

Econ 21003 Coursepack

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Chapter 1

Ten Principles of Economics

1.1 Ten Principles of Economics

In this chapter, you will be able to answer the following questions:

- 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 is the difference between microeconomics & Macroeconomics?

1.2 What Economics Is All About

- **Scarcity:** the limited nature of society's resources (labor, land, physical capital)
- **Economics:** the study of how society manages its scarce resources.

1.3 The principles of *HOW PEOPLE MAKE DECISIONS*



1.4 Principle #1. Because Resources are scarce, People Face Trade-offs

All decisions involve tradeoffs. Examples:

- Students face trade-offs:
- Farmers face trade-offs: producing more of apple vs. more of oranges
- Governments face trade-offs: more butter versus guns

1.5 Principle 1: Because Resources are scarce, People Face Trade-offs

- Society faces an important trade-off between **efficiency** vs. **equity (equality)** :
 - **Efficiency**: when society gets the most from its scarce resources
 - **Equity**: when prosperity is distributed uniformly or *fairly* among society's members

1.6. PRINCIPLE 2: THE COST OF SOMETHING IS WHAT YOU GIVE UP TO GET IT⁷

- Tradeoff: To achieve greater equality, society could redistribute income from wealthy to poor. But this reduces incentive to work and produce, shrinks the size of the economic *pie*.

1.6 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.

1.7 Principle 2: The Cost of Something Is What You Give Up to Get It

What is the opportunity cost of

- going to college?
- seeing a movie?

1.8 Principle 3: Rational People Think at the Margin

Variation: How much is the decision at the margin

- Economists assume that people are rational since they systematically and purposefully do the best they can to achieve their objectives.
- Or make decisions by evaluating marginal cost and marginal benefits;
- **Marginal Changes** – incremental adjustments to an existing plan.
- Ignore **Sunk Cost** – cost already incurred and cannot be recovered.

1.9 Principle 3: Rational People Think at the Margin

Examples:

- A student considering whether to go to college compares
- When a manager considers whether to increase output, she compares

1.10 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.

1.11 ACTIVE LEARNING 1: APPLYING THE PRINCIPLES ◁

Example 1: 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 is \$ 6500 if transmission works, \$ 5700 if it doesn't
- b. Blue book value is \$ 6000 if transmission works, \$ 5500 if it doesn't

1.12 ACTIVE LEARNING 2: APPLYING THE PRINCIPLES

Jim and Mike are roommates with the same taste for Jazz. Jim wins a ticket from a Radio station to see the jazz band perform at an outdoor concert. Mike has paid \$20 for a ticket to the same concert. Both tickets are non-refundable. Due to a tremendous thunderstorm, they are reconsidering their attending the concert. Who do you think will be more likely to attend the concert, assuming that both are rational? Explain why.

1.13 ACTIVE LEARNING 3: APPLYING THE PRINCIPLES ◁

Suppose you won a ticket from a Radio station to see a jazz band perform at an outdoor concert. But while preparing to go to the concert today, it rains and you decide not to go. Suppose you had paid \$500 for the ticket instead of getting it for free, what would be the rational decision for you to do now: go or not go to the concert?

1.14 The principles of HOW PEOPLE INTERACT



A doctor and a Barber

1.15 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 & specialization:
 - Get a better price abroad for goods they produce
 - Buy other goods more cheaply from abroad than could be produced at home

1.16 Principle 6: Markets Are Usually A Good Way to Organize Economic Activity

- **Market:** a group of buyers and sellers (not necessarily a place)
- **Organize economic activity** means determining:
 - what (and how much) g & s to produce

- how to produce them
- For Whom to produce: who gets them
- These are the 3 economic problems every society must solve.

1.17 Principle 6: Markets Are Usually A Good Way to Organize Economic Activity

- A **market economy**, unlike **command economy**, allocates resources through the decentralized decisions of many households and firms as they interact in markets.
- 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.”

1.18 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 (i.e., efficient).

1.19 Principle 6: Markets Are Usually A Good Way to Organize Economic Activity

- For the market mechanism to work, it needs the govt to **enforce property rights** (with police, courts, even the military)
- People are less inclined to work, produce, invest, or purchase if there is large risk of their property being stolen
- Even with proper enforcement of property rights, a market mechanism can sometimes lead to inefficient allocation of resources ...

