

CHAPTER 2

USEFUL TOOLS AND CONCEPTS

Principles of Economics in Context (Goodwin et al.)

Chapter Overview

This chapter discusses methods of economic investigation, introduces standard concepts of economic modeling, utility, product and factor markets, and circular flow, and includes a review of graphing techniques. It also discusses the broader, “contextual” view of economics, including social and environmental contexts, and defines three major spheres of economic activity: the core sphere (families and communities); the public purpose sphere (government and non-profits); and the business sphere (private business firms).

Chapter Objectives

After reading and reviewing this chapter, you should be able to:

1. Distinguish and differentiate among the different methods of investigation: empirical investigation, theoretical investigation, and historical investigation.
2. Understand the principle of an economic model.
3. Describe the actors and principles of the basic neoclassical circular flow model.
4. Understand the broader scope of a contextual model including social and environmental factors
5. Identify the different economic functions of households, communities, governments, non-profit organizations, and private business.

Key Terms

empirical investigation
time series data
theoretical investigation
model
ceteris paribus
historical investigation
basic neoclassical model
utility

factor markets
product markets
circular flow diagram
core sphere
business sphere
public purpose sphere
public good

Active Review

Fill in the Blank

1. The observation and recording of specific phenomena of concern is called _____ investigation, whereas the analysis based in abstract thought is called _____ investigation.
2. When researchers study past events, they are conducting a(n) _____ investigation.
3. The Latin phrase that means “all else constant” or “other things equal” is _____.
4. The two actors in the basic neoclassical (or traditional microeconomic) model of economics are _____ and _____.
5. The contextual economic model includes _____ and _____ contexts of economic production.
6. Institutions in the core sphere include _____ and _____.
7. The public purpose sphere includes _____ as well as _____.
8. The business sphere is mainly concerned with _____.
9. The informal sphere is especially significant in _____.

True or False

10. If two variables are correlated (tend to move together), changes in one can be said to be causing changes in the other.
11. Economic models are generally based on historical evidence
12. The assumption of *ceteris paribus* means that variables other than those being directly considered are assumed to be constant
13. The basic neoclassical model includes environmental and social contexts
14. A public good is defined as a good that is consumed by the public.
15. Cooking a family dinner at home is an activity of the core sphere of economics.

Short Answer

16. What kinds of investigation would be used to examine the record of the economy during the recession of 2007-2009?
17. What kind of investigation would be relevant to determining the *causes* of the recession of 2007-2009?
18. A classmate asserts that “Economic models are useless because they cannot fully describe reality”. How would you respond?
19. Name the two actors in the basic neoclassical (or traditional microeconomic) model of economics, and identify the assumptions the model makes of these two actors.
20. What contributes to full social and economic efficiency in the basic neoclassical model?

Problem

1. Given the following data:

Year	Unemployment Rate (percent)	Inflation Rate (percent per year)
1984	7.5	3.8
1985	7.2	3.0
1986	7.0	2.2
1987	6.2	2.7

Source: Economic Report of the President

- a. Plot the unemployment data on a time series graph:
- b. Plot the inflation data on a time series graph:
- c. Now plot the unemployment and inflation data using a scatter diagram. Over any period of years is there a positive relationship between the two variables? Over any period is there a negative relationship?

Self Test

1. Suppose an investigator has 50 years of data on rates of industrial production and annual accumulations of CO₂, and discovers a positive relationship between the two variables. This is an example of what type of investigation?
 - a. Theoretical investigation
 - b. Empirical investigation
 - c. Historical investigation
 - d. Both a and b.
 - e. a, b and c.

2. Suppose an economist develops a theory that prices of houses will rise when interest rates fall. A study of data over a twenty-year period seems to confirm the theory. This is an example of what type of investigation?
 - a. Theoretical investigation
 - b. Empirical investigation
 - c. Historical investigation
 - d. Both a and b.
 - e. a, b and c.

3. Which one of the following is *not* an assumption of the basic neoclassical model?
 - a. The actors in the economy are assumed to be households and firms
 - b. Firms are assumed to maximize profits
 - c. Households are assumed to maximize utility
 - d. Markets are assumed to be perfectly competitive, with prices determined by supply and demand
 - e. Communities are assumed to look after resource maintenance and environmental protection

4. Which of the following statements below best fits the basic neoclassical model's perspective?
 - a. Adam thinks that self-interested maximizing behavior and free markets lead to the best possible outcome.
 - b. Karl thinks that workers are squeezed by greedy, profit-hungry bosses.
 - c. Joseph experiences the booms and busts of the economy as if it were a rollercoaster ride.
 - d. John thinks the economy is like an elevator that can get stuck in the basement, and can only be fixed by an elevator repairman.
 - e. Julie values the work of volunteers and non-profit organizations in their communities that keeps the economy strong and vibrant.

