ECO5002 Introduction to Economics

Lecture 1: An Overview

Long Ma

School of Management and Economics
Chinese University of Hong Kong, Shenzhen

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Before Start

- Long Ma (longma@link.cuhk.edu.cn)
  - Fourth-year PhD candidate in ECON at CUHKSZ
  - Master in ECON at LSE; Bachelor in FIN at CUFE
  - Interest: Macroeconomics, Banking and Finance
- No fixed office hour, but you can always send me email.
- No exam. Three take-home quizzes (30%+30%+40%).
- A preterm mini-course for those who have no ECON (FIN, ACCT, etc.) background. Quite easy and basic!
- Textbook: *Principles of Economics*, by N. Gregory Mankiw.

I. Definition of Economics

- Economics is a study of man in the ordinary business of life. It enquires how he gets his income and uses it. (Marshall)
- Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses. (Robbins)
- Economics is the study of how societies use scarce resources to produce valuable commodities and distribute them among different people. (Samuelson)
- Economics is the study of how society manages its scarce resources. (Mankiw)
  - **Scarcity** means that society has limited resources and therefore cannot produce all the goods and services people wish to have.
  - Can you come up with any goods that are not scarce?

II. Ten Principles of Economics

Principle 1: People face trade-offs.

- To get something that we like, we usually have to give up something else that we also like.
- Efficiency v.s. Equality
  - the property of society getting <u>the most</u> it can from its scarce resources.
  - the property of distributing economic prosperity <u>uniformly</u> among the members of society.

Principle 2: The cost of sth. is what you give up to get it.

- Because of trade-offs, making decisions requires comparing the costs and benefits of alternative courses of action.
- Opportunity cost
  - whatever must be given up to obtain some item.
  - what's your cost of being a post-graduate student in CUHKSZ?

II. Ten Principles of Economics

Principle 3: Rational people think at the margin.

- Rational v.s. Irrational
  - systematically and purposefully do the best to achieve objectives.
  - people are not always rational, e.g., altruism or irrationality.
  - psychology and behavioral economics.
- Rational people often make decisions by comparing marginal benefits and marginal costs.
  - optimal choices are often determined when MC = MR.
  - why do you always get so full every time you go to a buffet?

Principle 4: People respond to incentives.

- An incentive is something that induces a person to act.
- Incentives are key to analyzing how markets work.
  - if people do not react to price changes, markets fail.
- Public policymakers should never forget about incentives.

II. Ten Principles of Economics

Principle 5: Trade can make everyone better off.

- A person cannot be good at everything. Hence, specialization and trade are needed and can benefit all people.
  - absolute advantage: the ability to produce a good using fewer inputs than another producer.
  - comparative advantage: the ability to produce a good at a lower opportunity cost than another producer.
- An example with 2 agents and 2 goods:

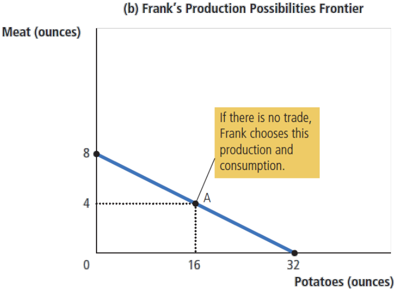
(a) Production Opportunities

	Minutes Needed to Make 1 Ounce of:		Amount Produced in 8 Hours	
	Meat	Potatoes	Meat	Potatoes
Frank the farmer	60 min/oz	15 min/oz	8 oz	32 oz
Ruby the rancher	20 min/oz	10 min/oz	24 oz	48 oz

  - Frank: 1 oz meat = 4 oz potatoes; 1 oz potatoes = 0.25 oz meat.
  - Ruby: 1 oz meat = 2 oz potatoes; 1 oz potatoes = 0.50 oz meat.

II. Ten Principles of Economics

- Production Possibilities Frontier (PPF):
  - the absolute value of the slope = opportunity cost
  - for Frank: $\Delta \text{meat} = -0.25 \cdot \Delta \text{potato}$
  - for Ruby: $\Delta \text{meat} = -0.50 \cdot \Delta \text{potato}$



II. Ten Principles of Economics

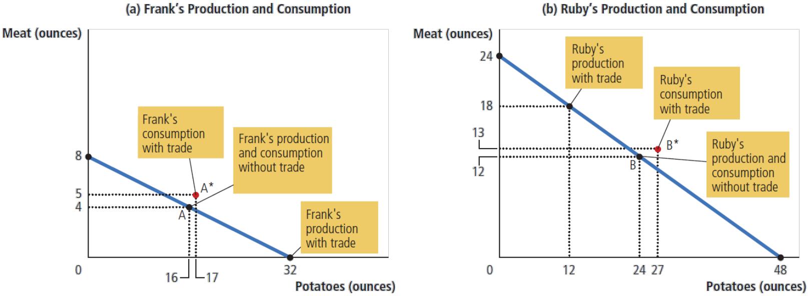
- No absolute advantage for Frank.
- Frank has the comparative advantage in producing potatoes. Ruby has the comparative advantage in producing meat.
- Gains from trade:

