CHAPTER 2

Thinking Like an Economist

# The Economist as Scientist

## Economists Follow the Scientific Method.

### Observations help us to develop theory.

### Data can be collected and analyzed to evaluate theories.

### Using data to evaluate theories is more difficult in economics than in physical science because economists are unable to generate their own data and must make do with whatever data are available.

### Thus, economists pay close attention to the natural experiments offered by history.

## Assumptions Make the World Easier to Understand.

### Example: to understand international trade, it may be helpful to start out assuming that there are only two countries in the world producing only two goods. Once we understand how trade would work between these two countries, we can extend our analysis to a greater number of countries and goods.

### One important role of a scientist is to understand which assumptions one should make.

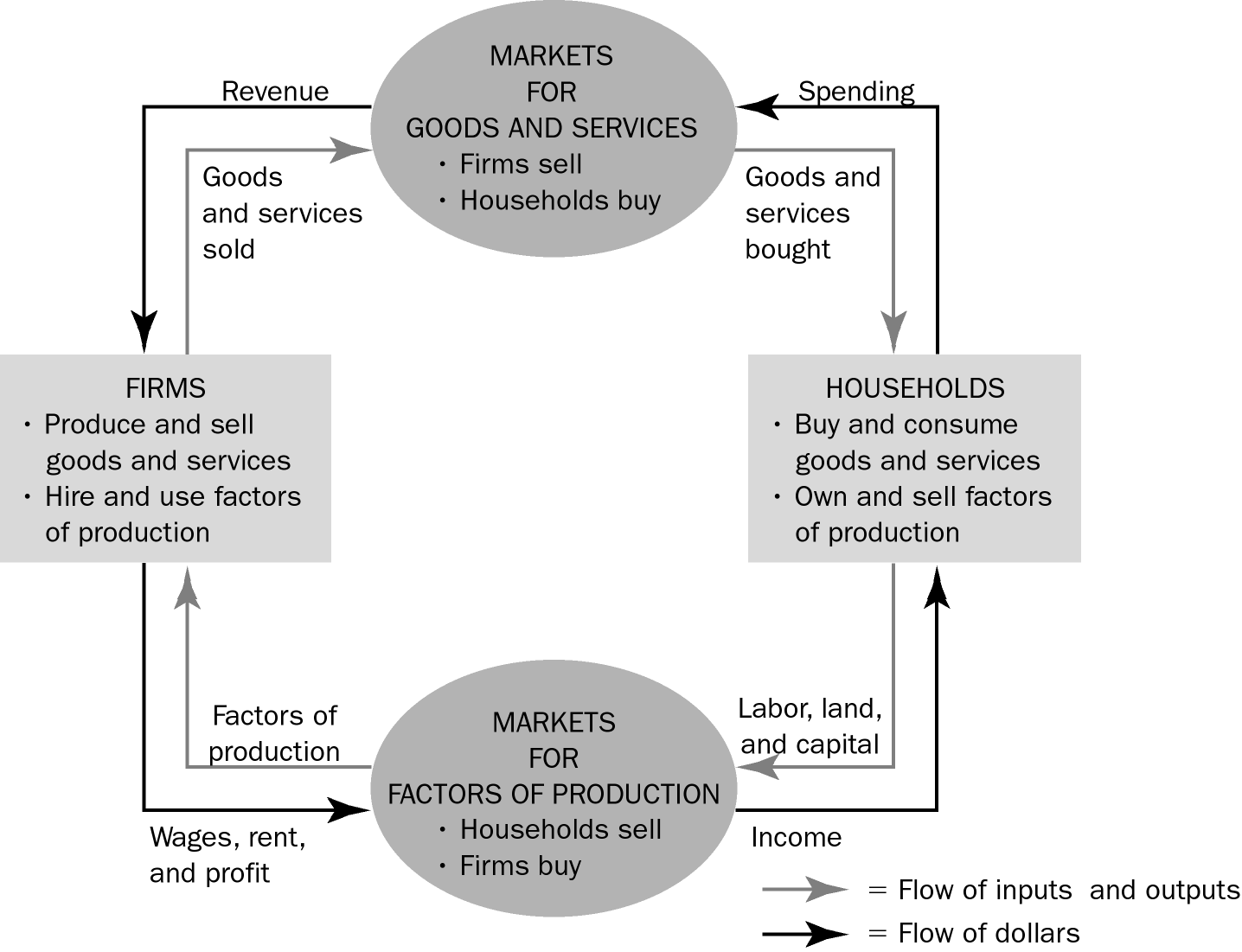
### Economists often use assumptions that are somewhat unrealistic but will have small effects on the actual outcome of the answer.

