The Scope and Method of Economics
PART I  INTRODUCTION TO ECONOMICS

The Scope and Method of Economics

Chapter Outline

Why Study Economics?
To Learn a Way of Thinking
To Understand Society
To Understand Global Affairs
To Be an Informed Voter

The Scope of Economics
Microeconomics and Macroeconomics
The Diverse Fields of Economics

The Method of Economics
Theories and Models
Economic Policy

An Invitation

Appendix: How to Read and Understand Graphs
economics  The study of how individuals and societies choose to use the scarce resources that nature and previous generations have provided.

Economics is the study of how individuals and societies choose to use the scarce resources that nature and previous generations have provided. The key word in this definition is choose. Economics is a behavioral, or social, science. In large measure it is the study of how people make choices. The choices that people make, when added up, translate into societal choices.
There are four main reasons to study economics:

• to learn a way of thinking,
• to understand society,
• to understand global affairs, and
• to be an informed voter.
WHY STUDY ECONOMICS?

TO LEARN A WAY OF THINKING

Three fundamental concepts:

*Opportunity cost*

*Marginalism*, and

*Efficient markets*
Opportunity Cost

**opportunity cost** The best alternative that we forgo, or give up, when we make a choice or a decision.

**scarce** Limited.
WHY STUDY ECONOMICS?

Efficient Markets—No Free Lunch

**efficient market** A market in which profit opportunities are eliminated almost instantaneously.

The study of economics teaches us a way of thinking and helps us make decisions.
WHY STUDY ECONOMICS?

TO UNDERSTAND SOCIETY

Industrial Revolution The period in England during the late eighteenth and early nineteenth centuries in which new manufacturing technologies and improved transportation gave rise to the modern factory system and a massive movement of the population from the countryside to the cities.

The study of economics is an essential part of the study of society.
WHY STUDY ECONOMICS?

TO UNDERSTAND GLOBAL AFFAIRS

The events of September 11, 2001, dealt a blow to the tourism industry and left airlines in deep financial trouble.

An understanding of economics is essential to an understanding of global affairs.
WHY STUDY ECONOMICS?

TO BE AN INFORMED VOTER

A knowledge of economics is essential to be an informed voter.

When we participate in the political process, we are voting on issues that require a basic understanding of economics.
THE SCOPE OF ECONOMICS

MICROECONOMICS AND MACROECONOMICS

microeconomics  The branch of economics that examines the functioning of individual industries and the behavior of individual decision-making units—that is, business firms and households.

macroeconomics  The branch of economics that examines the economic behavior of aggregates—income, employment, output, and so on—on a national scale.

Microeconomics looks at the individual unit—the household, the firm, the industry. It sees and examines the “trees.” Macroeconomics looks at the whole, the aggregate. It sees and analyzes the “forest.”
# THE SCOPE OF ECONOMICS

## THE DIVERSE FIELDS OF ECONOMICS

### TABLE 1.1 Examples of Microeconomic and Macroeconomic Concerns

<table>
<thead>
<tr>
<th>DIVISION OF ECONOMICS</th>
<th>PRODUCTION</th>
<th>PRICES</th>
<th>INCOME</th>
<th>EMPLOYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Microeconomics</strong></td>
<td>Production/output in individual industries and businesses</td>
<td>Price of individual goods and services</td>
<td>Distribution of income and wealth</td>
<td>Employment by individual businesses and industries</td>
</tr>
<tr>
<td></td>
<td>How much steel</td>
<td>Price of medical care</td>
<td>Wages in the auto industry</td>
<td>Jobs in the steel industry</td>
</tr>
<tr>
<td></td>
<td>How much office space</td>
<td>Price of gasoline</td>
<td>Minimum wage</td>
<td>Number of employees in a firm</td>
</tr>
<tr>
<td></td>
<td>How many cars</td>
<td>Food prices</td>
<td>Executive salaries</td>
<td>Number of accountants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Apartment rents</td>
<td>Poverty</td>
<td></td>
</tr>
<tr>
<td><strong>Macroeconomics</strong></td>
<td>National production/output</td>
<td>Aggregate price level</td>
<td>National income</td>
<td>Employment and unemployment in the economy</td>
</tr>
<tr>
<td></td>
<td>Total industrial output</td>
<td>Consumer prices</td>
<td>Total wages and salaries</td>
<td>Total number of jobs</td>
</tr>
<tr>
<td></td>
<td>Gross domestic product</td>
<td>Producer prices</td>
<td>Total corporate profits</td>
<td>Unemployment rate</td>
</tr>
<tr>
<td></td>
<td>Growth of output</td>
<td>Rate of inflation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
THE METHOD OF ECONOMICS

positive economics An approach to economics that seeks to understand behavior and the operation of systems without making judgments. It describes what exists and how it works.

normative economics An approach to economics that analyzes outcomes of economic behavior, evaluates them as good or bad, and may prescribe courses of action. Also called policy economics.
THE METHOD OF ECONOMICS

Descriptive Economics and Economic Theory

descriptive economics  The compilation of data that describe phenomena and facts.

economic theory  A statement or set of related statements about cause and effect, action and reaction.
THEORIES AND MODELS

**model** A formal statement of a theory, usually a mathematical statement of a presumed relationship between two or more variables.

**variable** A measure that can change from time to time or from observation to observation.
THE METHOD OF ECONOMICS

All Else Equal: *Ceteris Paribus*

ceteris paribus, or all else equal  A device used to analyze the relationship between two variables while the values of other variables are held unchanged.

