



# ECONOMICS: FOUNDATIONS AND MODELS

Chapter 1

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# Chapter Outline

**1.1** Three Key Economic Ideas

**1.2** The Economic Problem That Every Society Must Solve

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# The Basics:

People make choices as they try to attain their goals. Choices are necessary because we live in a world of scarcity.

**Scarcity**: A situation in which unlimited wants exceed the limited resources available to fulfill those wants.

**Economics** is the study of the choices people make to attain their goals, given their scarce resources.

Economists study these choices using **economic models**, simplified versions of reality used to analyze real-world economic situations.

# 1.1 Three Key Economic Ideas

We interact with one another in markets.

**Market**: A group of buyers and sellers of a good or service and the institution or arrangement by which they come together to trade.

In analyzing markets, we generally assume:

1. People are rational
2. People respond to economic incentives
3. Optimal decisions are made at the margin

# 1. People Are Rational

Economists generally assume that people are rational, using all available information to achieve their goals.

Rational consumers and firms weigh the benefits and costs of each action and try to make the best decision possible.

*Example: Apple doesn't randomly choose the price of its smartwatches; it chooses the price(s) that it thinks will be most profitable.*

## 2. People Respond To Economic Incentives

As incentives change, so do the actions that people will take.

*Example: Changes in several factors have resulted in increased obesity in Americans over the last couple of decades, including:*

- Decreases in the price of fast food relative to healthful food*
- Improved non-active entertainment options*
- Increased availability of health care and insurance, protecting people against the consequences of their actions*

# 3. Optimal Decisions Are Made at the Margin

While some decisions are all-or-nothing, most decisions involve doing a little more or a little less of something.

*Example: Should you watch an extra hour of TV, or study instead?*

Economists think about decisions like this in terms of the marginal cost and benefit (MC and MB): the additional cost or benefit associated with a small amount extra of some action.

Comparing MC and MB is known as marginal analysis.

# 1.2 The Economic Problem That Every Society Must Solve

In a world of scarcity, we have limited economic resources to satisfy our desires. Therefore we face trade-offs.

**Trade-off**: The idea that, because of scarcity, producing more of one good or service means producing less of another good or service.

Individuals, firms, and governments must decide on the goods and services that should be produced.

The highest-valued alternative given up in order to engage in some activity is known as the **opportunity cost**.

*Example: the government may face a **trade-off** between spending for unemployment benefits versus spending for food stamps. If it chooses to spend for food stamps, then the **opportunity cost** of increased funding for food stamps might be giving up spending for unemployment benefits.*

# Types Of Economies

**Centrally planned economy**: An economy in which the government decides how economic resources will be allocated. e.g. former Soviet Union, China, Vietnam, Cuba

**Market economy**: An economy in which the decisions of households and firms interacting in markets allocate economic resources. e.g. the United States approaches a market economy.

**Mixed economy**: An economy in which most economic decisions result from the interaction of buyers and sellers in markets but in which the government plays a significant role in the allocation of resources. This includes most of the countries of the world.

# Efficiency of Economies

Market economies tend to be more efficient than centrally-planned economies.

Market economies promote:

- **Productive efficiency**: where goods or services are produced at the lowest possible cost. Productive efficiency comes about from competition.
- **Allocative efficiency**: when every good or service is produced up to the point where the last unit provides a marginal benefit to society equal to the marginal cost of producing it. Allocative efficiency is an outcome of **voluntary exchange**.

# Efficiency Versus Equity

Markets may not always result in fully efficient outcomes. Sometimes economically efficient outcomes may not be the most desirable. Markets result in high inequality; some people prefer more equity.

**Equity**: The fair distribution of economic benefits.

An important trade-off for a government is that between efficiency and equity.

*Example: If we raise the income tax rate, people might work less or open fewer businesses, but those tax receipts can fund programs that aid the poor. It is inefficient because the tax lowers the willingness to work, but it promotes equitable distribution of economic benefits that the poor people otherwise would not have been able to afford.*

# 1.3 Economic Models

Economists develop economic models to analyze real-world issues.

Building an economic model often follows these steps:

1. Decide on the assumptions to use in developing the model.
2. Formulate a testable hypothesis.
3. Use economic data to test the hypothesis.
4. Revise the model if it fails to explain the economic data well.
5. Retain the revised model to help answer similar economic questions in the future.

# Positive Versus Normative Analysis

Economists try to mimic natural scientists by using the scientific methods. But economics is a social science; studying the behavior of people is often tricky our actions are often difficult to predict.

When analyzing human behavior, we can perform:

- **Positive analysis**: analysis concerned with facts e.g. how many firms are better off with the corporate tax cut?
- **Normative analysis**: analysis concerned with what ought to be e.g. should the corporate tax rate be low? Is it a good policy?

Economists mostly perform positive analysis.

# Microeconomics and Macroeconomics

**Microeconomics** is the study of

- how households and firms make choices,
- how they interact in markets, and
- how the government attempts to influence their choices.

**Macroeconomics** is the study of the economy as a whole, including topics such as inflation, unemployment, aggregate output, and economic growth.

Look at Table 1.1 in the textbook to clearly distinguish between microeconomic and macroeconomic issues. Check Section 1.5 to familiarize yourself with important economic terms.

# Appendix

Go through the “Positive and Negative Relationships” and “Determining Cause and Effect” thoroughly.

The material in the appendix section is not directly related to what we are going to discuss further into the course but knowing how to calculate and interpret slopes, and formulas of percentage changes may be helpful to understand a lot of the material.

# THE END

“There is no mystery to what an [economy](#) is. Whether we are talking about the economy of Los Angeles, the United States, or the whole world, an economy is just a group of people dealing with one another as they go about their lives.” – N. Gregory Mankiw