## Economists Use Economic Models to Explain the World around Us.

### Most economic models are composed of diagrams and equations.

### The goal of a model is to simplify reality in order to increase our understanding. This is where the use of assumptions is helpful.

## Our First Model: The Circular Flow Diagram



### Definition of circular-flow diagram: a visual model of the economy that shows how dollars flow through markets among households and firms.

### This diagram is a very simple model of the economy. Note that it ignores the roles of government and international trade.

#### There are two decision makers in the model: households and firms.

#### There are two markets: the market for goods and services and the market for factors of production.

#### Firms are sellers in the market for goods and services and buyers in the market for factors of production.

#### Households are buyers in the market for goods and services and sellers in the market for factors of production.

#### The inner loop represents the flows of inputs and outputs between households and firms.

#### The outer loop represents the flows of dollars between households and firms.

## Our Second Model: The Production Possibilities Frontier

### Definition of production possibilities frontier: a graph that shows the combinations of output that the economy can possibly produce given the available factors of production and the available production technology.

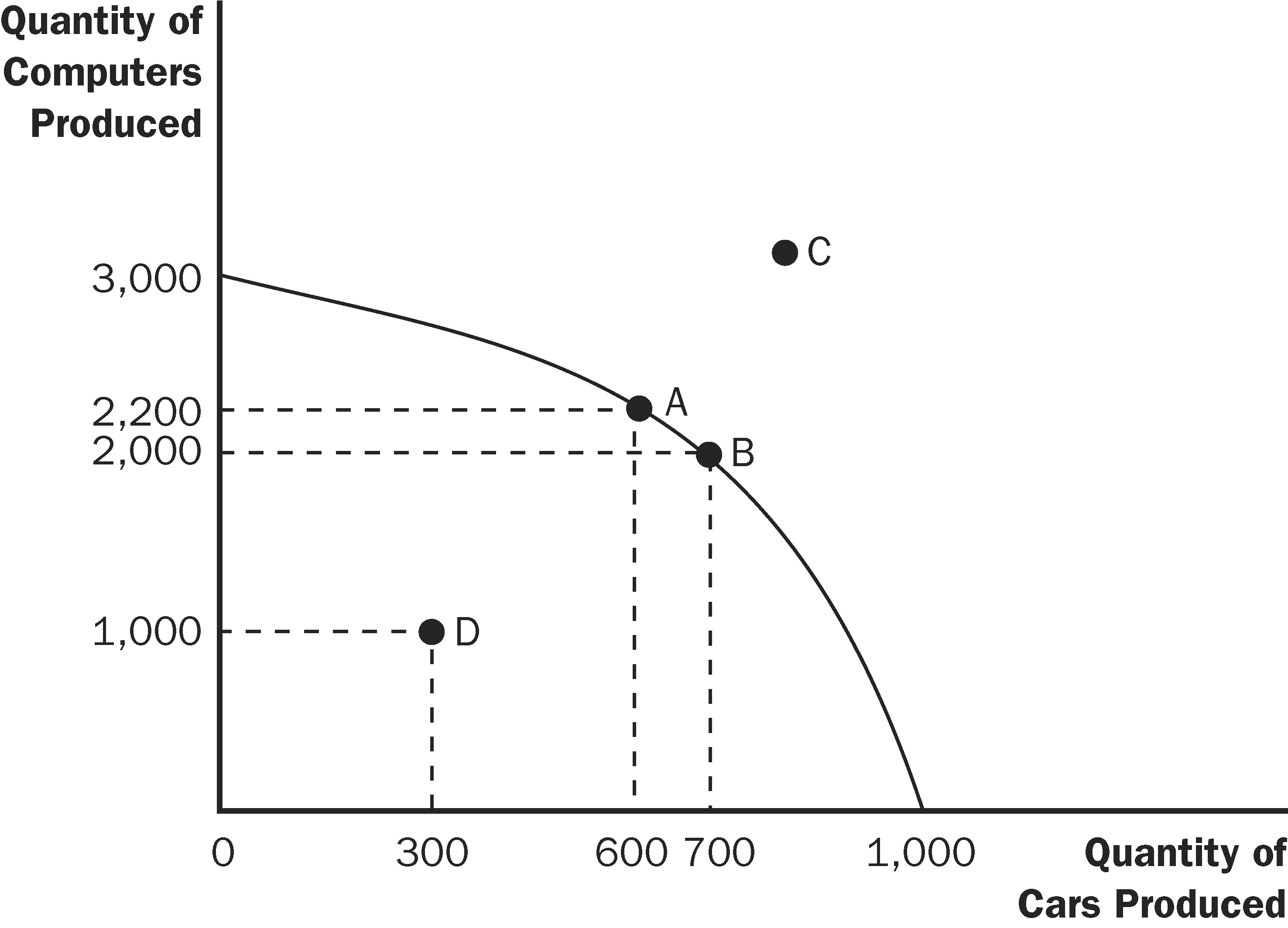
### Example: an economy that produces two goods, cars and computers.