Using the device of ceteris paribus is one part of the process of abstraction. In formulating economic theory, the concept helps us simplify reality to focus on the relationships that interest us.
THE METHOD OF ECONOMICS

Expressing Models in Words, Graphs, and Equations

The most common method of expressing the quantitative relationship between two variables is graphing that relationship on a two-dimensional plane.
THE METHOD OF ECONOMICS

Testing Theories and Models: Empirical Economics

**empirical economics** The collection and use of data to test economic theories.
ECONOMIC POLICY

Criteria for judging economic outcomes:

1. Efficiency
2. Equity
3. Growth
4. Stability
THE METHOD OF ECONOMICS

Efficiency

**efficiency**  In economics, allocative efficiency. An efficient economy is one that produces what people want at the least possible cost.

Equity

**equity**  Fairness.
Growth

**economic growth** An increase in the total output of an economy.

Stability

**stability** A condition in which national output is growing steadily, with low inflation and full employment of resources.
AN INVITATION

As you proceed, it is important that you keep track of what you have learned in earlier chapters. This book has a plan; it proceeds step by step, each section building on the last. It would be a good idea to read each chapter’s table of contents and scan each chapter before you read it to be sure you understand where it fits in the big picture.
## Review Terms and Concepts

- *ceteris paribus*
- descriptive economics
- economic growth
- economic theory
- economics
- efficiency
- efficient market
- empirical economics
- equity
- fallacy of composition
- Industrial Revolution
- macroeconomics
- marginalism
- microeconomics
- model
- normative economics
- Ockham’s razor
- opportunity cost
- positive economics
- post hoc, ergo propter hoc
- scarce
- stability
- sunk costs
- variable
A graph is a two-dimensional representation of a set of numbers, or data.
Appendix

TIME SERIES GRAPH

A time series graph shows how a single variable changes over time.

FIGURE 1A.1 Total Disposable Personal Income in the United States: 1975–2005 (in billions of dollars)
Appendix

GRAPHING TWO VARIABLES ON A CARTESIAN COORDINATE SYSTEM

The **Cartesian coordinate system** is the most common method of graphing two variables. This system is constructed by simply drawing two perpendicular lines: a horizontal line, or **X-axis**, and a vertical line, or **Y-axis**. The axes contain measurement scales that intersect at 0 (zero). This point is called the **origin**.

![A Cartesian Coordinate System](image)
### TABLE 1A.1 Total Disposable Personal Income in the United States, 1975–2005 (in billions of dollars)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL DISPOSABLE PERSONAL INCOME</th>
<th>YEAR</th>
<th>TOTAL DISPOSABLE PERSONAL INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>1,181.4</td>
<td>1989</td>
<td>4,016.3</td>
</tr>
<tr>
<td>1976</td>
<td>1,299.9</td>
<td>1990</td>
<td>4,293.6</td>
</tr>
<tr>
<td>1977</td>
<td>1,436.0</td>
<td>1991</td>
<td>4,474.8</td>
</tr>
<tr>
<td>1978</td>
<td>1,614.8</td>
<td>1992</td>
<td>4,754.6</td>
</tr>
<tr>
<td>1979</td>
<td>1,808.2</td>
<td>1993</td>
<td>4,935.3</td>
</tr>
<tr>
<td>1980</td>
<td>2,019.8</td>
<td>1994</td>
<td>5,165.4</td>
</tr>
<tr>
<td>1981</td>
<td>2,247.9</td>
<td>1995</td>
<td>5,422.6</td>
</tr>
<tr>
<td>1982</td>
<td>2,406.8</td>
<td>1996</td>
<td>5,677.7</td>
</tr>
<tr>
<td>1983</td>
<td>2,586.0</td>
<td>1997</td>
<td>5,968.2</td>
</tr>
<tr>
<td>1984</td>
<td>2,887.6</td>
<td>1998</td>
<td>6,355.6</td>
</tr>
<tr>
<td>1985</td>
<td>3,086.5</td>
<td>1999</td>
<td>6,627.4</td>
</tr>
<tr>
<td>1986</td>
<td>3,262.5</td>
<td>2000</td>
<td>7,120.2</td>
</tr>
<tr>
<td>1987</td>
<td>3,459.5</td>
<td>2001</td>
<td>7,393.2</td>
</tr>
<tr>
<td>1988</td>
<td>3,752.4</td>
<td>2002</td>
<td>7,827.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2003</td>
<td>8,159.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2004</td>
<td>8,646.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2005</td>
<td>8,945.6</td>
</tr>
</tbody>
</table>
This line slopes upward, indicating that there seems to be a **positive relationship** between income and spending.

Points $A$ and $B$, above the 45° line, show that consumption can be greater than income.

**TABLE 1A.2 Consumption Expenditures and Income, 2003**

<table>
<thead>
<tr>
<th>AVERAGE INCOME BEFORE TAXES</th>
<th>AVERAGE CONSUMPTION EXPENDITURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom fifth</td>
<td>$8,201</td>
</tr>
<tr>
<td>2nd fifth</td>
<td>21,478</td>
</tr>
<tr>
<td>3rd fifth</td>
<td>37,542</td>
</tr>
<tr>
<td>4th fifth</td>
<td>61,132</td>
</tr>
<tr>
<td>Top fifth</td>
<td>127,146</td>
</tr>
</tbody>
</table>

**FIGURE 1A.3 Household Consumption and Income**
Appendix

The slope of the line indicates whether the relationship between the variables is positive or negative.

The slope of the line is computed as follows:
An **upward-sloping** line describes a **positive relationship** between X and Y.

A **downward-sloping** line describes a **negative relationship** between X and Y.

**FIGURE 1A.4** A Curve with (a) Positive Slope and (b) Negative Slope
FIGURE 1A.5 Changing Slopes Along Curves
FIGURE 1A.6 National Income and Consumption