

Principles of Macroeconomics



Handout 1

Introduction to economics: Ten key principles

This week (today / next time)

1. Introduction to Macroeconomics (3 hours)

1.1 Introduction to Economics

What is economics?

Key principles of economics

Thinking like an economist: questions and methodology

1.2 Macroeconomic objectives and macroeconomic policy

1.3 Types of macroeconomics variables

1.3.1 Stock vs flow variables

1.3.2 Real vs nominal variables

1.4 Key Macroeconomic variables

1.4.1 Output/Input

1.4.2 Employment/Unemployment

1.4.3 Price level/Inflation

1.4.4 Interest rate

1.4.5 Exchange rate

1.5 Brief history of macroeconomics

Economics and Key principles of economics

- What kinds of questions does economics address?
- What are the principles of how people make decisions?
- What are the principles of how people interact?
- What are the principles of how the economy as a whole works?

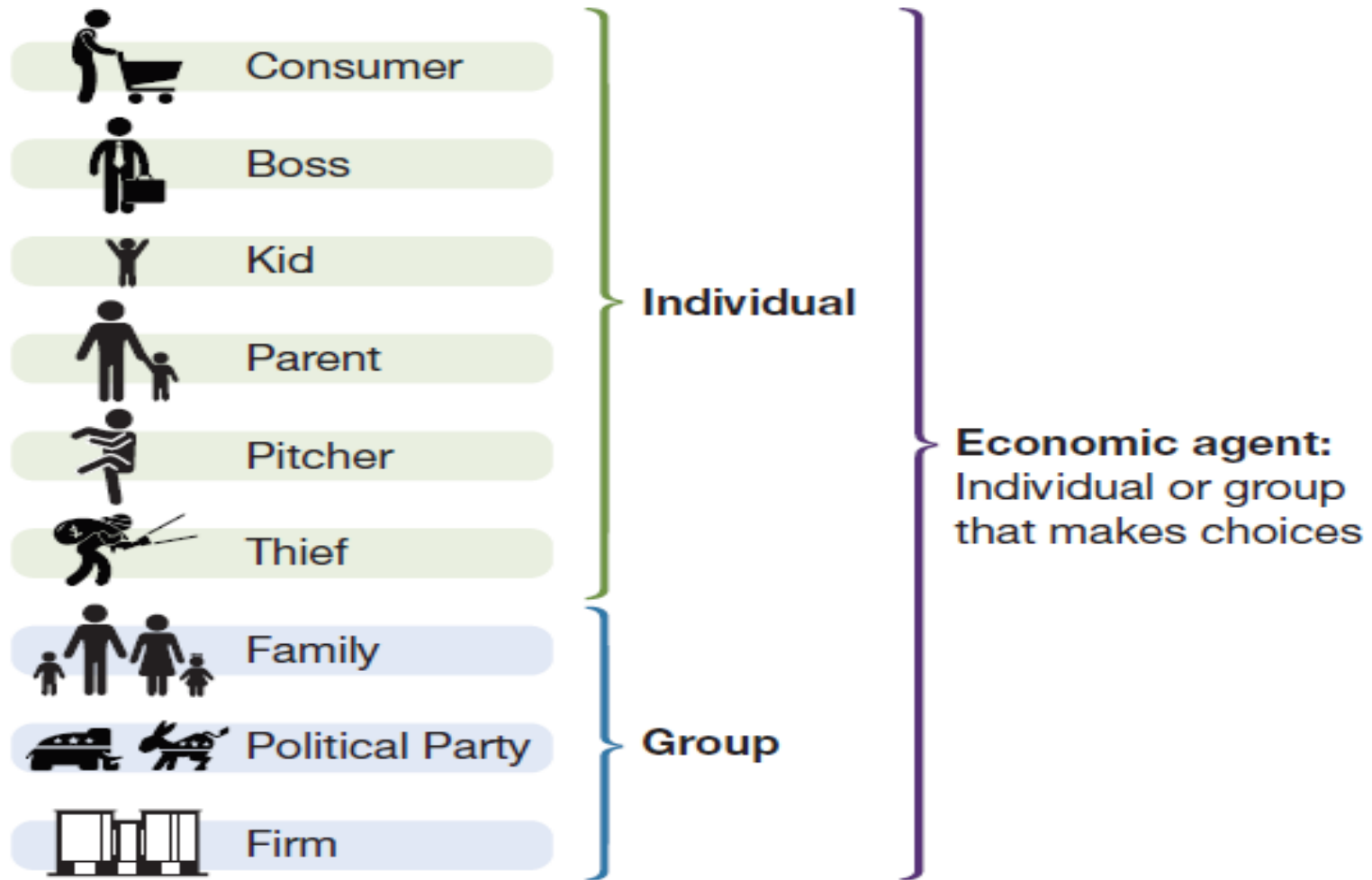
What Economics Is All About

- **Scarcity**: the limited nature of society's resources
- **Economics**: the study of how economic agent/society manages its scarce resources, e.g.
 - how people decide what to buy, how much to work, save, and spend
 - how firms decide how much to produce, how many workers to hire
 - how society decides how to divide its resources between national defense, consumer goods, protecting the environment, and other needs