1.20 Principle 7 : Governments Can Sometimes Improve Market Outcomes

- **Market failure:** when the market fails to allocate society's resources efficiently.
- 3 Causes of market failure:
 1. Externalities, when the production or consumption of a good affects bystanders (e.g. pollution)
 2. Market power, a single buyer or seller has substantial influence on market price (e.g. monopoly)
 3. Public goods: defense services, parks, etc.
- In such cases, well designed public policies may promote efficiency

1.21 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.

1.22 Discussion Questions ◁

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

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

1.23 Two Broad Branches of Economics

- **Microeconomics:** branch of economics concerned with how people make decisions and how these decisions interact.
 - e.g., determination of price, employment or output in a particular market or industry.
- **Macroeconomics:** branch of economics concerned with the overall economy.
 - e.g., determination of national income, economic growth, recessions, inflation.

1.24 The principles of HOW THE ECONOMY AS A WHOLE WORKS



1.25 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.

1.26 Principle 9: Prices Rise When the Government Prints Too Much Money

- Inflation: increase 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.

1.27. **PRINCIPLE 10:** SOCIETY FACES A SHORT-RUN TRADEOFF BETWEEN INFLATION AND UNEMPLOYMENT

1.27 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.

1.28 SUMMARY ◁

1. Because Resources are scarce, 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
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
8. A Country's Standard of Living Depends on Its Ability to Produce Goods & Services
9. Prices Rise When the Government Prints Too Much Money
10. Society Faces a Short-run Tradeoff Between Inflation and Unemployment

Chapter 2

Cross-references

Cross-references make it easier for your readers to find and link to elements in your book.

2.1 Chapters and sub-chapters

There are two steps to cross-reference any heading:

1. Label the heading: `# Hello world {#nice-label}`.
 - Leave the label off if you like the automated heading generated based on your heading title: for example, `# Hello world = # Hello world {#hello-world}`.
 - To label an un-numbered heading, use: `# Hello world {-#nice-label}` or `{# Hello world .unnumbered}`.
2. Next, reference the labeled heading anywhere in the text using `\@ref(nice-label)`; for example, please see Chapter 2.
 - If you prefer text as the link instead of a numbered reference use: any text you want can go here.

2.2 Captioned figures and tables

Figures and tables *with captions* can also be cross-referenced from elsewhere in your book using `\@ref(fig:chunk-label)` and `\@ref(tab:chunk-label)`, respectively.

See Figure 2.1.

```
par(mar = c(4, 4, .1, .1))
plot(pressure, type = 'b', pch = 19)
```

Don't miss Table 2.1.

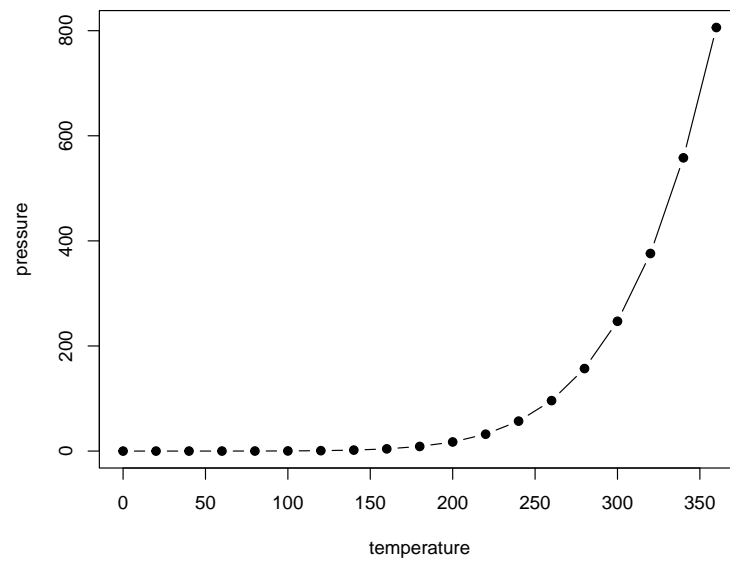


Figure 2.1: Here is a nice figure!

```
knitr::kable(  
  head(pressure, 10), caption = 'Here is a nice table!',  
  booktabs = TRUE  
)
```


Table 2.1: Here is a nice table!

temperature	pressure
0	0.0002
20	0.0012
40	0.0060
60	0.0300
80	0.0900
100	0.2700
120	0.7500
140	1.8500
160	4.2000
180	8.8000