

# Principles of Microeconomics

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## Syllabus

Session	Topic	Reading Assignment
1	Economics: The Big Ideas	Ch. 1
2	Trade	Ch. 2
3	Supply and Demand	Ch. 3
4	Equilibrium	Ch. 4
5	Elasticities	Ch. 5
6	Taxes and Subsidies	Ch. 6
7	The Price System	Ch. 7 & 8
8	Externalities	Ch. 10
9	Costs, Profits, and Perfect Competition	Ch. 11 & 12
10	Monopoly and Price Discrimination	Ch. 13 & 14
11	Game Theory, Oligopoly, & Monopolistic Competition	Ch. 15
12	Economics of Network Goods	Ch. 16
13	Consumer Behavior	Ch. 23
14	Review	
15	Final	

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## Grading

### Mandatory Readings

- ▶ Cowen, T. and Tabarok, A., Modern Principles of Economics, 2e, 2013, Worth, ISBN 9781464128745

- 10% Participation
- 10% Essay 1
- 20% Essay 2
- 30% Problem Sets & Quizzes
- 30% Final Exam

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## What Economics Is

“Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses.”

Lionel Robins, 1932,  
An Essay on the Nature & Significance of Economic Science

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## What Economics Is

- ▶ Economics is a social science
- ▶ There is overlap with psychology, sociology, political science
- ▶ Economists ask different questions and use different methods to answer their questions
- ▶ Economics is the study of how human beings coordinate their wants and desires, given the decision-making mechanism, social customs, and political realities of the society
- ▶ The three central coordination problems any economy must solve:
  1. What, and how much, to produce
  2. How to produce it
  3. For whom to produce it

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## Microeconomics and Macroeconomics

- ▶ Economic theory is divided into two parts
- ▶ Microeconomics is the study of individual choice, and how that choice is influenced by economic forces  
Microeconomics studies such things as:
  - ▶ The pricing policy of firms
  - ▶ Household's decisions on what to buy
  - ▶ How markets allocate resources among alternative ends
- ▶ Macroeconomics is the study of the economy as a whole  
Macroeconomics studies such things as:
  - ▶ Inflation
  - ▶ Unemployment
  - ▶ Economic growth

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## Positive and Normative analysis

- ▶ The *positive analysis* uses theories and models to predict the consequences of a decision / change: "What if ...?"
  - ▶ How does a quota on imports for foreign cars will impact on the sales of domestic cars?
  - ▶ What would be the effects of an increase in the gasoline tax?
- ▶ The *normative analysis* is devoted to questions concerning "what ought to be?"
  - ▶ Should the government reduce the tax for diesel vehicles with particulate filters?
  - ▶ Should the government tax the consumption of fossil fuels more?
- ▶ The *Art of economics* is using the knowledge of positive economics to achieve the goals determined in normative economics

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## Methods of Economists: Theory and Models

- ▶ Theories are used to formulate observed phenomena based on rules and assumptions.
  - ▶ Theory of the Firm
  - ▶ Consumption Theory
- ▶ Models are (mathematical) representations of a theory.
  - ▶ simplified, abstract representation of the real world
  - ▶ some characteristics may have been left out
  - ▶ As simple as possible but not simpler.

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## Theory and Models

### Assumptions and Conclusions

*Simplifying assumptions* facilitate the analysis without influence the conclusions derived from a model.

*Critical Assumptions* influence the conclusions derived from a model.

### The development of the theory

The review and improvement of the theories is central to the development of economics as a science.

### The confirmation of a theory

The validity of a theory is determined by the quality of their predictions given the assumptions.

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## Systems to organize economic activity History and Economic Systems

- ▶ Tradition
- ▶ Command: Central Planning
- ▶ Markets: The Price System

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## The Big Ideas in Economics

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## 1. Incentives Matter

Who is more likely to work long hours in a laboratory researching new cures for diseases:

- ▶ a scientist who earns a percentage of the profits from any new medicine she might invent, or
- ▶ a scientist who will get a handshake and a thank you note from her boss if she invents a new medicine?

- ▶ rewards and penalties that motivate behavior.
- ▶ People respond to incentives in predictable ways.
- ▶ Self-interest is an important incentive in economics.

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## 2. Good Institutions Align Self-Interest with the Social Interest

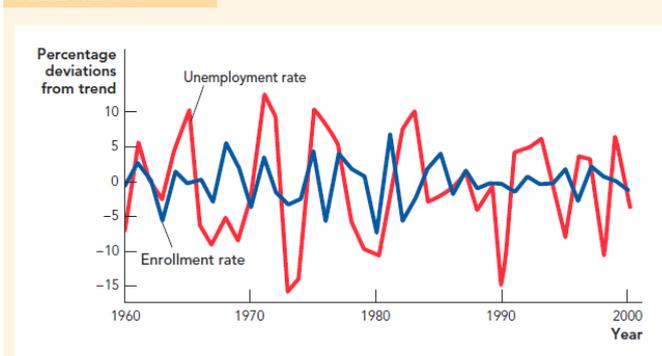
- ▶ Markets magically align your self-interest with social interest (usually)
- ▶ “It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest.”

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## 3. Trade-offs Are Everywhere

FIGURE 1.1



The College Enrollment Rate Tends to Increase When the Unemployment Rate Increases

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## Opportunity Cost

- ▶ Opportunity cost is the benefit forgone of the next-best alternative to the activity you have chosen
- ▶ Opportunity cost should always be less than the benefit of what you have chosen
- ▶ Opportunity cost is the basis of cost/benefit economic reasoning

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## Opportunity Cost

Examples of opportunity cost:

1. Individual decisions
  - ▶ The opportunity cost of college includes:
    - ▶ Items you could have purchased with the money spent for tuition and books
    - ▶ Loss of the income from a full-time job
2. Government decisions
  - ▶ The opportunity cost of money spent on the war on terrorism is less spending on health care or education

## 4. Thinking on the Margin

What would happen if the punishment for lesser crimes is increased (say, mandatory execution for drug dealers)?