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What Economics Is All About



The principles of
HOW PEOPLE
MAKE DECISIONS



PRINCIPLE 1

People Face Tradeoffs

All decisions involve tradeoffs. Examples:

- Going to a party the night before your midterm leaves less time for studying.
- Having more money to buy stuff requires working longer hours, which leaves less time for leisure.
- Protecting the environment requires resources that could otherwise be used to produce consumer goods.

PRINCIPLE 1

People Face Tradeoffs

- Society faces an important tradeoff:
efficiency vs. equality
- **Efficiency**: when society gets the most from its scarce resources
- **Equality**: when prosperity is distributed uniformly among society's members
- Tradeoff: To achieve greater equality, could redistribute income from wealthy to poor. But this reduces incentive to work and produce, shrinks the size of the economic "pie."

PRINCIPLE 2

The Cost of Something Is What You Give Up to Get It

- Making decisions requires comparing the costs and benefits of alternative choices.
- The **opportunity cost** of any item is whatever must be given up to obtain it.
- It is the relevant cost for decision making.

PRINCIPLE 2

The Cost of Something Is What You Give Up to Get It

Examples:

The opportunity cost of...

- ...going to college for a year is not just the tuition, books, and fees, **but also the foregone wages.**
- ...seeing a movie is not just the price of the ticket, **but the value of the time you spend in the theater.**

PRINCIPLE 3

Rational People Think at the Margin

Rational people

- systematically and purposefully do the best they can to achieve their objectives.
- make decisions by evaluating costs and benefits of **marginal changes**, incremental adjustments to an existing plan.

PRINCIPLE 3

Rational People Think at the Margin

Examples:

- When a student considers whether to go to college for **an additional year**, he compares the fees & foregone wages to the extra income he could earn with the extra year of education.
- When a manager considers whether to hire **another worker**, she compares the cost of the newly hired worker and what the worker can contribute to firm in terms of revenue.

PRINCIPLE 4

People Respond to Incentives

- **Incentive**: something that induces a person to act, i.e. the prospect of a reward or punishment.
- Rational people respond to incentives.

Examples:

- When gas prices rise, consumers buy more hybrid cars and fewer gas guzzling SUVs.
- When cigarette taxes increase, teen smoking falls.

ACTIVE LEARNING 1

Applying the principles

You are selling your 1996 Mustang. You have already spent \$1000 on repairs.

At the last minute, the transmission dies. You can pay \$600 to have it repaired, or sell the car “as is.”

In each of the following scenarios, should you have the transmission repaired? Explain.

- A.** Blue book value (what you could get for the car) is \$6500 if transmission works, \$5700 if it doesn't
- B.** Blue book value is \$6000 if transmission works, \$5500 if it doesn't

ACTIVE LEARNING 1

Answers

Cost of fixing transmission = \$600

A. Blue book value is \$6500 if transmission works,
\$5700 if it doesn't

B. Blue book value is \$6000 if transmission works,
\$5500 if it doesn't

ACTIVE LEARNING 2

Applying the principles

Do you think if the Facebook is free? If not, what are the cost of using Facebook?

Do you find it worthwhile using the Facebook?

The principles of **HOW PEOPLE INTERACT**



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PRINCIPLE 5

Trade Can Make Everyone Better Off

- Rather than being **self-sufficient**, people can specialize in producing one good or service and exchange it for other goods.
- Countries also benefit from trade and specialization:
 - Get a better price abroad for goods they produce
 - Buy other goods more cheaply from abroad than could be produced at home

