

Chapter 2

FOUNDATIONS OF ECONOMIC ANALYSIS

Essentials of Economics in Context (Goodwin, et al.), 1st Edition

Chapter Overview

This chapter introduces standard concepts of economic modeling, the advantages of market systems, and includes a review of graphing techniques. We provide examples of two basic economic models: the neoclassical model and the contextual model. It also provides an overview of the three spheres of economic activity defined in the contextual model: 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. The chapter concludes with a description of the market system, including a discussion of the institutional requirements of markets, and the advantages and limitations of markets. It also introduces the concepts of externalities, public goods, market power, transaction costs, information and expectations, and concern for human needs and equity in order to demonstrate why markets, while useful, are not on their own sufficient for organizing economic life in the service of 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: empiricism and rationalism
2. Understand the neoclassical and the contextual approaches to economic modeling and identify the key strengths and weaknesses of the models.
3. Describe the three spheres of economic activity,
4. Distinguish the different meanings of the term “market”.
5. Describe the institutional requirements of markets.
6. Identify the advantages and limitations of markets.

Key Terms

empirical investigation
historical investigation
negative (or inverse) relationship
positive (or direct) relationship
rationalist investigation
model
ceteris paribus
basic neoclassical model

circular flow diagram
utility
factor markets
product markets
core sphere
public purpose sphere
regulation
direct public provision

public good
nonexcludable good
nonrival good
business sphere
informal sphere
market (first meaning)
market (second meaning)
market (third meaning)
laissez-faire economy
institution
private property

money
physical infrastructure
posted prices
market price
bargaining
free riders
externalities
transaction costs
market power
market failure

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. Two main actors in the basic neoclassical model include: _____ and _____.
5. The contextual model places economic activities within the _____ and _____ context.
6. Cooking family dinner at home is an activity of the _____ sphere.
7. Retailers such as Walmart, Target and Amazon are categorized under the _____ sphere.
8. The two main economic functions of the public-purpose sphere are _____ and _____.
9. If someone enjoys the benefit of a well-paved highway but refuses to pay for it, they would be considered a _____.
10. You decide to buy a used car. You discover that it is hard to get information on the quality of the used cars that are available. You have trouble communicating with the car dealer. It takes a considerable amount of time to get the information you need to successfully get the car you had in mind. In other words, buying a used car turns out to be an activity with high _____ costs.

11. A new factory begins discharging pollutants into a previously pristine river. Fish in the river begin to die, and people who make their living through fishing have trouble maintaining their catch. This factory is generating _____.

12. A professional musician practices piano every afternoon. Her neighbor listens to the music and enjoys it. Through her activity, the musician is creating a _____.

True or False

13. A public good is a good that is consumed by the public.

14. Business interests are aligned with maximizing both financial profits and social well-being.

15. 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

16. Assume you see that two macroeconomic variables are correlated with each other. But you want to know if there's an underlying or causal relationship between the two variables. Would you use an empirical or rationalist investigation? Explain why.

17. 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.

18. What does the basic neoclassical, or traditional, model of economics assume about markets?

19. Discuss the two key features of the contextual model.

20. What is the distinguishing characteristic of institutions in the public purpose sphere?

21. What are some of the strengths of the business sphere?

22. Describe some of the key activities conducted in the core sphere.

23. Provide an example of a market that fits the first meaning of markets (as a physical place), and an example of a market that fits the second definition (as an institution).

24. List two advantages of markets identified by the authors of the text.

25. Identify the four institutional requirements of markets.

26. Identify six disadvantages of markets (i.e. cases of market failures).

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. Rational investigation
 - b. Empirical investigation
 - c. Theoretical investigation
 - d. Both A and C.
 - e. Both A and B.

2. 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

3. 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.

4. Which of the following statements below best fits the contextual model's perspective?
 - a. Markets are always perfectly competitive.
 - b. Non-market production such as cooking, cleaning and caring for children should be included in our economic model
 - c. The government should focus on helping businesses maximize profits.
 - d. The core sphere is primarily responsible for all resource management activities.
 - e. All of the above.

