

Lecture 1 Economics: Foundations and Models

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What Is Economics About?

- ▶ A subject about how people make choices to attain their goals, given scarce resources
 - ▶ e.g. study economics midterm or go to party tonight?
- ▶ Why an important subject
 - ▶ basic fact of life: we face trade-offs because we live in a world of scarcity
- ▶ Main references
 - ▶ HO: Hubbard & O'Brien, "*Macroeconomics*", 7th Edition (required)
 - ▶ BJ: Blanchard & Johnson, "*Macroeconomics*", 6th Edition (optional), see my lecture notes

Three Key Ideas

- ▶ People are rational
 - ▶ use all available information to make best decision possible
- ▶ People respond to economic incentives
 - ▶ e.g. few banks take costly security measures against not so costly robberies
- ▶ Optimal decisions are made at margin
 - ▶ optimality occurs when marginal cost (MC) equals marginal benefit (MB)

Three Fundamental Questions

- ▶ **What** goods and services to produce
 - ▶ opportunity cost: highest-valued alternative given up
 - ▶ e.g. funding for space exploration or cancer research
- ▶ **How** to produce goods and services
 - ▶ e.g. use more workers or more machines
- ▶ **Who** receive goods and services produced
 - ▶ e.g. people with higher incomes obtain more
 - ▶ changes in tax/welfare policy redistribute income

Economic Models

- ▶ What is a model
 - ▶ *probabilistic* characterization for what we observe
 - ▶ help guide our decision-making
- ▶ Steps to build economic models/theories
 - ▶ decide on assumptions/simplifications
 - ▶ formulate testable hypothesis
 - ▶ use data to test hypothesis
 - ▶ revise or retain model
- ▶ Micro models study individual choices; macro models study economy as a whole

Readings & Exercises

- ▶ Readings
 - ▶ HO: chapter 1
- ▶ Exercises
 - ▶ HO: problem 1.3, 1.4, 3.3