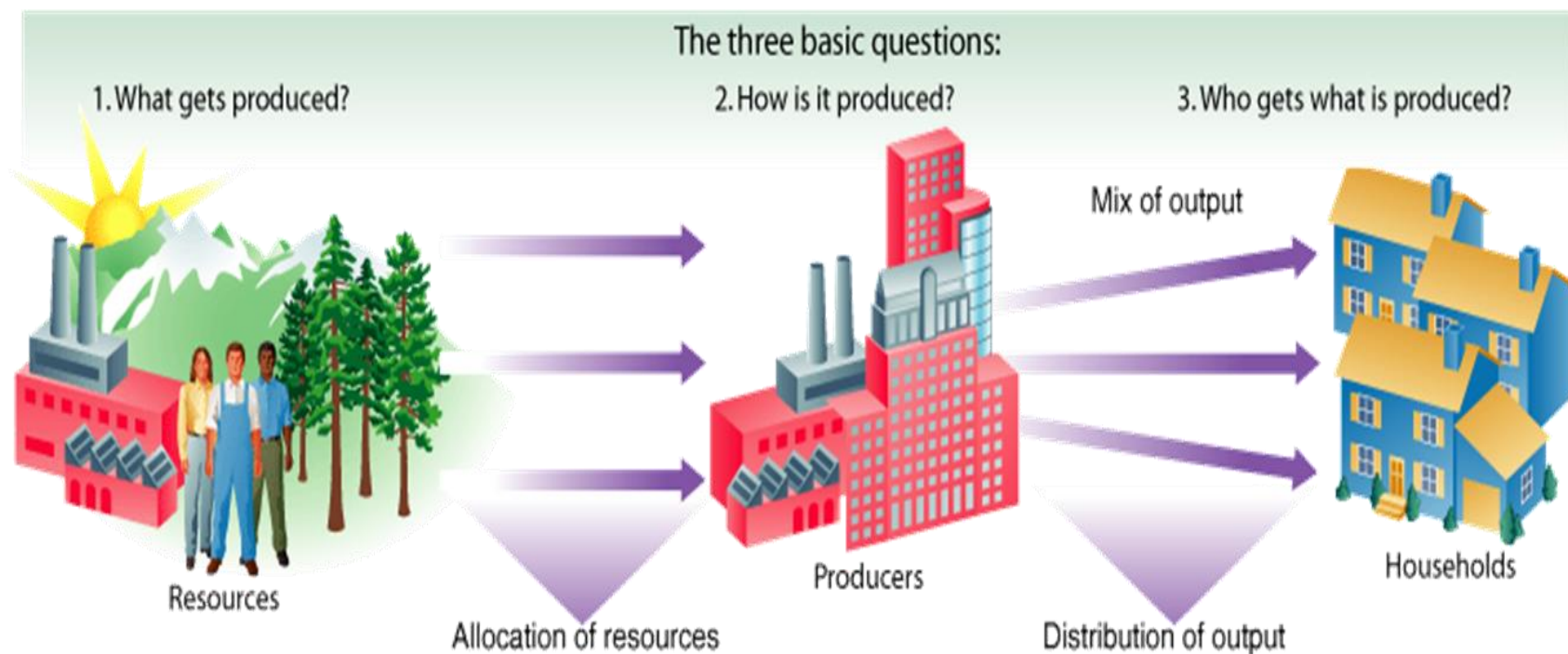
PRINCIPLE 6

Markets Are Usually A Good Way to Organize Economic Activity.

- **“Organize economic activity”** means determining
 - what goods to produce
 - how to produce them
 - how much of each to produce
 - who gets them
- The famous **“what-how-for whom”**

PRINCIPLE 6

Markets Are Usually A Good Way to Organize Economic Activity.



PRINCIPLE 6

Markets Are Usually A Good Way to Organize Economic Activity

- **Market:** a group of buyers and sellers (need not be in a single location)
- A **market economy** allocates resources through the decentralized decisions of many households and firms as they interact in markets.
- Lead by **an invisible hand**, the interaction leads to **equilibrium**, which is mostly **efficient**.

PRINCIPLE 6

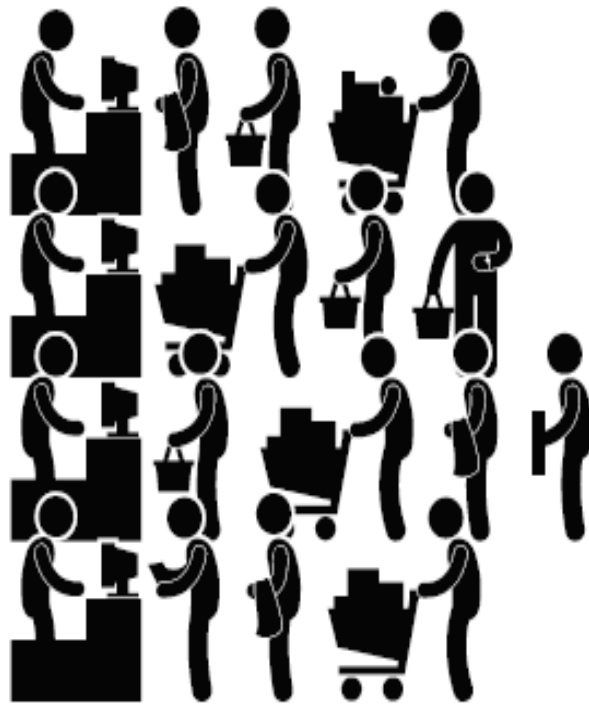
Markets Are Usually A Good Way to Organize Economic Activity

