

Chapter 2

USEFUL TOOLS AND CONCEPTS

Principles of Economics in Context (Goodwin, et al.), 2nd Edition

Chapter Overview

This chapter introduces standard concepts of economic modeling and reviews graphing techniques. It describes two different macroeconomic models: the neoclassical model and the contextual model. It also provides an overview of the three spheres of economic activity: the core sphere, the public purpose sphere, and the business sphere. In this chapter you will see these concepts set into a broader context of concern for well-being.

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

cross-sectional data

negative (or inverse) relationship

positive (or direct) relationship

theoretical investigation

model

ceteris paribus

historical investigation

basic neoclassical model

circular flow diagram

utility

factor markets

product markets

core sphere

business sphere

public-purpose sphere

public good

regulation

direct public provision

informal sphere

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 model places economic activities within the _____ and _____ context.
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 _____.
10. Cooking family dinner at home is an activity of the _____ sphere.
11. Retailers such as Walmart, Target and Amazon are categorized under the _____ sphere.
12. The two main economic functions of the public-purpose sphere are _____ and _____.

True or False

13. If two variables are correlated (tend to move together), changes in one can be said to be causing changes in the other.
14. Economic models are generally based on historical evidence
15. The assumption of *ceteris paribus* means that variables other than those being directly considered are assumed to be constant
16. The basic neoclassical model includes environmental and social contexts
17. A public good is defined as a good that is consumed by the public.
18. Business interests are aligned with maximizing both financial profits and social well-being.
19. The neoclassical model assumes that households make consumption decisions with the goal of maximizing utility and that businesses make production decisions with the goal of maximizing profits.

Short Answer

20. What kinds of investigation would be used to examine the record of the economy during the recession of 2007-2009?
21. A classmate asserts that “Economic models are useless because they cannot fully describe reality”. How would you respond?
22. 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.
23. What contributes to full social and economic efficiency in the basic neoclassical model?
24. Discuss the two key features of the contextual model.
25. What is the distinguishing characteristic of institutions in the public purpose sphere?
26. What are some of the strengths of the business sphere?
27. Describe some of the key activities conducted in the core sphere.

Problems

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 management 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 of all possible worlds.
 - 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. Which of the following statements below best fits the contextual model's perspective?
- Markets are always perfectly competitive.
 - Non-market production such as cooking, cleaning and caring for children should be included in our economic model
 - The government should focus on helping businesses maximize profits.
 - The core sphere is primarily responsible for all resource management activities.
 - All of the above.
6. Which of the following statements is FALSE?
- The neoclassical model identifies firms and households as the two main economic actors.
 - The neoclassical model assumes that firms always maximize profits.
 - The contextual model focuses only on market activity.
 - The contextual model considers the environmental costs of economic activity.
 - There is some overlap between the neoclassical and the contextual model.
7. What are the three spheres of economic activity?
- The core, business, and government spheres
 - The monetary, core, and government spheres
 - The public, private, and social spheres
 - The core, business, and monetary spheres
 - The core, business, and public purpose spheres
8. Which one of the following is an example of an organization in the public purpose sphere?
- A family
 - A supermarket chain
 - A local grocery store
 - A state environmental protection agency
 - A child selling lemonade
9. Which one of the following is an example of a public good?
- A clean house
 - A city park
 - A lawnmower shared by several neighbors
 - Cable television
 - A doctor's services

10. 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.
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 *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
13. 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.

14. The informal sphere
- Exists only in low-income countries.
 - Involves mainly non-profit production.
 - Is not generally subject to government oversight and regulation.
 - Is not significant as a component of economic production.
 - All of the above.
15. Which of the following is an example of a core sphere activity?
- James plays a game of catch with his nephew.
 - Martha works at a bank.
 - A local fire department responds to local emergencies.
 - A national government purchases weapons.
 - A publicly funded state college provides education.
16. The activities of the U.S. Environmental Protection Agency would be characterized as part of
- The core sphere
 - The free rider sphere
 - The public purpose sphere
 - The business sphere
 - The informal sphere
17. Which of the following is an activity in the business sphere?
- The government increases funding for public schools.
 - Tina sells home-made jam at the local market.
 - John helps a neighbor with yard work.
 - Martha volunteers to organize a community clean up event.
 - The local police department leads a training session on ensuring public safety.
18. Regulating the activities of financial institutions occurs in the
- public purpose sphere
 - the informal sphere
 - the banking sphere
 - the core sphere
 - the business sphere

19. In the United States, the monetary value of the annual production of goods and services was largest in:

- a. the core sphere
- b. the informal sphere
- c. the public purpose sphere
- d. the business sphere
- e. the free rider sphere

20. Which of the following is not a characteristic of the informal sphere?

- a. It is often dependent on family and community connections
- b. It operates under government regulation and oversight
- c. It is comprised of small scale market enterprises
- d. It may include illegal activities and services provided “off the books”
- e. The relative size of informal sphere tends to be larger in less developed countries