(c) The Gains from Trade: A Summary

	Frank		Ruby	
	Meat	**Potatoes**	**Meat**	**Potatoes**
Without Trade:				
Production and Consumption	4 oz	16 oz	12 oz	24 oz
With Trade:				
Production	0 oz	32 oz	18 oz	12 oz
Trade	Gets 5 oz	Gives 15 oz	Gives 5 oz	Gets 15 oz
Consumption	5 oz	17 oz	13 oz	27 oz
GAINS FROM TRADE:				
Increase in Consumption	+1 oz	+1 oz	+1 oz	+3 oz

II. Ten Principles of Economics

- The new consumption bundle lies outside the PPF.



II. Ten Principles of Economics

Principle 6: Markets are good in organizing econ. activities.

- Market economy: an economy that allocates resources through the <u>decentralized decisions</u> of many firms and households as they interact in markets for goods and services.
- <u>Prices</u> can 'automatically' adjust to guide individual buyers and sellers to reach outcomes that, in many cases, maximize the well-being of society as a whole. (Invisible Hand)

II. Ten Principles of Economics

Principle 7: Governments can improve market outcomes.

- Market economies need institutions to enforce property rights so that individuals can own and control scarce resources.
  - the ability of an individual to own and control over scarce resources.
  - the most important role of a government.
- Market failure: a situation in which the market on its own fails to produce an efficient allocation of resources.
  - externality: the impact of one's actions on the well-being of a bystander.
  - market power: the ability of a single economic actor (or small group of actors) to have a substantial influence on market prices.
- Governments want to promote equality.
  - Inequality may lead to social conflicts, turmoil, or even war and hence may increase the risk of subversion and destroy the market.

II. Ten Principles of Economics

Principle 8: A country's standard of living depends on its ability to produce goods and services.

- Almost all variation in living standards is attributable to differences in countries' productivity.
  - productivity: the quantity of goods and services produced from each unit of labor (or capital) input.
  - 'new quality productive forces'.

Principle 9: Prices rise when printing too much money.

- In almost all cases of large or persistent inflation, the culprit is growth in the quantity of money.
  - inflation: an increase in the overall prices in the economy.

Principle 10: Society faces a short-run trade-off between inflation and unemployment.

- negative relationship: printing money ↑, demand ↑, workers ↑.

III. General Methodology

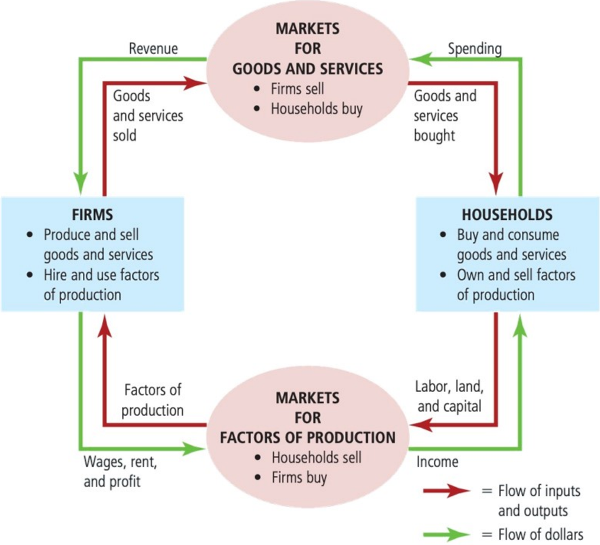
- Economics is a subject of **social science** (abundant topics).
- In academia, people use data, statistical models, and economic models to explain the world.
- In industry, people are more interested in different events and issues related to our daily life. They predict the future to guide their investment decisions.

III. General Methodology

- Positive analysis v.s. Normative analysis
  - positive: claims that attempt to describe the world as it is.
  - normative: claims that attempt to prescribe how the world should be.
- Empirical study v.s. Theoretical study.
- Micro v.s. Macro
  - Micro: the study of how households and firms make decisions and how they interact in markets.
  - Macro: the study of economy-wide phenomena, including inflation, unemployment, and economic growth.
- Economists use models to learn about the world. Their models mostly consist of diagrams and equations. All the models are built with <u>assumptions</u>.
  - Assumptions can simplify the complex world and make it easier to understand. (From concrete to abstract.)

III. General Methodology

The Circular-Flow Diagram:



III. General Methodology

How do you become a good economist?

- Math is important in modern economics.
    - but, economics $\neq$ math for sure.
    - math is only a tool.
- Economic sense (or intuition) is essential.
    - ideas and thoughts from different schools of economics.
    - other subjects in social science: political science, history, psychology, sociology, anthropology, geography, etc.
    - phenomena in your real life (from your observation, Internet or TV)

Reading

- Chapter 1 $\sim$ 3, *Principles of Economics* by Mankiw.