5. What are the three spheres of economic activity?
 - a. The core, business, and government spheres
 - b. The monetary, core, and government spheres
 - c. The public, private, and social spheres
 - d. The core, business, and monetary spheres
 - e. The core, business, and public purpose spheres

6. What sphere of economic activity is comprised of households, families, and communities?
 - a. Public purpose sphere
 - b. Core sphere
 - c. Internal sphere
 - d. Dependency sphere
 - e. Institutional sphere

7. Which one of the following is an example of an organization in the public purpose sphere?
 - a. A family
 - b. A supermarket chain
 - c. A local grocery store
 - d. A state environmental protection agency
 - e. A child selling lemonade

8. Which one of the following is an example of a public good?
 - a. A clean house
 - b. A city park
 - c. A lawnmower shared by several neighbors
 - d. Cable television
 - e. A doctor's services

9. Which one of the following statements is false?
 - a. Public purpose sphere organizations tend to conduct economic activities at a larger scale than core sphere organizations.
 - b. Core sphere organizations can respond to needs as well as wants.
 - c. The primary place where good social relations are established is in the business sphere.
 - d. One critique of public purpose sphere organizations is that they can be inefficient.
 - e. Business sphere organizations may pursue motives other than making a profit.

10. About what percent of economic activity in the United States occurs in the core sphere?
- a. 4%
 - b. 10%
 - c. 16%
 - d. 25%
 - e. 32%
11. A city government maintains local roads. This service is an example of:
- a. A factor market
 - b. A public good
 - c. A positive externality
 - d. A business sphere activity
 - e. A core sphere activity
12. Which of the following is an example of a core sphere activity?
- a. James plays a game of catch with his nephew.
 - b. Martha works at a bank.
 - c. A local fire department responds to local emergencies.
 - d. A national government purchases weapons.
 - e. A publicly funded state college provides education.
13. The activities of the U.S. Environmental Protection Agency would be characterized as part of
- a. The core sphere
 - b. The free rider sphere
 - c. The public purpose sphere
 - d. The business sphere
 - e. The informal sphere
14. Which of the following is *not* one of the main legal forms of enterprises in the business sphere?
- a. Proprietorships
 - b. Partnerships
 - c. Corporations
 - d. Non-profit organizations
 - e. Cooperatives

15. Why are public goods often provided through government agencies and supported by taxes?

- a. Because they are goods that the public generally believes are valuable and important for the smooth functioning of the economy.
- b. Because the goods would not be well-provided by the private sector, since they are non-excludable.
- c. Because consumers of the goods have little incentive to pay for them, since they are non-excludable.
- d. Because of the problem of free riders, who would otherwise benefit from the public good without paying for it.
- e. All of the above.

16. The informal sphere

- a. Exists only in low-income countries.
- b. Involves mainly non-profit production.
- c. Is not generally subject to government oversight and regulation.
- d. Is not significant as a component of economic production.
- e. All of the above.