5. Which of the following statements is FALSE?
- a. The neoclassical model identifies firms and households as the two main economic actors.
 - b. The neoclassical model assumes that firms always maximize profits.
 - c. The contextual model focuses only on market activity.
 - d. The contextual model considers the environmental costs of economic activity.
 - e. There is some overlap between the neoclassical and the contextual model.
6. 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.
7. 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
8. Which of the following is an activity in the business sphere?
- a. The government increases funding for public schools.
 - b. Tina sells home-made jam at the local market.
 - c. John helps a neighbor with yard work.
 - d. Martha volunteers to organize a community clean up event.
 - e. The local police department leads a training session on ensuring public safety.
9. Regulating the activities of financial institutions occurs in the
- a. public purpose sphere
 - b. the informal sphere
 - c. the banking sphere
 - d. the core sphere
 - e. the business sphere

10. Which of the following is not a characteristic of the informal sphere?
- It is often dependent on family and community connections
 - It operates under government regulation and oversight
 - It is comprised of small scale market enterprises
 - It may include illegal activities and services provided “off the books”
 - The relative size of informal sphere tends to be larger in less developed countries.
11. Which of the following would *not* be considered a market by any of the three meanings of markets?
- Seattle’s Pikes Place Market, a tourist attraction known for its fish and flower stands.
 - The mall of America in Minnesota, the U.S.’s largest retail complex.
 - The capitalist free market
 - The stock market
 - Marketplace, the radio program on national public radio.
12. Which of the following is *not* an example of an institutional requirement of markets?
- The deed of a house, identifying its owner.
 - A police force devoted to combating theft.
 - A firm’s reputation for making quality products.
 - Reliable roads and bridges that won’t fall apart
 - Central planners who are able to allocate and distribute resources
13. A city government maintains local roads. This service is an example of:
- A free rider
 - A public good
 - A positive externality
 - An external cost
 - A core sphere activity
14. Why are public goods often provided through the government and supported by taxes?
- Because they are goods that the public generally believes are valuable and important for the smooth functioning of the economy.
 - Because the goods would not be well-provided by the private sector, since they are non-excludable.
 - Because consumers of the goods have little incentive to pay for them, since they are non-excludable.
 - Because of the problem of free riders, who would otherwise benefit from the public good without paying for it.
 - All of the above.

15. Which of the following is an example of a positive externality?
- A musician performs in a concert. People pay to listen to the concert.
 - An architect designs a house for herself to live in. She enjoys spending time in the house.
 - A student volunteers in a shelter for the homeless.
 - A homeowner plants a tree for shade around her house. The tree also provides shade for her next-door neighbor.
 - A teacher drives his car to work and gets stuck in a traffic jam.
16. Which of the following is an example of a negative externality?
- A student receives a failing grade on a French exam.
 - Your roommate throws a loud party that keeps you awake all night.
 - You decide to take public transportation to work every day.
 - A group of farmers pool their resources to purchase seeds for next year.
 - You receive a letter saying your bank account is overdrawn.
17. A firm has an experienced worker who it has spent considerable time training. The economy goes into a recession, but the firm is reluctant to lay off the worker. Searching for another worker who is trained and trustworthy when the economy picks up again would entail which kind of costs?
- Opportunity costs
 - Implicit costs
 - Explicit costs
 - Transactions costs
 - External costs
18. Which of the following entities does *not* have substantial market power?
- An oil company like Exxon Mobil.
 - A multinational soft drink corporation like Coca Cola.
 - A government agency like the Department of Defense.
 - A computer software company like Microsoft.
 - A flower seller at a local farmers' market, where there are many flower sellers.