Answers to Active Review Questions

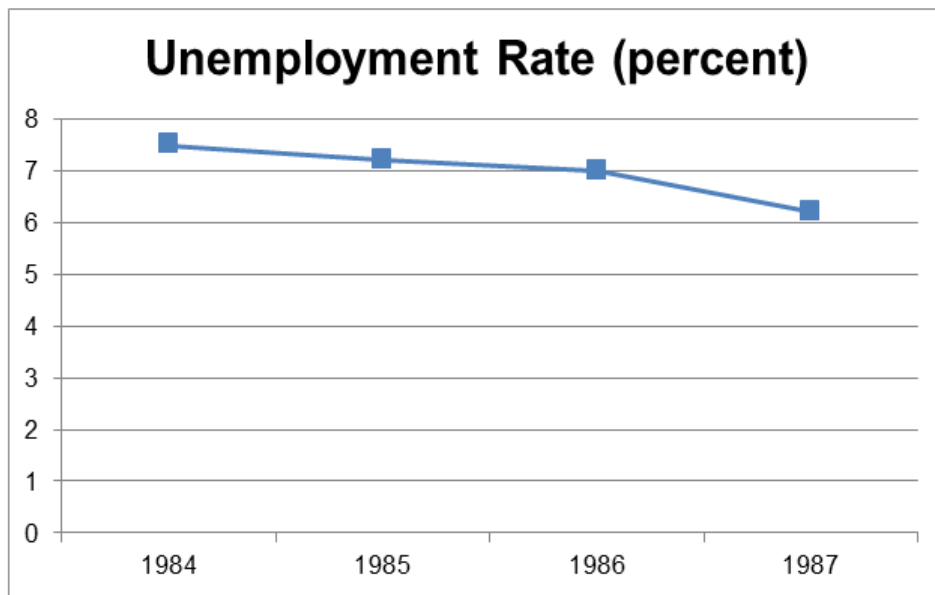
1. Empirical, theoretical
2. Historical
3. Ceteris paribus
4. Firms and households. Firms are assumed to maximize profits, and households are assumed to maximize their utility (or satisfaction).
5. Environmental and social contexts
6. Families and communities
7. Government agencies and non-profit organizations
8. Producing for profit
9. Developing countries
10. Core
11. Business
12. Regulation and private provision
13. False. Correlation between two variables does not necessarily imply causation.
14. 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.
15. True.
16. False. The contextual model considers social and environmental contexts, while these are generally absent from the neoclassical model.
17. 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.
18. False. Some of the decisions made by businesses with the goal of maximizing profits may come at the cost of social well-being. For example, cost-cutting measures such as reducing pay or benefits to workers by hiring temporary workers, or dodging environmental regulations to reduce production costs could have adverse impacts on social well-being.
19. True. These are the key assumptions of the neoclassical model.
20. 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).
21. 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.
22. Households, who are assumed to maximize their utility, or satisfaction; and firms, who are assumed to maximize their profits under competitive conditions.
23. Market price coordination, the profit motive, and the assumption that consumers maximize
24. The contextual model places economic activity in the environmental and social contexts. This model specifies economic activity as occurring within three spheres: core, public purpose, and business.
25. The distinguishing characteristic of institutions in the public purpose sphere is that

they exist to serve the common good for a group larger than an individual or family, and do not have the goal of making a profit.

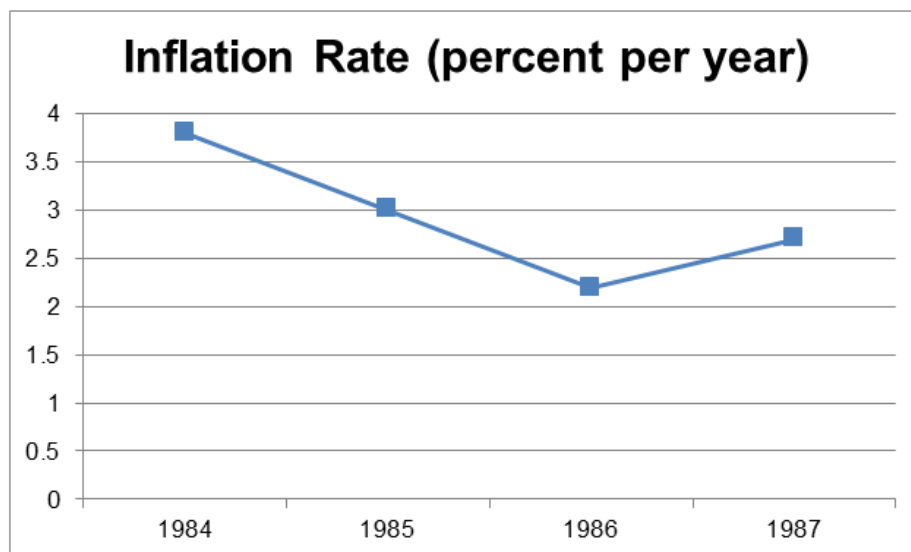
26. Because business sphere is focused on profit maximization, they are likely to encourage innovation and have higher efficiency.
27. Some of the key activities in the core sphere include producing of goods and services (such as cooking, lawn mowing, and providing care to dependent members), organizing savings and investment, allocating consumption spending, making labor supply decisions, and organizing of the use of leisure time.

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 | 11. B |
| 2. D | 12. D |
| 3. E | 13. E |
| 4. A | 14. C |
| 5. B | 15. A |
| 6. C | 16. C |
| 7. E | 17. B |
| 8. D | 18. A |
| 9. B | 19. D |
| 10. C | 20. B |