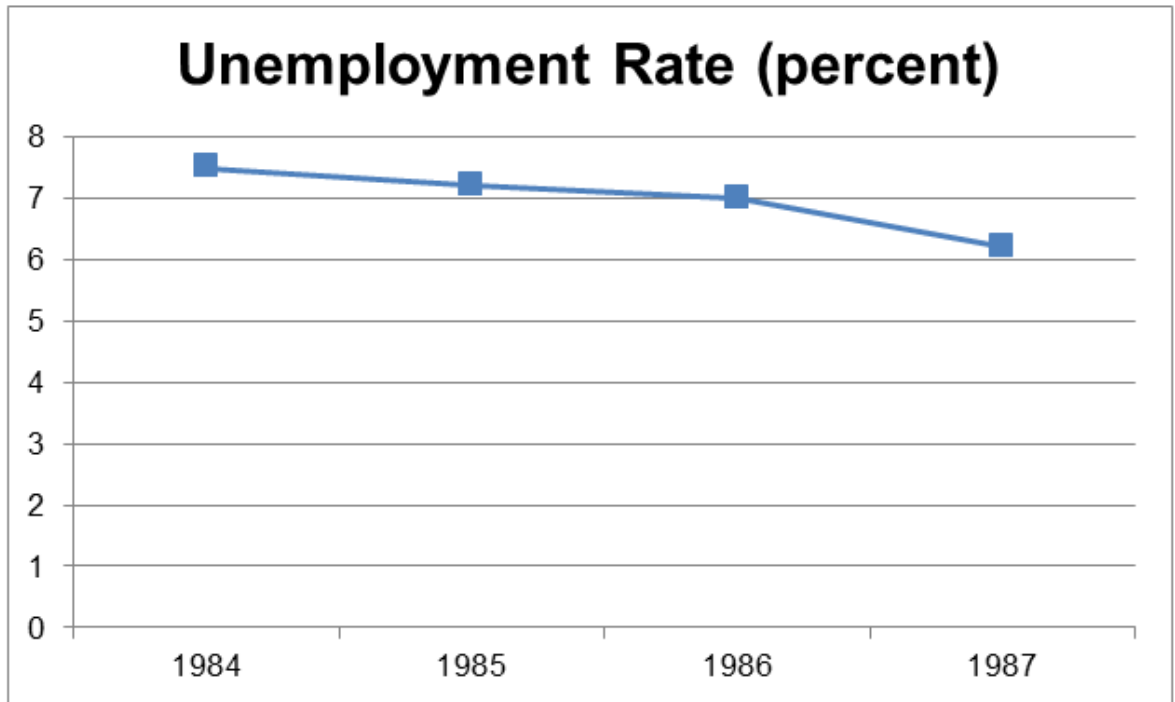
Answers to Active Review Questions

1. Empirical, theoretical
2. Historical
3. Ceteris paribus
4. Firms and households. Firms are assumed to maximize profits, and households are assumed to maximize their utility (or satisfaction).
5. Environmental and social contexts
6. Families and communities
7. Government agencies and non-profit organizations
8. Producing for profit
9. Developing countries
10. False. Correlation between two variables does not necessarily imply causation.
11. False. Most economic models are generally theoretical tools for analysis, which highlight some aspects of reality while ignoring others. Historical evidence can, however, be used to test aspects of economic models.
12. True.
13. False. The contextual model considers social and environmental contexts, while these are generally absent from the neoclassical model.
14. False. A public good is a good that is non-diminishable (use by one person does not diminish usefulness to others), and non-excludable (it would be difficult to exclude anyone from benefiting. There are many examples of goods consumed by the public that are not public goods.
15. True.
16. Empirical (such as data on unemployment and inflation).

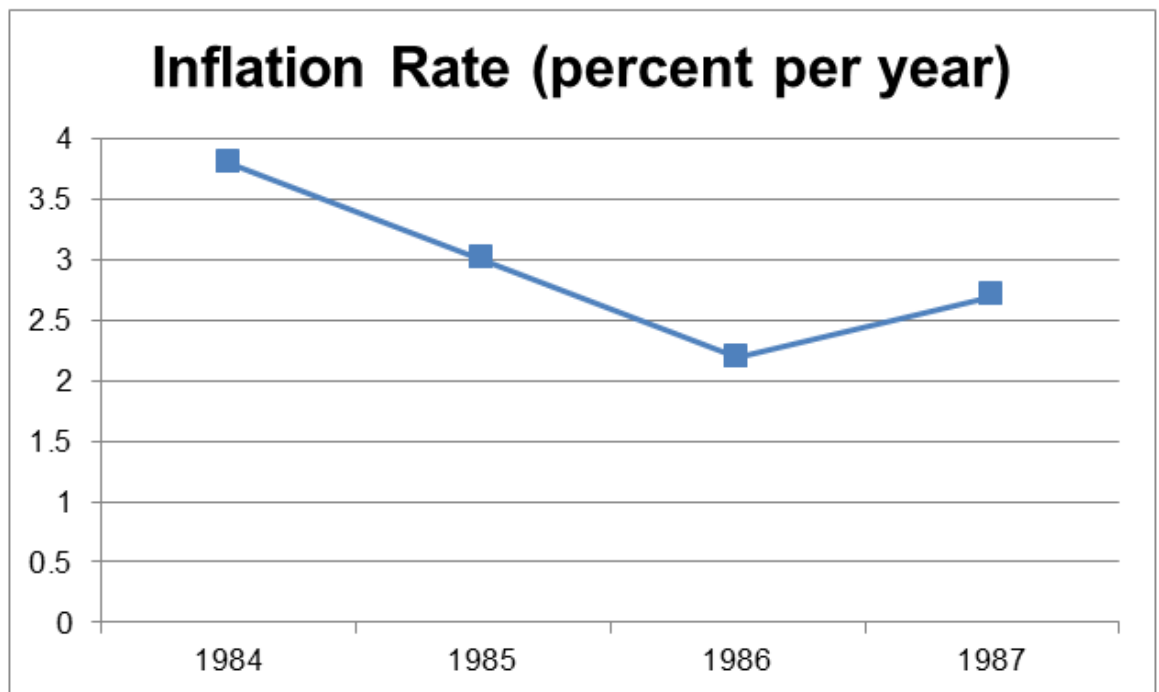
17. All three major techniques could be relevant: empirical (such as measures of excessive debt), historical (such as analysis of government regulatory policy) and theoretical (such as applying macroeconomic models to see how well they describe the performance of the economy during this period).
18. No model can fully describe reality, but just as a model plane can give engineers insight into the performance of a real plane, an economic model can help economists to understand actual economic activity.
19. Households, who are assumed to maximize their utility, or satisfaction; and firms, who are assumed to maximize their profits under competitive conditions.
20. Market price coordination, the profit motive, and the assumption that consumers maximize

Answers to Problems

1.a.



b.



c.



There appears to be a positive (direct) relationship between unemployment and inflation from 1984 to 1986 (both are falling), but an negative (inverse) relationship between them from 1986 to 1987 (unemployment falls while inflation rises).

Answers to Self Test Questions

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|------|-------|
| 1. b | 9. c |
| 2. d | 10. e |
| 3. e | 11. b |
| 4. a | 12. a |
| 5. e | 13. c |
| 6. b | 14. d |
| 7. d | 15. e |
| 8. b | 16. c |