communism*

PRINCIPLE #7: GOVERNMENTS CAN SOMETIMES IMPROVE MARKET OUTCOMES.

- If **Invisible hand** of the market is so great then why do we need government?
- **Answer:** Invisible hand can work its magic only if the government enforces the rules and maintains the institutions that are key to a market economy.
- The government also intervenes when *market failure* occurs (Market failure refers to a situation in which market on its own to fail to produce an efficient allocation of resources).
- To promote efficiency
- To promote equity
- *Either to enlarge the economic pie or to change how the pie is divided.*

□ Possible cause of market failure:

- *Externality*, which is the impact of one person or firm's actions on the well-being of a bystander.
- *Market power*, which is the ability of a single person or firm to unduly influence market prices.

PRINCIPLE #8: THE STANDARD OF LIVING DEPENDS ON A COUNTRY'S PRODUCTION.

- Standard of living may be measured in different ways:
 - By comparing personal incomes.
 - By comparing the total market value of a nation's production.
- Almost all variations in living standards are explained by differences in countries' productivities.
- *Productivity* is the amount of goods and services produced from each hour of a worker's time.

PRINCIPLE #9: PRICES RISE WHEN THE GOVERNMENT PRINTS TOO MUCH MONEY.

- Inflation is an increase in the overall level of prices in the economy.
- One cause of inflation is the growth in the quantity of money.
- When the government creates large quantities of money, the value of the money falls.

PRINCIPLE #10: SOCIETY FACES A SHORT-RUN TRADEOFF BETWEEN INFLATION AND UNEMPLOYMENT.

- Short-run effect of monetary injections:
- Increase in money supply leads to stimulate overall spending.
- Which leads to demand for more goods and services
- Higher demand leads firms to raise their prices (inflation) but high demand also requires more production of output which is possible through hiring more workers (less unemployment)
- **Phillips Curve**

FAMOUS ECONOMISTS

- Four of the last eight U.S. presidents including John F. Kennedy, Donald Trump.
- CEO of Berkshire Hathaway – Warren E Buffett; Former eBay president Meg Whitman, Former Microsoft Chief Executive Officer: Steve Ballmer, CNN founder Ted Turner, Intel president Paul Otellini, high-tech guru Esther Dyson, etc.