- ▶ Actual trade-offs are usually “on the margin.”
- ▶ Marginal means additional
- ▶ Most economic choices are marginal choices

## Marginal costs and marginal benefits

- ▶ Using economic reasoning, decisions are often made by comparing marginal costs and marginal benefits

**Marginal cost** is the additional cost over and above costs already incurred

**Marginal benefit** is the additional benefit above and beyond what has already accrued

The economic decision rule:

- ▶ If the marginal benefits of doing something exceed the marginal costs, do it.

$MB > MC \Rightarrow$  Do it!

- ▶ If the marginal costs of doing something exceed the marginal benefits, don't do it.

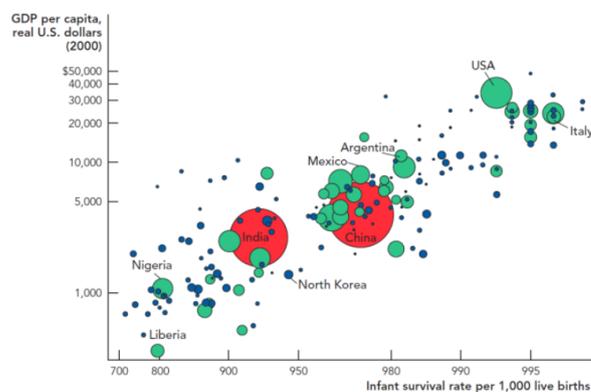
$MB < MC \Rightarrow$  Don't it!

## 5. The Power of Trade

200 Countries, 200 Years

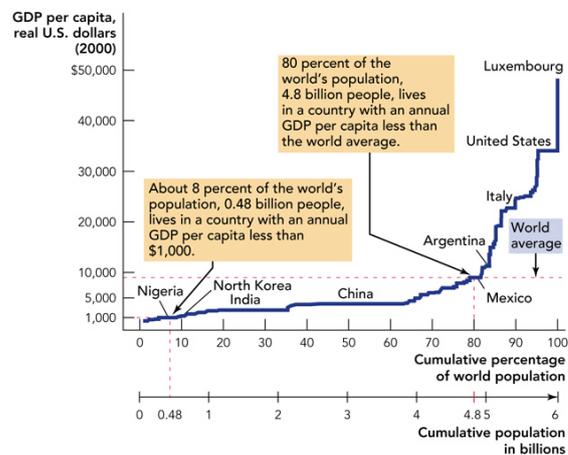
## 6. The Importance of Wealth & Economic Growth

Wealth brings higher standards of living.



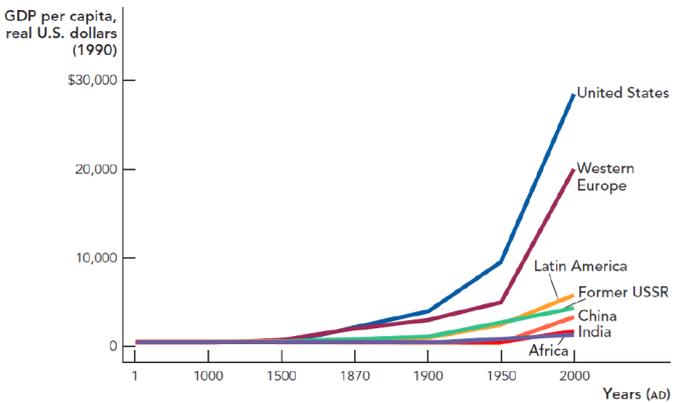
Wealth and Health go together

## Income per Capita varies enormously among Nations



Why are some countries rich and others poor?

# Everyone Used to be Poor



# 7. Institutions Matter

Incentives are sometimes lacking. Strong institutions that support these incentives foster economic growth.



# Economic Institutions

- ▶ To apply economic theory to reality, you've got to have a sense of economic institutions
- ▶ Economic institutions are laws, common practices, and organizations in a society that affect the economy
- ▶ Economic institutions differ significantly among nations
- ▶ They sometimes seem to operate differently than economic theory predicts

# Growth-Compatible Institutions

- ▶ Property rights
  - ▶ Informal property rights limit borrowing by the poor, and hence limit growth
  - ▶ When individuals get much of the gains of growth themselves, they work harder
- ▶ Competitive and open markets
  - ▶ Markets and private ownership of property foster economic growth
  - ▶ Corporations are growth-compatible institutions because of limited liability, which gives stockholders an incentive to invest their savings in large enterprises
- ▶ Honest Government
- ▶ A dependable legal system
- ▶ Political stability

# 8. Economic Booms and Busts Cannot Be Avoided but Can Be Moderated

- ▶ Policymakers use Fiscal Policy and Monetary Policy to attempt to smooth out economic volatility.

Do you think that people in poor countries are poor because they don't have enough money? In other words, could a country get richer by printing more pieces of paper called "money" and handing those out to its citizens?

## 9. Prices Rise When the Government Prints Too Much Money

- ▶ Inflation is an increase in the general level of prices.
- ▶ Heavily indebted nations often print money to pay down debt.

## 10. Central Banking & Economic Policy Making Is a Hard Job

- ▶ Helping the economy be stable
- ▶ Balancing inflation and unemployment
- ▶ Preventing banking crises?