- Famous insight by Adam Smith in *The Wealth of Nations* (1776):
 - Each of these households and firms acts as if “led by **an invisible hand**” to promote general economic well-being.

PRINCIPLE 6

Markets Are Usually A Good Way to Organize Economic Activity

- **Equilibrium**: condition where participants in the market has no incentive to deviate.



PRINCIPLE 6

Markets Are Usually A Good Way to Organize Economic Activity

- The invisible hand works through the price system:
 - The interaction of buyers and sellers determines prices.
 - Each price reflects the good's value to buyers and the cost of producing the good.
 - Prices guide self-interested households and firms to make decisions that, **in many cases, maximize society's economic well-being.**

PRINCIPLE 7

Governments Can Sometimes Improve Market Outcomes

- Important role for govt: **enforce property rights** (with police, courts)
- People are less inclined to work, produce, invest, or purchase if large risk of their property being stolen.

PRINCIPLE 7

Governments Can Sometimes Improve Market Outcomes

- **Market failure:** when the market fails to allocate society's resources efficiently
- Causes of market failure:
 - **Externalities**, when the production or consumption of a good affects bystanders (e.g. pollution)
 - **Market power**, a single buyer or seller has substantial influence on market price (e.g. monopoly)
- Public policy may **promote efficiency**.

PRINCIPLE 7

Governments Can Sometimes Improve Market Outcomes

- Govt may alter market outcome to **promote equity**.
- If the market's distribution of economic well-being is not desirable, tax or welfare policies can change how the economic "pie" is divided.

PRINCIPLE 7

Governments *Can* Sometimes Improve Market Outcomes



At the end of 1973, the U.S. government effectively capped the price of gasoline, creating a situation of excess demand.



This photograph was taken in 1974. Why don't we see signs like this today?

ACTIVE LEARNING 2

Discussion Question

In each of the following situations, what is the government's role? Does the government's intervention improve the outcome?

- a.** Public schools for 12-year
- b.** Public highways
- c.** Patent laws, which allow drug companies to charge high prices for life-saving drugs

The principles of **HOW THE ECONOMY AS A WHOLE WORKS**



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PRINCIPLE 8

A Country's Standard of Living Depends on Its Ability to Produce Goods & Services

- Huge variation in living standards across countries and over time:
 - Average income in rich countries is more than ten times average income in poor countries.
 - The standard of living of Thai is about ten times larger than 40 years ago.

PRINCIPLE 8

A Country's Standard of Living Depends on Its Ability to Produce Goods & Services

- The most important determinant of living standards: **productivity**, the amount of goods and services produced per unit of labor.
- Productivity depends on the equipment, skills, and technology available to workers.
- Other factors (e.g., labor unions, competition from abroad) have far less impact on living standards.

PRINCIPLE 9

Prices Rise When the Government Prints Too Much Money

- **Inflation**: increases in the general level of prices.
- In the long run, inflation is almost always caused by excessive growth in the quantity of money, which causes the value of money to fall.
- The faster the govt creates money, the greater the inflation rate.

PRINCIPLE 10

Society Faces a Short-run Tradeoff Between Inflation and Unemployment

- In the short-run (1–2 years), many economic policies push inflation and unemployment in opposite directions.
- Other factors can make this tradeoff more or less favorable, but the tradeoff is always present.

Summary

TABLE 1

Ten Principles of Economics

How People Make Decisions

- 1: People Face Trade-offs
- 2: The Cost of Something Is What You Give Up to Get It
- 3: Rational People Think at the Margin
- 4: People Respond to Incentives

How People Interact

- 5: Trade Can Make Everyone Better Off
- 6: Markets Are Usually a Good Way to Organize Economic Activity
- 7: Governments Can Sometimes Improve Market Outcomes

How the Economy as a Whole Works

- 8: A Country's Standard of Living Depends on Its Ability to Produce Goods and Services
- 9: Prices Rise When the Government Prints Too Much Money
- 10: Society Faces a Short-Run Trade-off between Inflation and Unemployment