#### If all resources are devoted to producing cars, the economy would produce 1,000 cars and zero computers.

#### If all resources are devoted to producing computers, the economy would produce 3,000 computers and zero cars.

#### More likely, the resources will be divided between the two industries, producing some cars and some computers. The feasible combinations of output are shown on the production possibilities frontier.

***Figure 2***



### Because resources are scarce, not every combination of computers and cars is possible. Production at a point outside of the curve (such as C) is not possible given the economy’s current level of resources and technology.

### Production is efficient at points on the curve (such as A and B). This implies that the economy is getting all it can from the scarce resources it has available. There is no way to produce more of one good without producing less of another.

### Production at a point inside the curve (such as D) is inefficient.

#### This means that the economy is producing less than it can from the resources it has available.

#### If the source of the inefficiency is eliminated, the economy can increase its production of both goods.

### The production possibilities frontier reveals Principle #1: People face trade-offs.

#### Suppose the economy is currently producing 600 cars and 2,200 computers.

#### To increase the production of cars to 700, the production of computers must fall to 2,000.

### Principle #2 is also shown on the production possibilities frontier: The cost of something is what you give up to get it (opportunity cost).

#### The opportunity cost of increasing the production of cars from 600 to 700 is 200 computers.

#### Thus, the opportunity cost of each car is two computers.

### The opportunity cost of a car depends on the number of cars and computers currently produced by the economy.

#### The opportunity cost of a car is high when the economy is producing many cars and few computers.

#### The opportunity cost of a car is low when the economy is producing few cars and many computers.

### Economists generally believe that production possibilities frontiers often have this bowed-out shape because some resources are better suited to the production of cars than computers (and vice versa).

### The production possibilities frontier can shift if resource availability or technology changes. Economic growth can be illustrated by an outward shift of the production possibilities frontier.

***Figure 3***

## Microeconomics and Macroeconomics

### Economics is studied on various levels.

#### Definition of microeconomics: the study of how households and firms make decisions and how they interact in markets.

#### Definition of macroeconomics: the study of economy-wide phenomena, including inflation, unemployment, and economic growth.

### Microeconomics and macroeconomics are closely intertwined because changes in the overall economy arise from the decisions of individual households and firms.

### Because microeconomics and macroeconomics address different questions, each field has its own set of models which are often taught in separate courses.

# II. The Economist as Policy Adviser

## Positive versus Normative Analysis

### Example of a discussion of minimum-wage laws: Polly says, “Minimum-wage laws cause unemployment.” Norma says, “The government should raise the minimum wage.”

### Definition of **positive statements: claims that attempt to describe the world as it is.**

### Definition of **normative statements: claims that attempt to prescribe how the world should be.**

### Positive statements can be evaluated by examining data, while normative statements involve personal viewpoints.

### Positive views about how the world works affect normative views about which policies are desirable.

### Much of economics is positive; it tries to explain how the economy works. But those who use economics often have goals that are normative. They want to understand how to improve the economy.

## Economists in Washington

### Economists are aware that trade-offs are involved in most policy decisions.

### The president receives advice from the Council of Economic Advisers (created in 1946).

### Economists are also employed by administrative departments within the various federal agencies such as the Office of Management and Budget, the Department of Treasury, the Department of Labor, the Congressional Budget Office, and the Federal Reserve.

### The research and writings of economists can also indirectly affect public policy.

## Why Economists’ Advice Is Not Always Followed

### The process by which economic policy is made differs from the idealized policy process assumed in textbooks.

### Economists offer crucial input into the policy process, but their advice is only part of the advice received by policymakers.

# Why Economists Disagree

## Differences in Scientific Judgments

### Economists may disagree about the validity of alternative positive theories or about the size of the effects of changes in the economy on the behavior of households and firms.

### Example: some economists feel that a change in the tax code that would eliminate a tax on income and create a tax on consumption would increase saving in this country. However, other economists feel that the change in the tax system would have little effect on saving behavior and therefore do not support the change.

## Differences in Values

## Perception versus Reality

### While it seems as if economists do not agree on much, this is in fact not true. Table 1 contains 20 propositions that are endorsed by a majority of economists.

***Table 1***

### Almost all economists believe that rent control adversely affects the availability and quality of housing.

### Most economists also oppose barriers to trade.