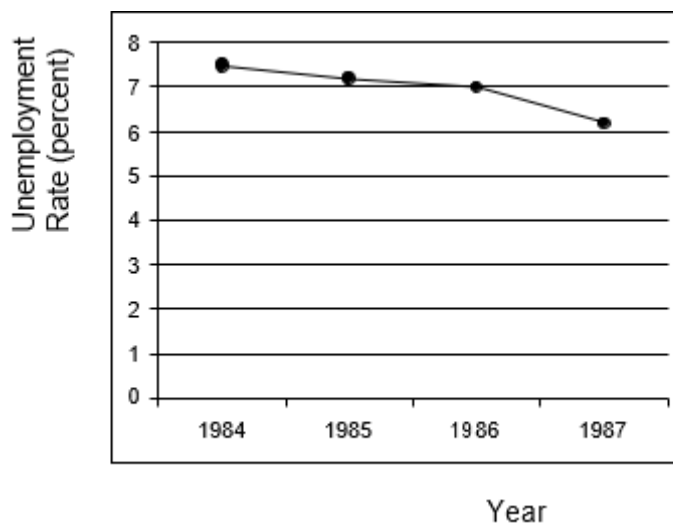
Answers to Active Review Questions

1. empirical, rationalist
2. historical
3. ceteris paribus
4. utility-maximizing households, profit-maximizing firms
5. environmental, social
6. core
7. business
8. regulation and direct provision
9. free-rider
10. transaction
11. negative externality
12. positive externality
13. False.
14. 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.
15. True. These are the key assumptions of the neoclassical model.
16. You would use a rationalist investigation that involves developing a theory based on some assumptions and logical reasoning to examine if there is a causal relation between the two variables. Empirical investigation is useful in describing economic phenomenon, but may be inadequate in explaining them. It may be clear that two variables are correlated, but unclear if there's a causal relation between the two. Rationalist investigation can more closely examine complex relationships between phenomena.
17. Firms and households. Firms are assumed to maximize profits, and households are assumed to maximize their utility (or satisfaction).
18. It assumes that markets are perfectly competitive and smoothly functioning, and that prices are determined purely by forces of supply and demand.
19. 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.
20. 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.
21. Because business sphere is focused on profit maximization, they are likely to encourage innovation and have higher efficiency.
22. 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.
23. A local farmer's market would be an example of a market understood as a physical place with both buyers and sellers of a good. The market for goods sold on eBay, the stock

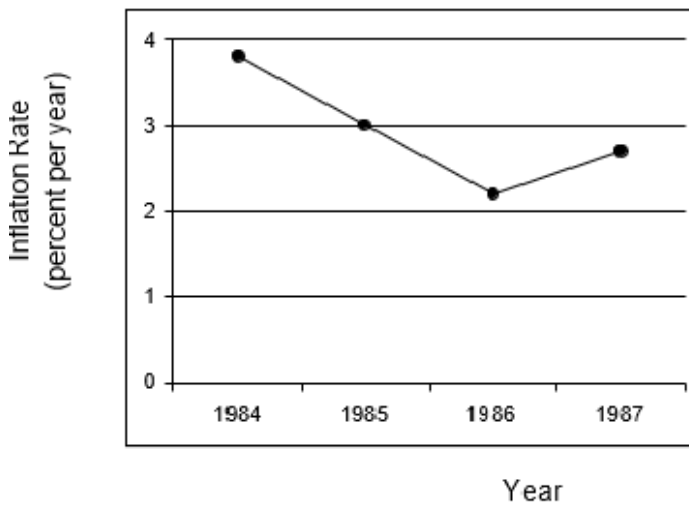
- market or the market for oil, are examples of markets understood as institutions.
24. Markets can be an efficient way of allocating resources. Markets involve voluntary exchanges. Another advantage identified in the text is that markets encourage innovation and creativity.
 25. The four institutional requirements of markets are: private property, social institutions of trust, good physical infrastructure, and money.
 26. Six disadvantages or cases of market failure are: public goods, externalities, market power, inequality, transactions costs, and information/expectations problems.

Answers to Problems

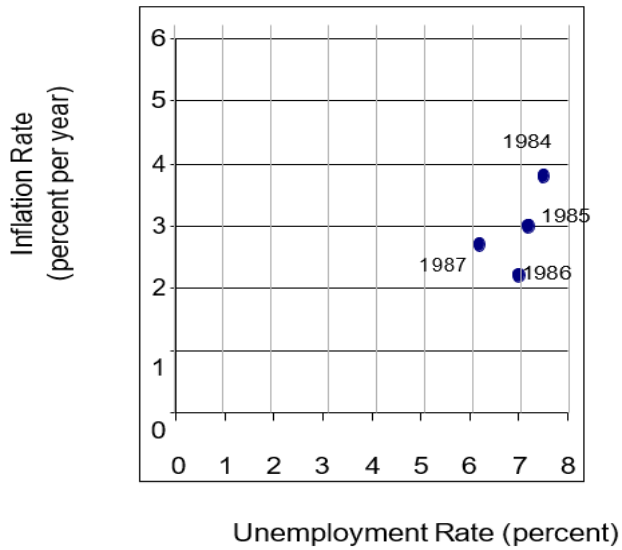
1.a.



b.



c.



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

Answers to Self Test Questions

1. B
2. E
3. A
4. B
5. C
6. A
7. C
8. B
9. A

10. B
11. E
12. E
13. B
14. E
15. D
16. B
17. D
18. E